

European Advertising Academy

Ivana Bušljeta Banks

Patrick De Pelsmacker

Shintaro Okazaki *Editors*

RESEARCH

Advances in Advertising Research (Vol. V)

Extending the Boundaries of Advertising



Springer Gabler

European Advertising Academy



Executive Board Members:

- S. Diehl, Klagenfurt, Austria
- M. Eisend, Frankfurt (Oder), Germany
- R. Heath, University of Bath, United Kingdom
- T. Langner, Wuppertal, Germany
- P. Neijens, Amsterdam, Netherlands
- S. Okazaki, Madrid, Spain
- P. De Pelsmacker, Antwerp, Belgium
- S. Rosengren, Stockholm, Sweden
- E. Smit, Amsterdam, Netherlands
- R. Terlutter, Klagenfurt, Austria

The objective of the European Advertising Academy (EAA) is to provide a professional association to academics and practitioners interested in advertising and its applications that will promote, disseminate, and stimulate high quality research in the field.

Executive Board Members:

Prof. Sandra Diehl
University of Klagenfurt

Prof. Shintaro Okazaki
Universidad Autónoma de Madrid

Prof. Martin Eisend
European University Viadrina
Frankfurt (Oder)

Prof. Patrick De Pelsmacker
University of Antwerp

Prof. Robert Heath
University of Bath

Assistant Prof. Sara Rosengren
School of Economics, Stockholm

Prof. Tobias Langner
Bergische University Wuppertal

Prof. Edith Smit
University of Amsterdam

Prof. Peter Neijens
University of Amsterdam

Prof. Ralf Terlutter
University of Klagenfurt

Ivana Bušljeta Banks
Patrick De Pelsmacker
Shintaro Okazaki (Eds.)

Advances in Advertising Research (Vol. V)

Extending the Boundaries
of Advertising

 Springer Gabler

Editors

Ivana Bušljeta Banks
Zagreb School of Economics
and Management
Zagreb, Croatia

Shintaro Okazaki
Universidad Autónoma de Madrid
Madrid, Spain

Patrick De Pelsmacker
University of Antwerp
Antwerp, Belgium

European Advertising Academy

ISBN 978-3-658-08131-7

ISBN 978-3-658-08132-4 (eBook)

DOI 10.1007/978-3-658-08132-4

Library of Congress Control Number: 2013938751

Springer Gabler

© Springer Fachmedien Wiesbaden 2015

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made.

Printed on acid-free paper

Springer Gabler is a brand of Springer Fachmedien Wiesbaden
Springer Fachmedien Wiesbaden is part of Springer Science+Business Media
(www.springer.com)

Preface

It is with distinct pleasure that we present to you *Advances in Advertising Research, Volume V – Extending the Boundaries of Advertising*, published by the European Advertising Academy (EAA). This volume consists of a selection of the best and most interesting research papers presented at the 12th International Conference on Research in Advertising (ICORIA), in their revised and extended versions. The conference was held at the Zagreb School of Economics and Management, in Zagreb, Croatia, at the end of June, 2013.

Technological and consumer trend changes are so swift these days that the notion of what can be labeled as new vs. traditional advertising media is experiencing a fundamental shift. Online advertising and social media are already on their way toward being considered traditional, with interactive advertising, as well as mobile advertising and applications taking over the position of new and cutting-edge. However, we should also not summarily dismiss the more traditional types of advertising and new trends in their usage and effectiveness from further research and discussion. With this in mind, researchers from around the world have contributed their papers to this volume, covering a wide range of topics intended to provide insights into both the traditional, the new, and the “new” new advertising outlets.

The book is divided into six main sections. Part I of the anthology explores advertising appeals and processing issues; Part II focuses on topics related to online and mobile advertising media; Part III provides fresh insights into the use of television as an advertising medium, as well as product placement; Part IV addresses issues related to culture, gender, and age (more precisely, advertising aimed at children) in advertising; Part V examines and discusses branding challenges; and Part VI is devoted to various topics in the field of integrated marketing communications.

We want to thank all the authors who accepted our invitation to revise and extend their conference papers, presented at the 12th ICORIA, and contribute their work to make this book possible. Additionally, we would like to extend a special thank you to Emanuel Pekić (AE), who skilfully handled the formatting of the book. Our gratitude also goes to the colleagues from the ZSEM Business Academy and the team of student volunteers, without whose help in the organization process the Zagreb conference would not have been as successful as it was.

It is our hope that academics, practitioners, and students interested in the field of advertising will find this volume useful to their work and enjoy reading the papers presented in it.

Ivana Bušljeta Banks
Patrick De Pelsmacker
Shintaro Okazaki
Zagreb, Antwerp, and Madrid, April 2014

The European Advertising Academy (EAA)

The objective of the association is to provide a professional association to academics and practitioners interested in advertising and its applications that will promote, disseminate and stimulate high quality research in the field. The association particularly serves as a meeting and communication forum for its members. It offers a network for the exchange of knowledge on an international level and constitutes a framework allowing for a better dissemination of information on research and teaching.

The EAA is closely related to the yearly **International Conference on Research in Advertising (ICORIA)**. The purpose of the conference is to create a forum where people studying advertising in the academic world could exchange ideas, and where they could meet with practitioners who have experience with advertising in the commercial world.

Every natural person that is professionally concerned with or interested in research or teaching in the field of advertising is, irrespective of nationality, eligible to become a full member of the organization.

The EAA was founded in 2005. The current board members are: Edith Smit (president, The Amsterdam School of Communications Research), Ralf Terlutter (past president, Institute for Marketing and International Management (Klagenfurt)), Peter Neijens (past president, The Amsterdam School of Communications Research), Sandra Diehl (treasurer, Institute for Marketing and International Management (Klagenfurt)), Tobias Langner (information manager, Bergische Universität Wuppertal, Schumpeter School of Business and Economics), Robert Heath (School of Management (Bath)), Shintaro Okazaki (Universidad Autónoma de Madrid), Patrick De Pelsmacker (University of Antwerp), Martin Eisend (Europa-Universität Viadrina (Frankfurt an der Oder)) and Sara Rosengren (Stockholm School of Economics).

For further information please visit our website: www.icoria.org

Table of Contents

Preface

v

I. Advertising Appeals and Processing

Lampros Gkiouzepas

Metaphor-Ad Layout Consistency Effects:
The Moderating Role of Personality Traits

3

Beatriz Casais and João F. Proença

A Model to Classify Television Social Advertisements
According to the Use of Positive or Negative Appeals

15

Antigone G. Kyrousi and George G. Panigyrakis

Color in Print Advertising:
Effects on Implicit and Explicit Memory and Priming

29

Martina Maurer and Heribert Gierl

Listen to My Story:
A Comparison of the Narrative to the Factual Format of
Information Presentation in Advertisements

47

II. Online and Mobile Advertising

Nathalia Purnawirawan, Patrick De Pelsmacker, and Nathalie Dens

The Impact of Managerial Responses to Online Reviews
on Consumers' Perceived Trust and Attitude

63

Su Jung Kim, Rebecca Jen-Hui Wang, and Edward C. Malthouse

The Good and the Bad of Negative Word-of-Mouth: Empirical
Investigation into the Effect of Online Messages

75

Sonja Grabner-Kräuter and Martin K. J. Waiguny

"I Believe More in Factual Reviews" - But Not so Much When the
Reviewer is Similar to the Reader and the Product is Hedonic

89

<i>Martina Čaić, Dominik Mahr, Elizabeth Aguirre, Ko de Ruyter, and Martin Wetzels</i> “Too Close for Comfort”: The Negative Effects of Location-Based Advertising	103
 III. TV Advertising and Product Placement	
<i>Liyong Wang and Carolus L. C. Praet</i> How Informative Are Chinese Television Commercials?	115
<i>Vijay Viswanathan and Hilde Voorveld</i> Media Multitasking with Television News: The Interaction of Content and Audience Factors	129
<i>Yann Verhellen, Nathalie Dens, and Patrick De Pelsmacker</i> Context Matters: Modeling the Impact of Context Perceptions on the Effectiveness of Brand Placement	143
 IV. Cultural, Gender, and Age Issues in Advertising	
<i>Barbara Mueller, Sandra Diehl, and Ralf Terlutter</i> GLOBE Cultural Dimensions: Providing Insights for Advertising Execution in the Global Marketplace	161
<i>Mahdi Rajabi, Nathalie Dens, and Patrick De Pelsmacker</i> Advertising Adaptation versus Standardization Effectiveness in Open and Closed Markets	177
<i>Suzanna J. Oprea and Esther Rozendaal</i> The Advertising Literacy of Primary School Aged Children	191
<i>Benjamin Ka Lun Cheng</i> To Drink More Water or Less Coke? Promoting Healthy Eating Among Children Using Regulatory Fit Theory	203
<i>Marie-Selien Fakkert, Hilde A.M. Voorveld, and Eva A. van Reijmersdal</i> Brand Placements in Fashion TV Series	217

V. Branding Challenges*Verena Hüttl and Heribert Gierl*

How to Avoid Brand Dilution: The Use of Conjunctive Cues
in Advertisements for Brand Extensions 231

Don E. Schultz and Martin P. Block

Brands and Consumer Relationships 245

Ingrid Moons and Patrick De Pelsmacker

Electric Car Extensions of Car Brands:
Impact on Brand Personality, Extension Evaluation
and Parent Brand Feedback 267

VI. IMC*Vesna Zabkar, Damijan Mumel, and Nina Vanita*

Is Management Involvement in Integrated Marketing
Communications Reasonable? 283

Morikazu Hirose, Kei Mineo, Keiya Tabe, and Kanji Yanagidate

What is the Effect of Third-Party Organization Endorsement
on Perceptions? The Structural Modelling Approach 295

*Leonids Aleksandrovs, Peter Goos, Nathalie Dens,
and Patrick De Pelsmacker*

How Consumers' Media Usage Influences the Advertising
Media Mix that Maximizes Campaign Recognition 307

Kande Kazadi, Annouk Lievens, Dominik Mahr

“Does it Pay off to Introduce my Partner?”
The Role of Stakeholder Cocreation in Consumers’
Willingness to Pay 321

Part I

Advertising Appeals and Processing

Metaphor-Ad Layout Consistency Effects: The Moderating Role of Personality Traits

Lampros Gkiouzepas

1 Introduction

The process of arranging such elements as headlines, images, slogans, or captions can be an important stage in the development of ads. The ability of the ad to capture and direct consumers' attention is often the primary criterion in the evaluation of ad layouts (Janiszewski, 1990; Pieters and Wedel, 2004). The present study suggests that in some cases orientational metaphors should also be considered when advertisers make decisions about the arrangement of ad elements. The proposition that deep-rooted metaphors might play a key role in the processing of ads is based on Lakoff and Johnson's idea (1980) that metaphor is not primarily a matter of language, but of thought.

In particular, the overall purpose of the present study is to expand on some early findings showing that aligning ad layout with metaphor-based mental representations facilitates comprehension (Gkiouzepas 2013). The distinctive role of the current study is twofold. First, it explicitly examines whether personality traits moderate metaphor-ad layout consistency effects. Specifically, Need for Power (nPow) as a personality trait is tested within the context of the orientational metaphor "having control is up". Second, this study investigates whether metaphor-based representations can also influence advertising persuasiveness.

The present article begins with a brief introduction to the notions of structural and orientational metaphor. It then provides an overview of research on metaphor-based representations as found mainly within the psycholinguist literature. The main focus is on studies that examine power-related metaphors. The hypotheses and the main study that examines the moderating role of psychographic attributes are discussed next. Finally, the managerial and theoretical implications of the present findings are provided in the discussion section.

2 Literature Review

Metaphor was traditionally considered as merely being about the ornamental use of language (Ortony 1993). However, Lakoff and Johnson (1980) suggested that metaphor might be a far more important concept - metaphor might shape the way we perceive the world around us. In particular, Lakoff and Johnson (1980) claim that individuals use metaphors to structure abstract concepts. For example, our idea of *significance* might be shaped by the structural metaphor "significance is big" (Lakoff and Johnson 1980, p. 50). Many examples in

everyday language reveal that we understand significance in terms of size: “he’s is a *big* man in the garment industry”, “that’s the *biggest* idea to hit advertising in years”, “he’s *head and shoulders above* everyone in the industry”, or “it was only a *small* crime”. Lakoff and Johnson (1980) further suggest that it is not only that we talk about some concepts in terms of others, but also we act according to metaphors. For example, senior managerial positions are often represented in organization charts with a larger box or they are placed above subordinate positions (Mintzberg and Van der Heyden 1999)

Oriental metaphor is a type of structural metaphor that gives a spatial orientation to the concepts they structure. For example, “having control or force is up” whereas “being subject to control or force is down”. Linguistic evidence for the metaphor “having control or force is up” might be found in such expressions as “I have control over her”, “I am on top of the situation”, “He’s in a superior position”, “He’s at the height of his power”, or “His power rose” (Lakoff and Johnson 1980, p. 15). Other examples of abstract concepts that are understood via orientational metaphors are status (high status is up; low status is down), good (good is up; bad is down), and more (more is up; less is down). Lakoff and Johnson (1980) further suggest that there is a physical basis on the orientation assigned to concepts – the orientation is not arbitrary. Physical size, for example, often correlates with physical strength or the victor in fights is usually on top.

Barsalou (2008) posits that this experiential nature of metaphor is consistent with an embodied view of cognition. Embodied cognition approaches knowledge not as a system of modal representations (or symbols), but as a system of experiential representations (Barsalou 2008; Schubert and Semin 2009). If experience-based metaphors structure the way concepts, such as powerfulness and significance, are represented in our cognitive system, then grounded mental representations might be able to frame concurrent perceptual information. Therefore, a pertinent question might be whether the arrangement of text and images in ads in a way that is consistent with the mental representation of metaphor facilitates processing. For example, the metaphor “powerful is up” might suggest that the image of the product in Figure 1 should have been placed over the stain rather than below it. By contrast, the ad in Figure 2 depicts the package over (rather than below) the headline “for life’s headaches”. This latter arrangement is consistent with the metaphor “powerful is up”. In fact, a recent study offers some evidence that such an arrangement might be more effective (Gkiouzepas 2013). In particular, metaphor-consistent ad arrangements were found to be easier to understand than metaphor-inconsistent ad layouts as compared to controls ads (Gkiouzepas 2013).



Figure 1: Ariel ad



Figure 2: Excedrin ad

Further evidence of the ability of power-related orientational metaphors to influence individuals' cognitive system can be found in the psycholinguistics literature (Casasanto and Dijkstra 2010; Crawford et al. 2006; Giessner and Schubert 2007; Meier et al. 2007; Palma, Garrido, and Semin 2011; Schubert 2005). Schubert (2005) has discovered, for example, that the metaphor "power is

up" can have an impact on the speed and accuracy of judging a group's power. In particular, powerful groups were identified more accurately and more quickly as being powerful when the group appeared at a higher position in the vertical space, above powerless groups rather than at a lower position below powerless groups. These findings suggest that power is represented in perceptual form as vertical difference (Schubert 2005). Vertical position seems to influence the judgment result itself. Respect for powerful animals was greater when their images appeared at the top of a screen rather than at the bottom of the screen (Schubert 2005).

Schubert and Koole (2009) further suggest that our self-concept might be embodied in sensory-motor representations. They provide evidence that motor actions associated with power such as making a fist can lead male (but not female) individuals to perceive themselves as being more assertive, esteemed, and to display stronger associations between the self-concept and power. In a similar fashion, positive feedback had a greater effect (feelings of pride) on men when they were standing in an upright position rather than when they were having a slumped posture (Stepper and Strack 1993). In a study by Meier and Dionne (2009), gender was also found to moderate the impact of orientational metaphors. In particular, women were found more attractive to men when their images appeared in lower positions whereas women rated men as more attractive when their images appeared in higher positions. Meier and Dionne (2009) explained their results based on the evolutionary view that males desire powerless (i.e., youthful and faithful) women whereas women desire powerful (i.e., having status and resources) men. Personality traits might also be able to moderate the impact of metaphor on individuals' cognitive processes. For example, Meier and Robinson (2006) have found neuroticism to influence the focus of attendance. Participants who scored higher in neuroticism or depressive symptoms were faster to attend to the lower regions of visual space (Meier and Robinson 2006).

In sum, empirical findings within the psycholinguistic literature suggest that bodily states might be able to influence the processing of such concepts as those of force or power. More importantly, these studies indicate that gender and personality traits might moderate the impact of metaphor-based mental representations (see also Young, Zhang, and Peracchio 2010). In the advertising literature, there is some preliminary empirical evidence that gender might moderate the impact of metaphor on consumers' responses (Gkiouzepas 2013). In this study (Gkiouzepas 2013), men better liked an ad when the image of the advertised painkiller appeared above a headline containing the phrase "for headaches" as compared to a control ad. In a similar fashion to some of the findings within psycholinguistics, female individuals were not influenced by the arrangement of the ads. This latter study, however, was not explicitly designed to explore the moderating impact of gender or personality traits.

Thus, the aim of the present study is to fulfil this gap by examining the extent to which personality traits such as need for power moderate the impact of metaphor-ad layout consistency within the context of a power-related ad message. The concept of power was selected because a power can be readily associated with a personality trait (e.g., dominance, need for power, leadership, assertiveness) and b. past research in psycholinguistics suggest that power-related concepts influences basic cognitive processes. Therefore, the present study examines whether or not individuals' need for power moderates the impact of metaphor on persuasion and ad liking. In particular, it is expected that individuals will perceive the brand as being more powerful when the ad layout follows the mental representation of the metaphor "having force is up". This effect, however, might be moderated by individuals' propensity for power (nPow). Thus, it is hypothesized that:

H1a: Individuals with a high need for power will hold stronger brand attribute beliefs than individuals with a low need for power when the ad arrangement is consistent with the metaphor "having force is up".

H1b: Individuals with a high need for power will hold weaker brand attribute beliefs than individuals with a low need for power when the ad arrangement is inconsistent with the metaphor "having force is up".

Relationships of power usually involve two entities. Thus, it can be hypothesized that ad arrangement might have an impact on perceptions about the problem the advertised product is called to solve. In particular, it is expected that:

H2a: Individuals with a high need for power will perceive the problem the advertised product was designed to solve as being smaller than individuals with a low need for power when the ad arrangement is consistent with the metaphor "having force is up".

H2b: Individuals with a high need for power will perceive the problem the advertised product was designed to solve as being greater than individuals with a low need for power when the ad arrangement is inconsistent with the metaphor "having force is up".

Finally, metaphor-ad layout consistency might be able to have an effect on attitudes towards the ad (Gkiouzepas 2013). In general, messages that match individuals' self-schemata are viewed more favorably (Wheeler, Petty, and Bizer 2005). Thus, it was also hypothesized that:

H3a: Individuals with a high need for power will have a more positive attitude towards the ad than individuals with a low need for power when the ad arrangement is consistent with the metaphor "having force is up".

H3b: Individuals with a high need for power will have a less positive attitude towards the ad than individuals with a low need for power when the ad arrangement is inconsistent with the metaphor "having force is up".

3 Main Study

3.1 Stimuli

Metaphor-ad layout consistency was manipulated by placing the image of a human figure either above (metaphor-consistent layout) or below (metaphor-inconsistent layout) a headline containing the word "problems" in an ad for a consulting firm (see Figure 3). A text appeared next to the human figure. This text introduced the name of a fictitious firm (Gicon) and the service category ("business consultants"). The headline always appeared in the middle of the page in both the vertical and horizontal dimension. The choice of a business-consulting firm as the advertised service was made in order to be interesting to the sample of the study (students in a business class).

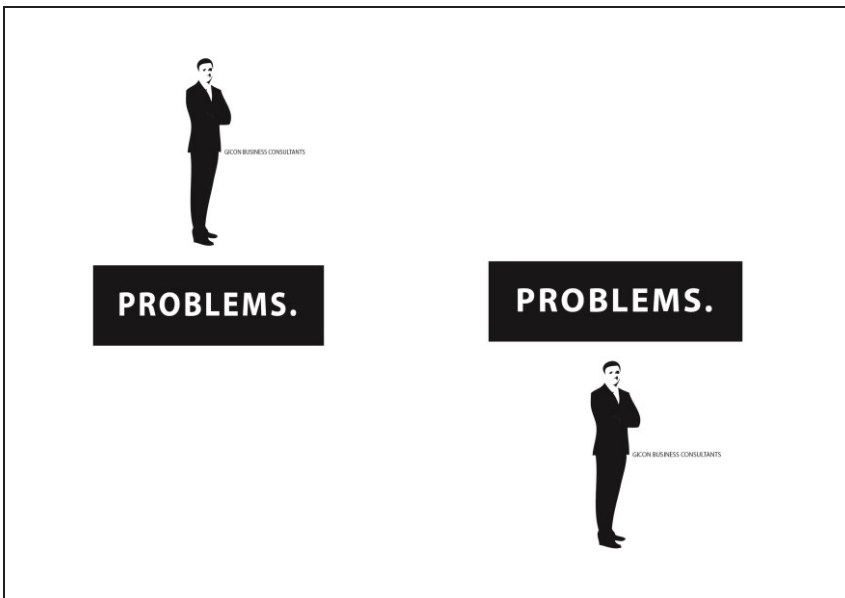


Figure 3: Ad stimuli

3.2 Procedure

Ninety-two participants took part in the study (66% women, $M_{\text{age}}=21.8$, age range: 20-28 years). Attribute belief strength was measured by means of a single item anchored by "strongly agree/strongly disagree" that asked participants to express their belief as to the degree to which the advertised consulting company has the ability to solve business problems as compared to other firms. Similarly, the size of the problem was measured by a single item scale anchored by "strongly agree/strongly disagree" that asked participants to state the degree to which they believed the size of the problems described by the ad was big. Ad liking was measured by the sum of three items anchored by "disliked/liked", "bad/good", and "unpleasant/pleasant" ($\alpha = .76$). Finally, a 5-point Likert scale, based on Tellegen's Multidimensional Personality Questionnaire (MPQ) was used to measure need for power (Goldberg et al. 2006). The scale consisted of 10 items. Principal component analysis of the ten items with varimax rotation revealed two factors. Three items reflecting extraversion ("keep in the background", "don't like to draw attention to myself", "have little to say") were not included in the scale because they had a low loading on the primary factor ($<.29$). These 3 items better reflected introversion rather than power-seeking tendencies. The primary factor consisted of 7 items ($\alpha = .82$) that accounted for 32.8% of the variance.

4 Results

Preliminary examination of the data indicated a significant interaction between gender, ad arrangement and nPow –thus, gender was included in the analysis. The data were analyzed based on $2 \times 2 \times 2$ analysis of variance with three between-participants factors. The first factor (ad arrangement) distinguishes between metaphor-consistent and -inconsistent ad layouts. The second factor (nPow) distinguishes between participants that scored high or low in need for power (median split).

Attribute belief strength was analyzed first. The analysis revealed a significant three-way interaction ($F(1, 84) = 4.54, p < .05$). The hypothesized pattern of means was observed only for men. Follow-up analysis focused on male participants. A significant two-way interaction was found between ad arrangement and need for power ($F(1, 27) = 5.95, p < .05$). This interaction indicated that men with a high need for power ($M = 5.57, SD = 1.13$) were significantly more persuaded ($F(1, 27) = 5.36, p < .05$) when the ad layout was consistent with the metaphor "having force is up" than men with a low nPow ($M = 3.86, SD = 1.57$). Thus, Hypothesis 1a was supported only for male participants. Although the pattern of means in the metaphor-inconsistent condition was such that men with a high nPow ($M = 4.40, SD = 1.58$) were less persuaded than men with a low nPow ($M = 5.14, SD = 1.07$), this

simple effect was not significant ($F(1, 27) = 1.18, p < \text{NS}$). Thus, Hypothesis 1b was not supported.

For purposes of data reporting completeness, it should be noted that men with a high need for power reported slightly stronger ($F(1, 27) = 2.94, p < .10$) brand attribute beliefs when the layout was metaphor-consistent (i.e., brand name appearing above “problems” headline) rather than metaphor-inconsistent (i.e., brand name appearing below “problems” headline). Interestingly, male participants with a low need for power were more persuaded by the inconsistent rather than by the consistent condition. This effect was also only marginally significant ($F(1, 27) = 3.01, p < .10$).

Perceived size of the “problems” mentioned in the ad was examined next. A two-way interaction between ad arrangement and nPow seems to support the hypothesized pattern of means ($F(1, 84) = 4.10, p < .05$). The simple effect of nPow within the metaphor-consistent condition on perceived problem size ($F(1, 84) = 3.18, p < .08$) suggested that individuals with a high need for power found the problems in the metaphor-consistent condition to be less intimidating ($M = 2.65, SD = 1.39$) than individuals with a low need for power ($M = 3.44, SD = 1.66$), supporting Hypothesis 2a. Although the pattern of means was in the expected direction, the difference between high- ($M = 3.12, SD = 1.56$) and low-nPow ($M = 2.77, SD = 1.27$) individuals within the inconsistent condition was not significant ($F(1, 84) = 1.12, p < \text{NS}$). Thus, Hypothesis 2b was not supported.

Attitude towards the ad was examined last. A two-way interaction between consistency and need for power was marginally significant ($F(1, 84) = 2.86, p < .09$). This interaction suggested that individuals with a high need for power ($M = 3.77, SD = 1.34$) did not like the metaphor-consistent layout more than participants with a low need for power ($M = 3.49, SD = 1.19; F < 1$). Thus, Hypothesis 3a was not supported. However, individuals with a high need for power ($M = 3.33, SD = 1.32$) liked the metaphor-inconsistent layout less than individuals with a low need for power ($M = 3.97, SD = 0.98; F(1, 84) = 3.35, p < .07$), supporting Hypothesis 3b.

5 Discussion

The current study contributes to the theory and practice of advertising by showing that deep-rooted metaphors can have an impact on persuasion. Furthermore, the present findings suggest that personality traits might moderate the impact of orientational metaphors. In particular, male individuals that scored high in need for power found a metaphor-consistent layout (i.e., that depicted the advertised brand name in a more “powerful position” over a headline containing the word “problems”) to be more persuasive than individuals that scored low in need for power. Furthermore, men that scored high in need for power found the metaphor-consistent layout to be marginally more persuasive than the metaphor-inconsistent layout. Overall, these findings suggest that advertisers should consider the mental representations induced by metaphor when making

decisions about the layout of ads with a power-related theme -at least when they communicate to a male audience. These are interesting findings because ads with a power-related message will probably target consumers with relevant psychographic attributes (i.e., with a high need for power). This finding becomes more remarkable in light of studies showing that high-power individuals are more likely to discount others' opinions (Mourali and Yang 2013).

The primary message in many ads is that the advertised product can be the solution to a problem. The present findings suggest that ad layout might also have an impact on consumers' perception of the size of the "problem". Specifically, both male and female participants that scored high in need for power found the problem to be less intimidating when exposed to a metaphor-consistent ad layout as compared to individuals that scored low in need for power. The managerial implications of such a finding are not straightforward. It might be more common for an ad to stress the superiority of the advertised product. However, some ads might instead want to emphasize the size of the problem (e.g., fear-appeal messages). To what extent such an approach might also negatively influence consumers' perceptions about the brands' ability to solve the problem is an interesting area for future research.

The impact of orientational metaphor on ad liking was only marginal significant. This result indicated that individuals with a high (rather than low) need for power liked less the metaphor-inconsistent ad layout. Ad liking was the only measure in the present study that a significant effect was found within the metaphor-inconsistent condition. Contrary to expectations, metaphor-inconsistent ad layouts did not have an effect on brand attribute beliefs or perceived problem size. These findings might be able to answer the question as to whether it is the match between stimuli and metaphor that drives metaphor effects or a mismatch that interferes with it (Schubert, 2005). In contrast to previous findings (Langston 2002), the present results suggest that metaphor-based mental representations facilitate the coding of consistent concurrent information. That is, it is a match that facilitates processing rather than a mismatch that interferes with it. Metaphor-based mental representations do not seem to negatively influence inconsistent information (see also Gkiouzepas 2013). However, this particular conclusion should be cautiously approached since the pattern of means in the inconsistent condition was in the opposite direction as compared to the scores observed in the consistent condition.

In general, the present study suggests that personality traits might be able to moderate the impact of orientational metaphor on consumers' responses. However, the personality trait examined in this study (i.e., need for power) moderated the impact of metaphor for male participants, but not for female participants. Following Meier and Dionne (2009), an explanation might be that a position of power in a managerial setting—such as that depicted in the present experimental stimuli—was more involving for men rather than women. This explanation might

also point to a limitation of the current study. That is, it might be that men and women satisfy their need for power in qualitatively different ways. Thus, future research might need to investigate whether the way a message is framed interacts with individuals' psychographic attributes.

In sum, the current study shows that orientational metaphor might play a significant role in consumers' cognitive processes. This finding has specific implications for decisions about the organization of print ads. Most notably, advertising research on the arrangement of ads should not be limited to issues of attention and prominence (Janiszewski 1990; Pieters and Wedel 2004). When the main message of an ad is structured by metaphor, the position of ad elements in relation to the mental representation evoked by metaphor might become a determinant factor. Metaphor-based mental representations might become even more important for consumers with a propensity towards the metaphor-structured concept (e.g., power). These consumers, however, more often than not will be the primary audience of such ads.

6 References

- Barsalou, L. W. (2008). Grounded Cognition. *Annual Review of Psychology*, 617-645.
- Casasanto, D., & Dijkstra, K. (2010). Motor action and emotional memory. *Cognition*, 115(1), 179-185.
- Crawford, E. L., Margolies, S. M., Drake, J. T., and Murphy, M. E. (2006). Affect biases memory of location: Evidence for the spatial representation of affect. *Cognition and Emotion*, 20, 1153-1169.
- Giessner, S. R., and Schubert, T. W. (2007). High in the hierarchy: How vertical location and judgments of leaders' power are interrelated. *Organizational Behavior and Human Decision Processes*, 104, 30-44.
- Gkiouzepas, L., (2013). Is your Ad Headline High Enough? The Influence of Orientational Metaphors on Affect and Comprehension for Print Advertisements. In the 12th *International Conference on Research in Advertising (ICORIA)*. Zagreb, Croatia: European Academy of Advertising.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40, 84-96.
- Janiszewski, C. (1990). The Influence of Print Advertisement Organization on Affect Toward a Brand Name. *Journal of Consumer Research*, 17, 53-65.
- Lakoff, G., and Johnson, M. (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.
- Langston, W. (2002). Violating Orientational Metaphors Slows Reading. *Discourse Processes*, 34, 281-310.
- Meier, B. P., and Dionne, S. (2009). Downright sexy: Verticality, implicit power, and perceived physical attractiveness. *Social Cognition*, 27, 883-892.
- Meier, B. P., Hauser, D. J., Robinson, M. D., Friesen, C. K., and Schjeldahl, K. (2007). What's "Up" With God? Vertical Space as a Representation of the Divine. *Journal of Personality and Social Psychology*, 93, 699-710.
- Meier, B. P., and Robinson, M. D. (2006). Does "feeling down" mean seeing down? Depressive symptoms and vertical selective attention. *Journal of Research in Personality*, 40, 451-461.
- Mintzberg, H. and Van der Heyden, L. (1999). Organigraphs: Drawing How Companies Really Work. *Harvard Business Review* (September-October), 87-94.

- Mourali, M., and Yang, Z. (2013). The Dual Role of Power in Resisting Social Influence. *Journal of Consumer Research*, 40(3), 539-554.
- Ortony, A. (1993). Metaphor, language, and thought. In A. Ortony (Ed.), *Metaphor and thought*(2nd ed., pp. 1-16). Cambridge: Cambridge University Press.
- Palma, T. A., Garrido, M. V., & Semin, G. R. (2011). Grounding person memory in space: Does spatial anchoring of behaviors improve recall? *European Journal of Social Psychology*, 41(3), 275-280.
- Pieters, R., and Wedel, M. (2004). Attention Capture and Transfer in Advertising: Brand, Pictorial, and Text-Size Effects. *Journal of Marketing*, 68, 36-50.
- Schubert, T. W. (2005). Your Highness: Vertical Positions as Perceptual Symbols of Power. *Journal of Personality and Social Psychology*, 89, 1-21.
- Schubert, T. W., and Koole, S. L. (2009). The embodied self: Making a fist enhances men's power-related self-conceptions. *Journal of Experimental Social Psychology*, 45, 828-834.
- Schubert, T. W., & Semin, G. R. (2009). Embodiment as a unifying perspective for psychology. *European Journal of Social Psychology*, 39(7), 1135-1141.
- Stepper, S., & Strack, F. (1993). Proprioceptive determinants of emotional and nonemotional feelings. *Journal of Personality and Social Psychology*, 64, 211-220.
- Tellegen, A. & Waller, N.G. (1992) Exploring personality through test construction: Development of the Multi-dimensional Personality Questionnaire (MPQ). *Unpublished manuscript*. Department of Psychology, University of Minnesota
- Wheeler, S. C., Petty, R. E., and Bizer, G. Y. (2005). Self-Schema Matching and Attitude Change: Situational and Dispositional Determinants of Message Elaboration. *Journal of Consumer Research*, 31, 787-797.
- Yang, X., Zhang, J., and Peracchio, L. A. (2010). Understanding the impact of self-concept on the stylistic properties of images. *Journal of Consumer Psychology*, 20, 508-520.

A Model to Classify Television Social Advertisements According to the Use of Positive or Negative Appeals

Beatriz Casais
João F. Proença

1 Positive and Negative Appeals in Social Marketing

Social Marketing consists on the use of marketing principles and techniques to influence behavior change with the goal of improving society and welfare (Andreasen 1994, 2003; Dann 2010; Kotler and Zaltman 1971; Smith 2000). There is evidence that interventions adopting social marketing have been effective in changing behaviors with expressive use and effectiveness in public health (Evans 2006; Evans and McCormack 2008; Gordon et al. 2006; Grier and Bryant 2005; Morris and Clarkson 2009; Stead et al. 2007; Walsh et al. 1993). One of the most important and effective tools of social marketing in public health has been social advertising, especially in television (Abroms and Maibach 2008; Block and Keller 1995; Della et al. 2008; Hastings et al. 1998).

Social marketing appeals may be expressed in a positive or negative way according to the intention of guiding behaviors. Positive appeals aim to show the direct benefits of a specific behavior, as an incentive to adopt it. Negative appeals describe unintended consequences of certain attitudes and behaviors, by creating psychic discomfort that leads to a disincentive or inhibition to behave in a certain way (Brennan and Binney 2010; Dillard and Anderson 2004). In order to inhibit people from continuing or adopting unhealthy behaviors, social marketing explores viewer reactions such as fear, guilt and shame with negative appeals such as threats (Boudewyns et al. 2013; Cauberghe et al. 2009; LaTour and Rotfeld 1997; Lewis et al. 2007; Ray and Wilkie 1970). On the contrary, positive appeals are based on humor, irony, hope, the exploration of benefits, and the use of celebrities or social models, who activate the coping response (Brennan and Binney 2010; Hastings et al. 2004; Lewis et al. 2007). A better understanding about the effectiveness of message appeals has long been a research challenge (Block and Keller 1995; Janis 1967; Lewis et al. 2007; Lewis et al. 2009) because the existing conclusions for the best direction – positive or negative - are not consistent (Block and Keller 1995; Brennan and Binney 2010; Dillard and Anderson 2004; Gardner and Wilhelm 1987; Hastings et al. 2004; Lewis et al. 2007; Lwin et al. 2010; Reeves et al. 1991). This topic is related to the self-efficacy understood by the receptor and efficacy levels of the message response (Block and Keller 1995; Manyiwa and Brennan 2012), as well as the motivation and involvement of the target, according to regulatory focus theory and the demographic factors that characterize it (Gygax et al. 2010; Higgins

1997; Jäger and Eisend 2013; Keller 2006; Keller and Lehmann 2008; Krisjanous et al. 2013; Yoon and Tinkham 2013).

It is crucial to analyze advertising appeals in order to understand the feelings evoked next to the receptors (Aaker et al. 1988). The research about social advertising involves several studies which require the analysis of the appeals used in advertisements which is a complex and subjective task. It is common to combine both positive and negative appeals in social ads, as the Ordered Protection Motivation Theory suggests (Eppright et al. 2003; Tanner et al. 1991) or the new tendency of combining fear with humor (Mukherjee and Dubé 2012; Yoon and Tinkham 2013). A methodological model to classify social advertisements according to their proportion use of positive and negative appeals might simplify the task and give a contribution to these research challenges.

2 A Model to Classify Social Advertisements

The literature uses to classify advertisements by the simple identification of presence/no presence of appeals, following their definitions without any model for qualitative analysis (Cismaru et al. 2009; Paek et al. 2010). Another methodology found is to classify advertisements using a population inquiry with a Likert scale from one to seven - one being totally negative, seven totally positive and four a combination of both (Biener et al. 2004). We also note the use of qualitative interviews or focus group in order to understand if people consider a social advertisement as positive, negative or a combination of both appeals (Brennan and Binney 2010; Soscia et al. 2012). Existing methodologies are difficult and expensive to develop, because they need respondents for inquiries or interviews. They can also be subjective and poor because the results may vary according to the respondents' technical knowledge of marketing and communication, who may not analyze the diverse forms of communication, since positive and negative appeals may be presented in advertisements in verbal or non-verbal forms (Anderson et al. 2006; Barthes 1964; DeRosia 2008; Mick 1986).

This research suggests a model to classify social advertisements focusing on health according to their use of positive or negative appeals with content and discourse analysis. The model is built from the definitions of positive and negative appeals in social marketing found in the literature and from an exploratory research conducted with external judges. It proposes to resolve this absence in the literature and assist rigorous qualitative research on this topic.

3 Methods

The authors started to build a first version of the model with the theoretical background of advertising creation and with the state of the art about the definitions of positive and negative appeals. That model was improved and strength-

ened with the identification of positive and negative appeals by a set of external judges in a sample range of social advertisements. The final model was tested with the comparison of results between its use by the researchers and the results of independent coders without using the model.

3.1 *The Conception of the Model*

The model, whose purpose is the advertisement analysis, was organized in three areas: 1) the story concept (Starks and Trinidad 2007), which is the creative guide and purpose of the advertisement; 2) verbal; and 3) non-verbal communication (Anderson et al. 2006; DeRosia 2008; Harris and Attour 2003; McQuarrie and Mick 1999; Vakratsas and Ambler 1999; Vaughn 1980). The research considered as important categories to analyze in verbal communication the narrative and slogan. As categories of non-verbal communication which may affect the meaning of messages the authors highlighted the music or tonality of voice (Craton and Lantos 2011), colors (Aslam 2006; Kress and Leeuwen 2002) and symbols of the scene (Anderson et al. 2006; DeRosia 2008; Harris and Attour 2003; McQuarrie and Mick 1999; Mick 1986; Puntoni et al. 2010; Vakratsas and Ambler 1999; Vaughn 1980). The authors searched for the definitions of positive and negative appeals in the literature and the model integrated the ideas that correspond to positive or negative appeals.

3.2 *The Empirical Test of the Model*

3.2.1 The Sample Data

HIV/AIDS prevention is considered a priority for public policies (Merson et al. 2008) and has been implemented with a range of social marketing activities, including social advertisements on television (Myhre and Flora 2000; Noar et al. 2009), which has been the most employed and effective media in AIDS prevention (Block and Keller 1995; Mattson and Basu 2010) and health-related social marketing in general (Fuhrel-Forbis et al. 2009; Self and Findley 2010). HIV prevention social advertisements also reveal contradictory results about the effectiveness of positive or negative appeals (Campbell and Babrow 2004; Eppright et al. 2002; Green and Witte 2006; Johnson and LaTour 1991; Lwin et al. 2010; Muthusamy et al. 2009; Sampson et al. 2001; Slavin et al. 2007; Smerecnik and Ruiters 2010; Terblanche-Smit and Terblanche 2010), suggesting the use of both positive and negative appeals.

The researchers used a sample of twenty television social advertisements preventing HIV/AIDS from a database of 375 HIV prevention television advertisements broadcasted until the end of 2011 in France, Germany, Portugal or Italy. The social advertisements were collected on the internet from January 1 to June 30 2012 and these four countries were those with more data within 539

advertisements collected in the same period from all the European Union countries. The sample included five advertisements from each of the four mentioned countries, dividing data into five chronological groups: 1987-1991; 1992-1996; 1997-2001; 2002-2006 and 2007-2011. As aleatory criteria to find the sample of twenty advertisements, the researchers selected the third of each group appearing in Nvivo software for each of the four countries, in alphabetical order of code. They were translated into English and totally transcribed to Nvivo software with descriptions of the story and the nonverbal communication.

3.2.2 The Analysis of Categories

The consensus of several judges might be more accurate than the judgment of any individual one (Perreault and Leigh 1989). The authors asked three external judges with wide academic experience in marketing and communication to view the twenty television social advertisements. One has an MBA, one a MSc in Marketing and one is PhD in Communication Sciences. After an individual briefing about the topic and a quick training about the tasks, the researchers asked the judges to complete an inquiry with an open question to identify the positive and negative appeals in the sample. In order confirm the conception of the model the answers of the judges were coded in the initial defined categories, using the N-Vivo software. The assessment of the judges' considerations also allowed the inclusion of new categories to the final model.

3.2.3 The Test of Model Classification

The external judges were also asked to grade the direction of each social advertisement from one to seven - one being a totally negative direction and seven totally positive, with four an equal combination of both appeals. This followed the Likert Scale method that has already been used in the literature (Biener et al. 2004).

In order to test the model, that grades were then compared with the results of the classifications done by one of the authors using the final proposed model, including new insights on the organization of categories that arose from the exploratory analysis. That classification was done with content analysis, considering the context of signs and the connotative associations with HIV/AIDS infection because the context is an important factor in qualitative and semiotic analysis (Mick 1986). Finally, each social advertisement was classified as positive or negative focused, depending on the proportion of references of each direction in all categories. Advertisements were classified as a combination of appeals when there was a draw between positive and negative appeals in each category or advertisement.

The research used the Proportional Reduction in Loss (PRL) approach to calculate reliability, an appropriate measure for qualitative judgment data (Rust

and Cooil 1994). In the case of 4 judges - 3 external judges and 1 of the authors – the agreements between the 6 pair of judgments were calculated. The design of the process of empirical test of the model can be analyzed in Figure 1.

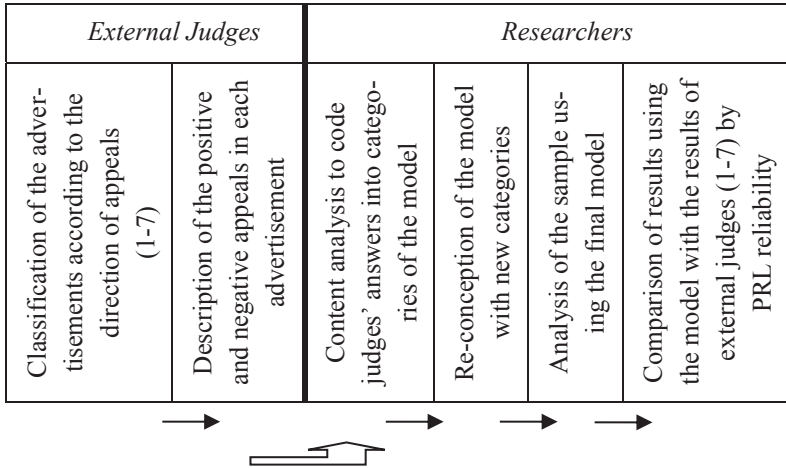


Figure 1: Design of the process of the empirical test of the model

4 Results

4.1 Categories of the Model

The researchers analyzed and coded the answers of judges identifying positive and negative appeals. Table 2 presents the 225 references eleven categories identified from a qualitative analysis. Those categories were re-organized into eight categories, as structured by tabs, because public figures or testimonials mentioned by the judges are characters of the advertisement. Symbols are part of the environment of the scenes and can also be joined in one category.

Table 1: Number of references from external judges discourse by categories

Category	No. References
Color	23
Character	15
Public Figure or Testimonial	8
Environment	21
Symbols	36
Humor	10
Music	19

Voice	2
Narrative	24
Slogan	11
Story	56
Total: 11	Total: 225

The results confirm the categories identified based on the background review and show that the characters and rhetoric figures as humor are important categories to add, as confirmed later in the literature (Barthes 1964; Chang and Yen 2013; Delbaere et al. 2011; Harris and Attour 2003; McQuarrie and Mick 1999). After identifying the signs related to the two new categories added to the previous model, we created the final model, shown in Table 2. The model consists of eight categories with literature support.

Table 2: Model to classify social advertisements as positive and negative appealed

Story Concept	
Positive	Negative
Benefits of intended behaviors (Brennan and Binney 2010; Cauberghe et al. 2009; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)	Dangerous consequences of unintended behaviors (Biener et al. 2004; Brennan and Binney 2010; Cauberghe et al. 2009; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)
Verbal Communication (oral/written)	
<i>Words/Expressions used in the narrative</i>	
Positive	Negative
Life, health, smile, love, respect, protect, prevent, treat, good, responsibility, copy, save, gains, intended, efficacy (Dillard and Anderson 2004; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)	Death, disease, illness, danger, fatality, fear, guilt, shame, risk, losses, bad, consequences, threat, effects, unintended (Brennan and Binney 2010; Cauberghe et al. 2009; Dillard and Anderson 2004; Hastings et al. 2004)
Slogan	
Positive	Negative
Incentive (Dillard and Anderson 2004)	Disincentive (Dillard and Anderson 2004)
Rhetoric Figures	
Positive	Negative
Humor, irony, empathy, motivating, advising, copy response (Dillard and Anderson 2004; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)	Shame, Frightening, Suspense with fear (Brennan and Binney 2010; Cauberghe et al. 2009; Dillard and Anderson 2004; Hastings et al. 2004)
Non-Verbal Communication	
<i>Tonality of Voice / Music</i>	
Positive	Negative

Motivating, exciting, empathic (Dillard and Anderson 2004; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)	Frightening, sad, noisy, threatening (Brennan and Binney 2010; Cauberghe et al. 2009; Dillard and Anderson 2004; Hastings et al. 2004)
<i>Colors</i>	
Positive	Negative
Varied palette, blues, green, white (Aslam 2006; Kress and Leeuwen 2002; Mick 1986)	Grey scale, red (Aslam 2006; Kress and Leeuwen 2002; Mick 1986)
<i>Signs in the Environment</i>	
Positive	Negative
Health, happiness, smiles, hedonism (Dillard and Anderson 2004; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)	Death, fear, guilt, shame, desperation (Brennan and Binney 2010; Cauberghe et al. 2009; Dillard and Anderson 2004; Hastings et al. 2004)
<i>Characters</i>	
Positive	Negative
Motivating/Confident people, social models, testimonial, public figures (Delbaere et al. 2011; Dillard and Anderson 2004; Hastings et al. 2004; Lewis et al. 2007; Lewis et al. 2009)	Frightened/worried people (Brennan and Binney 2010; Cauberghe et al. 2009; Dillard and Anderson 2004; Hastings et al. 2004)

4.2 *The Use of the Model*

For each advertisement, the researcher should code the transcriptions or notes corresponding to positive or negative appeals in each of the 8 categories. The negative form of discourse has to be considered in the syntax domain to avoid incorrect results (Hsieh and Shannon 2005). Considering the number of references coded in each category for each appeal, the researcher should classify those categories as positive or negative or even a combination of both. It is possible to classify a category as “Not Applicable”. It happens in advertisements without data on that category – an advertisement without narrative, or without characters or slogan, for example -, and if that absence has not a semiotics meaning. The final classification of the advertisement may be positive, negative or a combination, depending on the proportion of classifications in the eight categories. A social ad is only classified as a combination of appeals if there are an equal number of categories classified as positive, negative and/or combination of both. When there were several categories classified as a combination of appeals, the number of categories classified only as positive or negative usually resolved the draw. As social advertisements may include both negative and positive appeals (Eppright et al. 2002; Gallopel-Morvan et al. 2009), the final classification of social advertisements as positive, negative or a combination of both reflect the proportion of codifications as positive and negative in the differ-

ent categories of the model – more than 50% -, considering that each category has the same importance to the classification of social ads.

4.3 Reliability of the Model

We found that there is reliability in the model. We proposed three possible classifications to code data – positive, negative or an equal combination of both appeals and found 79.1% intercoding agreement in the classification of social advertisements of the sample. We measured the reliability of the model with the Proportional Reduction in Loss (PRL) approach proposed by Roland Rust and Bruce Cooil (1994). This result corresponds to a PRL reliability of 0.97 concerning the 4 judges, which means that we can be fairly confident in the classifications made in this exploratory analysis, as well as in the proposed model (Kassarjian 1977; Rust and Cooil 1994). Table 3 shows the intercoding agreements and PRL Reliability from external judges on a Likert Scale and from one of the researchers by the use of the proposed model.

Table 3: Interjudge agreements and PRL Reliability of judgments from external judges on a Likert Scale and from one of the researchers by the use of the model

Interjudge Agreements	95
Total Interjudge Agreements Possible	120
Proportion of Interjudge Agreement	0.791
PRL Reliability for 3 categories and 4 judges	0.97

The existing disagreements between the judges are not too accentuated because they respect to the differences of classification near the combination point of the Likert Scale. The model proposes the classification of an advertisement as combination when it shows an equal number of positive and negative appeals. This specific result would be hard to fit with the simple classification of the external judges, who did not have the model to help their analysis.

5 Conclusion and Research Implications

This study proposed a methodological model to classify social advertisements according to their use of positive, negative and equal combination of both appeals. The model is based on the definitions of positive and negative appeals and is confirmed with an exploratory research with sample data by the comparison of appeal classifications by three external judges and classification by one of the researchers, following the model created.

The results of this study allow confidence in reliability of the model, considering that by using this model in orienting the classification of appeal direction in social advertisements, a similar result can be found than by doing it without any model. The proposed model for classifying social advertisements into posi-

tive and negative appeals allows for a more rigorous and more inexpensive qualitative analysis than the previous methods identified in the literature. It also may lead the researcher to a deep discourse and semiotic analysis of the advertisements, both in verbal and non-verbal forms that might remain separate or even forgotten without the use of the model. The model has the advantage of minimizing classification errors. As positive and negative appeals in social advertising is an important research topic for psychology and marketing areas, this paper gives a relevant contribution to the knowledge with a tool that may simplify research concerning those topics.

6 Limitations and Further Research

The model allows the classification of social advertisements according to the presence and proportion of positive and negative appeals but does not provide the analysis of the order of their use, as focused by Ordered Protection Motivation Theory. Further research may use the present classification model to analyze the order that positive and negative appeals appear in social advertisements. The model was tested with audiovisual advertisements, since they include more dimensions. In the future the model can be also tested with other media, cancelling some categories as "Not Applicable". Future research may also discuss its effectiveness comparing the presence of positive and negative appeals in each advertisement categories so that it can be possible to understand the communication elements whose appeals work better.

7 References

- Aaker, D.A.;D.M. Stayman and R. Vezina (1988), "Identifying feelings elicited by advertising" in: *Psychology & Marketing*, Vol. 5, No. 1, 1-16.
- Abrams, L.C. and E.W. Maibach (2008), "The Effectiveness of Mass Communication to Change Behavior" in: *Annual Review of Public Health*, Vol. 29, No., 219-234.
- Anderson, S.J.;T. Dewhirst and P.M. Ling (2006), "Every document and picture tells a story: using internal corporate document reviews, semiotics, and content analysis to assess tobacco advertising" in: *Tobacco Control*, Vol. 15, No. 3, 254-261.
- Andreasen, A.R. (1994), "Social Marketing: Its Definition and Domain" in: *Journal of Public Policy & Marketing*, Vol. 13, No. 1, 108-114.
- Andreasen, A.R. (2003), "The Life Trajectory of Social Marketing Some Implications" in: *Marketing Theory*, Vol. 3, No. 3, 293-303.
- Aslam, M.M. (2006), "Are You Selling the Right Colour? A Cross-cultural Review of Colour as a Marketing Cue" in: *Journal of Marketing Communications*, Vol. 12, No. 1, 15-30.
- Barthes, R. (1964), "Éléments de sémiologie" in: *Communications*, Vol. 4, No. 4, 91-135.
- Biener, L.;M. Ji;E.A. Gilpin and A.B. Albers (2004), "The Impact of Emotional Tone, Message, and Broadcast Parameters in Youth Anti-Smoking Advertisements" in: *Journal of Health Communication: International Perspectives*, Vol. 9, No. 3, 259-274.
- Block, L.G. and P.A. Keller (1995), "When to Accentuate the Negative: The Effects of Perceived Efficacy and Message Framing on Intentions to Perform a Health-Related Behavior" in: *Journal of Marketing Research*, Vol. 32, No. 2, 192-203.

- Boudewyns, V.;M.M. Turner and R.S. Paquin (2013), "Shame-Free Guilt Appeals: Testing the Emotional and Cognitive Effects of Shame and Guilt Appeals" in: *Psychology & Marketing*, Vol. 30, No. 9, 811-825.
- Brennan, L. and W. Binney (2010), "Fear, guilt, and shame appeals in social marketing" in: *Journal of Business Research*, Vol. 63, No. 2, 140-146.
- Campbell, R.G. and A.S. Babrow (2004), "The Role of Empathy in Responses to Persuasive Risk Communication: Overcoming Resistance to HIV Prevention Messages" in: *Health Communication*, Vol. 16, No. 2, 159-182.
- Caubergh, V.;P.D. Pelsmacker;W. Janssens and N. Dens (2009), "Fear, Threat and Efficacy in Threat Appeals: Message Involvement as a Key Mediator to Mesasge Acceptance" in: *Accident Analysis and Prevention*, Vol. 41, No. 2, 276-285.
- Chang, C.-T. and C.-T. Yen (2013), "Missing Ingredients in Metaphor Advertising: The Right Formula of Metaphor Type, Product Type, and Need for Cognition" in: *Journal of Advertising*, Vol. 42, No. 1, 80-94.
- Cismaru, M.;A.M. Lavack and E. Markewich (2009), "Social Marketing Campaigns Aimed at Preventing Drunk Driving" in: *International Marketing Review*, Vol. 26, No. 3, 292-311.
- Craton, L.G. and G.P. Lantos (2011), "Attitude toward the advertising music: an overlooked potential pitfall in commercials" in: *Journal of Consumer Marketing*, Vol. 28, No. 6, 396-411.
- Dann, S. (2010), "Redefining social marketing with contemporary commercial marketing definitions" in: *Journal of Business Research*, Vol. 63, No. 2, 147-153.
- Delbaere, M.;E.F. McQuarrie and B.J. Phillips (2011), "Personification in Advertising" in: *Journal of Advertising*, Vol. 40, No. 1, 121-130.
- Della, L.J.;D. Eroglu;J.M. Bernhardt;E. Edgerton and J. Nall (2008), "Looking to the Future of New Media in Health Marketing: Deriving Propositions Based on Traditional Theories" in: *Health Marketing Quarterly*, Vol. 25, No. 1, 147-174.
- DeRosia, E.D. (2008), "The effectiveness of nonverbal symbolic signs and metaphors in advertisements: An experimental inquiry" in: *Psychology & Marketing*, Vol. 25, No. 3, 298-316.
- Dillard, J.P. and J.W. Anderson (2004), "The Role of Fear in Persuasion" in: *Psychology & Marketing*, Vol. 21, No. 11, 909-926.
- Eppright, D.R.;J.B. Hunt;J.F. Tanner Jr. and G.R. Franke (2002), "Fear, coping, and information: a pilot study on motivating a healthy response" in: *Health Marketing Quarterly*, Vol. 20, No. 51-73,
- Eppright, D.R.;J.B. Hunt;J.F. Tanner Jr. and G.R. Franke (2003), "Fear, coping, and information: a pilot study on motivating a healthy response" in: *Health Marketing Quarterly*, Vol. 20, No. 1, 51-73.
- Evans, W.D. (2006), "How Social Marketing works in health care" in: *British Medical Journal*, Vol. 322, No. 7551, 1207-1210.
- Evans, W.D. and L. McCormack (2008), "Applying Social Marketing in Health Care: Communicating Evidence to Change Consumer Behavior" in: *Medical Decision Making*, Vol. 28, No. 5, 781-792.
- Fuhrel-Forbis, A.;P.G. Nadorff and L.B. Snyder (2009), "Analysis of Public Service Announcements on National Television, 2001-2006" in: *Social Marketing Quarterly*, Vol. 15, No. 1, 49 — 69.
- Gallopel-Morvan, K.;P. Gabriel;M.L. Gall-Ely;S. Rieunier and B. Urien (2009), "The use of visual warnings in social marketing: The case of tobacco" in: *Journal of Business Research*, Vol. 64, No. 1, 7-11.
- Gardner, M.P. and J.F.O. Wilhelm (1987), "Consumer responses to ads with positive vs. negative appeals: some mediating effects of context induced mood and congruency between context and ad" in: *Current Issues and Research in Advertising*, Vol. 10, No. 1, 81-98.

- Gordon, R.;L. McDermmot;M. Stead and K. Angus (2006), "The Effectiveness of Social Marketing Interventions for Health Improvement: What's the Evidence?" in: *Public Health*, Vol. 120, No. 12, 1113-1139.
- Green, E.C. and K. Witte (2006), "Can Fear Arousal in Public Health Campaigns Contribute to the Decline of HIV Prevalence?" in: *Journal of Health Communication: International Perspectives*, Vol. 11, No. 3, 245-259.
- Grier, S. and C.A. Bryant (2005), "Social Marketing in Public Health" in: *Annual Review of Public Health*, Vol. 26, No., 319-339.
- Gygax, P.M.;M. Bosson;C. Gay and F. Ribordy (2010), "Relevance of Health Warnings in Cigarette Packs: A Psycholinguistic Investigation" in: *Health Communication*, Vol. 25, No. 5, 397-409.
- Harris, G. and S. Attour (2003), "The International Advertising Practices of Multinational Companies A Content Analysis Study" in: *European Journal of Marketing*, Vol. 37, No. 1/2, 154-168.
- Hastings, G.;M. Stead;R. Lowry;L. MacFadyen;D. McVey;L. Owen and K. Tomes (1998), "Using The Media to Tackle the Health Divide: Future Directions" in: *Social Marketing Quarterly*, Vol. 4, No. 3, 42-67.
- Hastings, G.;M. Stead and J. Webb (2004), "Fear Appeals in Social Marketing: Strategic and Ethical Reasons for Concern" in: *Psychology & Marketing*, Vol. 21, No. 11, 961-986.
- Higgins, E.T. (1997), "Beyond Pleasure and Pain" in: *American Psychologist*, Vol. 52, No. 12, 1280-1300.
- Hsieh, H.-F. and S.E. Shannon (2005), "Three Approaches to Qualitative Content Analysis " in: *Qualitative Health Research*, Vol. 15, No. 9, 1277-1288.
- Jäger, T. and M. Eisend (2013), "Effects of Fear-Arousing and Humorous Appeals in Social Marketing Advertising: The Moderating Role of Prior Attitude Toward the Advertised Behavior" in: *Journal of Current Issues & Research in Advertising*, Vol. 34, No. 1, 125-134.
- Janis, I.L. (1967) Effects of fear arousal on attitude change: Recent developments in theory and experimental research. In: Berkowitz L (ed) *Advances in experimental social psychology*, vol 3. Academic Press, New York,
- Johnson, K. and M.S. LaTour (1991), "AIDS Prevention and College Students: Male and Female Responses to "Fear-Provoking" Messages" in: *Health Marketing Quarterly*, Vol. 8, No. 3/4, 139-153.
- Kassarjian, H.H. (1977), "Content Analysis in Consumer Research" in: *The Journal of Consumer Research*, Vol. 4, No. 1, 8-18.
- Keller, P.A. (2006), "Regulatory Focus and Efficacy of Health Messages" in: *Journal of Consumer Research*, Vol. 33, No. 1, 109-114.
- Keller, P.A. and D.R. Lehmann (2008), "Designing Effective Health Communications: A Meta-Analysis" in: *Journal of Public Policy & Marketing*, Vol. 27, No. 2, 117-130.
- Kotler, P. and G. Zaltman (1971), "Social Marketing: An Approach to Planned Social Change" in: *Journal of Marketing*, Vol. 35, No. 3, 3-12.
- Kress, G. and T.V. Leeuwen (2002), "Colour as a semiotic mode: notes for a grammar of colour" in: *Visual Communication*, Vol. 1, No. 3, 343-368.
- Krisjanous, J.;N.J. Ashill;K. Eccarius and J. Carruthers (2013), "Scared Stiff? The Effectiveness of Threat Appeals in Counseling Services Advertising to High-Anxiety Students" in: *Psychology & Marketing*, Vol. 30, No. 10, 874-890.
- LaTour, M.S. and H.J. Rotfeld (1997), "There are Threats and (Maybe) Fear-Caused Arousal: Theory and Confusions of Appeals to Fear and Fear Arousal Itself" in: *Journal of Advertising*, Vol. 26, No. 3, 45-59.

- Lewis, I.M.;B. Watson;K.M. White and R. Tay (2007), "Promoting Public Health Messages: Should We Move Beyond Fear-Evoking Appeals in Road Safety?" in: *Qualitative Health Research*, Vol. 17, No. 1, 61-74.
- Lewis, I.M.;B.C. Watson and K.M. White (2009), "Response efficacy : the key to minimizing rejection and maximizing acceptance of emotion-based anti-speeding messages" in: *Accident Analysis & Prevention*, Vol. 42, No. 2, 459-467.
- Lwin, M.O.;A.J.S. Stanaland and D. Chan (2010), "Using Protection Motivation Theory to Predict Condom Usage and Assess HIV Health Communication Efficacy in Singapore" in: *Health Communication*, Vol. 25, No. 1, 69-79.
- Manyiwa, S. and R. Brennan (2012), "Fear appeals in anti-smoking advertising: How important is self-efficacy?" in: *Journal of Marketing Management*, Vol. 28, No. 11-12, 1419-1437.
- Mattson, M. and A. Basu (2010), "The Message Development Tool: A Case for Effective Operationalization of Messaging in Social Marketing Practice" in: *Health Marketing Quarterly*, Vol. 27, No. 3, 275-290.
- McQuarrie, E.F. and D.G. Mick (1999), "Visual Rhetoric in Advertising: Text Interpretive, Experimental, and Reader Response Analyses" in: *Journal of Consumer Research*, Vol. 26, No. 1, 37-54.
- Merson, M.H.;J. O'Malley;D. Serwadda and C. Apisuk (2008), "The history and challenge of HIV prevention" in: *Lancet*, Vol. 372, No. 9637, 475-488.
- Mick, D.G. (1986), "Consumer Research and Semiotics: Exploring the Morphology of Signs, Symbols, and Significance" in: *Journal of Consumer Research*, Vol. 13, No. 2, 196-213.
- Morris, Z.S. and P.J. Clarkson (2009), "Does Social Marketing Provide a Framework for Changing Healthcare Practice?" in: *Health Policy*, Vol. 91, No. 2, 135-141.
- Mukherjee, A. and L. Dubé (2012), "Mixing emotions: The use of humor in fear advertising" in: *Journal of Consumer Behaviour*, Vol. 11, No. 2, 147-161.
- Muthusamy, N.;T.R. Levine and R. Weber (2009), "Scaring the Already Scared: Some Problems with HIV/AIDS Fear Appeals in Namibia" in: *Journal of Communication*, Vol. 59, No. 2, 317-344.
- Myhre, S.L. and J.A. Flora (2000), "HIV/AIDS Communication Campaigns: Progress and Prospects" in: *Journal of Health Communication: International Perspectives*, Vol. 5, No. 1, 29-45.
- Noar, S.M.;P. Palmgreen;M. Chabot;N. Dobransky and R.S. Zimmerman (2009), "A 10-Year Systematic Review of HIV/AIDS Mass Communication Campaigns: Have We Made Progress?" in: *Journal of Health Communication: International Perspectives*, Vol. 14, No. 1, 15-42.
- Paek, H.-j.;K. Kim and T. Hove (2010), "Content Analysis of Antismoking videos on YouTube: message sensation value, message appeals, and their relationships with viewer responses" in: *Health Education Research*, Vol. 25, No. 6, 1085-1099.
- Perreault, W.D. and L.E. Leigh (1989), "Reliability of Nominal Data Based on Qualitative Judgments" in: *Journal of Marketing Research*, Vol. 26, No. 2, 135-148.
- Puntoni, S.;J.E. Schroeder and M. Ritson (2010), "Meaning Matters" in: *Journal of Advertising*, Vol. 39, No. 2, 51-64.
- Ray, M.L. and W.L. Wilkie (1970), "Fear: The Potential of an Appeal Neglected by Marketing" in: *Journal of Marketing*, Vol. 34, No. 1, 54-62.
- Reeves, B.R.;J. Newhagen;E.Maibach;M. Basil and K. Kurz (1991), "Negative and positive television messages: effects of message type and context on attention and memory" in: *American Behavioral Scientist*, Vol. 34, No. 6, 679-694.
- Rust, R.T. and B. Cooil (1994), "Reliability Measures for Qualitative Data: Theory and Implications" in: *Journal of Marketing Research*, Vol. 31, No. 1, 1-14.

- Sampson, J.;K. Witte;K. Morrison;W.-Y. Liu;A.P. Hubbell and L. Murray-Johnson (2001), "Addressing Cultural Orientations in Fear Appeals: Promoting AIDS-Protective Behaviors among Mexican Immigrant and African American Adolescents and American and Taiwanese College Students" in: *Journal of Health Communication: International Perspectives*, Vol. 6, No. 4, 335-358.
- Self, D.R. and C.S. Findley (2010), "Sensation Seekers as a Healthcare Marketing Metasegment" in: *Health Marketing Quarterly*, Vol. 27, No. 1, 21-47.
- Slavin, S.;C. Batrouney and D. Murphy (2007), "Fear appeals and treatment side-effects: an effective combination for HIV prevention?" in: *AIDS Care*, Vol. 19, No. 1, 130-137.
- Smerecnik, C.M.R. and R.A.C. Ruiter (2010), "Fear appeals in HIV prevention: The role of anticipated regret" in: *Psychology, Health & Medicine*, Vol. 15, No. 5, 550-559.
- Smith, W.A. (2000), "Social Marketing: An Evolving Definition" in: *American Journal of Health Behavior*, Vol. 24, No. 1, 11-17.
- Soscia, I.;A. Turrini and E. Tanzi (2012), "Non Castigat Ridendo Mores: Evaluating the Effectiveness of Humor Appeal in Printed Advertisements for HIV/AIDS Prevention in Italy" in: *Journal of Health Communication: International Perspectives*, Vol. 17, No. 9, 1011-1027.
- Starks, H. and S.B. Trinidad (2007), "Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory" in: *Qualitative Health Research*, Vol. 17, No. 10, 1372-1380.
- Stead, M.;R. Gordon;K. Angus and L. McDermott (2007), "A Systematic Review of Social Marketing Effectiveness" in: *Health Education*, Vol. 107, No. 2, 126-191.
- Tanner, J.F.;J.B.H. J. and D.R. Eppright (1991), "The Protection Motivation Model: A Normative Model of Fear Appeals" in: *Journal of Marketing*, Vol. 55, No. 3, 36-45.
- Terblanche-Smit, M. and N.S. Terblanche (2010), "Race and attitude formation in HIV/Aids fear advertising" in: *Journal of Business Research*, Vol. 63, No. 2, 121-125.
- Vakratsas, D. and T. Ambler (1999), "How Advertising Works: What Do We Really Know?" in: *Journal of Marketing*, Vol. 63, No. 1, 26-43.
- Vaughn, R. (1980), "How advertising works: A planning model" in: *Journal of Advertising Research*, Vol. 20, No. 5, 27-33.
- Walsh, D.C.;R.E. Rud;B.A. Moeykens and T.W. Moloney (1993), "Social Marketing for Public Health" in: *Health Affairs*, Vol. 12, No. 2, 104-119.
- Yoon, H.J. and S.F. Tinkham (2013), "Humorous Threat Persuasion in Advertising: The Effects of Humor, Threat Intensity, and Issue Involvement" in: *Journal of Advertising*, Vol. 42, No. 1, 30-41.

Color in Print Advertising: Effects on Implicit and Explicit Memory and Priming

Antigone G. Kyrousi
George G. Panigyrakis

1 Introduction

The notion that color, as a creative element, should affect consumer responses to advertising often seems a self-evident proposition to academicians and advertising practitioners alike. Nevertheless, it has been repeatedly pointed out that consumer responses to color still remain a largely unknown area (Lichtlé, 2007; Lohse and Rosen, 2001). The acknowledged scarcity of systematic empirical research on the issue within advertising and marketing (Gorn, Chattopadhyay, Yi and Dahl, 1997; Labrecque, Patrick and Milne, 2013) is striking, given the abundance of anecdotal evidence and almost axiomatic assertions which overwhelm anyone who performs even a cursory Google search on the matter. The effect of color on memory is the aspect of color inquiry which has mostly attracted researchers' interest within the attestedly limited literature on the subject within advertising (Panigyrakis and Kyrousi, 2014), perhaps due to the fact that memory measures, such as recall and recognition, are among the most frequently employed traditional metrics to assess advertising effectiveness (Mehta and Purvis, 2006). Extant studies have nonetheless produced conflicting evidence (Donthu, Cherian and Bhargava, 1993; Gronhaug, Kvitastein and Gronmo, 1991; Lehmann and Shemwell, 2011); as a result, little can be claimed with certainty regarding which colors, if any, render the ad more memorable, or even as to whether colored advertisements should be preferred over black and white ones. The state of current knowledge on color effects on memory is further aggravated by the fact that existing research has solely employed measures capturing a single aspect of memory, namely explicit memory. However, this is far from illustrating the whole picture, as there seems to be another yet un-addressed possibility, that of color in advertising affecting consumers' implicit memory.

The two experiments described in this chapter address this research gap by investigating color effects in print advertising on explicit and implicit memory in different involvement conditions (Study 1) and by looking into the influence of color on priming (Study 2). The chapter is structured as follows: first, the theoretical background is presented and the corresponding hypotheses are formulated. Then, the methodology and findings of each study are described. The chapter concludes with a general discussion of the findings and the identifica-

tion of theoretical and managerial implications, as well as limitations of the studies and directions for future research.

2 Theoretical Background

Although evidence on the relationship between the color of an advertisement and consumer memory can be traced as early as the beginning of the previous century (Gilbert, 1933; Nixon, 1925), it is not until the last decades of the century, with the advent of full-color printing technology and the increasing diffusion of color ads, that systematic research attempts to quantify the extent to which diverse executional elements, including color, contribute to advertising effectiveness (often assessed through recall and recognition) begin to appear (Donthu, Cherian and Bhargava, 1993; Gronhaug, Kvitastein and Gronmo, 1991; Hendon, 1973; Meyers-Levy and Perrachio, 1995; Naccarato and Neuendorf, 1998; Ray, Sawyer and Strong, 1971). The latter studies nonetheless yield contradicting evidence; indicatively, Gronhaug, Kvitastein and Gronmo (1991) and Hendon (1973) report that full-colored ads outperform black and white ones in recognition tests, Naccarato and Neuendorf (1998) similarly argue that colored ads scored better than black and white ones in terms of aided recall, whereas Donthu, Cherian and Bhargava (1993) conclude that black and white outdoor ads are better recalled than colored ones. Interestingly, such studies seem to offer little, if any, theoretical support for the hypothesized influence of color on recall/ recognition but rather base their predictions on evidence from industry reports (Gronhaug, Kvitastein and Gronmo, 1991) or predictions by advertising executives (Donthu, Cherian and Bhargava, 1993). This implicit assumption that color, as well as other creative elements, should serve as a “mechanical variable” (Percy, 1983, p. 95), appears to be underpinned by the Information Processing view of advertising processing, which has received substantial criticism over the years (cf. Heath and Feldwick, 2008; Vakratsas and Ambler, 1999).

In stark contrast with the assumption that the contemporary consumer “cognitively and consciously processes information received from advertising” (Penn, 2006, p. 516) and that color’s main purpose in advertising should be to aid such processing (Rossiter and Percy, 1997, p. 420), we argue that if color indeed facilitates the memorization of the ad, this is done implicitly and not explicitly. According to the Low Involvement Processing Model (LIPM), creative elements in advertising are mostly processed implicitly, with emotive values attached to them becoming implicitly associated with the brand itself and stored in implicit memory (Heath, 2012, p. 172). This line of thinking concurs with Color-in-Context Theory, a recent integrative theoretical account of responses to color (Elliot and Maier, 2007; 2012), which considers color an “implicit affective cue”, eliciting internal responses in the individuals outside of conscious awareness (Elliot and Maier, 2012, p. 68).

The existence of more than one type of memory and the distinction between implicit and explicit memory is well-documented in psychology (cf. Roediger, 1990) and has received increasing interest in contemporary advertising research (indicatively: Duke and Carlson, 1993, 1994; Goode, 2007; Shapiro and Krishnan, 2001). By definition, explicit memory is revealed when there is conscious and intentional retrieval of information, whereas implicit memory is indicated by facilitation in performance in a task that can be attributed to previously presented information (Graf and Schacter, 1985). Implicit memory is thought to be underlined by priming, an activation process “whereby unobtrusive prior exposure to information increases the accessibility of the primed information” (Finlay, Marmurek and Morton, 2005, p. 443). There are two types of priming, perceptual and conceptual priming; perceptual priming is the phenomenon whereby the perceptual fluency of the stimulus is enhanced and as a result the stimulus is identified more easily in subsequent encounters (Jacoby and Dallas, 1981), while conceptual priming reflects the enhancement of the conceptual fluency of the stimulus (Tulving and Schacter, 1990)¹. Both conceptual and perceptual priming are thought to underlie implicit memory as distinct constructs; implicit memory, according to this view, can be further distinguished into conceptually and perceptually driven implicit memory (Lee, 2002; Roediger, 1990).

The central issue that this chapter is concerned with is hence, first, to examine whether color in fact affects implicit memory, and second, to investigate if it influences perceptual or conceptual implicit memory. From a theoretical standpoint, on the basis of the previous discussion, it is argued that the addition of color in an ad will facilitate the *implicit* retrieval of the advertised brand because the *meaning* of the color will be implicitly transferred to the brand itself making the latter easier to identify in subsequent encounters. The chapter goes on to describe two studies designed to test this theoretical proposition and the corresponding hypotheses.

3 Study 1: Color Effects on Explicit and Implicit Memory

3.1 Overview, Purpose and Hypotheses

Study 1 has a two-fold purpose: first, to assess whether color in print advertising has in fact an effect on consumers’ explicit memorization of advertised brands in diverse involvement conditions and, second, to investigate the thus far unaddressed possibility of color in advertising influencing implicit memory. To this end, four sets of hypotheses were formulated regarding the predicted effects

¹Perceptual fluency refers to the ease of processing the perceptual characteristics of a given stimulus (Bornstein and D’Agostino, 1994), whereas conceptual fluency is the ease of processing the meaning of a stimulus (Whittlesea, 1993).

of advertisement colored backgrounds varying across a single color dimension, that of hue² (blue, red and achromatic), on explicit and implicit memory. The inclusion of involvement serves a dual purpose: first, its manipulation is expected to result in dissociations between explicit and implicit memory measures, given that it has been suggested to affect explicit, but not implicit, memory (Duke and Carlson, 1993) and second, because involvement is thought to moderate responses to ads according to the LIPM (Heath, 2001). For methodological reasons, which will be described in the corresponding section, explicit and implicit memory were assessed through two types of measures; explicit memory was assessed through a direct memory test and a calculation of the conscious memory component, whereas implicit memory was assessed through an indirect memory test and a calculation of the automatic memory component.

In accordance with the foregoing theorizing, it is proposed that color will not, under any exposure circumstances, operate as a “mechanical variable” (Percy, 1983, p. 95), aiding the conscious recognition of the advertised brand (Rossiter and Percy, 1997, p. 420); contrariwise, and in line with the view that creative elements “are not aids to recall or attention” (Heath and Feldwick, 2008, p. 51), it is suggested that the ads’ dominant color will have no effect on the explicit memorization of the advertised brands. Hence:

H1a: Performance on the direct memory test for colored advertisements will not differ from that for non-colored advertisements in both high and low involvement conditions.

H1b: Performance on the direct memory test for advertisements with a red dominant color (hue) will not differ from that for advertisements with a blue dominant color (hue) in both high and low involvement conditions.

Regarding color effects on implicit memory, in consonance with the LIPM and Color-in-Context Theory, it is suggested that color can function outside of conscious awareness, as an “implicit affective cue” (Elliot and Maier, 2012, p. 68). Such a prediction is also supported by a number of psychological studies which have demonstrated that color impacts implicit memory (Gerend and Sias, 2009; Mecklenbrauker, Hupback and Wippich, 2001; Uttl, Graf and Santacruz, 2006; Wippich and Mecklenbrauker, 1998). In addition, other creative elements, such as humor and music have been shown to affect implicit memory in extant advertising studies (Alexomanolaki, Loveday and Kennett, 2007; Hansen, Strick, Van Baaren, Hooghuis, and Wigboldus, 2009). As for the effect of dif-

²Although it has been well accepted that color has three separate properties, namely hue, saturation and brightness (Gorn, Chatopadhyay, Yi and Dahl, 1997), for reasons of simplicity, given the scarcity of research on the impact of the other two dimensions on memory, only hue was included in the studies.

ferent colors on implicit memory, research in the field of psychology still remains inconclusive, as reported by Vernon and Lloyd-Jones (2003). Given the absence of theoretical clarity, no specific hypothesis referring to the effect of blue versus red advertisement background on implicit memory is formed. Thus:

H2: Performance on the indirect memory test for colored advertisements will be better than that for non-colored advertisements in both high and low involvement conditions.

Two additional sets of hypotheses were formulated so as to determine whether conscious and automatic processing yield a pattern of results similar to that of the direct and indirect memory tests. This is critical in order to be able to sustain that the task distinction corresponds to a process distinction (Kelley and Jacoby, 2000). A similar pattern of results to those predicted by Hypotheses 1 and 2 can be therefore expected for the conscious and automatic memory components respectively. Specifically:

H3a: The conscious memory component for colored advertisements will not differ from that for non-colored advertisements in both high and low involvement conditions.

H3b: The conscious memory component for advertisements with a red dominant color (hue) will not differ from that for advertisements with a blue dominant color (hue) in both high and low involvement conditions.

H4: The automatic memory component for colored advertisements will be higher than that for non-colored advertisements in both high and low involvement conditions.

3.2 *Methodology*

To test the hypotheses, a 3x2 (hue x involvement) between-subjects factorial experiment was conducted, with the participation of 210 undergraduate students (randomly assigned to conditions), in exchange for course credit.

3.2.1 Manipulations and Measures

Regarding the manipulations of the independent variables, color (hue) was manipulated through the insertion of three different backgrounds in the target ads: a blue (5B 2/7), a red (5R 2/7) and an achromatic, white (N 9.5) one³. The

³ The notations of the specific colors in the Munsell color system (Kuehni, 2002, p. 272-286) are included in the parentheses. These specific shades were selected because they have identical values for saturation and brightness, which are hereby kept constant, in order to eliminate

selection of hues was based on the colors most often cited in previous relevant research (Gorn et al., 1997). As for involvement, it is conceptualized adopting the definition of Mitchell (1981) as an internal state of arousal with intensity (level of attention allocated to the ad) and direction (brand or non-brand evaluation strategies employed by the individual) properties (Laczniak, Muehling, and Grossbart, 1989). It is thus considered that high involvement occurs only when both attention is high and there is a brand evaluation processing strategy, whereas low involvement occurs either when there is an attentional deficit or a non-brand strategy (Gardner, Mitchell and Russo, 1985). Correspondingly, the manipulation of involvement was based on the manipulation of its two dimensions; attention was manipulated through the use of a radio program (Shapiro and Krishnan, 2001), under the “distraction paradigm” (Gardner et al., 1985, p. 11), while direction was manipulated through verbal instructions directing participants to evaluate the advertised brands (for the high involvement condition) or making no reference to the ads (for the low involvement condition) (Heath, 2012, p. 129). Manipulation checks for the two dimensions of involvement (Shapiro and Krishnan, 2001; Laczniak et al., 1989) were included.

Moving on to the dependent measures, it should be initially noted that within psychological literature, much debate surrounds the appropriateness of different methodological processes to capture and distinguish implicit from explicit memory (cf. Bornstein and D’Agostino, 1994; Roediger, 1990). In this experiment, two of the most pertinent approaches, the Retrieval Intentionality Criterion (Schacter, Bowers and Booker, 1989) and the Process Dissociation Procedure (Kelley and Jacoby, 2000) were simultaneously adopted, as suggested by Shapiro and Krishnan (2001). Based on the Retrieval Intentionality Criterion, a direct test was used to assess explicit memory, whereas an indirect test was employed to assess implicit memory. The indirect memory test asked participants to select the brand they were more likely to choose if they were purchasing the product listed (Shapiro and Krishnan, 2001); the score was the percentage of right answers minus a baseline performance level (Lee, 2002), which was obtained from 29 subjects who completed the test without being exposed to the ads ($M = 0.31$). The direct memory test was a typical forced-choice recognition task (Krishnan and Chakravarti, 1999); the score was the percentage of correct answers. The direct and indirect tests were identical with only the instructions alternating, and test awareness was assessed with 2 open-ended questions (Bowers and Schacter, 1990). Additionally, since it cannot be a priori assumed that there is a one to one mapping from task to process (Kelley and Jacoby, 2000), the PDP was used to separate the automatic and the conscious memory compo-

nents⁴. For the purposes of the PDP, an inclusion and an exclusion task, two identical tasks which only differed in terms of the instructions (inclusion/exclusion) given, were completed by the participants; probability equations adapted from Hansen et al. (2009) and Kelley and Jacoby (2000) were used to estimate the conscious and the automatic memory component.

In addition to the above, suitable measures were included to prevent potential confounds. Measures for color preferences for the two studied hues (Madden, Hewett and Roth, 2000) and for product involvement (Donthu et al., 1993) were included in the questionnaires, since these variables have been suggested to influence ad recognition and recall (Gronhaug et al., 1991). Participants indicated their age and gender and demand bias was also checked through an open-ended question (Allen and Janiszewski, 1989).

3.2.2 Procedure and Stimuli

The experimental procedure consisted of two stages, an exposure and a study stage, as is common in implicit memory research (Sanyal, 1992). To conceal the link between the two stages, in their initial briefing, participants were led to believe that they would participate in two unrelated experiments. Suitable cover stories were also devised to minimize the threat of demand bias to internal validity (Allen and Janiszewski, 1989). After initial instructions, the participants were exposed to the target stimuli; 6 mock ads which consisted of black and white photos which did not picture the advertised product, along with the brand name and a short slogan (per Heath and Nairn, 2005) were inserted in a 14-page booklet simulating a magazine, in the interest of ecological validity (McQuarrie, 2004). The ads were based on emotional, rather than informational, appeals and referred to fictitious brands for low category involvement products⁵ (pen, shampoo, paper tissue, potato chips, cereal, and chewing gum) to control for previous experience with the brand. A pretest was conducted to ascertain that the selected product categories were not previously associated with the hues used in the study, since certain product categories have known associations with colors (Bottomley and Doyle, 2006). The brand names were low frequency English words and they were not related to the product or the ad claims (Krishnan and Chakravarti, 2003). The exposure duration was set at 5 minutes, as indicated by a pretest. A distractor task was introduced after exposure to clear short-term

⁴ In essence, the indirect/direct memory tests and the automatic/conscious memory components, respectively, will measure the same underlying constructs (implicit/explicit memory), provided that the former are uncontaminated (Toth, Reingold and Jacoby, 1995).

⁵ It was ascertained that the product categories in question were in fact considered low involvement through a pretest.

memory (Lee, 2002). Afterwards, the participants completed a series of questionnaires containing the study measures.

3.3 Findings

Initially, test awareness was assessed; it was found that out of 210 participants, 25 (11.9%) could be classified as 'test aware' and were thus excluded from the analyses. An additional 5 participants were randomly eliminated in order to obtain equal cell sizes. This resulted in a total of 180 usable observations. 92 (51.1%) participants were male and 88 (49.8%) female, with a mean age of 20.56 ($SD = 1.83$). The data was found to be sufficiently close to normality to permit the use of parametric tests (Fife-Schaw, 2006). Moreover, the dependent measures and those included for the manipulation checks had acceptable reliability (all Spearman-Brown Coefficient and Cronbach α values exceeded 0.7). Regarding the manipulation checks, two consecutive two-way independent ANOVAs (3 levels of hue x 2 levels of involvement) were run with the objective measure for attention and the scale for brand processing direction as the dependent variables, respectively, indicating that the manipulation was successful. Further, a series of ANCOVAs, where gender, product involvement, and color preferences were inserted as covariates, showed that the possibility of potential confounds could be effectively dismissed (Perdue and Summers, 1986).

To test for H1a and H1b, a two-way independent ANOVA (3 levels of hue x 2 levels of involvement) was conducted, with the direct memory test score as the dependent variable. As predicted, there was a non-significant main effect of hue on direct memory test performance, $F(2, 174) = 2.39, p = 0.094, f = 0.16$; hence. However, there was also a significant interaction effect between the background hue of the advertisement and involvement, $F(2, 174) = 6.49, p < 0.05, f = 0.26$. This significant interaction indicates that involvement moderates the effect of hue on direct memory test performance (Baron and Kenny, 1986). To further investigate this interaction, a Simple Effects Analysis was performed at each level of the moderator variable (i.e. involvement). There was a significant simple main effect of hue on direct memory test performance at the low level of involvement, $F(2, 174) = 3.47, p < 0.05, f = 0.37$, while the simple main effect of hue at the high level of involvement was non-significant, $F(2, 174) = 0.29, p = 0.749, f = 0.14$. As suggested by Lehman (1995), the significant simple main effect was followed up by Tukey's HSD test, which revealed that there were two subsets with statistically similar means at the low involvement level; the first subset comprised of the red and blue groups ($M_{red} = 0.46, M_{blue} = 0.42$), while the second subset solely included the no color group ($M_{no\ color} = 0.57$). Therefore, H1b is supported, while H1a receives only partial support.

H2 was tested through a two-way independent ANOVA (3 levels of hue x 2 levels of involvement), with the indirect memory test score as the dependent

variable. As hypothesized, the main effect of hue on the indirect test was conversely significant, $F(2, 174) = 67.89$, $p < 0.001$, $f = 0.86$, while there was no significant interaction between the factors, $F(2, 174) = 0.03$, $p = 0.972$, $f = 0.02$. Tukey's HSD indicated significant differences between all three groups (all p values < 0.05), with performance on the indirect test being significantly better in the groups that had been exposed to advertisements with a blue background ($M_{blue} = 0.43$) than that of the participants exposed to ads with a red background ($M_{red} = 0.33$). The performance of the no color group was significantly poorer ($M_{no\ color} = 0.13$). Thus, H2 is confirmed.

As expected, the third and fourth set of hypotheses exhibit a pattern of findings similar to the ones for the first and the second hypotheses, respectively. In line with our expectations given the previous results, H3a is partially supported and H3b is supported. However, it is worthwhile to note that H4b is only partially supported, as the post hoc Tukey test revealed two, rather than three as in the indirect memory test, homogeneous subsets; the first subset included the achromatic and red groups ($M_{no\ color} = 0.23$, $M_{red} = 0.33$) and the second the blue one ($M_{blue} = 0.46$).

4 Study 2: Color Effects on Perceptual and Conceptual Priming

4.1 Overview, Purpose and Hypotheses

Study 2 aims at shedding additional light into the mechanisms underlying the attested influence of color on implicit memory, by juxtaposing the effects of different background colors on perceptual and conceptual priming for the advertised brands. In this respect, this study seeks to determine whether a colored (blue) ad background facilitates the perceptual processing of surface features in the ad or if it assists the deeper conceptual processing of its meaning. Given that previous research within the field of advertising has not as of yet addressed this issue, two hypotheses were formed drawing on the theoretical background, as well as on extant psychological studies which nonetheless are far from being unanimous.

Regarding the relationship between color and conceptual priming, Color-in-Context Theory views responses to color as resulting from its associations, thus implying that a semantic analysis of the colored stimulus takes place outside conscious awareness (Elliott and Maier, 2012), while the LIPM suggests that when consumers are exposed to advertisements, implicit associations of colors with pleasant experiences are transferred to the advertised brand (Heath, 2012, p. 205-206). Further, there is evidence, if only limited, suggesting that color is conceptually processed (Mecklenbrauker, Hupback and Wippich, 2001; Wippich and Mecklenbrauker, 1998); color "may become part of a semantic memory representation and is thus accessible in conceptual tests of implicit memory" (Wippich and Mecklenbrauker, 1998, p. 293). Thus, it is predicted that

the background color of an advertisement will become part of the meaning attached to the stimulus via a semantic analysis, thus enhancing conceptual fluency. Therefore:

H3: Performance on the conceptual test for participants exposed to colored advertisements will be higher than that of those exposed to non-colored advertisements in both high and low involvement conditions.

Concerning the effect of hue on perceptual priming, a body of psychological evidence (summarized in Wippich and Mecklenbrauker, 1998) indicates that pictures are more readily identified if they are colored; similarly, Hupback, Melzer and Hardt (2006) have demonstrated through a color-choice task that color influences perceptual priming. Nonetheless, others (Cave, Bost and Cobb, 1996; Treisman, 1992; Wippich and Mecklenbrauker, 1998) have found that color had no influence on perceptual tests of memory. The latter view appears to better conform to our theoretical reasoning, hence:

H4: Performance on the perceptual test for participants exposed to colored advertisements will not differ from that of those exposed to non-colored advertisements in both high and low involvement conditions.

4.2 *Methodology*

A 2-factor (2 hue x 2 involvement) between-subjects design was used, with the participation of 145 undergraduate students (randomly assigned to conditions), in exchange for course credit. In general, Study 2 was very similar to Study 1 in terms of experimental design, with the exception of the dependent measures used and the inclusion of ads for actual, rather than fictitious, brands.

4.2.1 *Manipulations and Measures*

The manipulations of the independent variables were the same as Study 1; for reasons of simplicity, hue in this experiment had two levels, blue (5B 2/7) and achromatic (N 9.5). The dependent measures included a perceptual and a conceptual test, as well as a direct memory test. The inclusion of the latter served a two-fold purpose: first, to secure that the perceptual and conceptual tests were in fact measuring the processes underlying implicit memory and were not contaminated by conscious recollection and second, to corroborate the unexpected findings regarding explicit memory in Study 1. The perceptual test was a word fragment completion task, adapted from Lee (2002) and Duke and Carlson (1994). Participants were presented with the 4 target word fragments, along with 4 distractor ones, next to which the corresponding product category appeared and were asked to complete them with the first brand name that came to

mind, without any reference to the exposure episode; to prevent floor and ceiling effects, alternative word fragments had been pretested beforehand. The score was the percentage of right answers minus a baseline performance level (Lee, 2002), which was obtained from 24 subjects who completed the test without being exposed to the ads ($M = 0.26$). For the conceptual test (Top of mind awareness per product category), which was adapted from Lee (2002), participants were cued with the 4 target and 2 distractor product categories and were instructed to list as many brand names as they could for each one. The score for the conceptual test was obtained by subtracting the baseline performance determined through 24 subjects who completed the conceptual test ($M = 0.21$) without previous exposure from the percentage of correct answers. To minimize the possibility of participants thinking back to the exposure episode, tight time constraints were imposed (Duke and Carlson, 1994). Apart from the dependent measures, a measure for brand familiarity (Low and Lamb, 2000) was included as a confound check.

4.2.2 Procedure and Stimuli

The experimental procedure consisted of the same stages (exposure, distractor task and study stage) as Study 1. 4 mock ads were created, following the layout described previously, for existing brands of chewing gum, shampoo, cereal and chips; the target brands (as well as the distractor ones used in the tests) were selected through a pretest so as to be moderately familiar to the participants. Another pretest was carried out to establish that the selected brands were not a priori associated with either of the target hues.

4.3 Findings

After the elimination of test aware subjects (9.72%) and normality and reliability checks (all Spearman-Brown Coefficient and Cronbach α values over 0.7), the success of the manipulation of involvement was verified, similarly to Study 1. The confound checks indicated that mean familiarity with the target brands was a covariate for both the perceptual and the conceptual test score (both p values < 0.001).

To test H3 and H4, two consecutive two-way independent ANCOVA (2 levels of hue x 2 levels of involvement) were carried out, with the conceptual test score and the perceptual test score as the dependent variable respectively and target brand familiarity as a covariate. A significant main effect of hue emerged after controlling for the effect of target brand familiarity ($F(1, 123) = 45.71, p < 0.001, f = 0.60$), with participants exposed to ads with a blue background exhibiting significantly higher scores in the conceptual test than their counterparts that had been exposed to achromatic ads ($M_{blue} = 0.45, M_{no\ color} = 0.30$). Thus, H3 is supported. Unexpectedly though, and contrary to H4, there was a significant,

albeit small, main effect of hue on the perceptual test score after controlling for the effect of target brand familiarity ($F(1, 123) = 4.03, p < 0.05, f = 0.18$), with participants exposed to ads with a blue background obtaining higher scores in the perceptual test than those exposed to achromatic ads ($M_{blue} = 0.33, M_{no\ color} = 0.27$). Hence, H4 fails to gain support.

5 General Discussion, Implications, Limitations and Further Research Directions

The findings from Study 1 suggest that the presence of a dominant color in a given ad results in a facilitation of the implicit recognition of the advertised brand. A plausible explanation of this finding might lie in the associations attached to a given color (Elliot and Maier, 2012), which elicit feelings that are transferred in a non-conscious manner to the advertised brand through emotional conditioning (Heath, 2012, p. 108-109). Thus, the fictional advertised brand, which is in a sense 'void' from a distinct character due to the absence of previous knowledge from the part of the consumer, 'borrows' some associations that consumers non-consciously relate to the dominant color in the ad; when consumers are presented with the brand afterwards, they find it easier to recognize than one that had been presented in a neutral manner. From the experiment, there is evidence, albeit tentative given that the results from the tasks and processes are not identical, that ads with a blue background are superior in terms of implicit memory to both ads with an achromatic background and to ads with a red one. This superiority of blue to red cannot be readily explained in theoretical terms, especially since it has been found to be independent of the preexisting color preferences and the gender of the participants. In the authors' view, this finding might have to do with the positive associations of the color blue itself (cf. Grimes and Doole, 1998). This inadvertently implies that color in advertising would have to receive at least some degree of non-conscious semantic (conceptual) processing; in this respect, the results of Study 2 indicate that such a possibility is likely. In line with the formulated hypotheses, the findings from Study 2 confirm that effects of color can be detected with a conceptual indirect test, thus suggesting that color can be part of a semantic memory representation (Mecklenbrauker, Hupback and Wippich, 2001), and that this effect is both large and immune to the manipulation of involvement during exposure.

The research findings regarding color effects on implicit and explicit memory and conceptual and perceptual priming, taken together, entail substantial theoretical implications. The finding that color significantly enhances implicit memory across different levels of involvement and that this effect is not diminished in high involvement conditions is in line with the theory of the LIPM. This suggests that color, as an executional element, is not an aid to conscious information processing, but that its influence mainly lies outside of consumers' conscious awareness. As far as advertising practice is concerned, the

aforementioned results provide some guidance for creative decisions regarding color in advertising, which are reportedly based on intuition and anecdotal evidence (Gorn et al., 1997); the research findings thus imply that advertisers should not treat color as a means to increase recognition, but rather consider it as a powerful implicit cue. In this respect, the calculated effect sizes are useful in determining the relative practical importance of color effects (Fern and Monroe, 1996), especially since prior studies have not attempted to assess the magnitude of such effects. An interpretation of the effect sizes in both studies hereby reported indicates that color effects on implicit memory are of more practical significance than those on explicit memory and that color effects on conceptual priming far outweigh in these terms those on conceptual priming. It logically follows that traditional recall or recognition measures for ad pretesting may not be appropriate as a basis for selecting which colors to include in an advertisement. Therefore, the present paper, adding to the increasing number of studies reporting evidence of ads and ad elements influencing implicit memory (Alexomanolaki et al., 2007; Hansen et al., 2009; Shapiro and Krishnan, 2001), highlights the need for implicit memory measures to be consistently included in the measurement of advertising effectiveness.

The studies are inadvertently characterized by a number of limitations, such as the use of student subjects (Soley and Reid, 1983), the inability to control for the exact duration of exposure to each ad separately or for the number of exposures (Lee, 2002), the exclusive use of emotional appeals in the target ads (Meyers-Levy and Perrachio, 1995), the potential inherent weaknesses of the PDP (Graf and Komatsu, 1994), to name but a few. Future research should address these issues, as well as further extend the investigation of color effects on implicit memory and priming in an advertising context. In this spectrum, it would be interesting to examine if the findings hold true for brands with pre-existing strong and salient color associations (e.g. Coca-Cola with the color red) and explore if color effects on implicit and explicit memory are conditional upon the advertised product categories (Bottomley and Doyle, 2006; Panigyrakis, 1993).

To conclude, the two experiments reported here have shown compelling evidence for the influence of color on implicit memory and conceptual priming; these effects have been found in both high and low involvement conditions during exposure. In this spectrum, it is the authors' contention that this initial investigation of the nascent area of inquiry on color effects on implicit memory and priming in an advertising context paves the way for a wider revisiting of the influence of color, a creative element which is routinely used, yet still little understood.

Acknowledgements: This research has been co-financed by the European Union (European Social Fund – ESF) and Greek national funds through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework

(NSRF) - Research Funding Program: Heracleitus II. Investing in knowledge society through the European Social Fund.

6 References

- Alexomanolaki, M., Loveday, C. & Kennett, C. 2007, "Music and Memory in Advertising: Music as a Device of Implicit Learning and Recall", *Music, Sound, and the Moving Image*, Vol. 1, No. 6, pp. 51-71.
- Allen, C.T. & Janiszewski, C.A. 1989, "Assessing the Role of Contingency Awareness in Attitudinal Conditioning with Implications for Advertising Research", *Journal of Marketing Research*, Vol. 26, No. 1, pp. 30-43.
- Bornstein, R.F. & D'Agostino, P.R. 1994, "The attribution and discounting of perceptual fluency: preliminary tests of a perceptual fluency/attributional model of the mere exposure effect", *Social Cognition*, Vol. 12, No. 2, pp. 103-28.
- Bottomley, P.A. & Doyle, J.R. 2006, "The interactive effects of colors and products on perceptions of brand logo appropriateness", *Marketing Theory*, Vol. 6, No. 1, pp. 63-83.
- Bowers, J.S. & Schacter, D.L. 1990, "Implicit memory and test awareness", *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 16, No. 3, p. 404.
- Cave, C.B., Bost, P.R. & Cobb, R.E. 1996, "Effects of color and pattern on implicit and explicit picture memory", *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 22, No. 3, p. 639.
- Donthu, N., Cherian, J. & Bhargava, M. 1993, "Factors influencing recall of outdoor advertising", *Journal of Advertising Research*, Vol. 33, No. 3, pp. 64-72.
- Duke, C.R. & Carlson, L. 1993, "A Conceptual Approach to Alternative Memory Measures for Advertising Effectiveness", *Journal of Current Issues and Research in Advertising*, Vol. 15, No. 2, pp. 1-14.
- Duke, C.R. & Carlson, L. 1994, "Applying implicit memory measures: Word fragment completion in advertising tests", *Journal of Current Issues and Research in Advertising*, Vol. 16, No. 2, pp. 29-39.
- Elliot, A.J. & Maier, M.A. 2007, "Color and psychological functioning", *Current Directions in Psychological Science*, Vol. 16, No. 5, pp. 250-4.
- Elliot, A.J. & Maier, M.A. 2012, "Color-in-context theory", in P. Devine & A. Plant (eds), *Advances in Experimental Social Psychology*, Vol. 45, Academic Press, pp. 63-125.
- Fern, E.F. & Monroe, K.B. 1996, "Effect-size estimates: Issues and problems in interpretation", *Journal of Consumer Research*, Vol. 23, No. 2, pp. 89-105.
- Fife-Schaw, C. 2006, "Principles of Statistical Inference Tests", in G. Breakwell, S.M. Hammond, C. Fife-Schaw & J.A. Smith (eds), *Research Methods in Psychology*, Sage Publications, London, pp. 378-413.
- Finlay, K., Marmurek, H.H.C. & Morton, R. 2005, "Priming effects in explicit and implicit memory for textual advertisements", *Applied Psychology: An International Review*, Vol. 54, No. 4, pp. 442-55.
- Gardner, M.P., Mitchell, A.A. & Russo, J.E. 1985, "Low Involvement Strategies for Processing Advertisements", *Journal of Advertising*, Vol. 14, No. 2, pp. 4-12.
- Gerend, M.A. & Sias, T. 2009, "Message Framing and Color Priming: How Subtle Threat Cues Affect Persuasion", *Journal of Experimental Social Psychology*, Vol. 45, No. 4, pp. 999-1002.
- Gilbert, H.N. 1933, "An experiment with colored and uncolored advertisements", *Journal of Applied Psychology*, Vol. 17, No. 1, pp. 49-54.
- Goode, A. 2007, "The implicit and explicit role of ad memory in ad persuasion: rethinking the hidden persuaders", *International Journal Of Market Research*, Vol. 49, No. 1, pp. 95-116.

- Gorn, G.J., Chattopadhyay, A., Yi, T. & Dahl, D.W. 1997, "Effects of Color As an Executional Cue in Advertising: They're in the Shade", *Management Science*, Vol. 43, No. 10, pp. 1387-400.
- Graf, P. & Komatsu, S. 1994, "Process dissociation procedure: Handle with caution!", *European Journal of Cognitive Psychology*, Vol. 6, No. 2, pp. 113-29.
- Graf, P. & Schacter, D.L. 1985, "Implicit and explicit memory for new associations in normal and amnesic subjects", *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 11, No. 3, pp. 501-18.
- Grimes, A. & Doole, I. 1998, "Exploring the relationships between color and international branding: a cross cultural comparison of the UK and Taiwan", *Journal of Marketing Management* Vol. 14, No. 7, pp. 799-817.
- Gronhaug, K., Kvitastein, O. & Gronmo, S. 1991, "Factors moderating advertising effectiveness as reflected in 333 tested advertisements", *Journal of Advertising Research* Vol. 31, No. 5, pp. 42-50.
- Hansen, J., Strick, M., van Baaren, R.B., Hooghuis, M. & Wigboldus, D.H. 2009, "Exploring memory for product names advertised with humor", *Journal of Consumer Behavior*, Vol. 8, No. 2-3, pp. 135-48.
- Heath, R. & Feldwick, P. 2008, "Fifty years using the wrong model of advertising", *International Journal of Market Research*, Vol. 50, No. 1, pp. 29-59.
- Heath, R.G. 2001, "Low involvement processing – a new model of brand communication", *Journal of Marketing Communications*, Vol. 7, No. 1, pp. 27-33.
- Heath, R.G. 2012, *Seducing the Subconscious: The Psychology of Emotional Influence in Advertising*, Wiley-Blackwell, West Sussex.
- Heath, R.G. & Nairn, A.C. 2005, "Measuring Emotive Advertising – implications of Low Attention Processing on recall", *Journal of Advertising Research*, Vol. 45, No. 2, pp. 269-81.
- Hupbach, A., Melzer, A. & Hardt, O. 2006, "The mere exposure effect is sensitive to color information: Evidence for color effects in a perceptual implicit memory test", *Experimental Psychology*, Vol. 53, No. 3, pp. 233-45.
- Jacoby, L.L. & Dallas, M. 1981, "On the Relationship Between Autobiographical Memory and Perceptual teaming", *Journal of Experimental Psychology: General*, Vol. 110, No. 3, pp. 306-40.
- Kelley, C.M. & Jacoby, L.L. 2000, "Recollection and familiarity: Process-dissociation", in E. Tulving & F.I.M. Craik (eds), *The Oxford handbook of memory* Oxford University Press, London, pp. 215-22.
- Krishnan, S. & Chakravarti, D. 1999, "Memory Measures for Pretesting Advertisements: An Integrative Conceptual Framework and a Diagnostic Template", *Journal of Consumer Psychology*, Vol. 8, No. 1, pp. 1-37.
- Labrecque, L.I., Patrick, V.M. & Milne, G.R. 2013, "The marketers' prismatic palette: A review of color research and future directions", *Psychology & Marketing*, Vol. 30, No. 2, pp. 187-202.
- Laczniak, R.N., Muehling, D.D. & Grossbart, S. 1989, "Manipulating Message Involvement in Advertising Research", *Journal of Advertising*, Vol. 18, No. 2, pp. 28-38.
- Lee, A.Y. 2002, "Effects of Implicit Memory on Memory-Based versus Stimulus-Based Brand Choice", *Journal of Marketing Research*, Vol. 39, No. 4, pp. 440-54.
- Lehmann, D. & Shemwell, D.J. 2011, "A field test of the effectiveness of different print layouts: A mixed model field experiment in alternative advertising", *Journal of Promotion Management*, Vol. 17, No. 1, pp. 61-75.
- Lichtlé, M.C. 2007, "The effect of an advertisement's color on emotions evoked by an ad and attitude towards the ad", *International Journal of Advertising*, Vol. 26, No. 1, pp. 37-62.
- Lohse, G.L. & Rosen, D.L. 2001, "Signaling quality and credibility in yellow pages advertising: the influence of color and graphics on choice", *Journal of Advertising*, Vol. 30, No. 2, pp. 73-83.

- Low, G.S. & Lamb, C.W. 2000, "The Measurement and Dimensionality of Brand Associations", *Journal of Product and Brand Management*, Vol. 9, No. 6, pp. 350-68.
- MacQuarrie, E.F. 2004, "Integration of Construct and External Validity by Means of Proximal Similarity: Implications for Laboratory Experiments in Marketing", *Journal of Business Research*, Vol. 57, No. 2, pp. 142-53.
- Madden, T.J., Allen, C.T. & Twible, J.L. 1988, "Attitude toward the Ad: An Assessment of Diverse Measurement Indices under Different Processing "Sets"", *Journal of Marketing Research*, Vol. 25, No. 3, pp. 241-52.
- Mecklenbrauker, S., Hubbach, A. & Wippich, W. 2001, "What color is the car? Implicit memory for color information in children", *Quarterly Journal of Experimental Psychology*, Vol. 54A, No. 4, pp. 1069-86.
- Mehta, A. & Purvis, S.C. 2006, "Reconsidering Recall and Emotion in Advertising", *Journal of Advertising Research*, Vol. 46, No. 1, pp. 49-56.
- Meyers-Levy, J. & Peracchio, L.A. 1995, "Understanding the effects of color: How the correspondence between available and required resources affects attitudes", *Journal of Consumer Research*, Vol. 22, No. 2, pp. 121-38.
- Mitchell, A.A. 1981, "The dimensions of advertising involvement", in K.B. Monroe (ed.), *Advances in Consumer Research*, Vol. 8, Association for Consumer Research, Ann Arbor, MI, pp. 25-30.
- Naccarato, J.L. & Neuendorf, K.A. 1998, "Content analysis as a predictive methodology: Recall, readership, and evaluations of business-to-business print advertising", *Journal of Advertising Research*, Vol. 38, No. 3, pp. 19-33.
- Nixon, H.K. 1925, "Two Studies of Attention to Advertisements", *Journal of Applied Psychology*, Vol. 9, No. 2, pp. 176-87.
- Panigyrakis, G.G. 1993, "British and French Creative Executives: A Comparison of their Opinion and Final Use of Color Effects in their Creativity Work per Product Category", paper presented to the *22nd European Marketing Academy Conference*, Barcelona, Spain.
- Panigyrakis, G.G. & Kyrousi, A.G. 2013a, "Color Effects In Print Advertising: A Research Update (1985-2012)", *Corporate Communications: An International Journal*, Vol. (forthcoming).
- Percy, L. 1983, "A review of the effect of specific advertising elements upon overall communication response", *Current Issues and Research in Advertising*, Vol. 6, No. 2, pp. 77-110.
- Percy, L. & Rossiter, J.R. 1992, "Advertising stimulus effects: a review", *Journal of Current Issues & Research in Advertising*, Vol. 14, No. 1, pp. 75-90.
- Perdue, B.C. & Summers, J.O. 1986, "Checking the success of manipulations in marketing experiments", *Journal of Marketing Research*, Vol. 23, No. 4, pp. 317-26.
- Ray, M.L., Sawyer, A.J. & Strong, E.C. 1971, "Frequency effects revisited", *Journal of Advertising Research*, Vol. 11, No. 1, pp. 39-45.
- Roediger, H.L. 1990, "Implicit memory: A commentary", *Bulletin of the Psychonomic Society*, Vol. 28, No. 4, pp. 373-80.
- Sanyal, A. 1992, "Priming and Implicit Memory: a Review and a Synthesis Relevant For Consumer Behavior", in J.F.S. Jr. & B. Sternthal (eds), *Advances in Consumer Research*, Vol. 19, Association for Consumer Research, Provo, UT pp. 795-805.
- Schacter, D.L., Bowers, J. & Booker, J. 1989, "Intention, awareness, and implicit memory: The retrieval intentionality criterion", in S. Lewandowsky, J.C. Dunn & K. Kirsner (eds), *Implicit memory: Theoretical issues*, Lawrence Erlbaum Hillsdale, NJ, pp. 47-65.
- Shapiro, S. & Krishnan, H.S. 2001, "Memory-based measures for assessing advertising effects: a comparison of explicit and implicit memory effects", *Journal of Advertising*, Vol. 30, No. 3, pp. 1-13.
- Soley, L.C. & Reid, L.N. 1983, "On the validity of students as subjects in advertising experiments", *Journal of Advertising Research*, Vol. 23, No. 4, pp. 57-9.

- Toth, J.P., Reingold, E.M. & Jacoby, L.L. 1995, "A response to Graf and Komatsu's critique of the process dissociation procedure: When is caution necessary?", *European Journal of Cognitive Psychology*, Vol. 7, No. 2, pp. 113-30.
- Tulving, E. & Schacter, D.L. 1990, "Priming and human memory systems", *Science*, Vol. 247, No. 4940, pp. 301-6.
- Uttl, B., Graf, P. & Santacruz, P. 2006, "Object color affects identification and repetition priming", *Scandinavian Journal of Psychology*, Vol. 47, No. 5, pp. 313-25.
- Vakratsas, D. & Ambler, T. 1999, "How advertising works: what do we really know?", *Journal of Marketing*, Vol. 63, No. 1, pp. 26-43.
- Vernon, D. & Lloyd-Jones, T.J. 2003, "The role of color in implicit and explicit memory performance", *Quarterly Journal of Experimental Psychology*, Vol. 56, No. 5, pp. 779-802.
- Whittlesea, B.W.A. 1993, "Illusions of familiarity", *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 19, No. 6, pp. 1235-53.
- Wippich, W. & Mecklenbräuer, S. 1998, "Effects of color on perceptual and conceptual tests of implicit memory", *Psychological research*, Vol. 61, No. 4, pp. 285-94.

Listen to My Story: A Comparison of the Narrative to the Factual Format of Information Presentation in Advertisements

Martina Maurer
Heribert Gierl

1 Introduction

Print advertisements frequently describe product features and benefits a consumer can experience when using the promoted product. There are numerous possibilities to present these pieces of information in a text. Often, a bullet-point-type presentation is used. Alternatively, they are embedded in a continuous text consisting of complete sentences that are connected together (continuous-factual format). In these cases, the ads simply “display the product, talk about its features, and show what it can do” (Wells, 1989, p. 13). Deighton et al. (1989, p. 335) state that this kind of ad “has no plot or character.” Another technique is the usage of a narrative. In this case, a first-person or third-person narrator tells the recipients of the ad a story that includes product features and benefits (Escalas, 1998, p. 267). It has a “plot, character, and narration” (Deighton et al., 1989, p. 335). According to Chang (2009a, p. 22), “in advertising, narratives always evolve around product consumption, that is, the experiences or consequences of product use.” Similar considerations regarding the characteristics of the continuous-factual and the narrative format were made by Smith (1995, p. 110).

So far, only few researchers compared the narrative format to the continuous-factual format. An overview of this issue which is reported in the next section shows that these researchers used narratives that were liked more than the continuous-factual text and analyzed which of both formats is superior. Hence, the effect of the information presentation format per se on product evaluations remains unclear. Moreover, these researchers used rather positively evaluated products or brands. Thus, it is also unclear whether the effect of using narratives compared to continuous-factual texts depends on brand favorability. We contribute to this stream of research by holding the extent of liking the text material constant and investigating the effect of the information presentation format (continuous-factual vs. narrative) on product evaluations under this condition. Additionally, we consider favorably evaluated brands and less favorably evaluated brands when we analyze the effect of the information presentation format. Our conceptual model is shown in Figure 1.

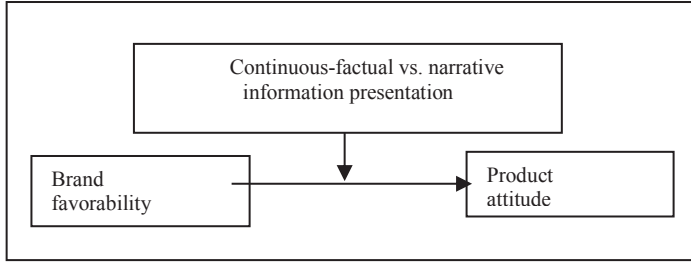


Figure 1: Conceptual model

2 Previous Research

2.1 Narratives

At first sight, one might expect that research in the field of the “mental process of transportation” can be used for predicting a positive effect of using narratives in advertisements on product evaluations. However, this stream of research did not provide convincing evidence of the transportation effect. For instance, Green and Brock (2000, p. 705) exposed students to a narrative that described the cruel fate of a fellow student’s young sister named Katie who was brutally murdered in a shopping mall (nine-page story). Then, the test participants agreed or disagreed with statements aiming at measuring the mental state of “transportation” (e.g., “While I was reading the narrative, I could easily picture the events in it taking place,” “I could picture myself in the scene of the events described in the narrative,” and “While reading the narrative I had a vivid image of Katie”). Based on these measures, the authors assigned the test participants into the low- and the high-transportation group (split-half technique). The authors investigated whether Katie and her sister were evaluated favorably or unfavorably on a 61-point scale (good/bad, attractive/unattractive, pleasant/unpleasant, and responsible/irresponsible) depending on “transportation” and found that people classified to the high-transportation group evaluated Katie more positively (Katie: $M_{\text{low}} = 43.04$ vs. $M_{\text{high}} = 47.96$, $p < .01$; Katie’s sister: $M_{\text{low}} = 38.39$ vs. $M_{\text{high}} = 40.68$, n.s.). Although the authors interpret these findings as evidence of the effect of “transportation”, it is likely that the differences mirror the common method bias only and, thus, are meaningless.

2.2 Narratives in Advertisement-Like Material

Until now, numerous studies have been conducted to compare the effects of different information presentation formats in advertisements. For instance, Peracchio and Meyers-Levy (1997) compared the effects of using active voice

to using passive voice while describing company and product characteristics. Mattila (2000; 2002) and Petrova and Cialdini (2005) compared the continuous-factual format to the bullet-point-like format. Adaval and Wyer (1998) also compared the bullet-point-like presentation to a continuous text which they declare as narrative. We think it should be considered as a rather factual text. Chang (2009a) compared a narrative to a continuous-factual version. Since there was no information given about the used stimuli material we refrain from presenting this study in detail. Most similar to our research are the experiments of Polyorat et al. (2007) and Wentzel et al. (2010). These authors presented texts to consumers consisting of approximately 120 and 250 words, respectively, that either described features and benefits of a product or service in the continuous-factual format or in the narrative format.

In the study of Polyorat et al. (2007), the texts promoted a cell phone. In the continuous-factual version, the product's features and benefits were described in complete sentences. In the narrative version, the same features and benefits were embedded in a story about a fictitious person named Garret. A third-person narrator reported that Garret and his date did not get access to a night club and used the promoted cell phone to look for a cinema that shows an exciting movie. The authors found that reading the narrative version was more pleasant than reading the continuous-factual text ($M_{\text{narr}} = 5.00$ and $M_{\text{fact}} = 4.23$ on a seven-point scale, $p < .001$). Seemingly, these sensations were used to evaluate the promoted product since the authors found that the evaluation of the cell phone was more favorable in the narrative-format condition ($M_{\text{narr}} = 5.29$ and $M_{\text{fact}} = 4.98$ on a seven-point scale, $p < .05$).

Wentzel et al. (2010) used a bank as test object and conducted a similar experiment. In the continuous-factual version, the customer orientation of the bank's employees was described in an abstract form (e.g., "The employees recognize their customers' needs, devise an optimal solution, and contact them at the right moment. Delivering these key benefits ensures that customers are loyal and trust Winston Investments to take care of their financial needs."). In the narrative form, a third-person narrator reported a story about the employee Rupert Brown, who had discovered an old bankbook and took great effort to identify the descendants of the former owner of this bankbook (e.g., "It was not a large sum of money but Brown was determined to find the owner. [...] In the end, Brown managed to find the owner. [...] The customer was delighted that Winston Investments had gone to so much trouble and contacted him proactively."). Additionally included rhetorical questions or the absence of these questions in the text were used to manipulate perceptions of manipulative intent. For the rhetorical-question-absent condition, the authors found that the readers of the narrative experienced more positive feelings while reading the text compared to the readers of the continuous-factual text, i.e., they liked reading the narrative text to a higher extent ($M_{\text{narr}} = 5.21$ and $M_{\text{fact}} = 4.14$ on a seven-point

scale, $p < .001$). Obviously, the attitude toward the text spills over onto the attitude toward the bank because the evaluation of the bank was more favorable in the narrative-format condition ($M_{\text{narr}} = 5.55$ and $M_{\text{fact}} = 4.32$ on a seven-point scale, $p < .001$).

To sum up, prior research found that narratives cause more favorable product evaluations than continuous-factual texts under conditions when reading the narrative is more pleasant than reading the continuous-factual text. Thus, we cannot conclude whether the narrative format has an effect per se (besides the effect via liking the story). Moreover, the reported figures indicate that the researchers focused on investigating the effect of narratives in the case of positively evaluated brands. A related research tradition investigates the question of whether judgments about other persons are more affected by narratives about this person (“individuating information”) than by statistical information that indicates the belonging to a certain group of people (“base-rate information”). This research found that people rely more strongly on individuating information (e.g., Argote et al., 1986; Ginosar and Trope, 1980). If this finding is transferred to our issue, one might conclude that narratives are more effective in influencing product evaluations.

3 Theoretical Considerations

Narratives in advertisements could have two effects on cognitive resource. First, processing narratives could absorb cognitive resource. Second, exposure to narratives could increase cognitive resource available for elaborating on the ad messages.

3.1 *Absorbed Cognitive Resource*

Numerous authors who investigated the effect of narratives presume that the human cognitive resources available for processing messages are rather constant. Then, two processes compete for cognitive resource. According to Bhatnagar and Wan (2011, p. 40), these processes consist of “(1) story-oriented narrative processing, in which people need cognitive resources to absorb the story and put themselves in the shoes of the characters, and (2) brand-oriented information processing, in which people require cognitive resources to critically evaluate brand information.”

Why may narratives absorb cognitive resource? Literature postulates that narratives put individuals into a mental state denoted “transportation” while processing narratives. Green and Brock (2000, p. 701) conceptualized “transportation into a narrative world as a distinct mental process, an integrative melding of attention, imagery, and feelings (...) where all mental systems and capacities become focused on events occurring in the narrative.” They hypothesize that narrative processing is different from the traditional systematic or heuristic

modes of information processing described in dual-process models of persuasion: “Elaboration implies critical attention to major points of an argument, whereas transportation is an immersion into a text” (p. 702). In the state of transportation, individuals are lost in another world and tend to ignore real-world facts. If cognitive resources are constant, individuals are assumed to spend resources for story-oriented processing and thus have reduced capacities for elaborating brand-related information in a systematic way (Chang, 2009a, p. 21). A similar proposition is made by Escalas (2007, p. 422) who states that transportation distracts people from thinking analytically about the message strength in an advertisement.

Effects of decreased cognitive resource for processing brand-related information: Product evaluations are expected to improve independently of brand favorability because counterarguments are unlikely to be generated even in the case of less favorable brands. For instance, Bhatnagar and Wan (2011, p. 40) posit the following effect of narratives: “Fewer cognitive resources are left thereafter for attending to and critically thinking about integrated brand messages; this lack of critical judgment in turn raises brand evaluations.” Moreover, narratives contained in advertisements may encourage individuals to create self-related narratives. According to Escalas (1998, p. 281), there is a potential of narratives to stimulate the audience in inventing own “narratives” that combine self-related facts and the promoted product. Thereby, the connections between the promoted product and the consumer’s own person may be intensified (Wentzel et al., 2010, p. 512). Because people tend to evaluate the own person favorably, the product is evaluated positively as well. We test:

H1a: Compared to the continuous-factual information presentation, narratives reduce the positive effect of brand favorability on product evaluations.

3.2 *Increased Cognitive Resource*

Why may narratives increase cognitive resource? First, the mere contact to a narrative could motivate the recipient to identify with and to tentatively put herself/himself in the position of the narrator (Boller and Olson, 1991, p. 173; Escalas, 1998, p. 281). The individual could ask questions such as “Could it be my own experience?” or “Should I strive for the same experiences?” These questions are likely to increase cognitive resource available for elaborating on the advertiser’s message simply because questions have to be answered. Second, a narrator’s story may provide information that is closer to consumer reality than information that is presented in a factual format. Thereby, it is easier to envision the own person using the product (Chang, 2009a, p. 21) and to comprehend the marketer’s arguments (Tun, 1989, p. 13). People may like ads that can easily be understood and thus make more cognitive resource available for processing the messages. Third, Petrova and Cialdini (2005, p. 442) argue that

individuals use the ease with which they can generate a mental script of an event as an indicator of the likelihood of the event. As narratives are easier to process than factual information, narratives may be more believable. Because consumers may like processing believable messages to a higher extent, they might also be willing to allocate more cognitive resource to process the message.

Effect of increased cognitive resource for processing brand-related information: In the case of a favorable brand, the audience could easily identify with the narrator and is more prone to adopt her/his behavior. Moreover, due to increased cognitive resource, the favorable brand information is expected to be processed more intensely resulting in more favorable product evaluations (Peracchio and Meyers-Levy, 1997, p. 179). On the contrary, if a product of a less favorable brand is promoted and the narrative increased cognitive resource, this surplus is likely to be used for generating counterarguments resulting in even worse product evaluations (Deighton and Hoch, 1993, p. 265). We test:

H1b: Compared to the continuous-factual information presentation, narratives increase evaluations of favorable brands and decrease evaluations of less favorable brands.

In Figure 2, we juxtapose the divergent effects of narratives that we described in this section.

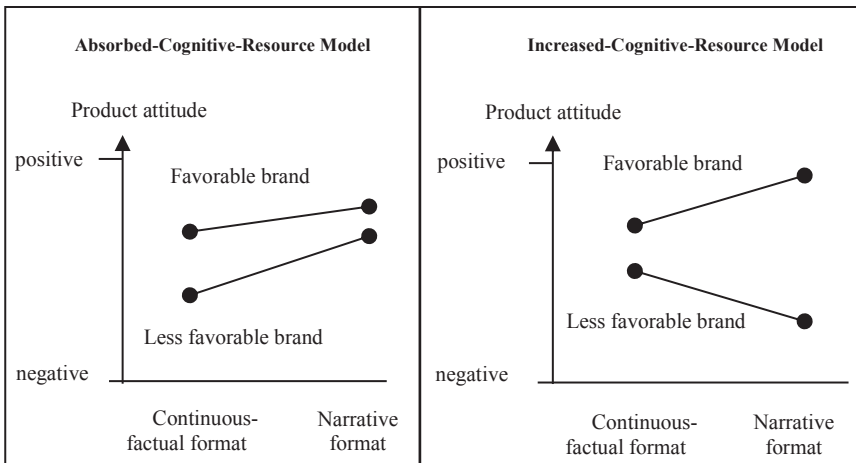


Figure 2: Alternative models of the effect of the information presentation format

4 Study

Experimental design: We conducted a pre-test to identify brands of products or services that are either evaluated favorably or less favorably. Then, we created two ad versions to promote products of these selected brands that differ regarding the information presentation format (continuous-factual vs. narrative format). In the next step, we selected pairs of ads that do not differ regarding the attitudes towards the ad significantly. I.e., we aimed at finding narratives that people liked to the same extent as the corresponding continuous-factual text. By doing so, we created a 2 (brand favorability: low vs. high) \times 2 (information presentation format: continuous-factual vs. narrative) factorial between-subjects design in our main study while holding ad liking constant.

Manipulation of brand favorability: We considered numerous brands from several product categories and created print advertisements that showed a picture of the promoted product. Moreover, we looked at some service brands and inserted few pieces of basic information into ads to promote special offers (e.g., few features presented in a bullet-point-like format). These ad versions were presented to samples of consumers that did not systematically differ from the samples used in the main study regarding age and gender. Based on this procedure, we chose three less favorably evaluated brands and three favorably evaluated brands. The less favorable brands were represented by the Sundance brand which denotes sun cream offered at the major German drug store dm, the Frisodent brand which is used for tooth paste offered at Aldi stores, and Rudy Project which is used for sports sunglasses. The favorably evaluated brands were represented by the Gallinat bank (because we found that consumers evaluated their online banking offer rather positively), the Gubor brand (pralines), and the Olympus brand (digital cameras). To provide an example of how the advertisements used in the pre-test looked like, we present the ad for the sun cream at the top of Figure 3. The procedure used in the pre-test was as follows: The participants saw one advertisement and indicated the degree to which the brand is “likeable,” “attractive,” and “appealing” on a seven-point scale. The pre-test results are reported in Table 1.

Manipulation of the information presentation format: For each of the brands selected in the pre-test, we created two versions of a print advertisement. These ads contained a picture of the product and the brand logo, and described product features and benefits. They only differed regarding the way of how these features and benefits were described. One version contained a continuous-factual text and the other version informed about these aspects by including a narrative. As mentioned above, we paid attention to the fact that the chosen versions did not differ regarding the extent to which the ads were liked. To illustrate the ads, we show how we manipulated the information presentation in the case of the sun cream in Figure 3 and Table 2.

Table 1: Results of the pre-test

	Attitude toward the brand	Sample size	t-value (one tailed p)
Less favorably evaluated brands			
Sundance (sun cream)	3.63 (1.57)	40	-1.49 (p < .10)
Friscodent (toothpaste)	3.47 (1.20)	35	-2.61 (p < .01)
Rudy Project (sports sunglasses)	3.35 (.71)	23	-4.39 (p < .001)
Favorably evaluated brands:			
Gallinat (online banking)	5.07 (1.83)	35	3.46 (p < .001)
Gubor (pralines)	5.25 (1.36)	80	8.22 (p < .001)
Olympus (digital camera)	4.86 (1.24)	28	3.67 (p < .001)

Scale ranges from 1 = negative to 7 = positive brand evaluation. Standard deviations in parentheses. We tested whether the attitude is higher than the scale's center (i.e., the scale value 4).

Procedure, dependent variable, and sample: Each participant of the main study was randomly assigned to one of the twelve conditions resulting from six brands and the information presentation format (continuous-factual vs. narrative). They could watch the ad as long as they wanted. Then, they evaluated the advertised product and the ad. Subsequently, they indicated their interest and their knowledge in the respective product category. Finally, the participants reported their age and gender. Product category interest and knowledge, age, and gender were used to ascertain that the sub-samples which were either exposed to the continuous-factual text or to the narrative were homogeneous. We did not find remarkable differences across these sub-samples. The respondents evaluated the product or service by indicating the extent to which they found it "likeable," "attractive," and "appealing" on a seven-point scale ($\alpha = .89$). We averaged these measures to calculate the attitude toward the advertised product. To calculate the attitude toward the ad we asked the participants to agree or disagree with "I like the ad," "The ad is professionally designed," and "The ad is boring" (recoded) on a seven-point scale ($\alpha = .72$). Overall, the sample consisted of 615 consumers. The details regarding sample size, respondents' age, gender and the portion of students in the sub-samples can be seen in Table 3.


<p>Arguments-absent condition (stimulus used in the pre-test)</p>	 <p>Die sundance Sonnenmilch</p> <p>weitere Infos unter www.SUNDANCE.de</p>
<p>Continuous-factual format (stimulus used in the main study)</p>	 <p>sundance</p> <p>Die sundance Sonnenmilch bietet Ihnen eine intensive Feuchtigkeits-Pflege sowie einen ausgewogenen UVA/UVB-Schutz. Sie zieht schnell ein und fettet nicht. sundance ist wasserfest und daher ein zuverlässiger Schutz vor Sonnenbrand. Die Sonnenmilch ist in Lichtschutzfaktor 10, 15 oder 20 erhältlich.</p> <p>weitere Infos unter www.sundance.de</p>
<p>Narrative format (stimulus used in the main study)</p>	 <p>sundance</p> <p>Heute ist der erste schöne Sommertag des Jahres. Perfekt zum Baden! Deswegen treffe ich mich später mit Freunden am See. Ich habe keine Sonnenmilch mehr zu Hause, aber einen Sonnenbrand möchte ich mir auch nicht holen. Also springe ich auf dem Weg zum See noch kurz in eine Drogerie und kaufe mir die sundance Sonnenmilch mit intensiver Feuchtigkeitspflege und Lichtschutzfaktor 10, 15 oder 20. Sie zieht schnell ein, fettet nicht und ist auch wasserfest. Außerdem kann ich durch den ausgewogenen UVA/UVB-Schutz die Sonne ohne Sorgen genießen. Natürlich haben meine Freunde nicht an dem Sonnenschutz gedacht. Mit Freude versorge ich alle mit der sundance Sonnenmilch, schließlich sollen sie morgen nicht rot wie ein Krebs sein.</p> <p>weitere Infos unter www.sundance.de</p>

Figure 3: Examples of test stimuli

Table 2: Examples of texts (translated)

	<i>Continuous-factual format</i>	<i>Narrative format</i>
Sundance sun cream	The Sundance sun cream offers you an intensive moisturizing as well as a balanced UVA-/UVB-protection. It absorbs quickly and is not greasy. Sundance is waterproof; hence, it is a reliable protection against sunburn. The sun cream is available in sun protection factor 10, 15, or 20.	Today is the first beautiful day of summer this year. Perfect to go swimming! There-fore, I meet up with my friends at the lake. I don't have any sun cream at home, but I don't want to get sunburned. So, on my way to the lake, I quickly jump to a drug store and buy myself a Sundance sun cream with intensive moisturizing and sufficient sun protection factor (available factors: 10, 15, or 20). It absorbs quickly, is not greasy, and is also waterproof. With this sun cream, I can enjoy the sun without worrying. Of course, my friends didn't think about sun protection. With pleasure, I am able to supply them with my Sundance sun cream, because I don't want them to get sunburned.
Rudy Project sunglasses for mountain biker	Rudy Project sunglasses are water-dirt-resistant. Due to the ventilation slots they do not mist up. They offer efficient protection from UVA-UVB-rays. The glasses also consist of rubber-covered earpieces and nose pads, which the color can be chosen individually.	I am going to ride my mountain bike and I am annoyed by the bad weather. It is cooler than at noon and temperature still decreases. The first rain drops are falling down. I put on my Rudy Project Noyz sunglasses and start my tour. Due to the ventilation slots my glasses do not mist. The rain gets worse, both dirt and rain drops are splashing in my face. Fortunately, my glasses are water-dirt-resistant. Thus, I can continue my ride. The bad weather is over sooner than expected. Now, the air is sticky and the sun is burning. My sunglasses are protecting my eyes from the UVA- and UVB-rays. I get closer to the long-awaited downhill. The rubber-covered earpieces and nose pads prevent any slipping of my glasses, so that I can cope with the difficult part of the downhill without any problems. I will have to clean the frame of my glasses at home, so that the color of the earpieces and the nose pads, that I chose, will be visible again.

Note that the texts were included in print advertisements that also showed the product and the brand logo.

Table 3: Sample characteristics of the main study

Brand	Sample size	Mean age	Females	Students
Sundance	108	27.8 years	66%	67%
Friscodent	62	23.7 years	52%	100%
Rudy Project	138	23.7 years	51%	100%
Gallinat	114	32.6 years	52%	58%
Gubor	80	22.4 years	45%	100%
Olympus	113	23.9 years	46%	85%

Results: In Table 4, we report the attitude toward the promoted product depending on the information presentation format. We used the attitude toward the ad and the interest and expertise of the participants in the category the product belongs to as control variables. When we compared the samples that were exposed to the continuous-factual or the narrative information presentation format we did not find significant differences regarding these control variables. For the attitude toward the ad, this finding was enabled deliberately through the systematic pre-selection of text versions. However, we found a significant effect of the information presentation format on the attitude toward the advertised product ($p < .05$). We aggregated data across the favorably evaluated brands and the less favorably evaluated brands, respectively, and illustrate this effect in Figure 4. Our results show that the attitude toward the product is lower for the less favorable brands if narratives were used to present information. On the contrary, using a narrative turned out to improve product attitudes for the favorable brands. Thus, our findings contradict H1a and support H1b.

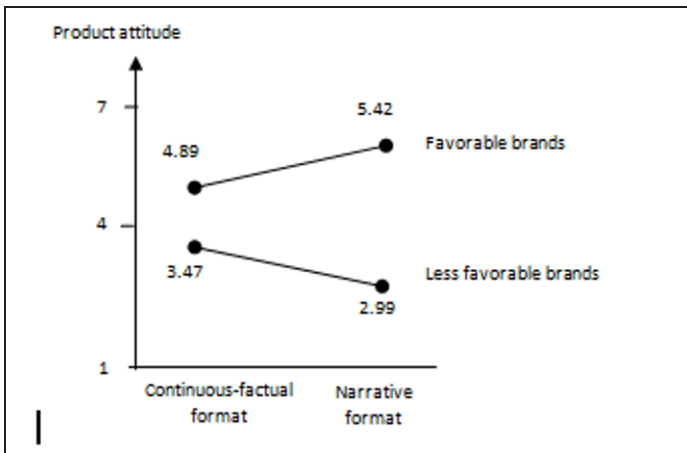


Figure 4: The interaction effect of the information presentation format and brand favorability

Table 4: Results of the main study

<i>Brand</i>	<i>Format</i>	<i>Attitude toward the product</i>	<i>Attitude toward the ad</i>	<i>Interest in the category</i>	<i>Expertise in the category</i>
<i>Less favorably evaluated brands:</i>					
Sundance	Factual	4.03 (1.21)	3.57 (1.19)	3.89 (1.53)	3.64 (1.52)
	Narrative	3.54 (1.18)	3.45 (.82)	3.76 (1.68)	3.84 (1.69)
	$F_{(1;106)}$ -value	4.034	.325	.147	.391
	p -value	.047	.570	.702	.533
Friscodent	Factual	4.04 (1.02)	2.74 (1.14)	4.78 (1.85)	5.12 (1.31)
	Narrative	3.43 (1.30)	2.46 (1.59)	4.49 (1.63)	5.31 (1.50)
	$F_{(1;60)}$ -value	4.029	.614	.435	.274
	p -value	.049	.437	.512	.603
Rudy Project	Factual	2.87 (1.23)	3.17 (1.33)	2.50 (1.46)	2.96 (1.46)
	Narrative	2.44 (.95)	2.83 (1.18)	2.30 (1.33)	2.68 (1.51)
	$F_{(1;136)}$ -value	5.132	2.413	.678	1.283
	p -value	.025	.123	.412	.259
<i>Favorably evaluated brands:</i>					
Gallinat	Factual	5.20 (1.62)	5.04 (1.35)	5.78 (1.50)	5.96 (1.84)
	Narrative	5.80 (1.37)	4.98 (1.91)	6.02 (1.37)	6.06 (1.34)
	$F_{(1;112)}$ -value	4.652	.030	.737	.118
	p -value	.033	.862	.392	.732
Gubor	Factual	4.65 (1.23)	4.59 (1.23)	3.50 (1.54)	3.23 (1.35)
	Narrative	5.23 (1.20)	4.53 (1.66)	3.40 (1.45)	3.63 (1.39)
	$F_{(1;78)}$ -value	4.610	.042	.090	1.706
	p -value	.035	.839	.765	.195
Olympus	Factual	4.74 (1.18)	4.40 (1.12)	4.70 (1.44)	4.44 (1.54)
	Narrative	5.18 (.69)	4.71 (.96)	4.91 (1.25)	4.70 (1.25)
	$F_{(1;111)}$ -value	4.819	2.313	.608	.841
	p -value	.030	.131	.437	.361

Scale ranges from 1 = negative (low) to 7 = positive (high).

Standard deviations in parentheses.

5 Conclusions

5.1 Implications for Practice

Our results indicate that the use of narratives makes product evaluations more extreme. Thus, we recommend marketers to use narratives in ads if favorable brands are promoted. On the opposite, marketers should be cautious when

they consider using narratives in the case of less favorable brands. We did not manipulate the pleasantness of the narratives. However, prior research showed an additional positive effect of pleasant narratives on product evaluations. Thus, even in the case of less favorable brands, the overall effect of pleasant narratives may be positive because the positive effect of ad liking could outperform the negative effect described in this paper. However, if reading the narrative is not pleasant (i.e., is evaluated neutral), marketers should refrain from using narratives if a less desirable brand is promoted in the advertisement.

5.2 Limitations and Directions for Future Research

In our experiment, we used brands from numerous product categories to manipulate brand favorability. In future research, desirable and less desirable brands that both belong to the same category should be used to investigate the interaction of brand favorability and the information presentation format. By doing so, the confounding effect due to the product category can be controlled (because narratives may fit to some categories such as cosmetics to a higher extent than to other categories such as toilet tissues). Moreover, the effect of the length of the texts should be controlled. In our experiments, the texts used in the narrative-presentation-format condition exceeded the length of the continuous-factual format.

Besides pleasantness, narratives can differ regarding numerous additional aspects (e.g., first-person vs. third-person narrator, length of the text, affective tone, and content of the story). Researchers in the field of advertising are encouraged to find types of narratives advertisements that are highly effective in improving the attitudes toward the promoted products.

Note

The study described in this paper has been presented at the ICORIA 2013. In this paper, we extended the presented version by referring to previous research in more detail. The authors wish to thank Philipp Bopp, Eva Dehnert, Sabine El Husseini, Jan Fabian, Cathrine Kandzia, Elisabeth Lang, Vanessa Volkmar, Ines Walter, and Sandra Wolfart for assisting us in developing the stimulus material and collecting the data.

6 References

- Adaval, R. and R. S. Wyer Jr. (1998), "The role of narratives in consumer information processing," in: *Journal of Consumer Psychology*, Vol. 7(3), 207–245.
- Argote, L.; Seabright, M. A. and L. Dyer (1986), "Individual versus group use of base-rate and individuating information," in: *Organizational Behavior and Human Decision Processes*, Vol. 38(1), 65–75.
- Bhatnagar, N. and F. Wan (2011), "Is self-character similarity always beneficial? The moderating role of immersion in product placement effects," in: *Journal of Advertising*, Vol. 40(2), 39–50.

- Boller, G. W. and J. C. Olson (1991), "Experiencing ad meanings: Crucial aspects of narrative/drama processing," in: Holman, R. H. and M. R. Solomon (eds.): *Advances in Consumer Research*, Provo, Association for Consumer Research, Vol. 18, 172–175.
- Chang, C. (2009a), "Being hooked' by editorial content," in: *Journal of Advertising*, Vol. 38(1), 21–33.
- Deighton, J. and S. J. Hoch (1993), "Teaching emotion with drama advertising," in: Mitchell A. A. (ed.): *Advertising Exposure, Memory and Choice*, Lawrence Erlbaum Associates, Hillsdale, 261–282.
- Deighton, J.; Romer, D. and J. McQueen (1989), "Using drama to persuade," in: *Journal of Consumer Research*, Vol. 16(3), 335–343.
- Escalas, J. E. (1998), "Advertising narratives: What are they and how do they work?" in: Stern B. B. (ed.): *Representing consumers: Voices, views and visions*, Routledge, London, 267–289.
- Escalas, J. E. (2007), "Self-referencing and persuasion: Narrative transportation versus analytical elaboration," in: *Journal of Consumer Research*, Vol. 33(4), 421–429.
- Ginosar, Z. and Y. Trope (1980), "The effects of base rates and individuating information on judgments about another person," in: *Journal of Experimental Social Psychology*, Vol. 16(3), 228–242.
- Green, M. C. and T. C. Brock (2000), "The role of transportation in the persuasiveness of public narratives," in: *Journal of Personality and Social Psychology*, Vol. 79(5), 701–721.
- Mattila, A. (2000), The role of narratives in the advertising of experimental services, in: *Journal of Service Research*, Vol. 3(1), 35–45.
- Mattila, A. (2002), "The use of narrative appeals in promoting restaurant experiences," in: *Journal of Hospitality & Tourism Research*, Vol. 26(4), 379–395.
- Peracchio, L. A. and J. Meyers-Levy (1997), "Evaluating persuasion-enhancing techniques from a resource-matching perspective," in: *Journal of Consumer Research*, Vol. 24(2), 178–191.
- Petrova, P. K. and R. B. Cialdini (2005), "Fluency of consumption imagery and the backfire effects of imagery appeals," in: *Journal of Consumer Research*, Vol. 32(3), 442–452.
- Polyorat, K.; Alden, D. L. and E. S. Kim (2007), "Impact of narrative versus factual print ad copy on product evaluation: The mediating role of ad message involvement," in: *Psychology & Marketing*, Vol. 24(6), 539–554.
- Tun, P. A. (1989), "Age differences in processing expository and narrative text," in: *Journal of Gerontology: Psychological Sciences*, Vol. 44(1), 9–15.
- Wells, W. D. (1989), "Lectures and dramas," in: Cafferata, P. and A. M. Tybout (eds.): *Cognitive and affective responses to advertising*, Lexington Books, Massachusetts, 13–20.
- Wentzel, D.; Tomczak, T. and A. Herrmann (2010), "The moderating effect of manipulative intent and cognitive resources on the evaluation of narrative ads," in: *Psychology & Marketing*, Vol. 27(5), 510–530.

Part II

Online and Mobile Advertising

The Impact of Managerial Responses to Online Reviews on Consumers' Perceived Trust and Attitude

Nathalia Purnawirawan

Patrick De Pelsmacker

Nathalie Dens

1 Introduction

Advancing technology and recent developments in communication media have created powerful possibilities for consumers to share their stories and experiences regarding a product or service online. They talk about brands and companies not only in a positive way (“Food and service in this restaurant are just great”) but also in a negative way (“This product turns out to be very disappointing”). Negative customer responses have received considerable attention, both in managerial and in academic research (e.g., Lee and Youn, 2009). Negative word-of-mouth (NWOM) by a dissatisfied customer who encountered a performance failure is considered as very harmful for a company (Cheung and Lee, 2008; Wirtz and Mattila, 2004). After reading negative reviews, readers are less inclined to buy the product or patronage the service. Therefore, one of the major challenges for companies is to develop appropriate response strategies to negative WOM to restore trust and a positive attitude of review readers (potential customers) (Hennig-Thurau et al., 2010). The main objective of this study is to investigate whether or not a service provider should respond to negative online reviews, and if so, how it should respond to (re)gain trust and stimulate positive attitude from review readers.

Previous research on service recovery has shown that when a service failure occurs, a well-executed recovery effort is not only capable of influencing customer satisfaction positively, but can also convert dissatisfied customers into satisfied and loyal ones (e.g., Maxham, 2001; Spreng et al., 1995; Swanson and Kelley, 2001; Tax et al., 1998). However, studies on service recovery were usually conducted in the offline environment, where the recovery was focused on converting the victimized customer. The present study is situated in the user generated online context, where the reader (a potential customer) takes the point of view of a bystander, a third party who is just looking for information and does not have anything to do with the service provider or the dissatisfied customers voicing the negative comment. This bystander point of view is crucial, as most Internet users are bystanders, and as research in an offline setting has shown that bystanders' attitudes are affected by their observations of the service recovery (Van Vaerenbergh et al., 2013). This indicates that the observing customers may react similarly to failures and recovery efforts as victim-

ized/complaining customer. Thus, if a service provider does not respond properly to negative reviews, it is likely that these potential customers will lose their trust in and develop a negative attitude towards the service provider.

The present study investigates how different response responses of a service provider to negative comments from prior customers are perceived by prospective customers of the company. Based on corporate response strategies and offline recovery literature, we study six response strategies: no response, refutation, apology only, apology and promise that it won't happen again, apology and compensation, apology and promise and compensation (Coombs, 1998; Davidow, 2003; Johnston and Mehra, 2002). In addition, as it is very likely to find both positive and negative online reviews about a product or service, we also investigate the moderating role of review balance (i.e. the ratio of positively and negatively valenced reviews (Purnawirawan et al., 2012)). When the number of positive reviews is higher than, equal to or lower than the number of the negative reviews, the balance is defined as respectively positive, neutral or negative.

Based on the fairness/justice theory (Tax and Brown, 1998) and the accountability principle (McCull-Kennedy and Sparks, 2003), the objective of this study is to provide a better understanding of prospective customers' trust and attitude towards the service provider following managerial responses to sets of online review varying in their degree of negativity.

2 Literature Review

Due to the characteristics of services, such as the intangibility, the heterogeneity and the simultaneous production-consumption process, customer satisfaction after a service recovery depends on their fairness perception (i.e. the extent to which they perceive themselves being treated fairly compared to other customers and the extent to which they perceive that the output is in balance with the input) and attribution of accountability (i.e. the perceived causes of success or failure, who is to blame) (Ostrom and Iacobucci, 1995; Swanson and Kelley, 2001). McCull-Kennedy and Sparks (2003) argue that a negative perception of fairness leads to the attribution of accountability (who is to blame). This accountability concept is fundamental to fairness theory, because when a service failure has occurred and this is perceived as unfair, someone will be blamed. We assume that attributing the accountability to a perceived wrongdoer helps the victimized customer, and thus, the bystander (the prospective customer) shape their fairness perception and consequently, affects their perceived trust and attitude towards the service provider.

When people post negative comments on the Internet, companies can choose between several response strategies depending on whether the company acknowledges the problem, takes responsibility and provides the customer a closure, a solution or a compensation (Coombs and Holladay, 2002; Davidow, 2003; Johnston and Mehra, 2002) (Figure 1). We distinguish six response strat-

egies that can be placed on a continuum ranging from the company doing no effort to a lot of effort (Figure 1). In a no response strategy the company does not even acknowledge that there is a problem (Kerkhof et al., 2010). Giving no response has been the standard strategy until companies realized how harmful negative comments on the Internet can be. Also, some companies choose not to interfere in web discussions or consumer forums because of their company policy (Schouten, 2007). This strategy could be appropriate in cases where most people are satisfied with the company. Refutation is defined as when the company acknowledges that there is a problem, but it denies responsibility by refuting the negative claim and trying to shift the blame elsewhere (Coombs, 1998). Some researchers have argued that as long as the “guilt” has not been established, a denial can be more successful in rebuilding trust than accepting responsibility (Kim et al., 2004). Refutation can thus be advisable when the number of negative reviews is outweighed by the number of positive reviews. In this case, the bystander could attribute the accountability to the few complaining customers, instead of the company. Apologies signal that the company acknowledges the problem and accepts responsibility (Davidow, 2003). Research has shown that an apology from the service provider can be an appropriate strategy, especially when the magnitude of the service failure is low (Smith et al., 1999), but it can also backfire. On one hand, an apology communicates concern and empathy to customers who have experienced a service failure (Blodgett et al., 1997). On the other hand, publicly taking responsibility and expressing regret by apologizing on an online forum might bring the readers to the conclusion that the reviewer was right in his negative assessment. In addition a simple apology is often not enough if it is not used in conjunction with some sort of compensation (Mueller et al., 2003). The company can acknowledge the problem, accept responsibility and provide the customer with a closure/solution. We distinguish between apology + promise, apology + compensation and apology + promise + compensation strategies. This means that, beside apologizing, the company also either promises or guarantees that the problem was temporary, is now solved and will not happen again, or offers a compensation, or promises that it won't happen again and offers a compensation (Coombs, 1998; Johnston and Mehra, 2002). Bitner (1990) concludes that a compensation offer leads the customer to attribute greater control to the firm and to believe that the service failure will not happen again in the future, because it may be costly for the company to keep compensating. Although a compensation offer usually implies a promise that the problem will not occur again, we argue that in some situations (e.g. when the reviews are predominantly positive) it is not necessary to offer a compensation (Mueller et al., 2003; Sparks and Mccoll-Kennedy, 2001).

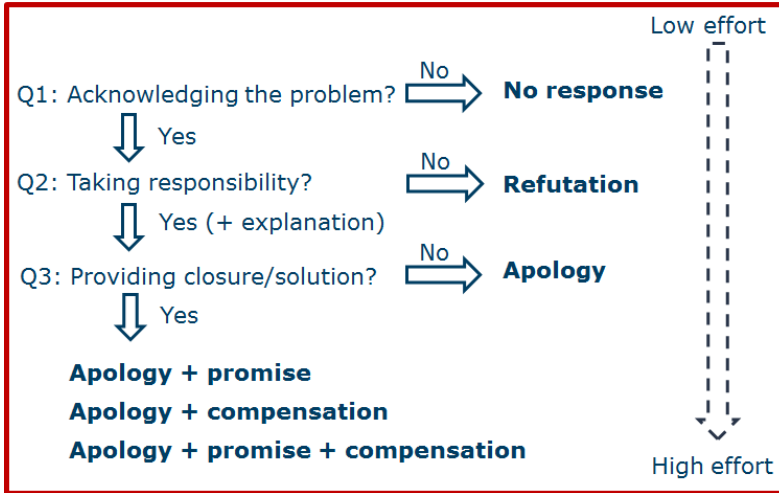


Figure 1: Managerial responses

We argue that the managerial response to negative online word-of-mouth should take the moderating role of review balance into account because the ratio of positive and negative reviews may affect the bystander's attribution of accountability and influence his/her perception of fairness of the recovery response. For instance, when only one single customer complains, while other customers have expressed their satisfaction with the service, the bystander may attribute the accountability to the complaining customers, instead of the service provider: "some people are just naggers". This may give the company more options and more rooms to react. In contrast, when most people post a negative comment, the bystander would probably blame the service provider as the cause of the failure. A (prospective) consumer who receives the same negative information from various sources is most likely to blame the product or the organization for the dissatisfaction rather than the complainer (Richins, 1983). Not only this kind of consistent (negative) information increases the perceived severity or magnitude of the problem, it also gives the impression that the problem is likely to occur again. Consequently, if the company wants to rebuild a positive relationship (in terms of perceived trust and attitude) with its (prospective) customers the company will probably need to come up with more than just a simple apology. Therefore we expect that the more negative the review set balance is, the more the service provider needs to do to enhance readers' perceived trust and attitude.

3 Research Method

3.1 *Pretest: Manipulation Check*

The purpose of the study is to investigate if and how a service provider should respond to negative online reviews to restore trust and stimulate a positive attitude towards the service from readers. To accomplish this purpose, we set up a study in a restaurant context. A content analysis of existing restaurant review websites revealed three dimensions that are often used for evaluating the quality of a restaurant, namely food, service and atmosphere. We first conducted a manipulation check for review balance in an online questionnaire with a sample of 79 respondents (51.9% male, $M_{Age} = 37.35$, $SD_{Age} = 11.56$). Respondents were given online review scores (/10) for three different hypothetical restaurants. Each restaurant was evaluated by four reviewers on food, service and atmosphere. The review sets were made up in such a way that the scores for each restaurant represented a different balance: the review scores for restaurant A represented a negative balance, for restaurant B a neutral balance and for restaurant C a positive balance. To maintain internal validity, we kept the scores for service and atmosphere constant across the different balance conditions (always scoring 5 or 6 out of 10), altering only the scores for “food” to manipulate the balance. In the positive balance condition, the respondents received three positive (9/10) and one negative (2/10) review scores about the food, while in the negative conditions, they received one positive (9/10) and three negative reviews about the food (2/10). In the neutral conditions, two positive (9/10) and two negative (2/10) reviews about the food were provided. The respondents in the pretest rated the valence of the review set for each restaurant on a single item 10-point scale (negative – positive). A repeated measures ANOVA shows that the negatively balanced review set was perceived as significantly more negative ($M = 4.18$) than the neutral ($M = 5.18$) and the positively ($M = 6.47$) ones, and that the neutrally balanced set scored significantly more negative than the positively balanced set ($F(2, 78) = 97.443$, $p < .001$). Hence, the balance manipulation was successful.

3.2 *Main Experiment*

A 3 (balance: negative, neutral, positive) x 6 (managerial responses: no response, refutation, apology only, apology and promise it won’t happen again, apology and compensation, apology and promise and compensation) between-subjects experiment was conducted. We opted for using a scenario as this method is shown to be ecologically and internally valid in service encounter research (Wirtz and Mattila, 2004). Respondents were recruited by a data collection agency and were randomly assigned to one of the eighteen conditions. 973 respondents (50.8% male, $M_{Age} = 42.49$, $SD_{Age} = 14.14$) completed the question-

naire online. They were told that they were going to a casual dinner with friends and that they were responsible for choosing a restaurant and for making a reservation. They were asked to consider the focal restaurant (either restaurant A, B, or C, randomly allocated across conditions), and were provided with the four online review scores for that restaurant as described in the pretest. After reading the four reviews, respondents immediately read one of the five possible responses by the restaurant's manager (or received no response). Then, participants were asked to rate the manager's response on a 7-point scale in terms of perceived trust (I found the response of the manager: credible, reliable, trustful, professional, experienced, competent (Lichtenstein and Bearden, 1989; Stafford et al., 2002), $\alpha = .939$) and their attitude toward the restaurant (My attitude toward this restaurant is positive/negative, I think this restaurant is good/bad, I think this is a high/low quality restaurant (Batra and Stayman 1990), $\alpha = .920$). The average score on these items is used in further analyses.

4 Results

Table 1 presents an overview of the 3x6 experimental design with means and standard deviations for perceived trust and attitude. ANOVA-analyses show that review balance does not exert a significant main effect on perceived trust ($F(2, 813) = .504, p = .605$), but it does on attitude ($F(2, 972) = 28.334, p < .001$). Bonferroni-corrected pairwise comparisons reveal that a positive balance ($M = 4.34$) results in a significantly more positive attitude than a neutral balance ($M = 3.95$) ($p < .001$), and a neutral balance results in a significantly more positive attitude than a negative balance ($M = 3.73$) ($p = .027$).

The main effects of managerial response are significant for perceived trust ($F(4, 813) = 7.316, p < .001$) and attitude ($F(5, 972) = 4.561, p < .001$). An apology + promise ($M = 4.55$), an apology + compensation ($M = 4.57$) and an apology + promise + compensation ($M = 4.64$) result in significantly higher perceived trust than refutation ($M = 4.05$) ($p < .002$). For attitude, an apology + promise + compensation ($M = 4.23$) results in significantly higher scores than no response ($M = 3.82$) and refutation ($M = 3.80$).

The interaction effects of review balance and managerial response are significant for both perceived trust ($F(8, 813) = 2.174, p = .027$) and attitude ($F(10, 972) = 1.869, p = .046$). For perceived trust, Bonferroni-corrected pairwise comparisons reveal no significant differences between the different response strategies in case of a positive review balance. However, in a neutral balance, an apology + promise ($M = 4.87$), an apology + compensation ($M = 4.51$) and an apology + promise + compensation ($M = 4.78$) result in significantly higher scores than refutation ($M = 3.85$) ($p < .023$). In case of a negative balance, the apology + promise + compensation ($M = 4.75$) results in significantly higher perceived trust than refutation ($M = 3.95$) ($p < .002$) (see Table 1). For attitude, Bonferroni-corrected pairwise comparisons also reveal no significant differ-

ences between the different strategies in case of a positive review balance. In a neutral balance, an apology + promise ($M = 4.23$) generates a significantly higher score compared to refutation ($M = 3.57$) ($p = .024$). In a negative balance, an apology + promise + compensation ($M = 4.22$) results in a significantly higher score compared to no response ($M = 3.59$), refutation ($M = 3.53$) and apology only ($M = 3.39$) ($p < .018$) (Table 1). The results for both perceived trust and attitude confirm our expectation: the more negative the balance, the more the service provider needs to do to regain trust and enhance positive attitude of the review reader.

Table 1: The impact of balance-response interaction on Perceived Trust and Attitude: N, means and standard deviations

	Positive	Neutral	Negative
No response	N = 48 $M_{Att} = 4.22 (.90)$	N = 51 $M_{Att} = 3.65 (1.03)$	N = 60 $M_{Att} = 3.59 (1.08)$
Refutation	N = 58 $M_{PT} = 4.37 (.15)$ $M_{Att} = 4.30 (.88)$	N = 51 $M_{PT} = 3.85 (.16)$ $M_{Att} = 3.57 (.83)$	N = 49 $M_{PT} = 3.95 (.16)$ $M_{Att} = 3.53 (1.12)$
Apology only	N = 54 $M_{PT} = 4.37 (.15)$ $M_{Att} = 4.31 (1.01)$	N = 55 $M_{PT} = 4.39 (.15)$ $M_{Att} = 4.13 (1.05)$	N = 57 $M_{PT} = 4.28 (.15)$ $M_{Att} = 3.39 (1.31)$
Apology + promise	N = 59 $M_{PT} = 4.36 (.15)$ $M_{Att} = 4.32 (.97)$	N = 47 $M_{PT} = 4.87 (.16)$ $M_{Att} = 4.23 (1.04)$	N = 51 $M_{PT} = 4.42 (.16)$ $M_{Att} = 3.84 (.99)$
Apology + compensation	N = 51 $M_{PT} = 4.68 (.16)$ $M_{Att} = 4.48 (.84)$	N = 57 $M_{PT} = 4.51 (.15)$ $M_{Att} = 4.02 (1.10)$	N = 65 $M_{PT} = 4.52 (.14)$ $M_{Att} = 3.81 (1.35)$
Apology + promise + compensation	N = 52 $M_{PT} = 4.39 (.15)$ $M_{Att} = 4.40 (1.05)$	N = 54 $M_{PT} = 4.78 (.15)$ $M_{Att} = 4.07 (1.09)$	N = 54 $M_{PT} = 4.75 (.15)$ $M_{Att} = 4.22 (.83)$

5 Discussion, Implications and Suggestions for Further Research

Negative WOM, as one of the consequences of a dissatisfied customer resulting from a service failure, is considered harmful to a business (Wirtz and Mattila, 2004). The results of this study show that negative electronic WOM is detrimental for service providers, as a negative balance (more negative than positive reviews) is found to significantly lower attitude of the potential customer, compared to a neutral or positive balance, and that a neutral balance results in significantly lower attitude than a positive balance.

The significant interaction effects of balance and managerial response on both perceived trust and attitude suggest two important learnings. First, we cannot just generalize conclusions drawn from the offline context. Unlike a face-to-face conversation, the source of the negative online WOM is unknown. Consequently, it may become less obvious to understand the motives or intentions of the reviewers to attribute accountability and to form judgment. Second, balance plays a moderating role and different response strategies are needed depending on the ratio of the positive and negative reviews. When the reviews are mostly positive, no reaction is needed to counter the few negative comments. The reader can easily attribute the accountability to the few complaining customers, because some people are just naggers. Offering an apology, be it in combination with a promise that the failure will not happen again and/or a compensation does not benefit the organization in terms of perceived trust and attitude as the company is apparently not perceived to be responsible for the failure. When the balance is neutral, suggesting that the opinion of previous customers is divided, an apology combined with a promise that the failure will not happen again appears to be the appropriate thing to do. Offering a compensation in this situation is found to be unnecessary. According to the justice theory, perceived distributional justice will be optimal when there is a balance between the input and the output. When the outcome of the recovery is more substantial than the damage experienced, people may feel guilty and less comfortable to accept the compensation (Spreng et al., 1995). As the opinion of the customers is divided, it is possible that the reader is in doubt of who is accountable, and perceives the failure as less severe. Consequently, an assurance of a fair service in the future is enough to enhance perceived trust and the attitude towards the service provider of the bystander. When the balance is negative, the reader may automatically assign accountability to the company as there are more dissatisfied people than satisfied ones. In this case, the company needs to do a lot. Not only an apology, but also a promise and compensation is desirable to restore the positive relationship.

Our findings also demonstrate that a refutation strategy usually results in low scores of perceived trust and attitude. Hence, regardless of who is responsible for the failure, we do not recommend companies to use this strategy in a recovery setting. Not only does refutation not communicate empathy towards the

dissatisfied customers, this kind of response may also enhance the credibility of the reviewer. Moreover, we believe that, although a refutation implies that the service provider does acknowledge the problem, this effort could be considered a 'negative' effort, as it defends the company's needs, rather than those of the customer. Therefore, such negative effort rather triggers a negative response of the public, than 'setting things right'. Additionally, although an apology is argued to communicate empathy toward the victimized customer, our study suggests that this strategy is usually not enough as it neither solves the problem, nor guarantees a fair service in the future for the readers.

Limitations of the present study provide opportunities for future research. First, we use evaluation scores without any text as a review. This method was chosen to ensure the internal validity of the study as it standardizes the service evaluation (Wirtz and Mattila, 2004). However, this may make it more difficult for the bystander to understand the context of the problem and to form judgment only based on the evaluation scores. Further research can include both scores and review text to investigate what the most appropriate response is. Second, we used four reviews to represent the concept of balance. Due to possible inconsistencies between the actual and the perceived review set balance (Purnawirawan et al., 2010), it is possible that the results will alter with altering numbers of reviews (Chevalier and Mayzlin, 2006). On the one hand, due to the large number of available reviews, the reader can get confused and the perception of unequal balance might be strengthened if the tenor of the review is clearly positive or negative, or disappear if the number of positive and negative reviews are more or less equal, or if the valence switches between positive and negative quite often. Further research could investigate to what extent the number of reviews affects readers' perception of justice and how the organization needs to respond. Furthermore, we drew upon the fairness theory to build the hypotheses, while we did not specifically measure the reader's perceived justice. The unfairness did not happen to the reader personally and the recovery effort was not offered to him specifically. As a result, the perceived justice of the reader (a third person who plans to purchase the service) may differ from that of the dissatisfied customer. This may explain why in certain situations, an apology and a promise suffices and even results in the highest score, as compared to an apology, a promise and a compensation. Additionally, researchers have suggested that perceived trust may play a mediating role on attitude and behavioral intention (Bart et al., 2005; Harrison Mcknight et al., 2002; Kim et al., 2008). Further research could explore this claim and investigate whether perceived trust mediates the impact of managerial response (moderated by balance) on attitude. If this is the case, the appropriate managerial response would play an even more important role in determining the reader's attitude. Finally, negative reviews in an online context are usually not considered as official complaints, as the reviewers are assumed to just express their opinion. However, recent studies sug-

gest that senders of negative reviews do not only express their opinion, but also expect companies to respond to their messages (Lee and Song, 2010; Van Noort and Willemsen, 2012). Review sites such as TripAdvisor even offer companies the opportunity to respond to reviews. This emphasizes the importance of adequately responding to negative WOM and calls for more research to further understand the complex nature of the consumer evaluation process. How do current customers and readers perceive a standardized response (the same response given to every review)? On one hand, it shows that the service provider cares. On the other hand, a standardized response might lead customers and readers to think that the service provider is not devoting a lot of effort into responding or recovering the customer. This might challenge the optimal satisfaction-productivity trade-off (Anderson et al., 1997).

6 References

- Anderson, E. W.; Fornell, C. and Rust, R. T. (1997), "Customer Satisfaction, Productivity, and Profitability: Differences between Goods and Services," in: *Marketing Science*, Vol. 16, 2, 129-145.
- Bart, Y.; Shankar, V.; Sultan, F. and Urban, G. L. (2005), "Are the Drivers and Role of Online Trust the Same for All Web Sites and Consumers? A Large-Scale Exploratory Empirical Study," in: *Journal of Marketing*, Vol., 133-152.
- Bitner, M. J. (1990), "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses," in: *The Journal of Marketing*, Vol., 69-82.
- Blodgett, J. G.; Hill, D. J. and Tax, S. S. (1997), "The Effects of Distributive, Procedural, and Interactional Justice on Postcomplaint Behavior," in: *Journal of Retailing*, Vol. 73, 2, 185-210.
- Cheung, C. M. K. and Lee, M. K. O. (2008), "Online Consumer Reviews: Does Negative Electronic Word-of-Mouth Hurt More?," *American Conference on Information Systems (AMCIS) Proceedings*, 143, <http://aisel.aisnet.org/amcis2008/143>.
- Chevalier, J. A. and Mayzlin, D. (2006), "The Effect of Word of Mouth on Sales: Online Book Reviews," in: *Journal of Marketing Research*, Vol. 43, 3, 345-354.
- Coombs, T. W. and Holladay, S. J. (2002), "Helping Crisis Managers Protect Reputational Assets: Initial Tests of the Situational Crisis Communication Theory," in: *Management Communication Quarterly*, Vol. 16, 2, 165-186.
- Coombs, W. T. (1998), "An Analytic Framework for Crisis Situations: Better Responses from a Better Understanding of the Situation," in: *Journal of Public Relations Research*, Vol. 10, 3, 177-191.
- Davidow, M. (2003), "Organizational Responses to Customer Complaints: What Works and What Doesn't," in: *Journal of Service Research*, Vol. 5, 3, 225-250.
- Harrison McKnight, D.; Choudhury, V. and Kacmar, C. (2002), "The Impact of Initial Consumer Trust on Intentions to Transact with a Web Site: A Trust Building Model," in: *The Journal of Strategic Information Systems*, Vol. 11, 3, 297-323.
- Hennig-Thurau, T.; Malthouse, E. C.; Friegle, C.; Gensler, S.; Lobschat, L.; Rangaswamy, A. and Skiera, B. (2010), "The Impact of New Media on Customer Relationships," in: *Journal of Service Research*, Vol. 13, 3, 311-330.
- Johnston, R. and Mehra, S. (2002), "Best-Practice Complaint Management," in: *Academy of Management Executive*, Vol. 16, 4, 145-154.

- Kerkhof, P.; Utz, S. and Beukeboom, C. (2010), "The Ironic Effects of Organizational Responses to Negative Online Consumer Reviews," *9th International Conference on Research in Advertising (Icoria) Proceedings*.
- Kim, D. J.; Ferrin, D. L. and Rao, H. R. (2008), "A Trust-Based Consumer Decision-Making Model in Electronic Commerce: The Role of Trust, Perceived Risk, and Their Antecedents," in: *Decision Support Systems*, Vol. 44, 2, 544-564.
- Kim, P. H.; Ferrin, D. L.; Cooper, C. D. and Dirks, K. T. (2004), "Removing the Shadow of Suspicion: The Effects of Apology Versus Denial for Repairing Competence-Versus Integrity-Based Trust Violations," in: *Journal of applied psychology*, Vol. 89, 1, 104.
- Lee, M. and Youn, S. (2009), "Electronic Word of Mouth (Ewom)," in: *International Journal of Advertising*, Vol. 28, 3, 473-499.
- Lee, Y. L. and Song, S. (2010), "An Empirical Investigation of Electronic Word-of-Mouth: Informational Motive and Corporate Response Strategy," in: *Computers in Human Behavior*, Vol. 26, 5, 1073-1080.
- Lichtenstein, D. R. and Bearden, W. O. (1989), "Contextual Influences on Perceptions of Merchant-Supplied Reference Prices," in: *Journal of Consumer Research*, Vol. 16, 1, 55-66.
- Maxham, J. G. (2001), "Service Recovery's Influence on Consumer Satisfaction, Positive Word-of-Mouth, and Purchase Intentions," in: *Journal of Business Research*, Vol. 54, 1, 11-24.
- McCull-Kennedy, J. R. and Sparks, B. A. (2003), "Application of Fairness Theory to Service Failures and Service Recovery," in: *Journal of Service Research*, Vol. 5, 3, 251-266.
- Mueller, R.; Palmer, A.; Mack, R. and McMullan, R. (2003), "Service in the Restaurant Industry: An American and Irish Comparison of Service Failures and Recovery Strategies," in: *International Journal of Hospitality Management*, Vol. 22, 4, 395-418.
- Ostrom, A. and Iacobucci, D. (1995), "Consumer Trade-Offs and the Evaluation of Services," in: *Journal of Marketing*, Vol. 59, 1, 17-28.
- Purnawirawan, N.; De Pelsmacker, P. and Dens, N. (2010), "Balance and Sequence in Online Reviews: The Wrap Effect," *9th International Conference on Research in Advertising (Icoria) Proceedings*.
- Purnawirawan, N.; De Pelsmacker, P. and Dens, N. (2012), "Balance and Sequence in Online Reviews: How Perceived Usefulness Affects Attitudes and Intentions," in: *Journal of Interactive Marketing*, Vol. 26, 4, 244-255.
- Richins, M. L. (1983), "Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study," in: *Journal of Marketing*, Vol. 47, 1, 68-78.
- Schouten, E. (2007), "Eerste Hulp Bij Webdiscussie."
http://vorige.nrc.nl/article1760860.ece/Eerste_hulp_bij_webdiscussie. Accessed 08/03/2013.
- Smith, A. K.; Bolton, R. N. and Wagner, J. (1999), "A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery," in: *Journal of Marketing Research*, Vol. 36, 3, 356-372.
- Sparks, B. A. and McCull-Kennedy, J. R. (2001), "Justice Strategy Options for Increased Customer Satisfaction in a Services Recovery Setting," in: *Journal of Business Research*, Vol. 54, 3, 209-218.
- Spreng, R. A.; Harrell, G. D. and Mackoy, R. D. (1995), "Service Recovery: Impact on Satisfaction and Intentions," in: *Journal of Services Marketing*, Vol. 9, 1, 15-23.
- Stafford, M. R.; Stafford, T. F. and Day, E. (2002), "A Contingency Approach: The Effects of Spokesperson Type and Service Type on Service Advertising Perceptions," in: *Journal of Advertising*, Vol. 31, 2, 17-35.
- Swanson, S. R. and Kelley, S. W. (2001), "Service Recovery Attributions and Word-of-Mouth Intentions," in: *European Journal of Marketing*, Vol. 35, 1/2, 194-211.

-
- Tax, S. S. and Brown, S. W. (1998), "Recovering and Learning from Service Failure," in: *Sloan Management review*, Vol., Fall, 75-88.
- Tax, S. S.; Brown, S. W. and Chandrashekar, M. (1998), "Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing," in: *Journal of Marketing*, Vol. 62, 2, 60-76.
- Van Noort, G. and Willemsen, L. M. (2012), "Online Damage Control: The Effects of Proactive Versus Reactive Webcare Interventions in Consumer-Generated and Brand-Generated Platforms," in: *Journal of Interactive Marketing*, Vol. 26, 3, 131-140.
- Van Vaerenbergh, Y.; Vermeir, I. and Larivière, B. (2013), "Service Recovery's Impact on Customers Next-in-Line," in: *Managing Service Quality*, Vol. 23, 6.
- Wirtz, J. and Mattila, A. S. (2004), "Consumer Responses to Compensation, Speed of Recovery and Apology after a Service Failure," in: *International Journal of Service Industry Management*, Vol. 15, 2, 150-166.

The Good and the Bad of Negative Word-of-Mouth: Empirical Investigation into the Effect of Online Messages

Su Jung Kim

Rebecca Jen-Hui Wang

Edward C. Malthouse

1 Introduction

With the advancement of Internet technologies, customers can share their opinions in ways that were not possible just a few years ago. Consumers now have the ability to express their thoughts and feelings openly after they consume a product or service. In particular, when customers experience dissatisfaction with a brand, they can post their negative reactions on an online public forum such as a company's website, social networking sites, or third-party complaint websites. This negative word-of-mouth (NWOM) is observable not only by other customers, but also by the firm itself. Thus, these social media technologies motivate a firm to understand the sentiments and the consequences of these negative messages posted by its customers (Chevalier & Mayzlin, 2006; Fournier & Avery, 2011). This engagement also changes the power dynamics between a firm and a consumer in the sense that customers' NWOM potentially influences other customers who read these expressions as well as the posters themselves (Pitt, Berthon, Watson, & Zinkhan, 2002).

The phenomenon of electronic word-of-mouth (e-WOM) has spurred streams of recent research in consumer complaining behavior (CCB) and sentiment analysis. In the CCB literature, complaints are thought to be triggered by negative feelings or emotions from perceived dissatisfaction (Day, 1984; Landon, 1980), and such emotions are believed to affect attitudes toward brands, purchase intentions, and purchase decisions (Maute & Dubés, 1999; Riegner, 2007). However, previous studies examined NWOM in a less accurate manner by conducting a survey asking participants to rate negative emotions (e.g., anger, contempt, disgust, shame, sadness) that are typically associated with dissatisfying consumption experiences, or other psychological and behavioral measures that could reflect customers' post-consumption experience. Moreover, prior studies were not able to estimate the impact of negative emotions on purchase behaviors.

We consider customers' complaints posted on an online public forum as NWOM and investigate the effects of posting and viewing NWOM, and expressing different negative emotions. We address the aforementioned shortcomings of previous studies by analyzing a unique dataset that comprises customers' NWOM activities on a firm's community website and their purchase and re-

demption behaviors. In doing so, we conduct a sentiment analysis on the customers' NWOM messages and link the NWOM activities to their actual purchase records.

2 Online NWOM as Consumer Complaint and Its Effects

2.1 NWOM as Consumer Complaint Behavior (CCB)

One of the major areas of research regarding WOM is the effect of WOM valence (i.e., whether WOM is positive, negative, or neutral). (Liu, 2006). Liu (2006) argues that valence implies the cognitive consequence of consumers' attitudes toward a brand. Because positive WOM (PWOM) enhances expected quality and brand attitude, whereas NWOM dampens them, PWOM leads to a recommendation for product purchase and NWOM elicits product denigration, rumor, and private complaining (Liu, 2006, p. 76). In particular, scholars have shown that NWOM activities diminish purchase intentions and sales (Chevalier & Mayzlin, 2006; Huang & Chen, 2006). Some even demonstrated that the impact of NWOM on decreasing sales is greater than the impact of PWOM on increasing sales (Mittal, Ross, & Baldasare, 1998; Park & Lee, 2009), suggesting how NWOM can critically harm product/service evaluations and revenue growth.

Another stream of research that examines various aspects of NWOM is consumer complaint behavior. NWOM has been considered to be a particular type of complaining behaviors in the CCB literature. Supplementing Hirschman's (1970) classic CCB model of exit (e.g., switching brands/store), voice (e.g., making a complaint to the seller), and loyalty (e.g., continuing to purchase from a dissatisfying seller or buy a disappointing product), more recent studies have included WOM or private (e.g., telling family and friends about the unsatisfactory experience) and public complaints (e.g., NWOM expressed openly to the public via offline or online channels) as distinct constructs of CCB (Singh, 1990; Ward & Ostrom, 2006).

Although most CCB literature focuses on the definition and classification of complaining behaviors (Richins, 1983; Singh, 1988), types of complaints or complainers (Gregg & Scott, 2008; Harrison-Walker, 2001; Singh, 1990; Vásquez, 2011), or firms' strategies for CCB management (Davidow, 2003; Fornell & Wernerfelt, 1987; Tax, Brown, & Chandrashekar, 1998), a few studies have found that engaging in complaining behavior reduces the level of dissatisfaction among complainers and mediates repurchase intentions (Davidow, 2003; Nyer & Gopinath, 2005).

2.2 *Differentiating the Effect of Posting and Viewing NWOM*

What is less clear from the previous literature on NWOM or private/public complaining behavior is the distinction between the effect of posting (i.e., expressing) and viewing (i.e., receiving) NWOM. Studies on negative reviews have mainly looked at the effect of reading NWOM messages on their receivers (Basuroy, Chatterjee, & Ravid, 2003; Chevalier & Mayzlin, 2006; Liu, 2006). General consensus is that exposure to NWOM taints brand impressions and reduces product sales (Chevalier & Mayzlin, 2006; Liu, 2006). Other studies have elaborated the conditions under which NWOM reception has a positive or negative effect. For instance, Chan and Cui (2011) showed that attribute-based (i.e., product-evaluative) NWOM has an aggravating effect because it escalates dissatisfaction among those who were exposed to such negative messages from other customers (i.e., attitude polarization), while experience-based NWOM has an alleviating effect (i.e., downward comparison). Berger and his colleagues (2010) demonstrated that NWOM decreases purchase likelihood and actual sales for brands that already have broad awareness, whereas it positively affects sales for unknown products.

Compared to reception studies, the effect of expressing NWOM has been less frequently investigated. Research on motivations of NWOM suggests that reasons for engaging in NWOM communications is (1) to prevent others from experiencing the same problem that they had encountered, (2) to vent their anger through NWOM as a way of reducing cognitive dissonance, (3) to retaliate against the offering company, and (4) to seek advice on how to solve their problems (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004; Sundaram, Mitra, & Webster, 1998). Nyer and Gopinath (2005) focused on the motivation for venting and investigated how the emotional release after successful venting affects subsequent complaining behavior and dissatisfaction level. They found that facilitating complaining behavior leads to venting, which in turn reduces subsequent NWOM behavior and dissatisfaction among complainers. Grégoire and his colleagues (2009) examined how revenge and avoidance desires of online complainers change over time depending on the strength of the customer-firm relationships (measured as trust, commitment, and social benefits) and the solution that the firm offers (e.g., apology or compensation). Their findings suggest that the desire to seek revenge decreases over time, but does so slowly among firms' best customers (what they called as a "love-becomes-hate effect"). They also found that when a firm offers a solution such as an apology or compensation after the online complaint, the customers who have strong relationships with the firm are more amenable to these recovery attempts than customers with weak relationships. This finding implies that the ex-ante strength of a customer-firm relationship has a moderating effect.

2.3 *The Role of Emotions*

What is also less explored in WOM research is the role of emotions expressed in WOM messages (Kim & Gupta, 2012). Because emotions are thought to be individuals' subjective feelings, the affective processes in which emotions influence consumers' reactions to their dissatisfying experiences have received little attention from scholars. Recent studies in cognitive psychology have suggested that negative emotions triggered by customers' dissatisfaction with a product or service influence both NWOM senders and receivers' emotional state and the subsequent cognitive and behavioral stages (Ladhari, 2007; Maute & Dubés, 1999; Riegner, 2007). Also, several studies have classified negative emotions that are relevant to consumption experiences (Izard, 1977; Parrott, 2001; Westbrook, 1987). Overall, these studies identified anger, contempt, disgust, shame, guilt, sadness, fear, and surprise as a set of negative emotions associated with dissatisfying consumption experience.

According to the appraisal-tendency perspective, each emotion is defined by a set of central appraisal dimensions, and different emotions trigger a different set of responses that resolves the emotion-eliciting problem (Lerner & Keltner, 2000). For example, Stephens and Gwinner (1998) showed how different appraisal dimensions are associated with 10 different consumption emotions and suggested how each emotion, based on its appraisal dimensions, will affect consumers' judgment and behavior. Bonifield and Cole (2007) examined how different negative emotions (anger and regret) have differential effects on consumers' retaliatory or conciliatory responses in a service failure context.

To identify real-time emotions from empirical data, researchers employ a set of methodologies that are referred to as sentiment analysis. It has become increasingly prominent in both academia and industries ranging from service management to online retail. Advertising and marketing researchers in particular apply these techniques to understand how positive, neutral, or negative emotions expressed in online WOM affect a consumer's product evaluation (Berger et al., 2010; Kim & Gupta, 2012). Managerial studies have also shown how analyzing online feedback data can reveal actionable strategies for firms to improve their brand image or service offerings (Pullman, McGuire, & Cleveland, 2005).

3 **Hypotheses and Research Questions**

Based on the previous findings on the effect of posting and viewing NWOM, we pose two separate hypotheses and one prediction concerning the effect of viewing NWOM and posting NWOM. Given the context of this study (i.e., online NWOM posted on a well-known loyalty program's community website due to a policy change that affects all existing members), we argue that viewers of NWOM messages are more likely to be informed about the problems associated with the dissatisfying experience (i.e., policy change), share the public's

sentiments, and decrease their purchase behaviors. We do not expect to see a positive effect of viewing. From the previous NWOM literature, a positive effect would only occur if (1) a brand is not well-known (i.e., negativity publicity effect as in Berger et al. 2010), and (2) if a NWOM receiver thinks other people's negative experience is worse than his own negative experience, lowering his evaluation criteria (i.e., downward comparison). In our study, the focal brand is well-known (over two-thirds of Canadian households are members of the brand). The event that triggered NWOM is a policy change, which has the same impact on everyone. Thus, it is not likely that people will make social comparisons among each other. Formally, we form the following hypothesis:

H1: Viewing NWOM will decrease future purchase behavior.

Regarding the impact of posting, we identify two contrasting forces. On the one hand, posting NWOM indicates the customer has a dissatisfying experience, which may lead to a decrease in subsequent purchases. On the other hand, according to extant research, posting NWOM may help customers vent their negative feelings and resolve their desire to retaliate, which leads to an increase in purchase behavior. Thus, we predict that the two contrasting forces will lead to an insignificant change in behaviors.

Prediction: The venting effect of posting NWOM counteracts the negative effect from the dissatisfying experience, and leads to an insignificant change in subsequent purchase behaviors.

Finally, we examine the interaction effect between posting NWOM and redeeming points. In other words, even though a customer has experienced dissatisfaction, if he or she is reminded of the value of the brand, how would his or her subsequent purchase behaviors change? Similar to a recovery attempt (Grégoire et al., 2009), redeeming points is an activity that not only reinforces the value of the brand to a customer, but it is also an indicator of the strength of his engagement and length of his commitment with the firm. Thus, we argue that the positive effect of posting is greater among those who are more committed/loyal/engaged customers, and predict that the interaction between posting NWOM and redeeming points has a positive effect.

H2: If a customer posts NWOM but extracts welfare from the firm through point redemption, his subsequent purchase behaviors will increase.

We also explore the types of negative emotions that are expressed in NWOM messages and how different emotions influence future purchase behavior. Since there have been few studies that link each emotion and its effect on purchase behavior, we pose the following research questions.

RQ1: What types of negative emotions are found in customers' NWOM messages?

RQ2: Is there a differential effect of each negative emotion on future purchase behavior?

4 Data

Our data came from a large coalition loyalty program that maintains a social media forum. Members can earn points for purchases at sponsors in different product categories including groceries, gas, and credit card. They may redeem them for a variety of rewards such as gift cards, merchandise, airline tickets, and hotel rooms. At the end of 2011, the loyalty program announced a policy change - earned points would expire after five years - that affected all existing customers and triggered NWOM on their community. The company provided us with transaction and redemption records of posters ($N=75$), viewers ($N=713$), and a control group ($N=10,000$), as well as records of posting (116 NWOM messages) and viewing activities (logs of page visits and views). The study period is 15 weeks, dating back to four weeks prior to the policy change announcement to 11 weeks after the announcement to account for the pre-announcement purchase and redemption behaviors of posters and viewers. The data offered a unique opportunity to measure the effect of posting and viewing online NWOM on purchase behaviors.

5 Model Estimation

5.1 Propensity Score Model

Before we proceed with our main regressions that will test our hypotheses, we will address the possibility that customers who visit the company's online forum tend to have certain pre-existing characteristics, e.g., they may be customers with higher spending to begin with. These pre-existing characteristics could potentially affect both the customers' online and subsequent purchase behaviors. Per practice in various fields such as marketing and education that examine observational data, we begin our analyses with a propensity score model, which predicts the relationship between forum participation and pre-period purchase behaviors. Propensity scores for forum visit are estimated using a logistic regression, as specified in Equation (1):

$$isAPosterOrViewer = \frac{1}{1 + e^{-(\beta_0 + \beta_1 \ln(1+m_i) + \beta_2 \ln(1+r_i))}} \quad (1),$$

where m_i is the total points accumulated by individual i in the pre-period, and r_i is the total points used to redeem rewards by individual i in the pre-period. After estimating the logistic model, we calculate the propensity scores, which are the predicted probabilities of whether an individual would post or view on the company's online forum. We then employ nearest neighborhood matching

without replacement, at a ratio of 1:1, i.e., 1 customer who posted or viewed on the forum to 1 customer who did not. In other words, instead of using the entire control sample, we only select the customers whose pre-announcement behaviors are similar to those of the forum visitors (Rosenbaum and Rubin 1985). After propensity score matching, we verify that covariate balance is improved by comparing the Q-Q plots of m_i and r_i before and after matching. We examine the propensity score distributions between the control group and the forum visitors, of all samples versus matched samples. As expected, the forum visitors' distribution is much more similar with that of the matched control group than with that of the full control sample. Final sample consists of 732 forum visitors (i.e., posters or viewers) and 732 matched controls.

5.2 Model 1 – Effects of NWOM

After obtaining a propensity score for each individual in our matched sample, we continue with our regression models by incorporating it as a covariate. To determine whether posting or viewing NWOM influences future purchase behavior, we aggregate our transactional data up to a weekly level, and estimate the effects on points earned from purchases and/or promotional events with the following random coefficient model:

$$\ln(y_{it}) = (\alpha_0 + \alpha_i) + \beta_1 x_{it} + \beta_2 r_{it} + \beta_3 x_{it} r_{it} + \beta_4 v_{it} + \beta_5 s_t + \beta_6 p_i + \varepsilon_{it} \quad (2),$$

where y_{it} is the points from a purchase that a customer i makes in week t . We use points as a proxy for a customer's spending because we do not directly observe the customers' actual dollars spent. However, we can infer a customer's expenditures from points, since 1 point is equivalent to every \$30 spent. Values of t ranging from one to four represent the weeks prior to the announcement of the policy change, and 5 to 15 for after the announcement. Binary variables x_{it} , r_{it} , v_{it} indicate whether customer i has posted, redeemed, or viewed respectively on or after week t . The regression is adjusted by the propensity score of each individual i , p_i . Fixed effect α_0 is the average across the population. To account for unobserved heterogeneous response from each individual i , α_i is the random effect that represent the unobserved heterogeneous response for each individual i . It is assumed to be independently and identically distributed (i.i.d.) with a normal distribution. To control for seasonality, the log weekly average points from the control group (i.e., who have neither viewed nor redeemed), is used (S_t).

5.3 Model 2 – Effects of Emotions

In addition to determining whether posting or viewing NWOM causes a change in purchase behaviors, we are interested in examining how the emotions expressed in NWOM may also have an impact. The first step is to perform sentiment analysis on our NWOM texts. Since the explosion of “big data” and social media technologies, textual analyses have become increasingly important for both academics and practitioners in marketing and advertising. Conventional textual analyses use a simple scale that classifies a text’s sentiment as positive, neutral or negative. As illustrated in the following sections, we propose a method that analyzes texts by two dimensions – types of emotions and their intensities – instead of the simple scale. Finally, after identifying and quantifying these emotions, we incorporate them in linear regressions to determine their effects on subsequent purchase behaviors.

5.3.1 Sentiment Analysis

Our goal is to identify the types of emotions that are embedded in NWOM and quantify the level of intensity of such emotions. Generally speaking, textual analysis involves two aspects – *what* is being expressed, and *how much* is being expressed (Manning & Schütze, 1999, p. 8). In our context, we are interested in identifying the types of emotions that are embedded in a word-of-mouth message, as well as quantifying the level of intensity of such emotion.

Consistent with previous findings that dissatisfied customers exhibit anger, disgust, sadness, and surprise (Izard, 1977; Parrott, 2001; Westbrook, 1987), we coded the following emotion categories: 1) anger, 2) disappointment, and 3) concern, i.e., doubt, surprise, confusion, and neutral comments. Two independent coders identified the emotion keywords for each post, and categorized it into one of the three emotions (Krippendorff’s $\alpha = .79$). 57% of posts are classified with anger, 29% with disappointment, and 13% with concern.

5.3.2 Sentiment Scoring

For a given post, we then quantify the level of intensity of each emotion. Intensity is defined with two attributes – the number of emotional keywords a message contains (e.g., “this program is now *useless* to me” versus “this *evil* program is now *useless* to me”), and the rarity of the keyword (e.g., “I am *angry*” versus “I am *outraged*”). Both of these attributes are captured by calculating word frequency. To be more precise with an example, if message *a* contains more emotional words than message *b*, the magnitude of the log-product of *a*’s keyword frequencies will be greater than that of *b*’s. Furthermore, a less frequent keyword yields a higher negative log value, and hence will contribute more to a message’s emotion score than a common word.

Treating all the posts as one corpus, we first calculate the occurrence frequency of each keyword that corresponds to anger, disappointment, or concern. Then, for each message, we compute its emotion score, which we define as the log-product of its keyword log-frequencies. Mathematically, it is expressed as:

$$ES = -\ln\left(\frac{\prod_i \log(F_i)}{\text{Message Length}}\right) \quad (3),$$

where F_i is the occurrence frequency of keyword i , and n is the number of keywords a post contains. Since a post may contain keywords across different emotions, it can have non-zero scores for more than one emotion.

5.4 Model 2 – Effects of Emotions

We apply the emotion scores from Equation (3) to a linear regression model, which is expressed as follows:

$$\begin{aligned} \ln(y_{it}) = & (\alpha_0 + \alpha_1) + \beta_1 \text{notx}_{it} + \beta_2 \text{anger}_{it} + \beta_3 \text{disappointment}_{it} \\ & + \beta_4 \text{concern}_{it} + \beta_5 \text{angerPlus}_{it} + \beta_6 \text{disappointmentPlus}_{it} \\ & + \beta_7 \text{concernPlus}_{it} + \beta_8 v_{it} + \beta_9 r_{it} + \beta_{10} S_t + \beta_{11} p_i + \varepsilon_{it} \end{aligned} \quad (4),$$

where, similar to Model 1, y_{it} is the reward points from a purchase that a customer i makes in week t . The variable notx_{it} is a binary variable: if it is equal to zero, it indicates that a given customer i has posted during or after week t . r_{it} and v_{it} are also binary variables, indicating whether a customer i has redeemed points for rewards or viewed NWOM posts respectively. Having observed a piecewise relationship between the sentiments and purchase behaviors, we represent each emotion using two variables. First, the overall effects are represented by the scores obtained from the textual analysis using Equation (3), anger_{it} , $\text{disappointment}_{it}$, and concern_{it} . For anger, disappointment, and concern scores greater than 3.8, 0.8 and 0.2 (i.e., the piecewise inflection points) respectively, we also include the high-sentiment effects, namely, angerPlus_{it} , $\text{disappointmentPlus}_{it}$, and concernPlus_{it} into the regression, where $\text{angerPlus}_{it} = 0$ if $\text{anger}_{it} < 3.8$, otherwise it is 1 (and similarly for $\text{disappointmentPlus}_{it}$, and concernPlus_{it}). The residuals are denoted as ε_{it} as in our previous model in Equation (2). Again, S_t (i.e., the natural logarithm of weekly average points earned from the control group) is entered into the model to control for seasonality, and p_i is the propensity score for each individual.

6 Results

The propensity score model estimates the likelihood that an individual will post or view the company's online forum. The estimate results show that both points accumulated and points used for reward redemption are positive and

significant, i.e., 0.36, $p < 0.001$ for $\ln(m_{i+1})$ and 0.04, $p < 0.05$ for $\ln(r_i + 1)$. Modeling with the full dataset, the results suggests that on average, forum visitors are more engaged with the firm to begin with. This finding also confirms that matching forum visitors with only the control individuals that exhibit similar a priori behaviors is necessarily to reduce confounding and self-selection bias.

Model 1 quantifies how posting or viewing NWOM impact future purchase behaviors (i.e., points earned), and the results are summarized in Table 1. Viewing NWOM has a significant negative effect (-0.15 , $p = < 0.001$). Thus, Hypothesis 1 is supported. The results also show that the effect of posting without redeeming is not significant, consistent with our prediction. Testing Hypothesis 2, the interaction between posting and redeeming is positive and significant on points ($+0.42$, $p < 0.05$). Customers who post NWOM and redeem points are likely to increase weekly expenditures and purchase incidences, supporting Hypothesis 2. Both seasonality and pre-existing propensity to visit the forum have significant and positive impact.

For our second model, anger has a significant and negative (-0.04 to -0.20 , $p < 0.05$) effect on purchase behaviors. High-level of concern, on the other hand, has a positive and significant effect ($+0.33$, $p < 0.05$). These findings suggest that customers who experience intense negative emotions (e.g., anger), are likely to decrease spending at the firm. On the other hand, customers expressing high-degree of concerns (e.g., doubts, surprise, or questions) online tend to increase future purchases. This latter observation is consistent with theories related to customer engagement, which have been shown to increase customer loyalty and mediate negative effects that have happened ex-ante. Finally, seasonality and pre-existing propensity to visit the company forum have significant effects.

Table 1: Model estimates

<i>Independent variables</i>	<i>Model 1 (DV: points accumulated - logged)</i>	<i>Model 2 (DV: point accumulated - logged)</i>
Intercept	-0.81 (0.24)	-0.78 (0.28)**
Viewing	-0.13 (0.03)***	-0.15 (0.36)***
Posting	-0.12 (0.10)	
Redeeming	-0.01 (0.04)	0.04 (0.04)
Posting*Redeeming	0.39 (0.18)*	
Not posting		-0.21 (0.16)

<i>Independent variables</i>	<i>Model 1 (DV: points accumulated - logged)</i>	<i>Model 2 (DV: point accumulated - logged)</i>
Anger score (overall)		-0.20 (0.08)*
Anger score (high-sentiments)		0.16 (0.08)*
Disappointment score (overall)		0.91 (0.60)
Disappointment score (high-sentiments)		-0.97 (0.59) ⁺
Concern score (overall)		-2.83 (1.63) ⁺
Concern score (high-sentiments)		3.16 (1.59)*
Seasonality (logged)	0.41 (0.07)***	0.46 (0.07)***
Propensity score	18.57 (0.37)***	18.66 (0.37)***
Random intercept covariance	0.46 (0.68)	0.46 (0.68)

Notes. Standard errors are presented in parentheses. ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

7 Discussion

This study found that (1) viewing NWOM has a negative effect on future purchases, (2) the positive effect of posting is moderated by redemption behavior, and (3) expressing emotions, especially more intense emotions such as anger tends to discourage purchase behaviors. The negative impact of viewing NWOM is consistent with previous findings (Chakravarty, Liu, & Mazumdar, 2010; Chevalier & Mayzlin, 2006; Liu, 2006). The effect of posting NWOM is moderated by whether a customer is engaged with the brand or not (i.e., redeeming). This tells us the importance of customer engagement when a complaining situation takes place. The positive interaction between posting and redeeming suggests that the positive impact of venting negative feelings and the chance to be reminded of a brand's benefit (i.e., miles redemption in the case of loyalty program) produces a synergy effect.

We also found that several distinctive negative emotions such as anger, disappointment, concern, surprise, confusion, and doubt are expressed in NWOM messages. We demonstrated that different types of emotions may have differential effects on purchase behaviors. Anger tends to have a negative impact, whereas concern is more likely to have a positive impact. Research on cognitive-appraisal theory and attribution theory suggests that different emotions are associated with different attribution routes and coping strategies (Bonifield & Cole, 2007; Lerner & Keltner, 2000; Stephens & Gwinner, 1998). Our findings

imply that the types of emotions a consumer expressed affect attribution routes and coping strategies, with different behavioral outcomes.

This study has limitations and raise questions for future research. Our data did not allow us to see which particular message a customer is exposed to. The online forum is structured as a thread format, and viewers can only be identified by a thread, not individual posts. Thus, we were not able to see how reading particular emotional words impacts the viewer's purchase behavior. Sample size is another limitation. With 116 messages created by 75 complainers, it was not possible to observe a variety of negative emotions and test their differential effects. With a larger sample size, we will be able to identify a wider range of emotions and their effects. Finally, this study used data from a company in a particular industry (e.g., loyalty program). The problem that triggered NWOM was also unique – policy change that influences all of its customers – compared to other NWOM research that looked at product or service reviews directed to unknown customers. Future research should investigate NWOM generated in a more general context from diverse industry types.

Despite these limitations, this paper offers important implications and applications. Few studies have examined posting and viewing at the same time. By linking people's expressions of sentiments and their purchase behaviors, we provided quantified evidence showing how posting or reading NWOM influences behaviors. We also demonstrated a scoring technique that quantifies intensity levels of various emotions of a given post that differs from conventional techniques, which classify a textual message on a simple valence scale. Given the "big data" trend in advertising, this methodological demonstration should prove to be helpful. From a managerial standpoint, our findings suggest that companies should customize strategies to handle NWOM messages by the type of messages or customers. For example, for viewers, it is important to provide counter-arguments to the dominant opinions in NWOM messages on the online forum to help them make an informed judgment. Such intervention also shows how the company is timely in handling complaints and attentive to their customers. For posters, companies should encourage them to be more participatory in their WOM activities, and at the same time, provide an opportunity that complainers can be engaged with the brand and reminded of the benefits they gain using the focal brand. Lastly, brand managers should carefully monitor the sentiments expressed in NWOM (e.g., anger or frustration related words) and provide reactive interventions.

8 References

- Basuroy, S.; Chatterjee, S. and S. A. Ravid (2003), "How Critical are Critical Reviews? The Box Office Effects of Film Critics, Star Power, and Budgets." in: *Journal of Marketing*, Vol. 67, No. 4, 103-117.

- Berger, J.; Sorensen, A. T., and S. J. Rasmussen (2010), "Positive Effects of Negative Publicity: When Negative Reviews Increase Sales." in: *Marketing Science*, Vol. 29, No. 5, 815-827.
- Bonifield, C. and C. Cole (2007), "Affective Responses to Service Failure: Anger, Regret, and Retaliatory versus Conciliatory Responses." in: *Marketing Letters*, Vol. 18, No. 1-2, 85-99.
- Chakravarty, A.; Liu, Y., and T. Mazumdar (2010), "The Differential Effects of Online Word-of-Mouth and Critics' Reviews on Pre-release Movie Evaluation." in: *Journal of Interactive Marketing*, Vol. 24, No. 3, 185-197.
- Chan, H., and S. Cui (2011), "The Contrasting Effects of Negative Word of Mouth in the Post-Consumption Stage." in: *Journal of Consumer Psychology*, Vol. 21, No. 3, 324-337.
- Chevalier, J. A., and D. Mayzlin (2006), "The Effect of Word of Mouth on Sales: Online Book Reviews." in: *Journal of Marketing Research*, Vol. 43, No. 3, 345-354.
- Davidow, M. (2003), "Organizational Responses to Customer Complaints: What Works and What Doesn't." in: *Journal of Service Research*, Vol. 5, No. 3, 225-250.
- Day, R. L. (1984), "Modeling Choices among Alternative Responses to Dissatisfaction." in: *Advances in Consumer Research*, Vol. 11, No. 1, 496-499.
- Fornell, C. and B. Wernerfelt (1987), "Defensive Marketing Strategy by Customer Complaint Management: A Theoretical Analysis." in: *Journal of Marketing Research*, Vol. 24, No. 4, 337-346.
- Fournier, S. and J. Avery (2011), "The Uninvited Brand." in: *Business Horizons*, Vol. 54, No. 3, 193-207.
- Gregg, D. G. and J. E. Scott (2008), "A Typology of Complaints about eBay Sellers." in: *Communications of the ACM*, Vol. 51, No. 4, 69-74.
- Grégoire, Y.; Tripp, T. M., and R. Legoux (2009), "When Customer Love Turns into Lasting Hate: The Effects of Relationship Strength and Time on Customer Revenge and Avoidance." in: *Journal of Marketing*, Vol. 73, No. 6, 18-32.
- Harrison-Walker, L. J. (2001) "E-complaining: A Content Analysis of an Internet Complaint Forum." in: *Journal of Services Marketing*, Vol. 15, No. 4/5, 397-412.
- Hennig-Thurau, T.; Gwinner, K. P.; Walsh, G. and D.D. Gremler (2004), "Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?" in: *Journal of Interactive Marketing*, Vol. 18, No. 1, 38-52.
- Hirschman, A. O. (1970), "Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States," Harvard University Press, Cambridge, Massachusetts.
- Huang, J.-H. and Y.-F. Chen (2006), "Herding in Online Product Choice." in: *Psychology and Marketing*, Vol. 23, No. 5, 413-428.
- Izard, C. E. (1977), "Human Emotions," Plenum Press, New York, New York.
- Kim, J. and P. Gupta (2012), "Emotional Expressions in Online User Reviews: How They Influence Consumers' Product Evaluations." in: *Journal of Business Research*, Vol. 65, No. 7, 985-992.
- Ladhari, R. (2007), "The Effect of Consumption Emotions on Satisfaction and Word-of-Mouth Communications." in: *Psychology & Marketing*, Vol. 24, No. 12, 1085-1108.
- Landon, E. L. (1980), "The Direction of Consumer Complaint Research." in: *Advances in Consumer Research*, Vol. 7, No. 1, 335-338.
- Lerner, J. S. and D. Keltner (2000), "Beyond Valence: Toward a Model of Emotion-Specific Influences on Judgement and Choice." in: *Cognition & Emotion*, Vol. 14, No. 4, 473-493.
- Liu, Y. (2006), "Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue." in: *Journal of Marketing*, Vol. 70, No. 3, 74-89.
- Manning, C. D. and H. Schütze (1999), "Foundations of Statistical Natural Language Processing," MIT Press, Cambridge, Massachusetts.
- Maute, M. F. and L. Dubés (1999), "Patterns of Emotional Responses and Behavioural Consequences of Dissatisfaction." in: *Applied Psychology*, Vol. 48, No. 3, 349-366.

- Mittal, V.; Ross, W. T., Jr. and P. M. Baldasare (1998), "The Asymmetric Impact of Negative and Positive Attribute-level Performance on Overall Satisfaction and Repurchase Intentions. in: *Journal of Marketing*, Vol. 62, No. 1, 33-47.
- Nyer, P. U. and M. Gopinath (2005), "Effects of Complaining versus Negative Word of Mouth on Subsequent Changes in Satisfaction: The Role of Public Commitment." in: *Psychology & Marketing*, Vol. 22, No. 12, 937-953.
- Park, C. and T. M. Lee (2009), "Information Direction, Website Reputation and eWOM Effect: A Moderating Role of Product Type." in: *Journal of Business Research*, Vol 62, No. 1, 61-67.
- Parrott, W. G. (2001), "Emotions in Social Psychology: Essential Readings," Psychology Press, Philadelphia, Pennsylvania.
- Pitt, L. F.; Berthon, P. R.; Watson, R. T. and G. M. Zinkhan (2002), "The Internet and the Birth of Real Consumer Power." in: *Business Horizons*, Vol. 45, No. 4, 7-14.
- Pullman, M.; McGuire, K. and C. Cleveland (2005), "Let Me Count the Words: Quantifying Open-ended Interactions with Guests." in: *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 46, No. 3, 323-343.
- Richins, M. L. (1983), "Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study." in: *Journal of Marketing*, Vol. 47, No. 1, 68-78.
- Riegner, C. (2007), "Word of Mouth on the Web: The Impact of Web 2.0 on Consumer Purchase Decisions." in: *Journal of Advertising Research*, Vol. 47, No. 4, 436-447.
- Rosenbaum, P. and D. Rubin (1983), "The Central Role of the Propensity Score in Observational Studies for Causal Effects." in: *Biometrika*, Vol. 70, 41-55.
- Singh, J. (1988), "Consumer Complaint Intentions and Behavior: Definitional and Taxonomical Issues." in: *Journal of Marketing*, Vol. 52, No. 1, 93-107.
- Singh, J. (1990), "A Typology of Consumer Dissatisfaction Response Styles." in: *Journal of Retailing*, Vol. 66, No. 1, 57-99.
- Stephens, N. and K. P. Gwinner (1998), "Why Don't Some People Complain? A Cognitive-Emotive Process Model of Consumer Complaint Behavior." in: *Journal of the Academy of Marketing Science*, Vol. 26, No. 3, 172-189.
- Sundaram, D. S.; Mitra, K. and C. Webster (1998), "Word-of-Mouth Communications: A Motivational Analysis." in: *Advances in Consumer Research*, Vol. 25, No. 1, 527-531.
- Tax, S. S.; Brown, S. W. and M. Chandrashekar (1998), "Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing." in: *Journal of Marketing*, Vol. 62, No. 2, 60-76.
- Vásquez, C. (2011), "Complaints Online: The Case of TripAdvisor." in: *Journal of Pragmatics*, Vol. 43, No. 6, 1707-1717.
- Ward, J. C. and A. L. Ostrom (2006), "Complaining to the Masses: The role of Protest Framing in Customer-created Complaint Web Sites." in: *Journal of Consumer Research*, Vol. 33, No. 2, 220-230.
- Westbrook, R. A. (1987), "Product/Consumption- based Affective Responses and Postpurchase Processes." in *Journal of Marketing Research*, Vol. 24, No. 3, 258-270.

“I Believe More in Factual Reviews” – But not so Much when the Reviewer Is Similar to the Reader and the Product Is Hedonic

Sonja Grabner-Kräuter
Martin K. J. Waiguny

1 Introduction

It is increasingly common for consumers to consult online reviews before making their (online) purchase decision. Online reviews are a specific form of electronic word-of-mouth (eWOM) which can be defined as any positive or negative statement made by potential, actual, or former customers about a product or company via the Internet (Hennig-Thurau et al., 2004). Due to its non-commercial character, consumers usually are more receptive to word-of-mouth or user-generated content on the Internet compared to product information provided by companies (Bambauer-Sachse and Mangold, 2013; Bickart and Schindler, 2001) and they rely more on recommendations of other consumers than on recommendations from an expert (Huang and Chen, 2006).

In recent years, considerable research has been directed at a better understanding of the preconditions and effects of online reviews (see e.g. De Bruyn and Lilien, 2008; Douet et al., 2012; Sparks and Browning, 2011; Zhang et al., 2010; Sparks et al., 2013). Information evaluation has been found to be a crucial determinant of (e)WOM adoption. According to traditional communication theories a recipient's information evaluation results from an interaction of source characteristics (e.g., expertise, trustworthiness), message characteristics (related to message content, comprising factors such as valence, consistency, and quality), and receiver characteristics (e.g., attitudes, previous experiences) (Wathen and Burkell, 2002). From this range of factors that potentially determine the influence of eWOM on consumers' decision-making especially message valence and consistency and information volume have been frequently examined, with more or less conclusive findings (Sen and Lerman, 2007; Cheung and Thadani, 2012; Sparks and Browning 2011; Vermeulen and Seegers, 2009; Floh et al., 2013). On the other hand, attributes of online reviews such as contents and quality represent an understudied aspect of eWOM (Kim and Gupta, 2012; Kozinets et al., 2010; Lee and Koo, 2012). Limited research attention also has been paid to source characteristics despite their importance as a criterion of assessing online information credibility (Dou et al. 2012).

The goal of this study is to better understand the role of review style and source-target similarity in the evaluation of online reviews. An explanation will

be sought for the limited and ambiguous findings on the effects of these message and source characteristics. More specifically, our study investigates how a more or less factually written review in conjunction with perceived similarity between reader and writer affects the evaluation of the reviewer, consumer's trust in the review and the attitude towards the reviewed product. Furthermore, the moderating effect of product type on the relationships among review style, reader-writer similarity and evaluation of the reviewer and acceptance of the review is investigated.

2 Theoretical Background

2.1 *Review Style*

A small but growing body of research suggests that the content and particularly the style (language, content depth, reported experiences and attributes) can contribute to the evaluation of customer reviews and blog postings (Ludwig et al. 2013; Mudambi and Schuff, 2010; Crotts et al., 2009); Willemsen et al., 2011; Xia and Bechwati, 2008). Willemsen et al. (2011) found argument density and diversity to be important predictors of the perceived usefulness of reviews. A qualitative study by Papathanassis and Knolle (2011) found that consumers prefer thematically structured, precise reviews that focus on simply describing the facts and refrain from extensively narrating the feelings of the reviewer. The study defined perceived factuality as the conciseness, standardization, and specificity of an online review and proposed that more structured and concise reviews will more likely be utilized for holiday decision-making. At the same time, narrative and emotional expressions might be seen as a sign of subjectivity and thus reduce the perceived value of a review. In another recent study Lee and Koo (2012) found that the credibility of online reviews with objective information was higher than that of online reviews with subjective statements. On the other hand, Bickart and Schindler (2001) argue that eWOM can be very influential because much of the information is presented in a narrative form and the emotional aspects of these narratives can be particularly persuasive. At the same time, attribution theory would suggest that consumers are likely to attribute positive emotional expressions in a review externally to the product and negative emotional expressions internally to the reviewer's personal disposition (for an overview see e.g. Campbell and Sedikides, 1999). Therefore, in a positive review emotions can serve as additional product information that can influence attitudes and product evaluations. For instance, an expression of pleasure in a positive review may imply better product quality than an otherwise identical review (Kim and Gupta, 2012). It can be suggested that, in the case of positive reviews, a review that includes emotional expressions has a stronger impact on the evaluation of the review than a factual written review. However, these heterogeneous arguments and prior findings prompt the consideration of some

moderating variables when researching the influence of review style (Ludwig et al., 2013). We assume that the influence of review style might interact with source characteristics and product context factors as further discussed, what might change if a more factual or a more emotional written review is more effective.

2.2 *Perceived Reader-Writer Similarity*

Demographic similarity between source and target (i.e. homophily) refers to the degree to which individuals share similarities in attributes such as age, gender, education and social status (Brown and Reingen, 1987). The literature reports ambiguous findings about the influence of similarity (homophily) on the consumer’s decision-making. E.g., Brown and Reingen (1987) found that more homophilic ties are more likely to be utilized as sources of information, but this information is not perceived as more influential in decision-making. De Bruyn and Lilien (2008) found that electronic referrals from demographically dissimilar ties had more influence than referrals from similar ones. On the other hand, (Steffes and Burgee, 2009) found that information from similar sources is also more influential over consumers’ decisions than information from dissimilar sources. The validity of the “like-me” principle also was confirmed in another recent study in which perceptual homophily proved to be crucial in determining credibility perceptions as well as attitudes toward user generated content (Ayeh et al., 2013). Naylor et al. (2012) found that a group of dissimilar fans of a brand on a social networking site produced significantly less brand liking than a group of similar (or heterogeneous) individuals, but they assume that in certain product categories (such as luxury goods) postings from demographically dissimilar individuals may have a positive effect on brand evaluations and purchase intentions. De Bruyn and Lilien (2008) as well as Racherla et al. (2012) suggest that the ambiguous findings about the influence of similarity result from its context dependence. Accordingly, demographic similarity may increase or decrease the influence of a WOM message depending on the circumstances. Based on this reasoning we expect an interaction effect of factuality and perceived similarity on the evaluation of the reviewer and the acceptance of the review. Reviews that focus on simply describing the facts and do not refer to the feelings of the reviewer might be even more influential over consumers’ decisions when the information source is perceived dissimilar, or, in other words, individuals may consider the advice of others who are “unlike-them” only if it is factually written. On the other hand, a consumer might be more willing to utilize a review that comprises emotional expressions for her/his purchase decision when the message comes from a source like her/him, because people are more used to handle emotional encounters in homophilic relationships in a broader sense (McPherson et al., 2001). Hence we expect emotional written reviews to be

more influential when the reviewer is similar to the recipient. Concluding we hypothesize:

H1: Perceived reader-writer similarity moderates the impact of factuality. Specifically, the effect of factuality on a) evaluation of the reviewer, b) trust in the review and c) attitude toward the reviewed product will be stronger (weaker) if the writer is dissimilar (similar) to the reader.

2.3 *Product Type*

Drawing on Holbrook and Hirschman (1982) and Chaudhuri and Holbrook (2001) we adopt the hedonic and utilitarian value of products as basic descriptors of product types. Hedonic products have more nontangible or subjective features and a greater potential to evoke emotions and feelings of consumers, whereas utilitarian products have more tangible or objective features and better correspond to rational and functional aspects of consumption. The aspects of hedonic and utilitarian consumption may also be reflected in the role of emotions and factual reasoning in consumer decision-making. If subjective feelings and emotions are salient aspects of the consumption experience, readers might be more willing to attribute emotions to the product and consider these emotions in their buying decision process (Kim and Gupta, 2012). On the other hand, when reading reviews for more utilitarian products, consumers may rather rely on factual and functional arguments as these are regarded as prime arguments for the decision and discount the meaning of emotions to build a rational decision. Hence, we hypothesize that:

H2: Product type moderates the impact of factuality. Specifically, the effect of factuality (emotions) on a) evaluation of the reviewer, b) trust in the review and c) attitude toward the reviewed product will be stronger for more utilitarian (hedonic) products.

Finally the question arises if these moderating factors also interact. Based on our assumptions above we expect that in the case of reviews for hedonic products and if the writer is similar to the reader, more emotional written reviews should outperform a factual version. On the other hand, if the reader and writer are dissimilar and the review is for a utilitarian product, factual written reviews should generate more favorable outcomes and responses to the review. With our experiment we explore how these factors interact, considering three potential effect variables of reading online reviews: trust in the review, perceived expertise of the reviewer, and attitude toward the reviewed product. Based on this exploration we subsequently investigate if the evaluation of the reviewer and trust in the review might be mediators for the effects of review style, perceived

similarity and product type on overall attitude towards the reviewed object or if only direct effects are observable.

3 Study

To test the proposed hypotheses an experimental study was carried out using a product search scenario and reviews for artificial hedonic and utilitarian products.

3.1 Methodology

Design: The experiment comprised a 2 style (factual vs. emotional) by 2 reader-reviewer similarity (similar vs. dissimilar) by 2 product type (hedonic vs. utilitarian value) design. The style was manipulated within the text of the review. In the factual condition the review was structured and purely related to facts while the emotional condition was less structured and filled with words like “awesome”, “legend” etc. At the end of the questionnaire we assessed how the participants perceived the review on a semantic differential (1 emotional to 7 factual). This check yielded a significant difference ($m_{\text{emotional}}=2.91$, $m_{\text{factual}}=4.76$, $F(1,195)=77.701$, $p=.000$). Reader-reviewer similarity was manipulated by showing the profile of the reviewer, including age, gender and occupation. In the similar condition the reviewer was a 25 years old student (male for male participants and female for female participants) and in the dissimilar condition a 35 years old professional was shown, again of the same sex as the participant. To ensure perceived similarity we controlled for the age of the participants and checked if they are full time students. We assessed whether the participants perceive themselves as similar to the reviewer (1 not at all similar to 7 very similar) which yielded a significant difference between the groups ($m_{\text{dissimilar}}=3.21$, $m_{\text{similar}}=5.38$, $F(1,195)=112.352$, $p=.000$). For the product type manipulation we first asked students in a pretest which consumer electronics they perceive to be more related to utilitarian aspects of consumption (e.g. work issues) and which ones to be more related to hedonic aspects of consumption (e.g. used for recreational activities). Among others, the students perceived a laptop as a more utilitarian product whereas a TV was seen as a more hedonic product. The product type was manipulated in the scenario, by explaining what the product should be used for (mostly for their courses of studies vs. recreation during leisure time), and the product (laptop vs. TV) itself.

Measures: All variables were measured on 7-point scales and taken from existing literature, furthermore mean scored and checked for scale reliability. Perceived expertise (comprising trustworthiness and competence measures) of the reviewer (REVAL: $m=0.35$, $sd=1.168$, $\alpha=.851$) was measured by semantic differential scale (-3 to +3) with 5 items adapted from Ohanian (1990). Trust in the review (RTRUST: $m=3.17$, $sd=1.462$, $\alpha=.938$) was a 3 item

scale taken from De Wulf et al. (2001). Attitude towards the reviewed object (ARO: $m=3.92$, $sd=1.411$, $\alpha=.927$) was measured with 3 items (Hwang et al., 2011). Considering their potential association with review acceptance and evaluation, attitudes toward online reviews served as covariates and were measured at two levels of generality (Liska, 1974): attitude toward online reviews in general, 3 items adapted from Lai and Li (2005), (AR: $m=5.17$, $sd=1.472$, $\alpha=.909$) and attitude toward the use of reviews when buying products 4 items adapted from Park and Kim (2008), (AUR: $m=4.21$, $sd=1.688$, $\alpha=.906$). Finally, as we used a screenshot from amazon.de as a real existing example, we assessed how often the participants use this platform from 1 never to 5 daily (UA: $m=2.93$, $sd=.869$). The usage frequency and attitude variables were included as covariates in the analyses.

Procedure: Participants were undergraduate and graduate students of a midsized Central European University. The students received an invitation email. After answering demographic questions about age and gender (to provide a review from a same sex reviewer) they were provided with a short introduction to a scenario to further manipulate the product type. The scenario in the utilitarian condition was describing that the students need a new notebook for their study, briefly outlining the advantages of a laptop in terms of mobility. For the hedonic value manipulation the scenario describes the pleasure of watching TV on a cold winter evening. Showing basic product information (picture and short description), and the review as well as the profile of the reviewer followed this scenario. Both products were fictitious, however we used amazon.de as the platform to show the review. After reading the reviews the participants completed questions regarding the dependent variables as well as control variables and the two manipulation checks at the end.

Sample: 223 participants took part in the study, 26 were students over the age of 30 years and not full time students and therefore discarded from the analyses to ensure the similarity manipulation. The final sample consisted of 197 participants (mean age: 24.15 years, 28.4% male 71.6% female). Checks on the dependent and independent variables for an impact of gender found no significant differences.

3.2 Results

To investigate the overall research question we run 3 ANCOVA analyses (table 1) with Style, Similarity and Product type as independent factors and REVAL, RTRUST and ARO as dependent variables. General attitude towards reviews (AR) as well as the attitude towards using reviews when buying a product online (AUR) served as covariates. Furthermore, the frequency of using Amazon (UA) controlled for effects of platform knowledge. The following table shows the results of the ANCOVA analyses.

Table 1: Results of the ANCOVA analyses

DV Source	REVAL		RTRUST		ARO	
	F	p	F	P	F	p
AR	2.290	.132	1.208	.273	4.09	.045
AUR	0.818	.367	19.087	.000	4.218	.041
UA	0.984	.323	0.745	.389	0.108	.743
STYLE	25.364	.000	8.552	.004	6.506	.012
SIM	0.469	.494	0.649	.422	0.370	.544
PROD	3.256	.073	2.84	.094	9.894	.002
STYLExSIM	1.975	.162	4.376	.038	2.445	.120
STYLExPROD	0.871	.352	4.54	.034	2.757	.099
SIMxPROD	0.340	.560	1.138	.288	0.106	.745
STYLExSIMxPROD	3.431	.066	0.223	.638	2.238	.136

Main effects of the independent variables: All three dependent variables showed a highly significant main effect of review style. Generally, the more factual a review is written the better is the evaluation of the reviewer (REVAL_{factual}=.78, REVAL_{emotional}=.01, F(1,186)=25.364, p=.000), the higher the trust in the review (RTUST_{factual}=3.47, RTRUST_{emotional}=2.93, F(1,186)=8.552, p=.004) and the attitude towards the reviewed object (ARO_{factual}=4.21, ARO_{emotional}=3.74, F(1,186)=6.506, p=.012). No main effects of reader-writer similarity were found. However, a main effect was found for product type. The ANCOVA resulted in significant differences between TV (more hedonic product) and Laptop (more utilitarian product) in REVAL and RTRUST on a p<.10 level and ARO on a p<.05 level. Generally, the reviewer (REVAL_{utilitarian}=.26, REVAL_{hedonic}=.53, F(1,186)=3.256, p=.073) and the reviews for hedonic products (RTRUST_{utilitarian}=3.05, RTRUST_{hedonic}=3.36, F(1,186)=2.840, p=.094) as well as the attitude towards the product (ARO_{utilitarian}=3.68, ARO_{hedonic}=4.27, F(1,186)=9.894, p=.002) were rated better if the participant was shown a review for the hedonic product. The findings for the main effects seem to generally confirm the view of Papathanassis and Knolle (2011) who argue for factually written reviews to be more effective. Furthermore it seems that reviews for hedonic products are perceived as more trustworthy and also result in higher product attitude scores.

Hypothesis testing: Our experimental data show only for the evaluation of the reviewer REVAL a three-way interaction on a p<.10 level. The main effect that reviewers of factual reviews were significantly better evaluated was mitigated if the reader was similar to the writer - but only if it was a review for a hedonic product. In this condition factual written reviews do not lead to a higher evaluation of the reviewer expertise (figure 1). Although we found an expected interaction, the effect just mitigates differences between factual and emotional written reviews, while we originally expected that this would fully turn. Thus the data only partly support our assumptions in H1a and H1b.

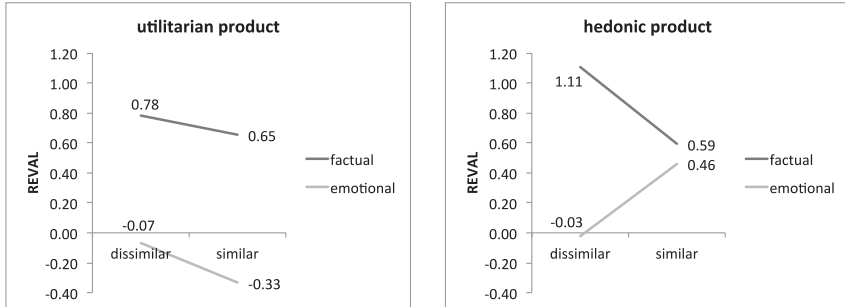


Figure 1: REVAL as function of Review style, Similarity and Product type

For RTRUST two two-way interactions were found. Firstly, similarity moderates the effect of review style. While in the dissimilar condition factual reviews were seen as more trustworthy than emotional ones ($RTRUST_{\text{factual}}=3.74$, $RTRUST_{\text{emotional}}=2.82$, $F(1,186)=12.706$, $p=.000$), again no difference was found in the similar condition ($RTRUST_{\text{factual}}=3.21$, $RTRUST_{\text{emotional}}=3.06$, $F(1,186)=.340$, $p=.561$) (figure 2). Furthermore, the product type moderated review style. As expected in the utilitarian condition factual reviews were seen as more trustworthy ($RTRUST_{\text{factual}}=3.52$, $RTRUST_{\text{emotional}}=2.58$, $F(1,186)=13.984$, $p=.000$) whereas in the hedonic condition (again) there was no difference observable ($RTRUST_{\text{factual}}=3.43$, $RTRUST_{\text{emotional}}=3.29$, $F(1,186)=.292$, $p=.590$) (figure 3). Thus our data lend to support H1b and H2b but only for the factual written reviews which are perceived as more trustworthy for utilitarian products and in a dissimilar condition. Again, we just see a mitigating effect, at this stage from the product type, but not a greater influence of emotional written reviews.

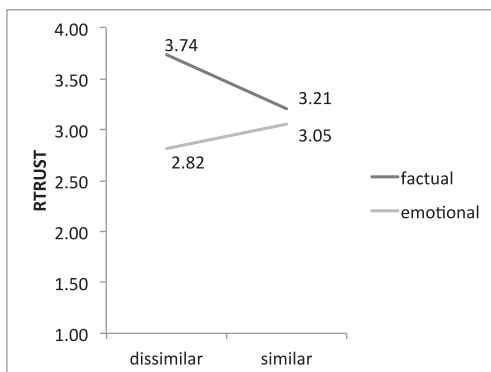


Figure 2: RTRUST as function of Review style and Similarity

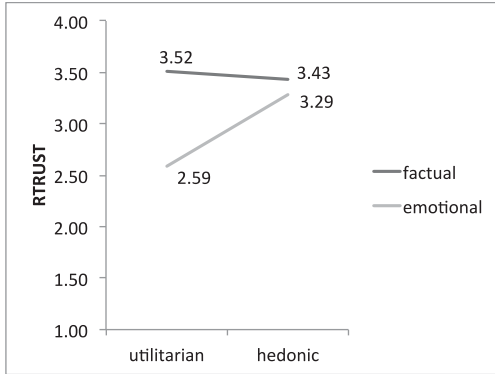


Figure 3: RTRUST as function of Review style and Product type

Finally, a similar pattern for the style - product type interaction was found for ARO, however, only on a marginally significant level. Obviously, when forming attitudes respondents might also take into account product attributes and other assumptions (like liking TV or Laptops in general) that influence attitudinal evaluation of the reviewed product besides the review. A two-way interaction between factuality and the product type on a $p < .10$ level was revealed. In the utilitarian condition factual reviews resulted in a more favorable attitude compared to emotional ones ($ARO_{\text{factual}}=4.08$, $ARO_{\text{emotional}}=3.29$, $F(1,186)=9.704$, $p=.002$), in the hedonic condition again there was no difference observable ($ARO_{\text{factual}}=4.35$, $ARO_{\text{emotional}}=4.18$, $F(1,186)=.367$, $p=.546$). Overall, our data lend to only marginally support H2c and not to support H1c.

We then proceeded to analyze if the effects of style, similarity and product type on attitude towards the reviewed object are mediated by the perceived expertise of the reviewer and trust in the review, or in other words, if both direct and indirect effects exist. We performed a conditional mediation analysis as this is seen superior to a regression approach and also cares for indirect effects on the final outcome variable even if no direct effects are observable in the first analysis (Preacher and Hayes, 2008; Zhao et al., 2010). We calculated model 12 with 5000 bootstraps following Hayes (2013) and using the PROCESS macro. Table 2 summarizes the conditional mediator model, and shows - in line with the ANCOVA analysis before- that there are effects of style and product type on the two proposed mediators as well as a two-way and three-way interaction for the proposed mediator REVAL. Furthermore, the model establishes a significant influence of the perceived expertise evaluation and trust in the review on the attitude towards the reviewed object with a variance explanation of $R^2=.59$.

The overall test for indirect effects reveals that the exogenous conditional factors influence attitude towards the reviewed object (ARO) via the expertise

evaluation of the reviewer. Trust in the review also was found to be a mediator in some conditions (see Table 3).

Table 2: Results of the conditional mediation analysis

DV Source	REVAL (mediator)		RTRUST (mediator)		ARO (outcome)	
	coeff	p	coeff	P	coeff	p
CONSTANT	-.604	.227	.820	.170	1.674	.000
AR	.110	.132	.096	.273	.089	.169
AUR	.057	.367	.329	.000	.007	.905
UA	-.091	.323	-.094	.389	.116	.150
STYLE	.853	.005	1.232	.001	-.076	.783
SIM	-.262	.354	.348	.303	-.158	.527
PROD	.046	.877	.811	.023	.232	.381
STYLExSIM	.135	.747	-.600	.230	.126	.731
STYLExPROD	.281	.520	-.612	.243	.024	.951
SIMxPROD	.748	.077	-.219	.663	.389	.300
STYLExSIMxPROD	-1.1379	.066	-.347	.638	-.423	.437
REVAL	---	---	---	---	.494	.000
RTRUST	---	---	---	---	.369	.000
	$R^2=.213,$		$R^2=.281,$		$R^2=.592,$	
	$F(10,186)=5.034,$		$F(10,186)=7.269,$		$F(12,184)=22.261,$	
	$p<.001$		$p<.001$		$p<.001$	

Table 3: Direct and indirect effects of the levels of factuality moderated by style and product type on attitude towards the reviewed product

Effect of factuality on ARO via	SIM	PROD	Indirect effect	BCBCI (significant if range does not include 0)	Direct effect from factuality on ARO	p
RTRUST	Dissimilar	Utilitarian	.455	.183 to .857*	-.076	.783
	Dissimilar	Hedonic	.229	-.013 to .565	-.052	.855
	Similar	Utilitarian	.233	.020 to .564*	.051	.844
	Similar	Hedonic	-.120	-.507 to .204	-.348	.230
REVAL	Dissimilar	Utilitarian	.421	.109 to .854*		
	Dissimilar	Hedonic	.560	.270 to 1.009*		
	Similar	Utilitarian	.488	.228 to .820*		
	Similar	Hedonic	.065	-.281 to .397		

Tables 2 and 3 show that with entering mediators in the conditional model the direct effect in all conditions gets insignificant. Furthermore, the effect of factuality is mediated either via trust and perceived expertise of the reviewer or via both variables in most of the conditions. Only in the condition of similarity and hedonic products the style did not have any direct or indirect effect on the attitude towards the reviewed object. For the other conditions a more factual style generally resulted in higher attitude scores as all coefficients are positive. However, the effect's strength varies across conditions and it is mediated via the expertise evaluation of the reviewer or trust in the review. If the readers were exposed to a review for a hedonic product written by a dissimilar reviewer factuality had an indirect effect of .560 on the attitude towards the reviewed prod-

uct. Reviews for utilitarian products and similar reviewers yielded an indirect effect of .488 while for dissimilar reviewers it was .421.

For the second mediator trust we found a significant indirect effect of .455 for more factual reviews if a dissimilar reviewer reviewed the utilitarian product, whereas in the case of a similar reviewer the indirect effect was only .255. The other conditions did not lead to significant indirect effects. Overall, as in the inclusive model none of the direct effects are significant but conditional significant mediation effects exist we can derive the finding that the positive effect of factuality is context specific to the product type and to the reader-reviewer homophily.

4 Discussion

Our paper provides some interesting findings and implications. Firstly, the results show that factual written reviews are better evaluated by the readers. However, secondly, in line with our expectations we found that context related factors interact with the review style. Our data suggest that reviewer-reader similarity impacts the perceived expertise of the reviewer as well as trust in the review. While we found evidence that in the case of dissimilarity factual reviews are better evaluated, this effect is mitigated if the reader is similar to the writer. In addition, our data provide evidence that trust in the review and evaluations of the reviewer's expertise are also moderated by the product type. As expected, for the more utilitarian product the response to factual written reviews is better, while against our expectation for the hedonic product (again) no differences between emotional and factual written reviews were found. Overall, we observed that a more factual style is beneficial for the evaluation of the reviewer's expertise and important for the generation of trust in the review, however, this effect is mitigated for hedonic products as well as if the writer is similar to the reader. Thus our study provides some important findings for industry too.

It seems that for more utilitarian products factual reviews are regarded as more trustworthy. Therefore, fostering communication that highlights product details that easily can be used by customers also to write up their reviews might be advisable. Furthermore, if companies that sell more hedonic products analyze their reviews they should be aware that there is almost no difference in the perceived trustworthiness of factual and emotional written reviews. Another finding of this study is that very emotional written reviews did not receive higher ratings in any condition, although the difference between factual and emotional written reviews was much smaller if the reader was similar to the reviewer. Thus having products with lots of emotional written reviews might not result in more favorable consumer responses to these reviews.

Finally some limitations and areas for future research shall be mentioned. One limitation is that participants were only exposed to positively valenced reviews. In real life situations, consumers typically face a number of positive

and negative reviews for a given product. Prior studies showed that negative messages and two-sided messages that include both positively and negatively valenced information are perceived to be more credible than one-sided messages (Cheung and Thadani, 2012; Crowley and Hoyer, 1994). Thus the results might be different for negative and/or two-sided messages. Another limitation is the use of Amazon as the only platform. Although controlling for the frequency of amazon usage, trust or distrust in amazon might influence results. Future research might use multiple platforms for online reviews. Finally, we only considered demographic similarity between reader and reviewer, the impact of motivational or psychographic similarity should be addressed in future studies.

5 References

- Bambauer-Sachse, S., and Mangold, S. (2013). Do consumers still believe what is said in online product reviews? A persuasion knowledge approach. *Journal of Retailing and Consumer Services*.
- Bickart, B., and Schindler, R. M. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing*, 15(3), 31-40.
- Brown, J. J., and Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer Research*, 14(3), 350-362.
- Campbell, W. K., and Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of general Psychology*, 3(1), 23.
- Chaudhuri, A., and Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(April), 81-93.
- Cheung, C. M. K., and Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54(1), 461-470.
- Crotts, J. C., Mason, P. R., and Davis, B. (2009). Measuring Guest Satisfaction and Competitive Position in the Hospitality and Tourism Industry An Application of Stance-Shift Analysis to Travel Blog Narratives. *Journal of Travel Research*, 48(2), 139-151.
- Crowley, A. E., and Hoyer, W. D. (1994). An integrative framework for understanding two-sided persuasion. *Journal of Consumer Research*, 561-574.
- De Bruyn, A., and Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, 25(3), 151-163.
- De Wulf, K., Odekerken-Schröder, G., and Iacobucci, D. (2001). Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration. [Article]. *Journal of Marketing*, 65(4), 33-50.
- Dou, X., Walden, J. A., Lee, S., and Lee, J. Y. (2012). Does source matter? Examining source effects in online product reviews. *Computers in Human Behavior*, 28(5), 1555-1563.
- Floh, A., Koller, M., and Zauner, A. (2013). Taking a deeper look at online reviews: The asymmetric effect of valence intensity on shopping behavior. *Journal of Marketing Management*, 1-25.
- Holbrook, M. B., and Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of consumer research*, 132-140.
- Hayes, A. F. 2013. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach: Guilford Press.
- Huang, J. H., and Chen, Y. F. (2006). Herding in online product choice. *Psychology and Marketing*, 23(5), 413-428.

- Hwang, J., Yoon, Y.-S., and Park, N.-H. (2011). Structural effects of cognitive and affective responses to web advertisements, website and brand attitudes, and purchase intentions: The case of casual-dining restaurants. *International Journal of Hospitality Management*, 30(4), 897-907.
- Kim, J., and Gupta, P. (2012). Emotional expressions in online user reviews: How they influence consumers' product evaluations. *Journal of Business Research*, 65(7), 985-992.
- Kozinets, R. V., de Valck, K., Wojnicki, A. C., and Wilner, S. J. S. (2010). Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities. [Article]. *Journal of Marketing*, 74, 71-89.
- Lai, V. S., and Li, H. (2005). Technology acceptance model for Internet banking: an invariance analysis. *Information and Management*, 42, 373-386.
- Lee, K.-T., and Koo, D.-M. (2012). Effects of attribute and valence of e-WOM on message adoption: Moderating roles of subjective knowledge and regulatory focus. *Computers in Human Behavior*, 28(5), 1974-1984.
- Liska, A. E. (1974). Attitude-behavior consistency as a function of generality equivalence between attitude and behavior objects. *The Journal of Psychology*, 86(2), 217-228.
- Ludwig, S., de Ruyter, K., Friedman, M., Brüggem, E. C., Wetzels, M., and Pfann, G. (2013). More Than Words: The Influence of Affective Content and Linguistic Style Matches in Online Reviews on Conversion Rates. *Journal of Marketing*, 77(1), 87-103.
- McPherson, M., Smith-Lovin, L., and Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 415-444.
- Mudambi, S. M., and Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on Amazon. com. *MIS quarterly*, 34(1), 185-200.
- Naylor, R., Lambertson, C., and West, P. M. (2012). Beyond the “Like” Button: The Impact of Mere Virtual Presence on Brand Evaluations and Purchase Intentions in Social Media Settings. *Journal of Marketing*. Accepted May.
- Ohanian, R. (1990). Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *Journal of Advertising Research*, 19(3), 39-52.
- Papathanassis, A., and Knolle, F. (2011). Exploring the adoption and processing of online holiday reviews: A grounded theory approach. *Tourism Management*, 32(2), 215-224.
- Park, D.-H., and Kim, S. (2008). The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. *Electronic Commerce Research and Applications*, 7(4), 399-410.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Racherla, P., Mandviwalla, M., and Connolly, D. J. (2012). Factors affecting consumers' trust in online product reviews. *Journal of Consumer Behavior*, 11(2), 94-104.
- Sen, S., and Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the Web. *Journal of Interactive Marketing*, 21(4), 76-94.
- Sparks, B. A., and Browning, V. (2011). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management*, 32(6), 1310-1323.
- Sparks, B. A., Perkins, H. E., and Buckley, R. (2013). Online travel reviews as persuasive communication: The effects of content type, source, and certification logos on consumer behavior. *Tourism Management*, 39, 1-9.
- Steffes, E. M., and Burgee, L. E. (2009). Social ties and online word of mouth. *Internet Research*, 19(1), 42-59.
- Vermeulen, I. E., and Seegers, D. (2009). Tried and tested: The impact of online hotel reviews on consumer consideration. *Tourism Management*, 30(1), 123-127.

- Wathen, C. N., and Burkell, J. (2002). Believe it or not: Factors influencing credibility on the Web. *Journal of the American Society for Information Science and Technology*, 53(2), 134-144.
- Willemssen, L. M., Neijens, P. C., Bronner, F., and de Ridder, J. A. (2011). "Highly Recommended!" The Content Characteristics and Perceived Usefulness of Online Consumer Reviews. *Journal of Computer-Mediated Communication*, 17(1), 19-38.
- Xia, L., and Bechwati, N. N. (2008). Word of Mouse: The Role of Cognitive Personalization in Online Consumer Reviews. *Journal of Interactive Advertising*, 9(1), 3-13.
- Zhang, J. Q., Craciun, G., and Shin, D. (2010). When does electronic word-of-mouth matter? A study of consumer product reviews. *Journal of Business Research*, 63(12), 1336-1341.
- Einhorn, H. J. and R. M. Hogarth (1981), "Behavioral Decision Theory: Processes of Judgment and Choice," in: *Annual Review of Psychology*, 32, 53-88.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.

“Too Close for Comfort”: The Negative Effects of Location-Based Advertising

Martina Čaić
Dominik Mahr
Elizabeth Aguirre
Ko de Ruyter
Martin Wetzels

1 Study Purpose

The expanding presence of mobile devices offers marketers a new advertising channel for reaching consumers. Whereas both real-world practice and academia hail the advantages of personalizing advertising messages with location information, this research probes its negative effects. An exploratory field study that places ads on a social network reveals a sharp drop in advertising effectiveness when an online ad includes location information. To explain these results, a subsequent experimental study demonstrates how location-based personalization can trigger feelings of vulnerability, which hamper online advertising effectiveness.

2 Introduction

The number of people accessing the Internet via a mobile device, such as a smartphone or tablet, has surpassed the number using fixed devices, such as PCs (Gartner, 2012). The time consumers spend using mobile devices also has multiplied, at the expense of traditional media channels such as radio and television. These rapid shifts have been echoed by advertisers, who have shifted their expenditures such that mobile advertising captured 22% of U.S. digital advertising expenses in 2013 and is likely to surpass desktop advertising by 2017 (eMarketer, 2013). The differences between fixed and mobile devices create some new opportunities for marketers, but they also prevent them from easily generalizing the research findings from fixed to mobile online settings (MSI, 2012). Anecdotal evidence suggests that typical online advertising strategies are either not applicable or at least demand modification to be effective (Shankar and Balasubramanian, 2009).

Most advertising research assumes that the effectiveness of online ads depends on their benefits for individual consumers. Tailoring advertisements and purchase experiences to individual tastes, on the basis of people's needs, interests, and preferences, is personalization (Chellappa and Sin, 2005). It provides various customer benefits, including better preference matching (Vesanan,

2007), reduced cognitive overload, and greater convenience (Ansari and Mela, 2003; Kleijnen, de Ruyter, and Wetzels, 2007), though recent research also notes its potentially negative effects (van Doorn and Hoekstra, 2013; White et al., 2008). For example, personalization can evoke feelings of vulnerability, in that consumers perceive the use of private data as a privacy violation and respond by rejecting online ads (i.e., personalization paradox; Aguirre et al., 2012). Extant research on fixed online devices informs understanding of these effects of mobile advertising, yet mobile devices still offer fundamentally different features.

In particular, smartphones and tablets are truly resourceful devices: They guarantee both mobility and connectivity, while also providing convenient, entertaining experiences (Shankar and Balasubramanian, 2009). Personalization efforts linked to these devices can access data about a user's current location, which represents a novel form of information about consumers for companies. By combining this information with personal data (e.g., demographics, prior purchases), firms can build extended consumer profiles to improve their market segmentation and tailor their promotions (King and Jessen, 2010). However, mobile devices also are considered very personal, as extensions of users' selves (Shu and Peck, 2011). Location-based advertising using GPS functions to track people's locations raises privacy concerns; ads tailored to individual locations also may provoke feelings of intrusion.

Despite increasing popular reports of location-based advertising campaigns, evidence of their actual effects remains rare. To provide initial empirical evidence, this article reports on an exploratory field study that involved placing personalized ads on a social network site. Two online ads for a cat food brand were posted for five days each, one ad with only interest personalization ("Dear cat lover!") and another ad that featured both interest and location personalization ("Dear cat lover in [city X]!"). The baseline ad achieved a click rate of .12% (with 78,444 impressions), whereas the click rate for the ad that also featured location personalization dropped to only .04% (with 49,186 impressions). The mechanism underlying this negative effect remains unclear though.

This research therefore aims to shed light on this issue and enrich understanding of personalization for mobile advertising and its adoption by consumers. By probing the effectiveness of location-based personalization and the reasons for some potential negative effects, this study makes the several contributions to advertising literature. First, it operationalizes and validates location-based personalization and demonstrates its positive effect on attitude toward the ad and usage intentions toward an advertised service. Second, the proposed conceptualization of perceived vulnerability offers an alternative to the typically used notion of privacy concerns to explain the negative effects of location-based advertisements. Third, an experimental study provides empirical evidence of how location-based personalization triggers consumers' sense of

vulnerability and hampers advertising effectiveness, even when controlling for privacy concerns.

3 Conceptual Framework and Hypothesis Development

3.1 Personalization in Advertising

Personalization is a customer-oriented marketing strategy that aims to deliver the right content to the right person at the right time, to maximize business opportunities (Tam and Ho, 2006). Its applicability increases significantly in online environments, prompting its use in various online contexts. Online advertisers provide behaviorally targeted advertisements, based on a user's behavior on the Internet over time (Goldfarb and Tucker, 2011). Customers thus benefit from a better preference match (Vesanen, 2007) and reduced cognitive overload (Ansari and Mela, 2003); firms benefit from greater recall, higher content evaluations, and more purchases (Tam and Ho, 2006), such that personalized ads are approximately twice as effective as non-personalized versions of similar ads (Aguirre et al., 2012).

3.2 Personalization on Mobile Devices

The unique features of mobile devices (always on and available) arguably should increase the success and acceptance of mobile advertising. Echoing commercial success of mobile services, researchers have recently dedicated more attention to the impact of mobile device features on the value creation of mobile services (Kleijnen, de Ruyter, and Wetzels, 2007; Mahr and Lievens, 2012). Heinonen (2004) cites the importance of spatial value dimensions for evaluating offerings; accordingly, this study investigates mobile ads, whose delivery reflects the consumer's current physical location. Gratton (2002) argues that such location personalization is an extension of common interest personalization; it depends on a mobile device's position and context and seeks to add utility for the mobile user (Unni and Harmon, 2007). That is, companies provide mobile device bearers with relevant promotional information, based on their activities and their location. Therefore, the predicted impacts of location personalization on advertising outcomes are as follows:

H1: Location-based personalization has positive effects on (a) consumers' attitude toward the ad and (b) intentions to use the advertised offer.

To obtain these benefits, customers must disclose personal information. An ad that reveals some knowledge of their location information (as presented in the initial empirical evidence presented above) may surprise or remind users of data collection tactics, increasing their perceptions of privacy violations (Aguirre

re et al., 2012; van Doorn and Hoekstra, 2013). Those perceptions even might be amplified in mobile settings, which place intimate data on personal devices. People's emotional attachment to their personal data likely reflects their strong psychological ownership of private information, which they consider as an integral part of their selves (Shu and Peck, 2011). Intrusive advertisements violate this sense, invoking negative emotional responses, such that the consumer senses a lack of control over the data. Baker et al. (2005) define such consumer *vulnerability* as a state of powerlessness, experienced when they lack control over the situation. This feeling of vulnerability could be triggered by location information displayed by an ad. Such an affective mechanism differs from the general privacy concerns that appear in prior studies on privacy though (Aguirre et al., 2012). Formally, regarding the negative impact of location-based ads on outcomes, this study hypothesizes:

H2: Perceived vulnerability stemming from location-based personalization has negative effects on (a) consumers' attitude toward the ad and (b) intentions to use the advertised offer.

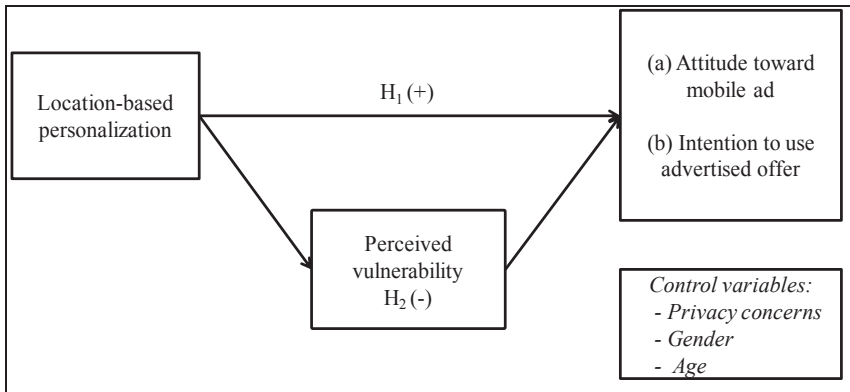


Figure 1: Hypothesized relationships

4 Experimental Study

The study tests whether location-based ads lead to positive effects (H_1) and if perceived vulnerability triggered by the ads hampers their effectiveness (H_2). In scenarios, respondents received a promotion, redeemable at either their present location or a distant location.

4.1 Method

To test the hypotheses, this study manipulates the degree to which the advertisement is personalized to the consumer's location (low vs. high; Table 1). The manipulation check confirmed the effectiveness of this manipulation (95% of respondents correctly reported the location mentioned). The sample consists of 79 participants.

Table 1: Experimental manipulations

<i>Degree of personalization based on user location</i>	
<i>Low (n = 41)</i>	<i>High (n = 38)</i>
"You receive a message delivering a 50% discount coupon on your smartphone for a restaurant in Y."	"You receive a message delivering a 50% discount coupon on your smartphone for the restaurant you are in front of."

You are walking in the city center of X, it is time to have lunch (around 12:30), and you are very hungry. You receive a message on your smartphone.

*X and Y are cities in a Western European country, approximately 200 km distant from each other.

The study relied on a convenience sample of respondents who were in average 25 years old, 53% of whom were men. After reading a scenario, respondents answered questions pertaining to the key measures: *attitude* toward the advertisement, which measured their evaluative affect about the ad (Bauer et al., 2005; Jong Woo and Sangmi, 2007; Nysveen et al., 2005); *intention* to use the advertised offer (Edwards et al., 2012); *privacy* concerns (Chellappa and Sin, 2005); and a feeling of *vulnerability* (Aguirre et al., 2012). Table 2 contains the item list, means, standard deviations, and reliabilities.

Table 2: Items in the questionnaire

<i>Construct (seven-point Likert scale)</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Cronbach's Alpha</i>
<i>Attitude toward the ad</i>	4.23	1.47	0.92
Please rate your attitude toward the advertisement you just received on your smartphone: Bad → Good Negative → Positive Undesirable → Desirable Unfavorable → Favorable How much did you like receiving the offer on your smartphone? Not at all → Very Much Please indicate how much you agree or disagree with the following statements: I find the ad... Convenient			

Beneficial Relevant			
<i>Intention to use advertised offer</i>	4.05	1.62	0.83
I would use the coupon provided on my smartphone. Based on this experience, I really like the ad. I would recommend the service (e.g., receiving this type of message on my smartphone).			
<i>Privacy concerns</i>	5.15	1.37	0.84
I am sensitive about giving out information regarding my location. When the "Location Services" option of my phone settings is turned on, I have the feeling of being watched. When the "Location Services" option of my phone settings is turned on, I have the feeling that all my movements are being tracked and monitored. I am concerned that a person can find information about my past and real-time location.			
<i>Feeling of vulnerability</i>	3.93	1.20	0.90
Please indicate the extent that receiving the advertisement on your smartphone made you feel... Unprotected Helpless Exposed Powerless Manipulated Unsafe Susceptible Vulnerable			

4.2 Results

The PROCESS model, as suggested by Hayes (2013), served to test the hypotheses. In support of H_1 , the main effect of location-based personalization was significant; greater personalization led to stronger attitudes toward the ad ($M_{low} = 3.70$, $M_{high} = 4.81$; $\beta = .62$; $t = 3.97$; $p < .01$) and greater intentions to use the service ($M_{low} = 3.72$, $M_{high} = 4.39$; $\beta = .44$; $t = 2.50$; $p < .05$). Regarding the mediation predicted in H_2 , perceived vulnerability showed partial mediation, with negative effects on attitude toward the ad (effect = $-.06$, $SE = .05$; bootstrap confidence interval: $LLCI = -.18$, $ULCI = -.01$, 90% significance level) and usage intentions (effect = $-.10$, $SE = .07$; bootstrap confidence interval: $LLCI = -.23$, $ULCI = -.01$, 90% significance level). General privacy concerns, gender, and age also appeared in the analysis as control variables, to rule them out as explanations for the results.

5 Discussion and Implications

This study has sought to analyze the impact of location-based personalization on consumer behavior and its influence on consumers' perceived vulnerability. In line with the predictions, matching the location cited in the ads with consumers' current positions produces superior advertising outcomes. However, this match simultaneously can trigger a feeling of intrusion into consumers' private sphere, which impedes ad effectiveness.

By investigating this phenomenon, the study offers several implications for research and practice. First, it enriches research on mobile advertising and services by operationalizing location-based personalization and distinguishing it from other personalization dimensions, such as interest or demographics. A location match has positive effects for attitude toward the ad that also spill over to the advertised offers. These findings suggest that firms should increase their investments in efforts to localize their offers on mobile devices, such as promotions and coupons; location personalization can increase the utility of an offer while also overcoming the limitations of smaller screen sizes, compared with non-mobile devices. Second, perceived vulnerability offers an alternative explanation, rather than the typically used privacy concerns, which ties in with recent literature pertaining to privacy and ownership and effectively explicates the negative effects of location-based advertisements. Just as Aguirre et al. (2012) indicated, perceived vulnerability is situational and might be triggered by the firm's use of data, such as location data in this study. In practice, consumers occasionally report surprise when online ads provide offers based on their recent online browsing behavior or online communication. Firms thus should use vulnerability measures to test the extent of an ad's intrusiveness, to reduce the risk of negative reactions from consumers. Third, the experimental study affirms that location-based personalization simultaneously increases advertising effectiveness and triggers consumers' vulnerability, which hampers advertising effectiveness. The findings reveal the underlying mechanism. Firms using online advertising thus must recognize this simultaneity and balance the effects when using location-based advertising.

This research also suggests interesting opportunities for research. Whereas the present study focuses on location information, additional research might disentangle the effects of interest, location, and time information to establish their relative influences. The utility and effectiveness of location-based personalization might also depend on the situation and the relationship which a consumer has towards the firm and offered service. For example, help seeking consumers might be more receptive for location-based offers matching their immediate needs (Moeller et al. 2013). Finally, a large-scale study using actual location tracking would offer more generalizable insights and clearer recommendations for managers.

The authors appreciate the support during the data collection by Maik Idzes, Lauri Limongi, and the company Blossom.

6 References

- Aguirre, M. E.; Mahr, D.; de Ruyter, K.; Wetzels, M. and D. Grewal (2012), "The Impact of Vulnerability During Covert Personalization—A Regulatory Mode Approach," Paper presented at the 41st EMAC Conference, Lisbon - ISCTE.
- Ansari, A. and C. F. Mela (2003), "E-Customization," in *Journal of Marketing Research*, Vol. 40, 2, 131-145.
- Baker, S. M.; Gentry, J. W. and T. L. Rittenburg (2005), "Building Understanding of the Domain of Consumer Vulnerability," in: *Journal of Macromarketing*, Vol. 25, 2, 128-139.
- Bauer, H.; Barnes, J.; Reichardt, T. and M. Neumann (2005), "Driving Consumer Acceptance of Mobile Marketing: A Theoretical Framework and Empirical Study," in: *Journal of Electronic Commerce Research*, Vol. 6, 3, 181-192.
- Chellappa, R. K. and R. G. Sin (2005), "Personalization versus Privacy: An empirical Examination of the Online Consumer's Dilemma," in: *Information Technology and Management*, Vol. 6, 2, 181-202.
- Edwards, S. M.; Li, H. and J.-H. Lee (2002), "Forced Exposure and Psychological Reactance: Antecedents and Consequences of the Perceived Intrusiveness of Pop-Up Ads," in: *Journal of Advertising*, Vol. 31, 3, 83-95.
- eMarketer (2013), "Most Digital Ad Growth Now Goes to Mobile as Desktop Growth Falters." Retrieved January 15, 2013 from: <http://www.emarketer.com/Article/Most-Digital-Ad-Growth-Now-Goes-Mobile-Desktop-Growth-Falters/1010458>.
- Gartner (2012), "Gartner Identifies the Top 10 Strategic Technology Trends for 2013." Retrieved March 19, 2013 from: <http://www.gartner.com/newsroom/id/2209615>.
- Goldfarb, A. and C. Tucker (2011), "Online Display Advertising: Targeting and Obtrusiveness," in: *Marketing Science*, Vol. 30, 3, 389-404.
- Gratton, E. (2002), "M-Commerce: The Notion of Consumer Consent in Receiving Location-Based Advertising," in: *Canadian Journal of Law and Technology*, Vol. 1, 2, 59-77.
- Hayes, A. F. (2013), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," White paper. <http://www.afhayes.com/public/process2012.pdf>.
- Heinonen, K. (2004), "Reconceptualizing Customer Perceived Value: The Value of Time and Place," in: *Managing Service Quality*, Vol. 14, 2/3, 205-215.
- Jong Woo, J. and L. Sangmi (2007), "Mobile Media Use and its Impact on Consumer Attitudes toward Mobile Advertising," in: *International Journal of Mobile Marketing*, Vol. 2, 1, 50-58.
- King, N. J. and P. W. Jessen (2010), "Profiling the Mobile Customer – Is Industry Self-Regulation Adequate to Protect Consumer Privacy when Behavioral Advertisers Target Mobile Phones?" in: *Computer Law & Security Review*, Vol. 26, 6, 595-612.
- Kleijnen, M.; de Ruyter, K. and M. Wetzels (2007), "An Assessment of Value Creation in Mobile Service Delivery and the Moderating Role of Time Consciousness," in: *Journal of Retailing*, Vol. 83, 1, 33-46.
- Mahr, D. and A. Lievens (2012), "Virtual Lead User Communities: Drivers of Knowledge Creation for Innovation," in: *Research Policy*, Vol. 41, 1, 167-177.
- Moeller, S.; Ciuchita, R.; Mahr, D.; Odekerken-Schröder, G. and M. Fassnacht (2013), "Uncovering Collaborative Value Creation Patterns and Establishing Corresponding Customer Roles," in: *Journal of Service Research*, Vol. 16, 4, 471-487.
- MSI (2012), "Research Priorities 2012-2014," Cambridge, MA. Marketing Science Institute.

- Nysveen, H.; Pedersen, P. and H. Thorbjørnsen (2005), "Intentions to Use Mobile Services: Antecedents and Cross-Service Comparisons," in: *Journal of the Academy of Marketing Science*, Vol. 33, 3, 330-346.
- Shankar, V. and S. Balasubramanian (2009), "Mobile Marketing: A Synthesis and Prognosis," in: *Journal of Interactive Marketing*, Vol. 23, 2, 118-129.
- Shu, S. B. and J. Peck (2011), "Psychological Ownership and Affective Reaction: Emotional Attachment Process Variables and the Endowment Effect," in: *Journal of Consumer Psychology*, Vol. 21, 4, 439-452.
- Tam, K. Y. and S. Y. Ho (2006), "Understanding the Impact of Web Personalization on User Information Processing and Decision Outcomes," in: *MIS Quarterly*, Vol. 30, 4, 865-890.
- Unni, R. and R. Harmon (2007), "Perceived Effectiveness of Push vs. Pull Mobile Location-Based Advertising," in: *Journal of Interactive Advertising*, Vol. 7, 2, 28-40.
- van Doorn, J. and J.C. Hoekstra (2013), "Customization of Online Advertising: The Role of Intrusiveness," in: *Marketing Letters*, Vol. 24, 4, 339-351.
- Vesanen, J. (2007), "What Is Personalization? A Conceptual Framework," in: *European Journal of Marketing*, Vol. 41, 5/6, 409-418.
- White, T. B.; Zahay, D. L.; Thorbjørnsen, H. and S. Shavitt (2008), "Getting Too Personal: Reactance to Highly Personalized Email Solicitations," in: *Marketing Letters*, Vol. 19, 1, 39-50.

Part III

TV Advertising and Product Placement

How Informative Are Chinese Television Commercials?

Liyong Wang

Carolus L. C. Praet

1 Introduction

Informativeness is the extent to which advertisements focus on consumers' practical, functional or utilitarian needs for the product (Resnik and Stern, 1977; Mueller, 1991). Resnik and Stern (1977) developed a scheme of 14 information cues, which has become the de facto standard for examining advertising information content and/or informativeness. Many follow-up studies have applied this framework (cf. Abernety and Franke, 1996). Since the start of the 21st century, the geographic focus of studies on advertising informativeness has been increasingly shifting from industrialized nations to emerging markets. The emerging market that has received the most attention from advertising researchers is China. While studies on advertising in China have contributed to our knowledge on Chinese advertising, the advertising characteristics reported in these studies have been inconsistent. The inconsistencies in results are probably due to a) sampling issues and b) the fast-paced growth of China's economy and increasing sophistication of consumers and advertising know-how. This suggests that Chinese advertising is a moving target that requires constant monitoring by researchers. This paper seeks to update our knowledge on the nature of Chinese advertising by concentrating on its informativeness. We also expand the Resnik and Stern coding scheme to capture more aspects of information content. We focus on television advertising because it is the most important advertising medium in China (Cheng and Chan, 2009).

1.1 Advertising Informativeness

Resnik and Stern (1977) contend that an advertisement can be considered informative if it contains at least one of 14 objective information cues. Based on this criterion, the level of informativeness and the patterns and types of information cues in advertisements have been reported by many cross-national and single-country studies on magazine ads (e.g., Stern, Krugman, and Resnik, 1981; Madden et al., 1986; Biswas et al., 1992; Keown et al., 1992; Akan, 2007), and television commercials (e.g., Aaker, 1984; Weinberger and Spotts, 1989; Keown et al., 1992; Choi et al., 2006). A related criterion for evaluating the level of advertising informativeness is the average number of cues per ad, which has also been reported in a variety of studies of magazine ads (e.g., Stern, Krugman, and Resnik, 1981; Madden et al., 1986; Biswas et al., 1992; Akan,

2007) and television commercials (e.g., Dowling, 1980; Stern and Resnik, 1991; Choi et al., 2006).

A smaller number of cross-national and single-country empirical studies have explored the informativeness of Chinese advertising. Keown et al. (1992) compared advertising from the U.S., Japan, South Korea and China across four media and found that 100% of Chinese magazine advertising was informative and contained an average of 3.27 cues per ad, whereas 92% of Chinese TV commercials were informative and contained an average of 1.9 cues per commercial. Rice and Lou (1988) reported that 100% of Chinese magazine ads were informative with an average of 2.26 cues per ad and that the top five cues were availability, performance, quality, price, and independent research. Chan (1995) reported that 58.3% of Chinese commercials were informative with an average of 1.5 cues per informative commercial. In a replicative study, Chan and Chan (2005) reported that 55.2% of Chinese commercials were informative with an average of 1.3 cues per informative commercial. In both studies, performance, components, and quality constituted the top three information cues (Chan 1995; Chan and Chan 2005).

1.2 Factors Affecting Advertising Informativeness

Previous studies report variability in levels of advertising informativeness across countries, within countries over time, and across media. Many prior studies have identified product category as an important factor for explaining differences in levels of informativeness (e.g. Resnik and Stern, 1977; Stern, Krugman, and Resnik, 1981; Weinberger and Spotts, 1989; Abernethy and Franke, 1996; Choi et al., 2006; Akan, 2007). Alternative explanations include government control (e.g. Dowling, 1980; Zandpour et al., 1994; Akan, 2007), advertising medium (e.g. Stern, Krugman, and Resnik, 1981; Keown et al., 1992; Abernethy and Franke, 1996; Choi et al., 2006), national culture (e.g. Biswas et al., 1992; Keown et al., 1992; Zandpour et al., 1994; Taylor et al., 1997), advertiser execution strategy (e.g. Mueller, 1991), level of development of the advertising industry in a country (e.g., Zandpour et al., 1994; Chan and Chan, 2005), product life cycle (e.g. Stern and Resnik, 1991), differences between market and transition economies (Herpen et al., 2000), and research design and method effects (Abernethy and Franke, 1996). In this study we focus on the relationship between product category and advertising informativeness.

1.3 The Influence of Product Category on Informativeness

Previous research shows that product category not only affects advertising informativeness but also creative strategy, message, execution, and value appeals. Although prior studies have employed a variety of criteria for categorizing products (Abernethy and Franke, 1996), one widely accepted categorization

scheme used in advertising informativeness studies is based on industry type (e.g., Resnik and Stern, 1977; Stern, Krugman, and Resnik, 1981; Aaker, 1984; Tom et al., 1984; Madden et al., 1986; Abernethy and Franke, 1996; Chan and Chan, 2005; Choi et al., 2006; Akan, 2007). These studies generally show the influence of product type on information content and levels of informativeness. This study adopts the same product categorization scheme to maintain comparability with previous research. Based on the above review, we formulate the following hypotheses:

H1a: The percentage of informative Chinese television commercials differs across product categories.

H1b: The average number of information cues per commercial in Chinese television commercial differs across product categories.

A broader product classification scheme distinguishing between durable and non-durable goods is used in studies such as Keown et al. (1992), Abernethy and Franke (1996), and Choi et al. (2006). Results of these studies suggest that ads for durable goods provide more information than ads for non-durable goods, which is attributed to the fact that consumers tend to search for more information for durable goods than for non-durable goods. Durable goods tend to be high-involvement goods whereas non-durable goods are usually low-involvement goods (Abernethy and Franke, 1996). As a result, advertisers tend to offer more information to assist consumer decision-making for durable goods (Choi et al., 2006). We thus formulate the following hypotheses:

H2a: The percentage of informative Chinese television commercials for durable goods is higher than that for non-durable goods.

H2b: Chinese television commercials for durable goods on average contain more information cues than those for non-durable goods.

1.4 The Influence of a Commercial's Length on Informativeness

Whereas common sense suggests that longer commercials would contain more information cues, previous studies have reported contradictory results. Zandpour et al. (1992) conducted a comparative analysis of French, Taiwanese, and U.S. television commercials and found that—regardless of country and product category—longer commercials (30 seconds) tended to contain more information than shorter ones (15 seconds). Nevett (1992) compared the differences of information content between U.S. and U.K. ads and found no association between length and information content in both countries. In a study of Chinese television commercials, Chan and Chan (2005) too reported no association between ad length and level of informativeness. Based on the findings by Chan and Chan (2005), we propose the following hypothesis:

H3a: There is no relationship between length of Chinese television commercials and their level of informativeness.

H3b: There is no relationship between length of Chinese television commercials and the number of information cues they contain.

2 Methodology

2.1 Sample Collection

Commercials were systematically collected during the entire year of 2010. We recorded once a week in an interval of 8 days, i.e. January 1st (Friday), January 9th (Saturday), January 17th (Sunday), and so forth. We selected Channel 1 and Channel 2 of China Central Television (CCTV), the largest national television broadcaster with coverage of over 97% of the PRC's population. In order to cover the time slots with the highest audience concentration we recorded all programming during the six hours from 18:00 to 24:00. We adopt Stern and Resnik's (1991) approach in making non-duplicated ads the unit of analysis to avoid sample bias towards high GRP advertisers. We excluded governmental ads and ads for TV programs. The final sample consisted of 1439 commercials.

2.2 Coding Framework

Resnik and Stern's (1977) information content framework, described in detail in Stern, Krugman, and Resnik's (1981), forms the basis for this study. However, several studies have suggested that this framework is not exhaustive and fails to capture certain types of information that advertising commonly contains (e.g., Abernethy and Franke, 1996; Taylor et al., 1997). In response to this limitation, researchers have incorporated additional cues to measure types of information commonly used in specific markets, or to reflect recent developments in society, the advertising industry and media technology. Concrete examples are Taylor et al., (1997) who expanded the original framework to 30 cues for use in South Korea, Herpen et al. (2000) who included 'contest', 'address', 'telephone number', and 'country of origin' cues to measure information content in transition economies, Harmon, Razzouk, and Stern (1983) who added 'energy consumption,' Choi et al. (2006) who incorporated 'toll-free number,' 'web address,' 'brand name/advertiser,' and 'disclaimer,' and Akan (2007) who included a 'variety of size, shape, color and taste' cue to the original scheme. Based on a pre-test of the additional cues used in more recent studies on a sample of Chinese ads not included in this study, we decided to include the 'variety,' 'telephone number,' 'homepage/keyword search,' and 'country of origin' cues. The 18 information cues and their operational definitions are listed in Table 1.

Table 1: Information cues and operational definitions

<i>Information cues</i>	<i>Operational definition</i>
Price-value ^a	What does the product cost? What is its value-retention capability? What is the need-satisfaction capability/dollars?
Quality ^a	What are the product's characteristics that distinguish it from competing products based on an objective evaluation of workmanship, engineering, durability, excellence of materials, structural superiority, personnel superiority, attention to detail, or special services?
Performance ^a	What does the product do and how well does it do what it is designed to do in comparison to alternative purchases?
Components or contents ^a	What is the product composed of? What ingredients does it contain? What ancillary items are included with the product?
Availability ^a	Where can the product be purchased? When will the product be available for purchase?
Special offers ^a	What limited-time nonprice deals are available with a particular purchase?
Taste ^a	Is evidence presented that the taste of a particular product is perceived as superior in taste by a sample of potential customers? (The opinion of the advertiser is inadequate).
Nutrition ^a	Are specific data given concerning the nutritional content of a particular product, or is a direct specific comparison made with other products?
Packaging or shape ^a	What package is the product available in which makes it more desirable than alternatives? What special shapes is the product available in?
Guarantees and warranties ^a	What post-purchase assurances accompany the product?
Safety ^a	What safety features are available on a particular product compared to alternative choices?
Independent research ^a	Are results of research gathered by an "independent" research firm presented?
Company research ^a	Are data gathered by a company to compare its product with a competitor's presented?
New ideas ^a	Is a totally new concept introduced during the commercial? Are its advantages presented?
Variety ^b	Is the product available in different colors, sizes, shapes, flavors, tastes, etc.?
Country of origin ^c	In what country was the product manufactured, assembled, or designed? From what country were ingredients or parts sourced?
Telephone number ^d	Does the ad show a telephone number (toll-free or otherwise)?
Homepage/ keyword search ^d	Does the ad redirect consumers to the brand or company homepage, or does it encourage consumers to perform an Internet search using a product related keyword?

a: Stern, Krugman, and Resnik (1981); b: Akan (2007); c: Herpen et al. (2000); d: Choi et al. (2006).

2.3 Coding Procedure

Two bilingual Chinese native speakers coded the sample. Coders were trained with detailed written instructions in English and by coding 20 commercials that were not part of the sample. Coders judged information cues in any part of the visual (e.g., on-screen descriptions, captions, characters' body language, background settings, visual symbols) and audial aspects (e.g. speech by on-screen characters, voice-over, musical lyrics) of the advertisements. To check intercoder reliability, coders independently coded 104 commercials (about 7%) randomly selected from the sample. Based on the proportional reduction in loss (PRL) approach suggested by Rust and Cooil (1994), the PRL reliability measures for all the coding variables were above 0.92. Therefore, coding reliability was deemed satisfactory. After discussing and resolving all discrepancies, coders each coded a different half of the sample.

3 Results

Table 2 presents the overall level of informativeness of Chinese television commercials. 76.3% of the sample contained at least one information cue, 47.0% of the sample contained two or more information cues and 24.8% contained at least three cues. We found a total of 2344 cues in 1439 television commercials, for an average of 1.6 cues per commercial (Table 3).

Table 3 presents the extent to which each of the 19 information cues are used in Chinese television commercials. 'Performance' (39.1%), 'Variety' (27.0%), 'Components/contents' (19.3%), and 'Quality' (14.5%) constitute the four most frequently used information cues. The top 8 information cues can be found in more than 5% of ads.

Table 2: Information level of Chinese television commercials

<i>Cues per ad (n)</i>	<i>ads (n)</i>	<i>% (n=1439)</i>
No cue	341	23.7
At least 1 cue	1098	76.3
2 cues or more	675	47.0
3 cues or more	357	24.8
4 cues or more	147	10.2
5 cues or more	46	3.2

Table 3: Information cues in Chinese television commercials

<i>Information cue</i>	<i>Frequency (n)</i>	<i>% (n=1439)</i>
Performance	562	39.1
Variety	388	27.0
Components/contents	278	19.3
Quality	209	14.5
Availability	175	12.2
Homepage/keyword search	151	10.5
Telephone No.	137	9.5
Country of Origin	122	8.5
Special offers	68	4.7
New ideas	60	4.2
Safety	50	3.5
Nutrition	38	2.6
Price	36	2.5
Company research	26	1.8
Packaging	16	1.1
Independent research	14	1.0
Guarantees/ warranties	10	0.7
Taste	4	0.3
Total	2344	162.9

Table 4 presents the differences in information level across product categories. The percentage of informativeness ranges from 38.9% to 100% across 17 product categories and these differences (H1a) are significant ($X^2=259.3$, $p<0.001$, $df=16$). The average number of cues per commercial ranges from 0.8 to 2.6 and these differences (H1b) are also significant ($F=26.000$, $p<0.001$, $df=16$). Hence, H1a and H1b are supported. Product categories exhibiting high levels of informativeness —operationalized here as more than 80% of ads in the category containing at least 1 information cue, in combination with an average number of information cues per ad of 2 or more— can be found in the personal care (98.0%, 2.6), detergents (96.7%, 2.2), food and beverage (93.6%, 2.5), IT, telecom and electronics (91.5%, 2.0), and automobiles and accessories (82.5%, 2.1) categories. In contrast, five categories feature low informativeness —operationalized as less than 70% of ads in the category containing at least 1 information cue, in combination with an average number of information cues per ad of less than 1— i.e., the housing and decorating (38.9%, 0.6), financial and insurances (45.8%, 0.8), institutional (48.6%, 0.9), Others (55.6%, 0.9), and fashion (62.8%, 0.9) categories.

To further investigate the relationship between informativeness of commer-

cial and product categories we classified a total of 1130 commercials into two categories, durable goods (470 ads) and non-durable goods (660 ads). Ads for services were not included in this analysis as they are not goods. The percentage of informative ads tends to be slightly higher for durable goods (83.0%) than for non-durable goods (82.3%). However, the difference is not statistically significant ($X^2=0.104$, $p=0.75$, $df=1$). Thus, H2a is not supported. On the other hand, non-durable goods tend to feature a slightly higher average number of cues (1.84) than durable goods (1.77), which is in the opposite direction of H2b. This difference however, is also not significant ($t= -0.826$, $p=0.409$, $df=1128$). Consequently, H2 is not supported.

Regarding commercial length, Table 5 shows a range spanning from 5 seconds to 105 seconds. The most frequently used commercial length in our sample is 15 seconds, accounting for 65.3% whereas 30-second commercials represent 11.5%. To investigate the relationship between length and information content, we categorized all commercials into 2 groups based on length, i.e., commercials of 15 seconds and less ($n=1260$) and commercials longer than 15 seconds ($n=179$). Results indicate that longer commercials tend to be more often informative than shorter ones (83.2% versus 75.3%). Since the difference is statistically significant ($X^2=5.012$, $p=0.025$, $df=1$), H3a is not supported. Furthermore, results show that longer commercials feature a higher average number of cues (2.15) than shorter ones (1.55) and this difference is statistically significant ($t= -5.416$, $p<0.001$, $df=1437$). Thus H3b is also not supported. To confirm this positive correlation between commercial length and information content, we also compared the differences in informativeness between 15-second and 30-second commercials and found the same tendency, i.e., that longer commercials contain more information. However, these differences were not statistically significant. Thus, our results confirm the intuitively logical positive relationship between length and information content reported by Zandpour et al (1992), but contradict the results reported for Chinese advertising by Chan and Chan (2005).

Table 4: Information level by product category

<i>Product category</i>	<i>ads (n)</i>	<i>% informative^a</i>	<i>average cues^b (n)</i>
Media	5	100.0	1.4
Personal care	100	98.0	2.6
Detergents	30	96.7	2.2
Food and beverage	233	93.6	2.5
IT, telecom and electronics	82	91.5	2.0
Events	18	88.9	1.3
Automobiles and accessories	206	82.5	2.1
Health care products and services	91	82.4	1.4
Home durable appliances	182	80.2	1.3
Services	27	77.8	1.3
Retailing	23	73.9	2.3
Fashion	86	62.8	0.9
Alcohol	120	57.5	1.0
Others	9	55.6	0.9
Institutional	37	48.6	0.9
Finance and insurance	118	45.8	0.8
Housing and decorating	72	38.9	0.6
Total	1439	76.3	1.6
Durable**	470	83.0^c	1.77^d
Non-durable	660	82.3^c	1.84^d

*Product category 'Others' is excluded from the analysis because of the diversity and the inconsistent characteristics of commercials in this product category.

**Durable goods: automobiles & accessories, IT, telecom & electronics, and home durable appliances categories. Non-durable goods: alcohol, detergents, fashion, food & drinks, health care, personal care categories.

a: Differences across 17 product categories are significant ($X^2=259.3$, $p<0.001$, $df=16$).

b: Differences across 17 product categories are significant ($F=26.000$, $p<0.001$, $df=16$).

c: Differences between durable and non-durable goods are not significant ($X^2=0.104$, $p=0.75$, $df=1$).

d: Differences between durable and non-durable goods are not significant ($t= -0.826$, $p=0.409$, $df=1128$).

Table 5: Information level by commercial length

<i>Length</i>	<i>n</i>	<i>%</i>	<i>n with >=1 cue</i>	<i>% informative</i>
5 sec.	174	12.1	112	64.4
8 sec.	30	2.1	23	76.7
10 sec.	116	8.1	69	59.5
15 sec.	940	65.3	745	79.3
20 sec.	3	0.2	2	66.7
30 sec.	165	11.5	138	83.6
45 sec.	3	0.2	3	100.0
60 sec.	7	0.5	5	71.4
105 sec.	1	0.1	1	100.0
Total	1439	100	1098	76.3
<=15 sec.	1260	87.6	949	75.3
>15 sec.	179	12.4	149	83.2

4 Discussion

Compared to previous studies, results of this study indicate that the level of informativeness in Chinese television advertising is relatively high in spite of the fact that we calculated average number of information cues as a ratio of all commercials, whereas previous studies on Chinese advertising informativeness calculated this number as the ratio of informative ads (Chan, 1995; Chan and Chan, 2005). One reason for this result is that we expanded the coding scheme with four additional information cues. Inclusion of these additional cues increases the average number of information cues to 1.6. If we only include the original 14 information cues, the average number of cues per commercial drops to 1.2, and the percentage of informative commercials drops from 76.3% to 68.0%. In addition, an uneven distribution of ads across product categories in the sample as compared to other studies may explain this overall high level of informativeness. Product categories such as ‘Personal care,’ ‘Food and beverage,’ ‘Automobiles and accessories,’ and ‘IT, telecom and electronics’ which contain more information cues, contribute more to the average level of informativeness. Commercials from these four categories constitute 43% of the sample, but account for 60% of the total number of cues. Furthermore, there may be reasons universal to the product categories and reasons specific to China as to why these categories contain more information. Reasons of a general nature apply to the ‘IT, telecom and electronics,’ and ‘automobiles and accessories’ categories which are classified as high-involvement and thinking products under the FCB matrix (Ratchford, 1987; Weinberger and Spotts, 1989) and thus prone to contain more information cues. Moreover, these categories in China are in the

growth stage of the product life cycle, when advertisers tend to focus more on the product's benefits and features to differentiate their products from those of competitors (Anderson and Zeithaml, 1984; Day, 1981). In addition, the majority of Chinese car buyers are first-time users and need more information on the characteristics and performance of products. With respect to the food and beverage category, in China a general trend toward heightened consumer health awareness in combination with the many recent food scandals has led to increased consumer need for information on product contents and safety. Pew Research Center (2012) reports that after a number of high-profile food safety scandals in recent years, concerns about the safety of food have more than tripled from 12% in 2008 to 41% in 2012. A recent trend in the high-involvement personal care and cosmetics category is that Chinese female consumers have been increasingly concerned about naturalness of product ingredients in addition to product performance (LabBrand, 2009; China Cosmetic Market Study, 2013). Thus, personal care and cosmetics advertising will need to focus on rational explanations of product, ingredients, and specific benefits (China Cosmetic Market Study, 2013). Our findings suggest that advertisers appear to be responding to the developments in these product categories.

In this study we confirmed the influence of product category on the level of informativeness. However, results show that there are no significant differences between commercials for durable goods and non-durable goods. This contradicts results of prior studies that ads for non-durable goods contain less information cues (e.g., Stern et al., 1981; Choi et al., 2006; Akan, 2007). The above-mentioned socio-economic environment and Chinese consumer needs in the personal care and food and beverage categories may explain this finding. The level of informativeness of these two product categories contributes to the high informativeness of non-durable goods found in this study. Durable goods are usually high involvement products, but non-durable goods are not necessarily low involvement products, especially in the current Chinese context. Consumers' purchasing involvement in a certain type of product may vary across national markets and may change over time. For instance, the food and beverages categories have usually been categorized as low involvement products. However, the current situation in China where consumers cannot take food safety for granted, leads to a dramatic increase in consumer perceived risk of and involvement with these categories.

Results are also contrary to our third hypothesis that the level of informativeness is uncorrelated to commercial length. Previous research also reports contradictory findings. This study does however confirm the findings of the cross-cultural study by Zandpour et al. (1992) and thus corroborates the intuitively appealing logic that longer commercial contain more information than shorter ones.

This study updates Resnik and Stern's (1977) framework with four additional cues. The relatively frequent occurrences of these cues confirm the necessity of expanding the original framework. 'Variety' is even the second most frequently used information cue. 'Telephone No.' and 'Homepage/keyword search' are two types of cue that redirect consumers to sources of more detailed information. 'Country of origin' plays an important role in Chinese consumers' purchasing decision-making process as a symbol of trustworthiness and implicit assurance of product quality, especially for products made outside of China (Zhang, 1996). However, 'Country of origin' was used in only 8.5% of commercials. Furthermore, closer inspection of our data set reveals that if only references to foreign origin are counted, the percentage drops to 2.6%. This suggests that Chinese manufacturers are increasingly becoming confident in referring to China as the source of products.

One specific finding of this study is that, in spite of increased consumer needs for information on product safety, advertisers only sparingly used the safety cue (3.5%). This implies that companies that employ high product safety standards should consider providing safety information claims in their ads. One more example that is worthy of highlighting is the financial and insurance industry. Products related to credit cards, banking and life insurance are usually categorized as high involvement and think products under FCB grid and thus advertisements for them would be expected to contain a high level of information content. However, the pattern is different in Chinese television commercials where most ads in the finance and insurance category contain a relatively low level of information and focus more on brand or corporate image, presumably to establish an image of trust among consumers. The reason for this may be that in China for financial and insurance products corporate trust is more important than specific product details and benefits and that these products may have a higher emotional component.

5 Future Research and Limitations

Content analysis reflects the view of advertisers and marketers. Future studies should also investigate consumer information needs and perceptions. Due to space limitations we were not able to include analyses of information cue distribution patterns by product category. This needs to be dealt with in a future study. Finally, limitations of the Resnik and Stern framework need to be addressed. One limitation is that the framework explicitly measures types of cues rather than instances of information (cf. Abernethy and Franke, 1996; Choi et al, 2006), preventing researchers from measuring the actual information level as perceived by consumers. Another limitation is that it does not cover all types of information found in advertising. A thorough cross-cultural reevaluation, validation and expansion of the framework appear warranted.

6 References

- Aaker, D. A. (1984), "Measuring the Information Content of Television Advertising," in: *Current Issues & Research in Advertising*, Vol. 7(1), 93-108.
- Abernethy, A. M.; and G. R. Franke (1996), "The Information Content of Advertising: A Meta-Analysis," in: *Journal of Advertising*, Vol. 25(2), 1-17.
- Akan, P. (2007), "Information Content of Magazine Advertising in Turkey," in: *Journal of European Advertising*, Vol. 16(4), 33-47.
- Anderson, C. R. and C. P. Zeithaml (1984), "Stage of the Product Life Cycle, Business Strategy, and Business Performance," in: *Academy of Management Journal*, Vol. 27(1), 5-24
- Biswas, A.; Olsen, J.; and V. Carlet (1992), "A Comparison of Print Advertisements from the United States and France," in: *Journal of Advertising*, Vol. 21(4), 73-81.
- Chan, K. (1995), "Information Content of Television Advertising in China," in: *International Journal of Advertising*, Vol. 14(4), 365-373.
- Chan, K.; and F. Chan (2005), "Information Content of Television Advertising in China: An Update," in: *Asian Journal of Communication*, Vol. 15(1), 1-15.
- Cheng H.; and K. Chan (2009), "Advertising and Chinese Society: Impacts and Issues," Copenhagen Business University Press, Frederiksberg, Copenhagen.
- China Cosmetic Market Study (2013), retrieved on May 12, 2013 from: http://www.export.gov.il/uploadfiles/04_2013/chinacosmeticmarketreport2013.pdf.
- Choi, S. M.; Rifon, N. J.; Trimble, C. S.; and B. B. Reece (2006), "Information Content in Magazine, Television and Web Advertising: A Comparison and Update," in: *Marketing Management Journal*, Vol. 16(1), 188-203.
- Day, G. S. (1981), "The Product Life Cycle: Analysis and Applications Issues," in: *Journal of Marketing*, Vol. 45(4), 60-67.
- Dowling, G. R. (1980), "Information Content in U.S. and Australian Television Advertising," in: *Journal of Marketing*, Vol. 44(4), 34-37.
- Harmon, R. R.; Razzouk, N. Y.; and B. L. Stern (1983), "The Information Content of Comparative Magazine Advertisements," in: *Journal of Advertising*, Vol. 12(4), 10-19.
- Herpen, E. V.; Pieters, R.; Fidrmucova, J.; and P. Roosenboom (2000), "The Information Content of Magazine Advertising in Market and Transition Economies," in: *Journal of Consumer Policy*, Vol. 23(3), 257-283.
- Keown, C.; Jacobs, L.; Schmidt, R.; and K. Ghymn (1992), "Information Content of Advertising in the United States, Japan, South Korea and the People's Republic of China," in: *International Journal of Advertising*, Vol. 11(3), 257-267.
- LabBrand (2009), "High-end Cosmetics Trends in China," retrieved on May 12, 2013 from: <http://www.labbrand.com/knowledge/best-practices/high-end-cosmetics-trends-china>.
- Madden, C. S.; Caballero, M. J.; and S. Matsukubo (1986), "Analysis of Information Content in U.S. and Japanese Magazine Advertising," in: *Journal of Advertising*, Vol. 15(3), 38-45.
- Mueller, B. (1991), "An Analysis of Information Content in Standardized vs. Specialized Multinational Advertisements," in: *Journal of International Business Studies*, Vol. 22(1), 23-39.
- Nevett, T. (1992), "Differences Between American and British Television Advertising-Explanations and Implications," in: *Journal of Advertising*, Vol. 21(4), 61-71.
- Pew Research (2012), "Growing Concerns in China about Inequality, Corruption and Food Concern," retrieved on May 7, 2013 from: <http://www.pewglobal.org/2012/10/16/growing-concerns-in-china-about-inequality-corruption/>.
- Ratchford, B. T. (1987), "New Insights about the FCB Grid," in: *Journal of Advertising Research*, Vol. 27 (4), 24-38.
- Resnik, A.; and B. L. Stern (1977), "An Analysis of Information Content in Television Advertising,"

- in: *Journal of Marketing*, Vol. 41(1), 50-53.
- Rice, M. D.; and Z. Lou (1988), "A Content Analysis of Chinese Magazine Advertisements," in: *Journal of Advertising*, Vol. 17(4), 43-48.
- Rust, R.T.; and B. Cool (1994), "Reliability Measures for Qualitative Data: Theory and Implications," in: *Journal of Marketing Research*, Vol. 31(1), 1-14.
- Stern, B. L.; Krugman, D. M.; and A. Resnik (1981), "Magazine Advertising: An Analysis of Its Information Content," in: *Journal of Advertising Research*, Vol. 21(2), 39-44.
- Stern, B. L.; and A. Resnik (1991), "Information Content in Television Advertising: A Replication and Extension," in: *Journal of Advertising Research*, Vol. 31(3), 36-46.
- Taylor, C. R.; Gordon E. M.; and D. R. Wilson (1997), "The Impact of Information Level on the Effectiveness of U.S. and Korean Television Commercials," in: *Journal of Advertising*, Vol. 26(1), 1-15.
- Tom, G.; Calvert, S.; Goolkatsian, R.; and A. Zumsteg (1984), "An Analysis of Information Content in Television Advertising: An Update," in: *Current Issues & Research in Advertising*, Vol. 7(1), 159-165.
- Weinberger, M. G.; and H. E. Spotts (1989), "A Situational View of Information Content in TV Advertising in the U.S. and U.K.," in: *Journal of Marketing*, Vol. 53 (1), 89-94.
- Zandpour, F.; Campos, V.; Catalano, J.; Chang, C.; Cho, Y. D.; Hoobyar, R.; Jiang, S.; Lin, M.; Scheideler, H.; and S. T. Osborn (1994), "Global Reach and Local Touch: Achieving Cultural Fitness in TV Advertising," in: *Journal of Advertising Research*, Vol. 34(5), 35-63.
- Zandpour, F.; Chang, C.; and J. Catalano (1992), "Stories, Symbols, and Straight Talk: A Comparative Analysis of French, Taiwanese, and U.S. TV Commercials," in: *Journal of Advertising Research*, Vol. 32(1), 25-38.
- Zhang, Y. (1996), "Chinese Consumers' Evaluation of Foreign Products: The Influence of Culture, Product Types and Product Presentation Format," in: *European Journal of Marketing*, Vol. 30(2), 1-17.

Media Multitasking with Television News: The Interaction of Content and Audience Factors

Vijay Viswanathan
Hilde Voorveld

1 Introduction

News programs are an important source of revenue for the media and communications industry. The FCC (2011) reports that advertising on news programs accounts for around 40% of a TV station's revenue. A more recent report by the Pew Research Center (2013) points out that revenue from advertising expenditure on cable, local TV, and digital news platforms grew by at least 5% from 2011 to 2012. The report also reveals that while TV is still the dominant medium for obtaining news, consumers are increasingly using digital media to stay abreast of the latest news. In fact, recent studies have found that individuals across age groups frequently engage with multiple media platforms such as television and computers concurrently (Carrier, Cheever, Rosen, Benitez, & Chang, 2009; Roberts & Foehr, 2008; Voorveld & Van der Goot, 2013). From an integrated marketing communications point of view, the concurrent consumption of television and other media platforms poses an interesting opportunity for news channels and their advertisers. While some firms have attempted to take advantage of the opportunity, few have done so effectively. For instance, Nielsen conducted an analysis of around 5,000 cross channel campaigns and found that while TV advertisements reached 63% of the target audience, online advertisements reached only 2%. Moreover, the overlap was only 5%, much lower than the objectives set for these campaigns (Urbanski, 2013). These statistics suggest that firms have yet to gain a good understanding of the media consumption behavior of the target audience before planning cross channel campaigns. Campaigns that are developed and executed without a clear understanding of which consumer segments are likely to use multiple media are bound to be ineffective and expensive. Knowledge of the multiple media consumption patterns of the target audience is therefore crucial to the future performance of news channels and the media industry at large.

The phenomenon of individuals engaging with multiple media concurrently has aroused the interest of scholars from various disciplines. Concurrent media consumption or "multiple exposures to various media forms at a single point in time for the same media consumer" has been termed as media multitasking (Pilotta et al., 2004). Previous studies have shown that multitasking is common and that approximately a quarter of one's media day involves media multitasking (Papper et al., 2004). While evidence suggests that media multitasking is on

the rise, only a few studies (e.g., Voorveld and Viswanathan, 2013) have attempted to examine whether the phenomenon is prevalent across different genres. This study builds on such work and examines how different segments of individuals engage in media multitasking with one specific genre. Specifically, since television is still the dominant medium for gathering news, the main objective of this study is to explain individual differences in engaging with multiple media while watching television news.

The article makes two key contributions to ongoing work on media multitasking. Hitherto, some studies on media multitasking have examined the role of structural or situational factors (Voorveld and Viswanathan, 2013) and others have focused on the uses and gratifications framework (Wang and Tchernev, 2013) to explain media multitasking. However, previous studies on media consumption state that it is important to consider the interaction of structural and individual factors to understand media consumption (Webster & Wakshlag, 1983). While structural factors do influence consumption of media to a large extent, studies that ignore audience factors implicitly treat all individuals as homogeneous (Cooper and Tang, 2009). Moreover, studies have found that individuals differ in their motivations for using different media and consuming content such as news (Ksiazek, Malthouse and Webster, 2010; Wonneberger, Schoenbach & van Meurs, 2011). Second, while most studies have relied purely on surveys or only on observational data e.g., Jordan, Trentacoste, Henderson, Manganello, & Fishbein, 2007; Mitchell, Macklin, & Paxman, 2007) to explain media multitasking, this study uses a combination of observational data and survey research. Audience factors such as uses and gratifications are obtained from a survey and included in the empirical analysis. To summarize, this study not only contributes to ongoing work on media multitasking but also provides news channels and advertisers a better understanding of the media consumption patterns of different segments of television news viewers.

2 Theoretical Framework

The section is laid out as follows. We conduct a brief review of prior work to gain a good understanding of the various factors that influence media consumption. We then examine how these factors have been used in previous studies on media multitasking, specifically with news on television. As stated earlier, we focus on media multitasking with television news as evidence suggests that television is still the dominant information resource (Pew Research Center, 2013). We then develop our theoretical framework to explain how the interaction of audience factors and characteristics of news content interact with each other and influence the extent of media multitasking. The audience factors that we are interested for this study are television viewing motivations related to social interaction, relaxation and information. Finally, we propose our hypothe-

sis to test whether there are individual differences in the extent of media multitasking with television news.

2.1 *Factors Influencing Media Consumption*

Webster, Phalen, and Lichtly (2000) suggest two factors that broadly explain media use: audience factors and media factors. Examples of audience factors are socio-demographic and psychological factors (Jeong & Fishbein, 2007). Previous studies on age (Carrier et al., 2009; Voorveld & Van der Goot, 2013) have surprisingly found that multitasking varies little between younger and older age groups. Other studies have also found that females are more likely than males to combine media usage with non-media activities, and that sensation seeking and impulsivity influence multitasking (Jeong & Fishbein, 2007; Sanbonmatsu, Strayer, Medeiros-Ward, & Watson, 2013).

An important audience factor in prior research on media use is uses and gratifications. According to this approach, people are aware of their needs and choose media content that provides the gratifications they seek (Katz, Blumler & Gurevitch., 1974; McQuail, 1983; Rubin, 2002). In this study, we focus on three specific needs or motivations for watching television. The three needs, which are need for social interaction, need for relaxation and need for information, have often been used in previous television uses and gratification studies. For instance, studies have found a positive relationship between need for relaxation and use of traditional media (e.g., Rubin, 1983). A similar relationship has been found between the need for relaxation and use of digital media (e.g., Stafford, Stafford and Schkade, 2004).

Media factors (Webster et al., 2000) comprise of structural media factors (e.g., media market) and individual media factors (e.g., media ownership). Cooper and Tang (2009) find that audience and structural factors are both influential in driving media consumption. Wonneberger et al. (2011) specifically examined consumption of television news and similarly found that both structural and individual factors have a significant effect on television news consumption.

2.2 *Media Multitasking with Television News*

Studies on media multitasking too have investigated the role of audience and situational factors. For instance, Wang and Tchernev (2012) investigate various individual factors to explain media multitasking and find that factors such as cognitive needs and habitual needs significantly influence individuals' decisions to engage in media multitasking. Voorveld and Viswanathan (2013) study the impact of several structural factors such as day parts, social viewing and media ownership, and find that they significantly affect the extent of media multitasking.

From the point of view of this study, an important finding in the latter study is that the extent of media multitasking varies for different genres being viewed on television. For instance, they find that the extent of media multitasking is lower when individuals watch television news than when they watch sports on the television. Voorveld and Viswanathan explain the low amount of media multitasking with television news by integrating theories related to intentional exposure, cognitive load, limited information capacity and benefits sought. Specifically, news can be characterized as a genre that is watched intentionally and which provides the latest information to its viewers. Newscasts are generally fast-paced and have tabloid style production qualities (Grabe, Zhou, Lang, & Bolls, 2000). Watching news can therefore be a highly complex and cognitively demanding process (Schaap, Renckstorf, & Wester, 2005). According to cognitive load theory (Lang & Chzran, 2013; Lee, 2012), news is likely to draw more cognitive resources (Grabe et al., 2000) and combining it with another medium simultaneously could result in overload. It is also quite possible that media multitasking with news results in lower processing of the news content as previous research suggests that multitasking with media results in lower levels of cognitive task performance (Bowman et al., 2010; Ophir, Nass, & Wagner, 2009; Pool, Koolstra, & van der Voort, 2003). To summarize, it seems that watching television news is typically accompanied by low levels of media multitasking.

2.3 *Media Multitasking with News: Interaction of Audience and News Characteristics*

Previous studies on media multitasking have examined the role of audience factors and situational factors in isolation i.e., only main effects. However, a plethora of prior studies suggest that media exposure is a function of both gratifications sought by the individual as well as those obtained from consuming certain content. For example, Palmgreen, Wenner and Rayburn (1980) found that television news viewing is positively correlated to the strength of the relationship between gratifications sought by the individual and gratifications obtained from the content. Content that largely succeeded (failed) to meet the gratifications being sought were often the most (least) viewed ones. We bridge these findings and our knowledge of the theories that influence media multitasking to explain how television viewing motivations such as need for social interaction, relaxation or information influence the extent of media multitasking while watching television news in different ways.

In the previous sub-section we noted that media multitasking results in greater cognitive load and limits the information processing abilities of individuals. Therefore media multitasking with news inhibits individuals who have a high need for social interaction and also those who have a high need for relaxation from achieving their needs. Individuals who have a high need for social interaction have little to gain from media multitasking with news. Similarly,

media multitasking with news requires greater cognitive resources and thus prevents individuals from relaxing. However, it is quite possible that individuals who have a high need for information are able to meet their needs from media multitasking with news. Since television news often only partially meets the information needs of its viewers (Palmgreen et al., 1980), media multitasking can result in additional information and thus satiate the needs of these information seekers. While individuals do perhaps incur cognitive and information processing costs, the benefits obtained from media multitasking possibly overwhelm the costs incurred. We therefore hypothesize that

H1: A higher need for social interaction results in lower levels of media multitasking while watching television news.

H2: A higher need for relaxation results in lower levels of media multitasking while watching television news.

H3: A higher need for information results in higher levels of media multitasking while watching television news.

3 Research Design

3.1 Data

The Council for Research Excellence (CRE) is an independent group of research professionals that have conducted a host of studies on media consumption behaviors. For the analysis, we use data from the Video Consumer Mapping (VCM) study conducted from March 26, 2008 to July 24, 2008 (also see Voorveld and Viswanathan 2013). Nielsen initially provided CRE a list of former participants from their Peoplemeter panel. From this list, 495 U.S. adults were recruited from six Designated Market Areas (DMAs), specifically Dallas, Philadelphia, Atlanta, Seattle, Chicago, and Indianapolis, and were observed for an entire day. CRE took on the responsibility of training observers and providing them with “smart keyboards” and custom software. Custom software on the device presented a hierarchical menu system for coding the categories and activities. These tools helped the observer to record the use of various media including concurrent media usage at granular intervals of 10 seconds. Specifically, concurrent usage is said to occur when a participant uses two or more media simultaneously. Observers worked in eight hours shifts, and two shifts were sufficient to record a participant’s activities over the course of the day. A follow-up survey was also conducted to obtain information on participants’ socio-demographic profiles and background information. We included only those observations for the analysis where an individual watched television between 6am and 11pm. The final sample for the analysis consists of 108,664 observations pertaining to 273 participants.

3.2 *Independent Variables*

Observers from CRE recorded the genres that participants viewed on television. The genre news includes local newscasts as well as 24 hours cable channels such as CNN and news programs such as 60 Minutes. Around 15% of the total observations were related to watching news. News viewing was coded as a binary variable with a value of 1 if an individual's primary attention was on a television news program and 0 otherwise.

Panelists responded to a questionnaire designed to understand their motivations for watching television specifically (see Table 1). A factor analysis of the responses revealed the presence of three needs or motivations that explained 58.5% of the total variance. The factors were named as the need for social interaction (Cronbach alpha = 0.829), the need relaxation (Cronbach alpha = 0.811) and the need for information (Cronbach alpha = 0.802). The table below shows the loadings obtained from the Varimax rotation.

Table 1: Factor loadings from factor analysis with varimax rotation

	Need for		
	Interaction	Relaxation	Information
Find something in common with others	.798		
Connect with friends, family or others	.781		
It's cool	.598	.385	
I trust it	.587		.339
Feel that I am on the cutting edge of things	.541		.540
Feel completely immersed in the experience	.506	.436	
It puts me in control	.385	.348	
To be entertained		.795	
It helps me unwind		.755	
It's fun		.740	
Pass the time		.677	
Satisfy my curiosity about something			.783
Keep up with what's going on in the world			.779
Offers me things that are personally relevant			.740

3.3 *Media Multitasking*

Observers recorded the use of television and the concurrent use of six other media, if any. The six other media are video, audio, phone, print, gaming, and

others. Please refer to Voorveld and Viswanathan (2013) for a detailed description of specific devices included in the study. Consistent with the definition, media multitasking was operationalized as the number of different media platforms used concurrently with television as the primary medium at each observation point. For example, an individual who watches a news program on television and simultaneously surfs the internet at a certain instance of time has a media multitasking measure of 2 at that observation instance. In our data, around 84% of the observations have a media multitasking measure of 1 and the remaining 16% have a media multitasking measure of at least 2.

3.4 *Control Variables*

We included gender (operationalized as a dummy with male = 1), education (college or higher = 1 else 0), age, and income levels (coded 1 to 4, with 1 representing the lowest income group and 4 representing the highest) as measures of individual demographics. Around 41% of the participants are male and 36% have at least a college education. The average age of the sample is around 49 years ($SD = 17.25$) with a minimum age of 19 years and a maximum age of 88 years. Finally, 33% of the sample has an income of less than USD 30K per annum, 16% has an income greater than USD 100K per annum, and the remaining 50% are in between.

Previous studies (Heeter, 1985; Yuan & Webster, 2006) suggest that audiences with higher availability use more media. We therefore used the amount of time individuals spend watching news. To control for time of the day, television viewing from 6am to 12pm was classified as morning, 12pm to 6pm as afternoon, and 6pm to 11pm as evening. Late night television viewing was not included in this study due to the sparse number of observations in this day part. Morning television viewing comprised around 18% of the total observations, afternoon television comprised of 36%, and evening television comprised of the remaining 46%.

We excluded media ownership from this study as all the respondents in the study had a television and most of the respondents had access to the internet and mobile phones. Ownership of media is also likely to be highly correlated with the motivations for media use.

3.5 *Results*

To test the hypotheses we used a univariate analysis of variance (ANCOVA) with news and uses and gratifications as independent variables and the number of media consumed simultaneously as the dependent variable. Estimation was done using Hochberg's GT2 correction. The model overall was significant ($F = 306.37$, $p < 0.01$). Significant effects are reported using the 99% confidence interval.

Table 2: Effects of independent variables on media multitasking (ANCOVA)

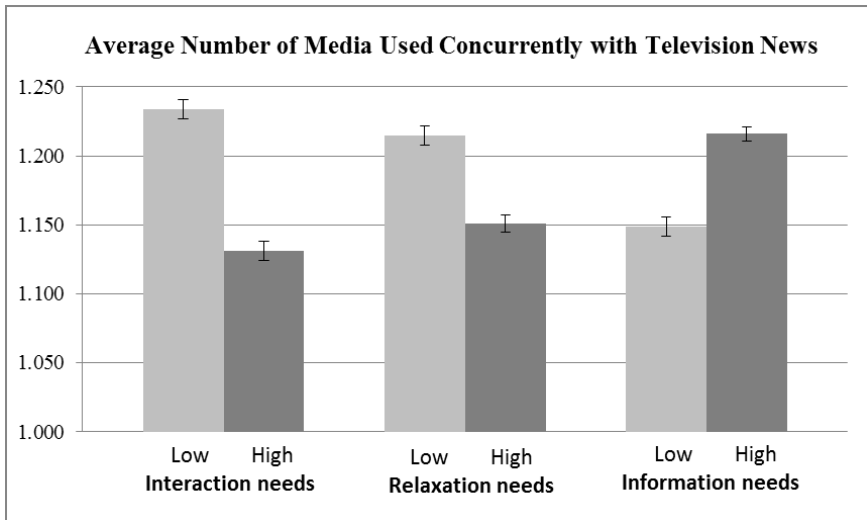
Source	DF	Type III SS	F	p
News	1	5.18	31.28	0.00
Day part	2	78.86	238.02	0.00
Male	1	12.21	73.69	0.00
College Education	1	2.47	14.88	0.00
Income	3	96.41	194.01	0.00
Age	1	3.12	18.82	0.00
Interaction	1	58.93	355.73	0.00
Relaxation	1	0.38	2.27	0.13
Information	1	36.87	222.56	0.00
Time with news	1	231.59	1,398.08	0.00
News x Interaction	1	0.94	5.68	0.02
News x Relaxation	1	14.49	87.46	0.00
News x Information	1	0.01	0.04	0.83

We first discuss the effects of the control variables pertaining to demographic variables and structural factors and then focus on the results pertaining to the hypotheses. The ANCOVA results in Table 2 suggest that gender and income differences between participants have a significant effect on media multitasking. Structural variables such as day parts, too, have a significant effect.

We now report the results for the main effects for news and viewing motivations. The ANCOVA results find that television news has a significant effect on media multitasking. The extent of media multitasking while watching news ($M = 1.18$, $SE = 0.00$) is greater than while watching other genres ($M = 1.16$, $SE = 0.00$). Two of the three motivations for watching television have a significant main effect on the extent of media multitasking. Individuals with a higher need for social interaction significantly engage with fewer media ($M = 1.11$, $SE = 0.00$) than individuals with a lower need for social interaction ($M = 1.23$, $SE = 0.00$). We do not find a significant difference in the extent of media multitasking between individuals with high or low need for relaxation. However, we do find a significant difference in the extent of media multitasking between individuals who have a high need for information and those who have a low need for information. Individuals who have a high need for information engage with more media concurrently ($M=1.20$, $SE=0.00$) than those with a lower need for information ($M=1.14$, $SE=0.00$).

We now report the results for the marginal means for the interaction effects of viewing motivations and news content. First, we find that individuals who

have a high need for social interaction significantly engage with fewer media ($M = 1.13$, $SE = 0.00$) while watching television news than those who have a lower need for social interaction ($M = 1.23$, $SE = 0.00$). H1 is therefore supported. Similarly, individuals who have a high need for relaxation significantly engage with fewer media ($M = 1.15$, $SE = 0.00$) while watching television news than those who have a lower need for relaxation ($M = 1.21$, $SE = 0.00$). Therefore, H2 is also supported. Finally, individuals who have a high need for information significantly engage with more media ($M = 1.22$, $SE = 0.00$) while watching television news than those who have a lower need for information ($M = 1.15$, $SE = 0.00$). H3 is also supported. The results from the ANCOVA therefore support all the three hypotheses. Figure 1 below provides a visual depiction of the marginal means reported above.



Note: SE lines displayed for each bar plot

Figure 1: The moderating effect of viewing motivations

4 Discussion

The main objective of the study was to study whether the interaction of media characteristics and motivations for watching television have a significant effect on media multitasking with television news. Previous studies have examined only one of these factors at a time to explain simultaneous use of multiple media. However, we find that the interaction of the two factors has a significant effect on media multitasking with television news and provides deeper insights

on how different individuals engage concurrently with multiple media. A unique combination of observational data and survey responses helped us conduct the analysis and test the hypotheses. This study therefore answers the call of Rubin (1984) and Ruggiero (2000) to add observational data when studying media use.

This study extends ongoing work on media multitasking and reveals important insights for academics and practitioners. Greater use of cognitive resources and limited ability to process information does seem to inhibit the use of multiple media. As Voorveld and Viswanathan (2013) suggest, people are less likely to engage in media multitasking when a situation is cognitively demanding, except when benefits can be expected from media multitasking. It is this context that the uses and gratifications approach plays an important role in determining the extent of media multitasking. As the results suggest, individuals who have a high need for information were perhaps able to meet their needs while multitasking with news television and therefore engage concurrently with more media. Conversely, media multitasking with television news was of little use and came at a high cost to individuals who have a high need for interaction or relaxation. Broadly speaking, the results suggest that there exists heterogeneity in individuals' preferences for multitasking depending on their motivations for media use. Previous studies have pointed out the importance of studying the structural factors that influence media use. However, it is important to note that an examination of only the structural factors ignores the existence of heterogeneity or differences in people's needs and preferences. It is therefore important that studies on media use include both structural factors as well as audience characteristics.

The advent of the digital era and penetration of multiple digital devices across households has tremendously empowered consumers of information. While marketing managers can choose what information to share with the market at large, individuals have greater control on decisions pertaining to what information to consume, which platform(s) to use, and when to consume it. This study therefore has important implications for practitioners in the communications industry. While the news industry rapidly increases its presence on digital media, it should be aware of which users are more likely than others to use a certain combination of media. Firms that seek to target the segment of information seekers will be better off ensuring that their content across media platforms are consistent and meet the needs of their viewers. On the other hand, news organizations or programs that cater to the segments of individuals who are looking for relaxation or social interaction can perhaps afford to be less vigilant. These segments seem to consume one medium at a time and do not perceive gaining any additional benefits from media multitasking. The study also has implications for firms that advertise on television news networks or programs. From an integrated marketing point of view, firms have to take into cognizance that some individuals may find certain content in a television news

program intriguing and consequently begin searching for related information on other media. Knowledge of these results can help advertisers be better prepared in how they manage their content over different media platforms.

5 Conclusion

The growing phenomenon of multitasking has aroused the interest of scholars in various disciplines. While this study makes important theoretical and managerial contributions to ongoing work on media multitasking, more work is needed. Future studies on multitasking can examine how the characteristics of other genres interact with audience factors in influencing the extent of media multitasking. While the motivations for television viewing were captured as a snapshot in a survey, future work can attempt to use more innovative research designs where viewing motivations are captured at the onset of and/or during media consumption. There is increasing interest in using technologies from medicine such as skin sensors, fMRIs and eye tracking cameras in the social sciences. Future studies could use data captured by these methods to understand how people allocate attention to different media (Brasel & Gips, 2011) and how this influences information processing (e.g., Jeong & Hwang, 2012).

This study does suffer from certain limitations. As stated earlier, it would be ideal to have measures of gratifications sought and obtained at different viewing moments. While only 24% of individuals contacted agreed to participate in the study, this is understandable given the high level of involvement. The response rate is similar to those in most survey research. The observational nature of the study can raise concerns on whether participants only engaged in activities that were socially desirable a.k.a the Hawthorne Effect. Future research could use methods and technologies that are less intrusive to capture actual media consumption behaviors and thus further our understanding of media multitasking. While we did not include social viewing as a structural variable in this study, robustness tests revealed little change in the results even after including this variable.

In conclusion, our study provides important insights on how the extent of media multitasking with a certain genre varies depending on the viewing motivations of an individual. Studies that consider the interaction of structural factors and audience factors not only improve our understanding of multitasking but also provide managers a better idea of who is in fact their audience.

6 References

- Bowman, L. L., Levine, L. E., Waite, B. M., & Gendron, M. (2010). Can students really multitask? An experimental study of instant messaging while reading. *Computers & Education, 54*(4), 927-931. doi: 10.1016/j.compedu.2009.09.024

- Brasel, S., & Gips, J. (2011). Media multitasking behavior: Concurrent television and computer usage. *Cyberpsychology, Behavior, and Social Networking, 14*(9), 527-534. doi: 10.1089/cyber.2010.0350
- Carrier, L. M., Cheever, N. A., Rosen, L. D., Benitez, S., & Chang, J. (2009). Multitasking across generations: Multitasking choices and difficulty ratings in three generations of Americans. *Computers in Human Behavior, 25*(2), 483-489. doi: 10.1016/j.chb.2008.10.012
- Cooper, R., & Tang, T. (2009). Predicting audience exposure to television in today's media environment: An empirical integration of active-audience and structural theories. *Journal of Broadcasting & Electronic Media, 53*(3), 400-418. doi: 10.1080/08838150903102204
- FCC (2011), <http://transition.fcc.gov/osp/inc-report/INoC-3-TV.pdf>, accessed on January 24, 2014
- Grabe, M. E., Zhou, S., Lang, A., & Bolls, P. D. (2000). Packaging television news: The effects of tabloid on information processing and evaluative responses. *Journal of Broadcasting & Electronic Media, 44*(4), 581-598. doi: 10.1207/s15506878jobem4404_4
- Heeter, C. (1985). Program selection with abundance of choice. *Human Communication Research, 12*(1), 126-152. doi: 10.1111/j.1468-2958.1985.tb00070.x
- Jeong, S., & Fishbein, M. (2007). Predictors of multitasking with media: Media factors and audience factors. *Media Psychology, 10*(3), 364-384. doi: 10.1080/15213260701532948
- Jeong, S., & Hwang, Y. (2012). Does multitasking increase or decrease persuasion? Effects of multitasking on comprehension and counterarguing. *Journal of Communication, 62*(4), 571-587. doi: 10.1111/j.1460-2466.2012.01659.x
- Jordan, A., Trentacoste, N., Henderson, V., Manganello, J., & Fishbein, M. (2007). Measuring the time teens spend with media: Challenges and opportunities. *Media Psychology, 9*(1), 19-41. doi: 10.1080/15213260709336801
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. *The uses of mass communications: Current perspectives on gratifications research, 3*, 19-32.
- Ksiazek, T. B., Malthouse, E. C., & Webster, J. G. (2010). News-seekers and avoiders: Exploring patterns of total news consumption across media and the relationship to civic participation. *Journal of Broadcasting & Electronic Media, 54*(4), 551-568.
- Lang, A., & Chzran, J. (2013). *Media multitasking: Good, bad or ugly?* Manuscript in review.
- Lee, Y. S. (2012). Cognitive load hypothesis of item-method directed forgetting. *The Quarterly Journal of Experimental Psychology, 65*(6), 1110-1122. doi: 10.1080/17470218.2011.644303
- McQuail, D. (1985). Sociology of mass communication. *Annual Review of Sociology, 9*, 93-111.
- Mitchell, V., Macklin, J. E., & Paxman, J. (2007). Social uses of advertising: An example of young male adults. *International Journal of Advertising, 26*(2), 199-222.
- Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences, 106*(37), 15583-15587. doi: 10.1073/pnas.0903620106
- Papper, R. A., Holmes, M. E. & Popovich, M. N. (2004). Middletown media studies: Media multitasking... and how much people really use the media. *The International Digital Media & Arts Association Journal, 1*(1), 5-50.
- Pew Research Center. (2013, March 18). *Local TV: Audience declines as revenue bounces back*. Retrieved from <http://stateofthemediamedia.org/2013/local-tv-audience-declines-as-revenue-bounces-back/>
- Pilotta, J. J., Schultz, D. E., Drenik, G., & Rist, P. (2004). Simultaneous media usage: A critical consumer orientation to media planning. *Journal of Consumer Behaviour, 3*(3), 285-292. doi: 10.1002/cb.141
- Pool, M. M., Koolstra, C. M., & van der Voort, T. H. A. (2003). The impact of background radio and television on high school students' homework performance. *Journal of Communication, 53*(1), 74-87. doi: 10.1111/j.1460-2466.2003.tb03006.x

- Roberts, D. F., & Foehr, U. G. (2008). Trends in media use. *The Future of Children*, 18(1), 11-37. doi: 10.1353/foc.0.0000
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *Journal of Communication*, 34(3), 67-77. doi: 10.1111/j.1460-2466.1984.tb02174.x
- Rubin, A. M. (2002). The uses-and-gratifications perspective of media effects.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, 3(1), 3-37. doi: 10.1207/S15327825MCS0301_02
- Sanbonmatsu, D. M., Strayer, D. L., Medeiros-Ward, N., & Watson, J. M. (2013). Who multi-tasks and why? Multi-tasking ability, perceived multi-tasking ability, impulsivity, and sensation seeking. *PLOS One*, 8(1), 10.1371/journal.pone.0054402.
- Schaap, G. Renckstorf, K., & Wester, F. (2005). Conceptualizing television news interpretation by its viewers: The concept of interpretive complexity. *Communications*, 30(3), 269-291. doi: 10.1515/comm.2005.30.3.269
- Stafford, T. F., Stafford, M. R., & Schkade, L. L. (2004). Determining uses and gratifications for the Internet. *Decision Sciences*, 35(2), 259-288.
- Urbanski, Al (2013), <http://www.dmnews.com/advertising-week-cross-channel-campaigns-dont-measure-up/article/313142/>, accessed on Jan 22,2014
- Voorveld, H. A. M., & Van der Goot, M. (2013). Age differences in media multitasking: A diary study. *Journal of Broadcasting & Electronic Media*. 57(3), 392- 408. doi: 10.1080/08838151.2013.816709
- Voorveld, H. A. M., & Viswanathan, V. (2013). An Observational Study on How Situational Factors Influence Media Multitasking With TV: The Role of Genres, Dayparts, and Social Viewing. *Media Psychology*. Forthcoming
- Wang, Z., & Tchernev, J. M. (2012). The "myth" of media multitasking: Reciprocal dynamics of media multitasking, personal needs, and gratifications. *Journal of Communication*, 62(4), 493-513. doi: 10.1111/j.1460-2466.2012.01641.x
- Webster, J. G., & Wakshlag, J. J. (1983). A theory of television program choice. *Communication Research*, 10(4), 430-446. doi: 10.1177/009365083010004002
- Webster, J., Phalen, P., & Lichty, L. (2000). *Ratings analysis* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wonneberger, A., Schoenbach, K., & van Meurs, L. (2011). Interest in news and politics—or situational determinants? Why people watch the news. *Journal of Broadcasting & Electronic Media*, 55(3), 325-343. doi: 10.1080/08838151.2011.597466

Context Matters: Modeling the Impact of Context Perceptions on the Effectiveness of Brand Placement

Yann Verhellen

Nathalie Dens

Patrick De Pelsmacker

1 Introduction

Brand placement, the paid incorporation of brands and products in mass media content (Karrh, 1998), is an increasingly popular marketing communications tool. Previous research into the nature of this phenomenon, has revealed that its effects may vary depending on characteristics of the placement (e.g., Dens et al., 2012), characteristics of the individual consumer (e.g., Lehu and Bressoud, 2008) and contextual factors (e.g., Van Reijmersdal et al., 2010). However, not all these elements have received the same amount of academic attention. In particular, research concerning the impact of consumers' context related perceptions on brand placement effectiveness has been sparse. This is surprising because brand placements are embedded in media content and often linked to the context in which they are represented (Russell, 1998). Although prior research has established that viewers' responses to the context are of paramount importance in determining their responses to placed brands (e.g., Russell and Stern, 2006; Van Reijmersdal et al., 2010), there is still a lot of ground to be covered in this area.

Wiles and Danielova (2009) point out that a potential key factor in determining placement success is the perceived fit of the placed brand with its context (e.g., the movie in which it is placed, the endorser to which it is linked, etc.). The first contribution of the present study is that we examine how perceived fit between the placed brand and its context (fit with the movie itself and the associated character) impacts consumer responses towards brand placement in a movie context.

Our second contribution is that we propose and empirically test a model that integrates multiple contextual perceptions (attitude toward the character, fit with character, fit with movie and movie liking) with placement characteristics (prominence and plot connection) (Figures 1 and 2). Extant literature boasts only a few studies that explore the simultaneous impact of, and relationships between different context related perceptions in determining consumers' responses to brand placement (e.g., Russell and Stern, 2006). Moreover, researchers have yet to answer the outspoken need for frameworks that integrate context factors with characteristics of the placement itself (Balasubramanian et al., 2006). Our study extends this research by examining how brand responses are

influenced by multiple contextual perceptions, placement characteristics and their interaction.

2 Literature Review and Hypotheses

The impact of context-related attitudes on responses towards traditional print and television advertisements is well-documented. For these traditional forms of advertising, context appreciation has been shown to enhance brand recognition (De Pelsmacker et al., 2002). Hedonic contingency theory explains this relationship (Côté, 2005). The positive state of mind caused by context appreciation improves people's willingness to process information and store it in memory, because people are more confident of a positive outcome (De Pelsmacker et al., 2002; Van Reijmersdal et al., 2010). These findings may transfer to brand placements. Two studies (Bressoud et al., 2010; Johnstone and Dodd, 2000) demonstrate that attitude towards the movie is positively associated with the salience and brand recall of brands placed in that movie. As predicted by hedonic contingency theory, people with higher levels of appreciation for the movie will be more willing to process information (e.g., brands or branded products) and store it in memory, which should positively affect brand recognition. Therefore we hypothesize that:

H1a: Viewers' movie liking positively impacts brand recognition for placed brands.

Advertising studies in traditional media find that context-related evaluations, such as liking or attitude toward the program spill over to evaluations of brands that are embedded in the content (De Pelsmacker et al., 2002). Through the process of classical conditioning, affective responses to contextual elements of a movie or program can be associated with objects (e.g., brands and products) that appear in the movie or program (D'astous and Chartier, 2000). More recently, the spillover principle has also been validated in a brand placement setting. For instance, a study by Van Reijmersdal et al. (2010) finds that viewers who evaluated a television program positively were more likely to positively change their brand attitudes after seeing the brand placement in that program. In accordance with these findings, we postulate the following hypotheses:

H1b: Viewers' movie liking positively impacts brand attitude for placed brands.

In terms of brand placements, "context" not only refers to the program or movie itself, but also to the character(s) in the movie that are associated with the placed brands. As viewers become involved with the movie and the characters, they will develop attitudes towards the characters. Prior research indicates that the attitudes towards the characters associated with the placed brands positively

affect how brands are processed and stored in memory (Russell and Stern, 2006). A positive relationship between the viewer and the character instigates an upward social comparison process in which the character is perceived as a referent other whose behaviors (e.g., consumption patterns) are aspired to by the viewer (Karrh, 1998; Russell and Stern, 2006). This process raises the viewers' attention for brands that are placed around the character. This increased attention makes the placed brands more accessible in memory, and thus more easily retrievable.

H2a: Viewers' attitude towards the character associated with the placed brand has a direct positive impact on brand recognition.

For brand placements, we expect that the attitude toward the character associated with the placed brand, can spill over to the brand as well (Russell and Stern, 2006). In advertising, Mccracken (1989) explains this process as a meaning transfer. Movie characters derive meaning from their environment and how they interact with it, and this meaning can be transferred onto brands and products that are part of the environment or that are used by the characters. This reasoning is consistent with associative learning theory (Till and Shimp, 1998). While consumers watch a movie, they learn about the characters from how they act in different social situations. Based on these experiences, viewers automatically build a network of associations around the character, which will reflect in their attitude towards of the character (Teichert and Schöntag, 2010; Till and Busler, 2000). By linking a brand to the character, the character's associative network becomes a source of information about the brand (Till et al., 2008). Consequently, moviegoers' character evaluations may have a strong impact on their perceptions of the placed brands.

H2b: Viewers' attitude towards the character associated with the placed brand has a direct positive impact on brand attitude.

A contextual factor that remains unexplored in a brand placement context is the perceived fit between the brand and the context in which it is embedded (Wiles and Danielova, 2009). Consumers learn to attach meaning to brands by observing their relationship with the movie context (Cooper et al., 2010). Congruence or fit between the movie context and the placed brands is likely to facilitate this process and result in more favorable brand responses (Till and Busler, 2000). This idea is consistent with literature on celebrity endorsement in advertising, which generally finds that a perceived matchup between the endorser and the brand results in better brand recognition (Erdogan, 1999). Schema congruity theory (Meyers-Levy and Tybout, 1989) can explain this. A schema is a cognitive representation of associations and knowledge structures relating to the at-

tributes of a certain stimulus (Meyers-Levy and Tybout, 1989). Schemas structure the process of encoding, retaining and retrieving information. People acquire context-relevant schemas when confronted with attitude objects (e.g., movies, characters, brands, ...). When a brand or a product is placed in a movie, its schema can be implicitly compared to that of the movie itself. Similarly, when a brand is associated with a certain character, the schemas of the brand and the character are compared. Schema congruity theory predicts that information that is congruent with existing schemas is more easily remembered (Meyers-Levy and Tybout, 1989). If a placed brand or product has a high perceived fit with its context (i.e., the movie or the character), the congruity between the schemata of the brand and of the movie/character is likely to benefit information processing and the storing of new information in memory, resulting in better brand recognition (Misra and Beatty, 1990; Mittelstaedt et al., 2000). We expect that:

H3a: The perceived fit between a placed brand and the movie positively impacts brand recognition.

H3b: The perceived fit between a placed brand and the character positively impacts brand recognition.

Apart from their attitude towards the movie and the character, consumers may also make inferences about the brand based on its fit with the character and the general context of the movie or program (Bhatnagar et al., 2004). Empirical findings confirm that a positive perceived fit between the brand and its context increases brand attitudes (e.g., Amos et al., 2008; Ohanian, 1991; Till and Busler, 2000). Although this existing research is primarily set in the field of celebrity endorsements in traditional advertising (Erdogan, 1999), it can be extended to brand placement. Because of its integrated nature, brand placement forges a cognitive link between the placed brands and their context. Schema congruity theory predicts enhanced brand attitudes when the brand's schema is congruent with the schemas associated with the character and the movie (Kamins and Gupta, 1994; Misra and Beatty, 1990; Till and Busler, 2000). Consequently, we hypothesize that:

H3c: The perceived fit between the brand and the movie positively impacts brand attitude.

H3d: The perceived fit between the brand and the character positively impacts brand attitude.

In the absence of consumer behavior data, researchers approximate such response behavior using self-reported behavioral intention measures. Purchase intention is a frequently employed effectiveness measure in both consumer and

advertising research (Spears and Singh, 2004). Previous research firmly established that (brand) attitudes are important determinants of behavioral (purchase) intentions (Fishbein and Ajzen, 1974; Spears and Singh, 2004; Van Ittersum, 2012). Consequently, we expect that brand attitude will significantly predict purchase intention:

H4: Brand attitude has a positive impact on purchase intention.

2.1 The Mediating Role of Brand Recognition on Brand Attitude Formation

Past brand placement research demonstrates that explicit memory measures are poor predictors of persuasion (e.g., Law and Braun, 2000; Russell, 2002). Consistent with the mere exposure principle, researchers argue that the impact of brand placement on brand attitude formation is rather implicit (Van Reijmersdal et al., 2007). The mere exposure principle predicts a positive attitude resulting from a brief exposure to a brand, without explicit recognition, based on a misattribution of the increase in accessibility (implicit memory) for the brand as liking (Cowley and Barron, 2008; Zajonc, 1968). However, the recent findings of Dens et al. (2012) shed new light on the role of recognition in attitude formation. Their experiment on the effectiveness of brand placements in movies demonstrates a positive link between brand recognition and brand attitude. Furthermore, their study shows that recognition partially mediates the impact of placement characteristics (i.e., plot connection) on brand attitude. In order to explain their results they invoke the accessibility-diagnostics framework (Herr et al., 1991). This theoretical framework argues that the likelihood that a piece of information is used to form judgments is a function of its accessibility in memory and its diagnosticity (Ahluwalia and Gürhan-Canli, 2000). As argued above, we expect that positive context evaluations will augment the accessibility of brand placements in memory, making it more likely that the placement's information will be used to make a judgment about the placed brand. Furthermore, the greater the shared associations between the brand and the context, the more diagnostic the info about the context will be for making judgments about the brand (Skowronski and Carlston, 1987). Thus, positive context perceptions can stimulate both the accessibility and diagnosticity of brand placements. According to this reasoning, the recognition of the brand in the movie is likely to trigger a more positive reaction to the brand if its context is positively evaluated. Consequently, we hypothesize that:

H5: Brand recognition mediates the impact of movie liking, character liking and perceived fit between the brand and the movie/the character on brand attitude.

2.2 *The Moderating Impact of Prominence and Plot Connection*

Previous research has identified a number of placement characteristics that influence how people respond to brand placements (e.g., Gupta and Lord, 1998; Homer, 2009). Two factors whose effects are well-established in literature are prominence (e.g., Cowley and Barron, 2008; Gupta and Lord, 1998; Van Reijmersdal, 2009; Van Reijmersdal et al., 2012) and plot connection (e.g., Dens et al., 2012; Russell, 2002). Prominence relates to how noticeably a brand is represented on screen. In sum it can be defined as the extent to which the brand placement possesses characteristics designed to make it a central focus of audience attention (Gupta and Lord, 1998). Prior research has operationalized prominence in many different ways, e.g., the relative size of a brand on the screen, its centrality in the screen, time on screen or the number of mentions, modality (visual, auditory, audiovisual) or character interaction (is the character shown using or handling the brand or actively mentioning the brand name?) (e.g., Cowley and Barron, 2008; Gupta and Gould, 2007; La Ferle and Edwards, 2006). Regardless of how prominence is operationalized prior studies that assessed its effects find that it positively influences brand recognition and brand recall (e.g., Bressoud et al., 2010; Gupta and Lord, 1998). We expect prominence to reinforce the workings of hedonic contingency and associative learning. Because they are more noticeable, prominent placements could benefit more from positive context appreciation. We hypothesize that:

H6a: The direct impact of movie liking, character liking and perceived fit between the brand and the movie/the character on brand recognition will be greater for prominently placed brands than for subtly placed brands.

Prominence is shown to significantly boost brand memory, while it can be detrimental to brand attitude (Van Reijmersdal, 2009). This placement characteristic can interact with context related perceptions in determining consumers' responses to brand placement. Cowley and Barron (2008) show that prominent placements, as opposed to subtle placements, yield less favorable brand responses with people with high levels of program liking. They argue that prominent brand placements may disrupt the engaged viewer from its ongoing interaction with the program and trigger skeptical thoughts toward the advertiser, which results in less favorable brand attitudes. The skepticism evoked by prominent brand placements might also reflect on context related perceptions. For example, overly prominent placements could reduce the overall liking for the movie, or lead to a lower attitude toward the involved characters, which can subsequently spill over onto attitudes toward the placed brands. Therefore we hypothesize that:

H6b: The direct impact of context perceptions on brand attitude will be greater for subtly placed brands than for prominently placed brands.

Based on the accessibility-diagnostics framework, we expect the indirect effects of context perceptions on brand attitudes through brand recognition to be positively influenced by prominence. As we hypothesized in H6a, we expect prominence to reinforce the positive impact of context perceptions on brand recognition. In turn, higher accessibility of the brand increases the likelihood that the adopted placement information will be used in attitude formation. In other words, brand information from prominent placements is more likely to be used in the brand attitude formation process. Consequently, we expect that:

H6c: The indirect impact of context perceptions on brand attitude through recognition will be greater for prominently placed brands than for subtly placed brands.

Plot connection is the degree to which a placement is connected with the plot or storyline of the movie or program in which it is embedded. Strongly plot connected brands are part of the narrative structure and story of movies and television programs and characterize a dimension of meaning (Russell, 2002). Plot connection implies a stronger link between the brand and the context in which it is placed. Consistent with associative network theory, highly plot connected brands benefit from a stronger network of context relevant associations than lowly plot connected brands, which facilitates the retrieval of these brands from memory (Dens et al., 2012). Indeed, studies find that a high degree of plot connection improves brand recognition (Brennan et al., 1999). In the light of these findings, we expect plot connection to strengthen the impact of context perceptions on brand recognition.

H7a: The direct impact of context perceptions on brand recognition will be greater for highly plot connected brands than for lowly plot connected brands.

From the perspective of the viewer, it is easier to link context and brand specific cognitive schemas of highly plot connected brands, as opposed to lowly plot connected brands. In other words, it is easier to learn about the brand from its context when the placement is highly plot connected. Plot connection fortifies the link between brand and context, facilitating the transfer of context perceptions on brand attitudes through classical conditioning. Therefore we hypothesize that:

H7b: The direct impact of context perceptions on brand attitude will be greater for highly plot connected brands than for lowly plot connected brands.

Connecting brands to the plot or the story of a movie increases their relevance. A highly plot connected brand can be considered as “primary information” (important information which is closely related to the story), whereas a weakly plot connected brand rather represents secondary (less important, peripheral) information, which is normally not retrieved from memory as well as primary information (Dens et al., 2012; Roberts et al., 1996). Because of its contextual relevance, information from highly plot connected brand placements is also of higher diagnostic value (Ahluwalia and Gürhan-Canli, 2000). As plot connection increases both the accessibility and diagnosticity of brand information, we expect that:

H7c: The indirect impact of context perceptions on brand attitude through recognition will be greater for highly plot connected brands than for lowly plot connected brands

3 Method

3.1 Procedure and Sample

Our study was performed during two separate editions of ‘Ladies at the movies’, a monthly women-only event organized in several movie theatres in Belgium. During this event a preview of a Hollywood blockbuster is shown. The movies shown on the night of the study were *Bride Wars* and *The Women*. Using a coding instrument based on La Ferle and Edwards (2006) and Ferraro and Avery (2000), both movies were content analyzed beforehand by two independent coders to categorize the brand placements according to their levels of prominence and plot connection. Inter-coder agreement on prominence level was 91.8%, agreement on plot connection level was 93.9%. Cohen’s Kappa for the overall categorization was $K = .755$ (+ 1 indicates perfect agreement, 0 indicates no agreement other than expected by chance) (Cohen, 1960; Perreault and Leigh, 1989). E-mail addresses were collected just before the movie, and a web link containing the questionnaire was mailed a few days after seeing the movie. This yielded 187 completed questionnaires for *Bride Wars* (response rate: 39.6%) and 103 for *The Women* (response rate: 45.6%). To be able to control for pre-existing brand attitudes (see discussion in Webb, 1979), a survey was also conducted with a control group of women ($N = 85$, movie: *Last Chance Harvey*) to measure attitudes towards the selected brands in a group that had not been exposed to either of the two test movies.

3.2 Measures

First we measured respondents’ movie liking on a 7-point Likert scale consisting of 7 items ($\alpha = .93$). Second, the attitude toward the characters linked to

the placements was measured using a 9 item 7-point Likert scale ($\alpha = .95$). An exploratory factor analysis with Varimax rotation confirmed that the items belonging to each construct loaded on the same factor, thus evidencing the constructs' discriminant validity. In order to mitigate multicollinearity in our path models, we use the factor scores as input. Next the respondents completed two 4 item 7-point scales that measure their perceived fit between the brands and the movie ($\alpha = .93$), and the brands and the character ($\alpha = .93$). Again, the expected factorial structure was confirmed, and we use the factor scores in the analyses. Subsequently, respondents were asked to mark the brands they recognized in the movie from a list that contained the brands placed in the movie and filler brands. The proportion of respondents who correctly recognized the brand after being exposed to the placement in the movie was reduced by the proportion who falsely remembered seeing the brand in the other movie (which in that case served as a control group), to arrive at a facilitated brand recognition score. This technique allows to control for false recall (cfr. Dens et al., 2012). Brand attitude (A_b) and purchase intention (P_i) were measured by means of a 4-item 7-point semantic differential scale ($\alpha \geq .858$). Brand attitude and purchase intention toward these brands were also measured in the control group, for the eight brands under study ($\alpha \geq .883$). For each brand, the control group's mean A_b and P_i scores were subtracted from each individual's post-exposure scores in the main group. This resulted in both A_b and P_i difference measures that are used in subsequent analyses.

4 Results

The hypothesized relationships were tested by means of a path model using structural equation modeling (SEM).

Movie liking does not have an impact on brand recognition ($\beta = .016$, $p = .958$) and brand attitude ($\beta = -0.014$, $p = .653$). Hypothesis 1a and hypothesis 1b are thus not supported. As predicted by hypothesis 2a, viewers' attitude toward the character has a significant effect on brand recognition ($\beta = .070$, $p < .001$). However, we observe no significant impact of attitude toward the character on brand attitude ($\beta = .010$, $p = .741$), which disproves hypothesis 2b. Consumers' perceived fit between the movie and the placed brand significantly impacts both brand recognition ($\beta = .103$, $p < .001$) and brand attitude ($\beta = .176$, $p < .001$). Our results are thus in full support of hypothesis 3a and hypothesis 3b. In contradiction with hypothesis 3c, the perceived fit between the character and the placed brand does not have a significant influence on brand recognition ($\beta = .009$, $p = .671$). In support of hypothesis 3d, it does significantly impact brand attitude ($\beta = .095$, $p = .004$). The path between brand attitude and purchase intention is also significant ($\beta = .679$, $p < .001$). Hypothesis 4 is thus confirmed.

4.1 The Mediating Role of Brand Recognition

Brand recognition has a positive significant impact on brand attitude ($\beta = .141, p < .028$). Contrary to what we expected, the indirect effect of movie liking on brand attitude is not significant ($\beta = .001, p = .958$). In line with our predictions the indirect effect of attitude toward the character on brand recognition is marginally significant ($\beta = .010, p = .050$). Perceived fit between the brand and the movie exerts a significant indirect effect on brand attitude, through brand recognition ($\beta = .014, p = .038$). The indirect impact of perceived fit between the brand and the character on brand attitude was not significant ($\beta = .001, p = .676$). Our findings partially support hypothesis 5.

4.2 The Moderating Effect of Prominence and Plot Connection

To gauge the moderating effect of prominence and plot connection on the relationships within our model, we performed a multigroup analysis using the structural equation modeling module in JMP 10 Pro.

With respect to prominence, our results support H6a for movie liking only. We found that the effect of movie liking on brand recognition is significantly greater for prominently placed brands ($\beta = .067$) than for subtly placed brands ($\beta = -.077, t = 2.218, p = .027$). Hypothesis 6b predicted that the direct impact of context perceptions on brand attitude would be greater for subtly placed brands than for prominently placed brands. In support of this hypothesis, we found that the effect of perceived fit between the brand and the movie is more positive for subtly placed brands ($\beta = .235$), than for prominently placed brands ($\beta = .106, t = 1.961, p = .050$). We found no support for hypothesis 6c. Prominence did not moderate the indirect effects of context perceptions on brand attitude, through brand recognition.

Table 1: Results of the multigroup analysis

			Prominence			Plot connection			Total sample	p
			Subtle (n = 388)	Prominent (n = 568)	p diff.	Low (n = 388)	High (n = 568)	p diff.		
Brand recognition	H1a	Movie liking	-.077	.067	.027	.097	-.082	.005	.016	.958
	H2a	Att. character	.127	.076	.402	.218	.116	.106	.070	<.001
	H3a	Fit movie	.170	.198	.658	-.032	.214	<.001	.103	<.001
	H3b	Fit character	.003	.089	.186	-.088	-.021	.301	.009	.671
Brand attitude	H1b	Movie liking	.021	-.039	.361	-.040	-.006	.607	-.014	.653
	H2b	Att. character	.009	.018	.892	.011	-.002	.836	.010	.741
	H3c	Fit movie	.235	.106	.050	.154	.174	.751	.176	<.001
	H3d	Fit character	.061	.074	.843	.108	.086	.746	.095	.004
Indirect effects on brand attitude	H5	Movie liking	-.007	.006	.085	.013	-.002	.064	.001	.958
	H5	Att. character	.012	.007	.562	.030	.003	.027	.010	.050
	H5	Fit movie	.016	.017	.895	-.004	.005	.458	.014	.038
	H5	Fit character	.001	.008	.309	-.012	.001	.097	.001	.676

Our analyses for plot connection shows two significant multigroup differences (see Table 1). Firstly, in support of hypothesis 7a, we find that the impact of perceived fit between the brand and the movie on brand recognition is more positive for highly plot connected brands ($\beta = .214$) than for lowly plot connected brands ($\beta = -.032$, $t = 3.847$, $p < .001$). Secondly, we observe that the effect of movie liking on brand recognition is stronger for lowly plot connected brands ($\beta = .097$) than for highly plot connected brands ($\beta = -.082$, $t = 2.795$, $p = .005$). This contradicts hypothesis 7a. Plot connection did not moderate the effects of context perceptions on brand attitude. Hypothesis 7b is thus rejected. The indirect effect of attitude toward the character on brand attitude is stronger for lowly plot connected brands ($\beta = .029$) than for highly plot connected brands ($\beta = -.003$, $t = 2.210$, $p = .027$). As this result is in contradiction with our expectations, hypothesis 7c is rejected.

5 Discussion, Limitations and Suggestions for Further Research

Our findings show that a good fit between the brand and the movie in which it is placed enhances both memory for the brand and consumers' brand attitude, and subsequently purchase intention. These effects can be explained by schema congruity theory. A strong congruence between a brand and the context in which it is embedded leads to an overlap in their respective cognitive schemas. This process facilitates information processing and storage (Misra and Beatty, 1990), and the shared set of associative links creates a sense of belongingness that drives positive brand evaluations (Till and Busler, 2000).

The attitude towards the character that is associated with the placement positively impacts brand recognition, but not brand attitude. These findings indicate that a positive attitude towards the character can raise attention for brands that are associated with that character. Because the viewer evaluates the character positively, an upward social comparison process is triggered that makes the viewer more mindful of the character and its environment (Russell, 1998; Russell and Stern, 2006). Consequently, brands that appear near the character are processed more attentively, resulting in better brand recognition. Contrary to our expectations, however, attitude toward the character does not spill over on brand attitude. The character is thus not used by movie viewers as a source of information about placed brands. Possibly, it is more important to look at the perceived fit between the movie, the character and the brand, and how this influences brand attitude formation (Russell and Stern, 2006). Our results suggest that in a movie context, placement effectiveness is rather influenced by perceptions of fit between placed brands and their context than general evaluations of this context.

Through multigroup analysis we studied whether context effects differ across two placement characteristics: prominence and plot connection. We observed that the effect of movie liking on brand recognition is significantly

stronger for brands that are more prominently placed. Hedonic contingency theory predicts that a higher level of movie liking predisposes viewers to more willingly process information (De Pelsmacker et al., 2002). Yet, the positive state of mind created by movie liking only leads to better brand recognition when the brand is placed prominently. Remarkably, we found that the effect of movie liking on brand recognition is significantly negative for highly plot connected brands, whereas it is positive for lowly plot connected brands. Possibly, this is because people with high levels of liking for the movie are more absorbed by the context (Cowley and Barron, 2008), which can diminish their direct attention for stimuli that are an integral part of the context. Lowly plot connected brands are less integrated in the storyline and plot of the movie, and can thus distract viewers' attention and direct it to the brand.

In terms of brand recognition, highly plot connected brands benefit more from good fit with the movie than lowly plot connected brands. Highly plot connected brands are an integral part of the story and define the context of the movie (Russell, 2002). This level of integration effectuates the formation of a strong match between the cognitive schemas of the brand and the movie. Thus, plot connection further facilitates the processing and storage of information related to these brands.

In addition, as shown in previous research, overly prominent brand placements are likely to cause negative attitudinal reactions (e.g., Dens et al., 2012; Van Reijmersdal, 2009). Our study demonstrates that placement prominence interferes with the transfer of positive matchup effects between the brand and the movie to attitude towards the brand. This adds weight to the argument that placements should be carefully managed and preferably be subtle (Cowley and Barron, 2008; Dens et al., 2012).

Our study also holds a few limitations that can be taken into account by future research. Both movies were romantic comedies and our audience consisted of women. Gender differences with regard to the reaction to the placement of, for example, ethically-charged products have been established by Gould et al. (2000). The present study should thus be extended to other demographic segments and other genres (e.g., action movies, thrillers, alternative cinema) to see to what extent the results of this study can be replicated under different contexts.

Lastly, brands placed in movies are often well-known, and are thus familiar to the moviegoer (Brennan and Babin, 2004). This is also the case in the present study. Familiar brands exhibit stronger associations with their product categories (Lee and Sternthal, 1999), making them more accessible in memory (Nedungadi, 1990). This may inflate recognition scores in general (Babin and Carder, 1996). At the same time, attitudes developed toward familiar brands may be relatively stable, and not easily changed by a single occurrence in a movie (Stammerjohan et al., 2005). Future research could study to what extent

brand placement techniques have different effects for familiar and unfamiliar brands.

6 References

- Ahlwalia, R. and Gürhan-Canli, Z. (2000), "The Effects of Extensions on the Family Brand Name: An Accessibility-Diagnosticity Perspective," in: *Journal of Consumer Research*, Vol. 27, 3, 371-381.
- Amos, C.; Holmes, G. and Stratton, D. (2008), "Exploring the Relationship between Celebrity Endorser Effects and Advertising Effectiveness," in: *International Journal of Advertising*, Vol. 27, 2, 209-234.
- Babin, L. A. and Carder, S. T. (1996), "Advertising Via the Box Office: Is Product Placement Effective?," in: *Journal of Promotion Management*, Vol. 3, 1/2, 31-51.
- Balasubramanian, S. K.; Karrh, J. A. and Patwardhan, H. (2006), "Audience Response to Product Placements: An Integrative Framework and Future Research Agenda," in: *Journal of Advertising*, Vol. 35, 3, 115-141.
- Bhatnagar, N.; Aksoy, L. and Malkoc, S. A. (2004), "Embedding Brands within Media Content: The Impact of Message, Media, and Consumer Characteristics on Placement Efficiency" in: Shrum, L. J., ed. *The Psychology of Entertainment Media: Blurring the Lines between Entertainment and Persuasion*. Mahwah, NJ, Lawrence Erlbaum, 99-116.
- Brennan, I. and Babin, L. A. (2004), "Brand Placement Recognition: The Influence of Presentation Mode and Brand Familiarity," in: *Journal of Promotion Management*, Vol. 10, 1/2, 185-202.
- Brennan, I.; Dubas, K. M. and Babin, L. A. (1999), "The Influence of Product-Placement Type & Exposure Time on Product-Placement Recognition," in: *International Journal of Advertising*, Vol. 18, 3, 323-337.
- Bressoud, E.; Lehu, J.-M. and Russell, C. A. (2010), "The Product Well Placed: The Relative Impact of Placement and Audience Characteristics on Placement Recall," in: *Journal of Advertising Research*, Vol. 50, 4, 374-385.
- Cohen, J. (1960), "A Coefficient of Agreement for Nominal Scales," in: *Educational and Psychological Measurement*, Vol. 20, 37-46.
- Cooper, H.; Schembri, S. and Miller, D. (2010), "Brand-Self Identity Narratives in the James Bond Movies," in: *Psychology & Marketing*, Vol. 27, 6, 557-567.
- Côté, S. (2005), "Reconciling the Feelings-as-Information and Hedonic Contingency Models of How Mood Influences Systematic Information Processing," in: *Journal of Applied Social Psychology*, Vol. 35, 8, 1656-1679.
- Cowley, E. and Barron, C. (2008), "When Product Placement Goes Wrong: The Effects of Program Liking and Placement Prominence," in: *Journal of Advertising*, Vol. 37, 1, 89-98.
- d'Astous, A. and Chartier, F. (2000), "A Study of Factors Affecting Consumer Evaluations and Memory of Product Placements in Movies," in: *Journal of Current Issues and Research in Advertising*, Vol. 22, 2, 31-40.
- De Pelsmacker, P.; Geuens, M. and Anckaert, P. (2002), "Media Context and Advertising Effectiveness: The Role of Context/Ad Similarity," in: *Journal of Advertising*, Vol. 21, 2, 49-61.
- Dens, N.; De Pelsmacker, P.; Wouters, M. and Purnawirawan, N. (2012), "Do You Like What You Recognize? The Effects of Brand Placement Prominence and Movie Plot Connection on Brand Attitude as Mediated by Recognition," in: *Journal of Advertising*, Vol. 41, 3, 35-53.
- Erdogan, Z. B. (1999), "Celebrity Endorsement: A Literature Review," in: *Journal of Marketing Management*, Vol. 15, 4, 291-314.
- Ferraro, R. and Avery, R. J. (2000), "Brand Appearances on Prime-Time Television," in: *Journal of Current Issues and Research in Advertising*, Vol. 22, 2, 1-15.
- Fishbein, M. and Ajzen, I. (1974), "Attitudes Towards Objects as Predictors of Single and Multiple Behavioral Criteria," in: *Psychological Review*, Vol. 81, 1, 59-74.

- Gould, S. J.; Gupta, P. B. and Grabner-Kräuter, S. (2000), "Product Placements in Movies: A Cross-Cultural Analysis of Austrian, French and American Consumers' Attitudes toward This Emerging, International Promotional Medium," in: *Journal of Advertising*, Vol. 29, 4, 41-58.
- Gupta, P. B. and Gould, S. J. (2007), "Recall of Products Placed as Prizes Versus Commercials in Game Shows," in: *Journal of Current Issues and Research in Advertising*, Vol. 29, 1, 44-53.
- Gupta, P. B. and Lord, K. R. (1998), "Product Placement in Movies: The Effect of Prominence and Mode on Audience Recall," in: *Journal of Current Issues and Research in Advertising*, Vol. 20, 1, 47-59.
- Herr, P. M.; Kardes, F. R. and Kim, J. (1991), "Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective," in: *Journal of Consumer Research*, Vol. 17, 4, 454-462.
- Homer, P. M. (2009), "Product Placements: The Impact of Placement Type and Repetition on Attitude," in: *Journal of Advertising*, Vol. 38, 3, 21-31.
- Johnstone, E. and Dodd, C. A. (2000), "Placements as Mediators of Brand Salience within a UK Cinema Audience," in: *Journal of Marketing Communications*, Vol. 6, 3, 141-158.
- Kamins, M. A. and Gupta, K. (1994), "Congruence between Spokesperson and Product Type: A Matchup Hypothesis Perspective," in: *Psychology & Marketing*, Vol. 11, 6, 569-586.
- Karrh, J. A. (1998), "Brand Placement: A Review," in: *Journal of Current Issues and Research in Advertising*, Vol. 20, 2, 31-49.
- La Ferle, C. and Edwards, S. M. (2006), "Product Placement: How Brands Appear on Television," in: *Journal of Advertising*, Vol. 35, 4, 65-86.
- Law, S. and Braun, K. A. (2000), "I'll Have What She's Having: Gauging the Impact of Product Placements on Viewers," in: *Psychology & Marketing*, Vol. 17, 12, 1059-1075.
- Lee, A. Y. and Sternthal, B. (1999), "The Effects of Positive Mood on Memory," in: *Journal of Consumer Research*, Vol. 26, 2, 115-127.
- Lehu, J.-M. and Bressoud, E. (2008), "Effectiveness of Brand Placement: New Insights About Viewers," in: *Journal of Business Research*, Vol. 61, 10, 1083-1090.
- McCracken, G. (1989), "Who Is the Celebrity Endorser? Cultural Foundations of the Endorsement Process," in: *Journal of Consumer Research*, Vol. 16, Dec, 310-321.
- Meyers-Levy, J. and Tybout, A. M. (1989), "Schema Congruity as a Basis for Product Evaluation," in: *Journal of Consumer Research*, Vol. 16, Jun, 39-54.
- Misra, S. and Beatty, S. E. (1990), "Celebrity Spokesperson and Brand Congruence: An Assessment of Recall and Affect," in: *Journal of Business Research*, Vol. 21, 2, 159-173.
- Mittelstaedt, J. D.; Riesz, P. C. and Burns, W. J. (2000), "Why Are Endorsements Effective? Sorting among Theories of Product and Endorser Effects," in: *Journal of Current Issues & Research in Advertising*, Vol. 22, 1, 55-65.
- Nedungadi, P. (1990), "Recall and Consumer Consideration Sets: Influencing Choice without Altering Brand Evaluations," in: *Journal of Consumer Research*, Vol. 17, 3, 263-276.
- Ohanian, R. (1991), "The Impact of Celebrity Spokespersons' Perceived Image on Consumers' Intention to Purchase," in: *Journal of Advertising Research*, Vol. 31, 1, 46-54.
- Perreault, W. D., Jr. and Leigh, L. E. (1989), "Reliability of Nominal Data Based on Qualitative Judgments," in: *Journal of Marketing Research*, Vol. 26, 2, 135-148.
- Roberts, D. S. L.; Cowen, P. S. and MacDonald, B. E. (1996), "Effects of Narrative Structure and Emotional Content on Cognitive and Evaluative Responses to Film and Text," in: *Empirical Studies of the Arts*, Vol. 14, 1, 33-47.
- Russell, C. A. (1998), "Toward a Framework of Product Placement: Theoretical Propositions," in: *Advances in Consumer Research*, Vol. 25, 1, 357-362.
- (2002), "Investigating the Effectiveness of Product Placements in Television Shows: The Role of Modality and Plot Connection Congruence on Brand Memory and Attitude," in: *Journal of Consumer Research*, Vol. 29, 3, 306-318.
- Russell, C. A. and Stern, B. B. (2006), "Consumers, Characters, and Products: A Balance Model of Sitcom Product Placement Effects," in: *Journal of Advertising*, Vol. 35, 1, 7-21.

- Skowronski, J. J. and Carlston, D. E. (1987), "Social Judgment and Social Memory: The Role of Cue Diagnosticity in Negativity, Positivity, and Extremity Biases," in: *Journal of Personality and Social Psychology*, Vol. 52, 4, 689-699.
- Spears, N. and Singh, S. N. (2004), "Measuring Attitude toward the Brand and Purchase Intentions," in: *Journal of Current Issues & Research in Advertising*, Vol. 26, 2, 53-66.
- Stammerjohan, C.; Wood, C. M.; Chang, Y. and Thorson, E. (2005), "An Empirical Investigation of the Interaction between Publicity, Advertising, and Previous Brand Attitudes and Knowledge," in: *Journal of Advertising*, Vol. 34, 4, 55-67.
- Teichert, T. A. and Schöntag, K. (2010), "Exploring Consumer Knowledge Structures Using Associative Network Analysis," in: *Psychology & Marketing*, Vol. 27, 4, 369-398.
- Till, B. D. and Busler, M. (2000), "The Match-up Hypothesis: Physical Attractiveness, Expertise, and the Role of Fit on Brand Attitude, Purchase Intent and Brand Beliefs," in: *Journal of Advertising*, Vol. 29, 3, 1-13.
- Till, B. D. and Shimp, T. A. (1998), "Endorsers in Advertising: The Case of Negative Celebrity Information," in: *Journal of Advertising*, Vol. 27, 1, 67-82.
- Till, B. D.; Stanley, S. M. and Priluck, R. (2008), "Classical Conditioning and Celebrity Endorsers: An Examination of Belongingness and Resistance to Extinction," in: *Psychology & Marketing*, Vol. 25, 2, 179-196.
- Van Ittersum, K. (2012), "The Effect of Decision Makers' Time Perspective on Intention-Behavior Consistency," in: *Marketing Letters*, Vol. 23, 1, 263-277.
- Van Reijmersdal, E. A. (2009), "Brand Placement Prominence: Good for Memory! Bad for Attitudes?," in: *Journal of Advertising Research*, Vol. 49, 2, 151-153.
- Van Reijmersdal, E. A.; Neijens, P. and Smit, E. (2007), "Effects of Television Brand Placement on Brand Image.," in: *Psychology & Marketing*, Vol. 24, 5, 403-420.
- Van Reijmersdal, E. A.; Rozendaal, E. and Buijzen, M. (2012), "Effects of Prominence, Involvement, and Persuasion Knowledge on Children's Cognitive and Affective Responses to Advergaming," in: *Journal of Interactive Marketing*, Vol. 26, 1, 33-42.
- Van Reijmersdal, E. A.; Smit, E. G. and Neijens, P. C. (2010), "How Media Factors Affect Audience Responses to Brand Placement," in: *International Journal of Advertising*, Vol. 21, 2, 279-302.
- Webb, P. H. (1979), "Consumer Initial Processing in a Difficult Media Environment," in: *Journal of Consumer Research*, Vol. 6, 3, 225-236.
- Wiles, M. A. and Danielova, A. (2009), "The Worth of Product Placement in Successful Films: An Event Study Analysis," in: *Journal of Marketing*, Vol. 73, June, 44-63.
- Zajonc, R. B. (1968), "Attitudinal Effects of Mere Exposure," in: *Journal of Personality and Social Psychology*, Vol. 9, 2, Part 2, 1-27.

Part IV

Cultural, Gender, and Age Issues in Advertising

GLOBE Cultural Dimensions: Providing Insights for Advertising Execution in the Global Marketplace

Barbara Mueller
Sandra Diehl
Ralf Terlutter

1 Introduction

From A (Absolute Vodka) to V (Visa), marketers are increasingly launching global campaigns to promote their products and services to consumers in every corner of the planet (PR Newswire, 2007; corporate.visa.com, 2009). There appears to be ample evidence that standardized advertising is more feasible than ever before (Mueller and Taylor, 2011). The benefits of a common marketing and, in particular, advertising strategy are manifold. However, the question regarding the degree to which standardized advertising executions can be employed, and under what circumstances, has not been definitively answered. Adherents of adaptation or localization point to a multitude of marketing blunders that have resulted from not paying close attention to cultural differences between markets. Multinational marketers must clearly still take culture and country specific variance into account in planning advertising executions. At least four major frameworks have had influence on the academic literature and also have practical applicability. These frameworks have outlined a number of cultural dimensions that attempt to explain a significant portion of country-to-country variance. By far the most prominent approach to cultural dimensions in marketing and advertising research is Hofstede's typology of cultural values (Hofstede, 1980, 2001). Somewhat less frequently applied frameworks include Schwartz's cultural values (1992, 1994 and 1999) and Inglehart's World Values Survey (Inglehart, 1997; Inglehart, Basanez and Moreno, 1998; and Inglehart and Welzel, 2005). Most recently, a framework developed by House et.al (2004, 2010) has proven a useful means of understanding societal-level cultural differences between and among consumers around the world. For a thorough comparison of these various frameworks, see Terlutter et al. (2006, 2012) and Quigley et al., (2012). In what follows, we very briefly outline this alternative cultural framework – entitled Project GLOBE, and then move on to summarize the cross-cultural advertising research that has been conducted to date employing the GLOBE cultural dimensions. Finally, we suggest further application of the GLOBE framework in order to advance the advertising discipline.

2 Project GLOBE

GLOBE (Global Leadership and Organizational Behavior Effectiveness Research Program) as developed by House et al., (2004) offers an alternative to previous frameworks of cultural dimensions. The GLOBE Project was initially designed to analyze the relationship between societal values and practices, and leadership effectiveness. However, as it provides data on cultural values and practices in different countries, a number of authors have proposed that it may prove relevant for advertising purposes, as well (Terlutter et al., 2006, Okazaki and Mueller, 2007; House et al., 2010). GLOBE provides data for 62 cultures, based on a survey of 17,300 middle managers in 951 organizations. Managers were drawn from three industries: financial services, food processing, and telecommunications. Given data collection began after 1994, the GLOBE framework is based on relatively current data. In recognizing the work of a large number of cross-cultural researchers, the GLOBE framework aims at providing a broader theoretical foundation for their cultural dimensions. Over 170 GLOBE researchers from different cultural backgrounds worked together on construct definition, construct conceptualization and on the measurement of the constructs.

GLOBE outlines nine cultural dimensions: (1) assertiveness, (2) uncertainty avoidance, (3) power distance, (4) collectivism I (institutional collectivism), (5) collectivism II (in-group collectivism), (6) gender egalitarianism, (7) future orientation, (8) performance orientation, and (9) humane orientation. An important contribution of the GLOBE framework is that it explicitly differentiates between societal values and societal practices. The distinction between cultural values and cultural practices was incorporated to correspond with Schein's (2010) concepts of artifacts vs. espoused values as two unique levels of culture (House and Hanges, 2004). Artifacts are the visible products, processes and behaviors of a culture. They mainly reflect the current status and how issues are handled in a society, and therefore, the cultural practices. Espoused values are the individuals' or society's sense of what ought to be, as distinct from, what is. They primarily reflect how things should be and therefore, the cultural values. Both values and practices are often contradictory in a culture and are therefore seen as paradoxical values. Such paradoxical values are common in most cultures. For instance, a culture or an individual may value saving money, but that society's or individual's spending habits may reflect the exact opposite. Thus, though individuals well know that piling up credit card debt is unwise and that they should instead contribute to their savings account (values) they nevertheless enjoy shopping and purchasing the latest fashions with their credit cards (practices). Given the fact that values and practices in a society may be inconsistent and sometimes even contradictory, it is a major strength that GLOBE clearly distinguishes between both levels of cultures.

Another advantage of GLOBE is that it outlines a larger number of cultural dimensions -- nine in total. In contrast, Hofstede identified only five value dimensions based on fundamental problems which all societies face. Schwartz outlined seven national-cultural domains, and Inglehart's World Values Survey revealed that a wide range of attitudes and values are reflected in just two major dimensions -- the polarization between traditional values and secular-rational values; and the polarization between survival values and self-expression values. Regarding GLOBE's nine dimensions, House et al. (2010) suggests that they shed some light on cultures when considered separately, but for an even more complete picture of a given culture, the scores on practices and values for multiple dimensions (or even all nine) should be considered together. House acknowledges the challenge in doing so. To provide a more meaningful consideration of the 62 societal cultures in the GLOBE data sample, GLOBE cultures were grouped into a set of ten regional clusters (Gupta & Hanges, 2004). Based on a detailed conceptual and empirical process, these regional clusters were developed incorporating all nine dimensions, using both cultural practices and values. "These cluster profiles provide a convenient way of summarizing intercultural similarities as well as intercultural differences" (Gupta & Hanges, 2004, p. 178). As such, the ten clusters may prove quite useful to international advertising scholars as well as practitioners. For example, an understanding of these clusters could be of value to multinational marketers in segmenting consumers across multiple markets. Segmenting according to cluster provides very real benefits. Cross-border segments that transcend national boundaries may share other characteristics (such as needs, preferences, lifestyles, tastes and habits). Increasing convergence among consumer segments enables firms to formulate standardized marketing strategies for their brands. Conversely, an understanding of significant differences between (or perhaps even within) clusters might suggest that adaptation or localization is the more prudent route.

GLOBE provides data on the societal level, but not on the individual level. The items used in the GLOBE project are designed to reflect societal values and practices, not individual values and practices. But one should consider that as individuals are socialized through values that are held and behaviors that are practiced in their cultures, it is very likely that they adopt values and practices that are shared among members of their society (Markus and Kitayama, 1991). The values held and practices shown by members of a culture influence individual values and practices, as they enable the individual to behave according to social norms and rules and in a manner that is rewarded by other members of that group. Of course individual values and practices may also deviate from the values and practices held in a society.

3 Applications of the GLOBE Framework to Cross-Cultural Advertising Research

The GLOBE project is useful to cross-cultural advertising researchers who wish to examine culture as an antecedent of individual perceptions of commercial communications. In particular, the GLOBE dimensions are relevant to, and important for, international advertising scholarship. To date, virtually all of the cross-cultural advertising research incorporating GLOBE has focused on individual cultural dimensions. GLOBE dimensions that have been explored include assertiveness (Terlutter et al., 2005, 2006 and 2010), performance orientation (Diehl et al, 2008), humane orientation (Diehl et al. 2012, 2013) and future orientation (Diehl et al. 2013). Each of these investigations will be explored in greater detail below.

3.1 *The Cultural Dimension of Assertiveness*

The very first attempt to apply GLOBE dimensions to international advertising research dates back to 2005. In this investigation, Terlutter et al. (2005, 2006) examined the influence of assertiveness on the perception and evaluation of an advertisement. Assertiveness is defined as the degree to which individuals in societies are assertive, confrontational, aggressive, and straightforward. There are a number of reasons why this cultural dimension was chosen for analysis. Prior to this study, assertiveness had never been investigated in the context of international advertising – a rather surprising fact, given that assertiveness is an appeal commonly employed in commercial messages (consider Nike’s former “Just Do It” slogan, which commands consumers to be more assertive and take control of their fitness regimen). Assertiveness is generally perceived as an important trait – in the workplace as well as in daily life – and is even seen as a prerequisite for being successful. Indeed, the large number of publications as well as seminars which exist, whose primary goal is to assist individuals in become more assertive suggest that this dimension is generally viewed as a desirable goal for both the individual and society. With regard to assertiveness, consumers in five countries that differed in their societal values and practices in terms of assertiveness were surveyed (Terlutter et al., 2010). It was expected that perception of a higher level of assertiveness in an ad would lead to a more positive evaluation of that ad, regardless of country. One might expect that the country ranking highest in terms of assertiveness would most positively evaluate ads incorporating assertive appeals. However, individuals’ perceptions and evaluations of commercial messages are also based on that individual’s frame of reference. Theories that explain such context effects are known as reference value theories. Helson’s (1948) adaptation-level theory postulates that, based on all stimuli in a particular situation, the individual has a given adaptation-level, which serves as a comparison standard for the subsequent perception and evalu-

ation of the stimuli. The adaptation-level is the typical representative value of the focal dimension and is used to represent the category. According to adaptation-level theory, the sensorial strength of a stimulus is not based solely on the stimulus itself, but also influenced by individuals' experiences with such stimuli as well as stimuli surrounding the focal stimuli. In addition, the theory suggests that a stimulus will be perceived as less strong if the surrounding stimuli are strong (accordingly it will be perceived as stronger if the surrounding stimuli are weak). The comparison standard can be regarded as the average of the experiences and is described as a reference value to which the focal stimulus in a given situation is compared. Similarly, Parducci's (1965) range-frequency theory also postulates that a given stimulus is related to a comparison standard. Range-frequency theory posits that judgments are based on comparisons to specific category members, as well as on their range and distribution frequency. In terms of advertising, both theories suggest that the perception of assertiveness in commercial communications may be dependent upon the level of assertiveness surrounding the individual, which serves as a comparison standard for the perception of that commercial. If the cultural environment is highly assertive and places importance on assertiveness, this level of assertiveness is likely to serve as the frame of reference. This means that in a culture with a high comparison standard regarding assertiveness, an ad designed to incorporate an assertive appeal may be viewed as only mildly assertive. Conversely, in a cultural environment that is less assertive in nature, individuals have a lower reference value regarding assertiveness, and the very same ad may be viewed as highly assertive in nature. In other words, a consumer socialized in an assertive environment might perceive a given advertisement as significantly less assertive than a consumer socialized in a relatively less assertive environment would evaluate that very same ad.

In terms of the research design, a full-page ad was developed. The ad was for a fictional brand called "Milo" shoes. The ad contained the slogan "Your first choice." A non-student sample of 714 respondents took part in the main investigation (US: 140; Germany: 200; UK: 100; Austria: 124; Argentina: 150). A structured questionnaire was developed. In the first part of the instrument, questions regarding the level of the respondent's assertiveness, as well as questions about the society in which they live were asked. Subjects were then exposed to the ad and asked to evaluate it. Individual and societal assertiveness levels were measured via three items adopted from GLOBE (House et al. 2004). Subjects were asked to rate the ad on four items in order to assess the level of assertiveness reflected in the ad. In-person interviews were conducted in each country. Interviewers in all countries received extensive training to ensure comparable interviewing situations. The evaluation of the ad was assessed with four items adapted from MacKenzie and Lutz (1989).

The results of this investigation suggest that, by incorporating an assertive appeal in commercial messages, advertisers may positively influence the evaluation of those messages. As hypothesized, data revealed a significant relationship between the perceived level of assertiveness in an ad and the overall evaluation of the ad. This proved to be true for every country in this investigation, which differs significantly with regard to their cultural background. Because assertiveness is a positively held value in many countries, it can therefore be seen as an appeal type promising for cross-cultural standardized advertising campaigns. However, the results of this investigation suggest that a given, standardized ad incorporating an assertive appeal may well be evaluated quite differently in various markets. An important finding of this study is that it is not consumers from the country with the highest assertiveness scores (the US) that most positively evaluate advertisements incorporating assertive appeals. Instead, consumers from the country who perceive the highest level of assertiveness in an ad tend to evaluate it most positively – and this study shows that they, in fact, are from the country with the lowest assertiveness scores (Argentina). The results suggest that advertisers attempting to achieve a specific level of assertiveness in their campaigns will need to adapt their commercial messages for various countries. In assertive markets, stronger assertive cues may be required if consumers are indeed to perceive the ads as assertive in nature. In less assertive countries, more subtle cues may be sufficient to obtain the same level of perceived assertiveness.

3.2 *The Cultural Dimension of Performance Orientation*

Diehl et al. (2008) examined a second GLOBE dimension – performance orientation. Individuals with a high need for achievement tend to obtain pleasure from steady improvement. Performance orientation is seen as desirable among members of many societies. Countries exhibiting high levels of performance orientation achieve – though typically within several decades time – an above average increase in economic wealth (McClelland, 1967). On an individual level, according to Schwartz and Bilsky (1987), performance orientation generally results in increased social acceptance and the admiration of others. Performance orientation also leads to increased status (Trompenaars, 1993). Hence, performance orientation is often viewed as something desirable at both the societal as well as the individual level. With regard to advertising, employing performance-oriented appeals may therefore be an effective means of enhancing the success of a commercial. As with assertiveness, it is expected that the greater the level of perceived performance orientation in an ad, the more positive the evaluation of the ad.

The relationship between the level of perceived performance orientation in an advertisement and the evaluation of the advertisement was expected to be positive in all countries, but as with assertiveness, its strength was expected to

vary depending on the importance that individuals in each country placed upon performance orientation. If performance orientation was perceived as an important value by individuals of a given country, then the level of perceived performance orientation in an advertisement was expected to have a stronger influence on the evaluation of the advertisement. The greater the importance of performance orientation, the more central it became in the individual's evaluation of an advertisement. On the other hand, if performance orientation was perceived as less important by individuals in a particular country, then the level of perceived performance orientation likely played a less significant role in the judgment of that advertisement. Therefore, it was expected that in those nations in which individuals placed greater importance on performance orientation, influence of the level of perceived performance orientation in an advertisement on the evaluation of that advertisement would be stronger, compared with those nations in which individuals placed less importance on performance orientation.

As with assertiveness, it was argued that the perception of performance orientation in commercial communications may be dependent upon the level of performance orientation surrounding the individual, which serves as a comparison standard for the perception of performance orientation in a given commercial. It was thus expected that, given a standardized ad designed to incorporate a performance oriented appeal, individuals in highly performance-oriented cultures would perceive a lower level of performance orientation in that ad than in less performance-oriented cultures.

A non-student survey of 698 individuals was conducted in five countries, the U.S. (n=180), Germany (n=142), France (n=100), Spain (n=100) and Thailand (n=176). In-person interviews were conducted in each country. A structured questionnaire was developed. Subjects were exposed to a full-page advertisement for a fictional brand of wristwatch ("Schwartz"). The ad portrayed a team on a sail boat, successfully maneuvering through strong swells, thereby demonstrating performance-oriented behavior. The slogan "Every performance counts" supported performance orientation in the ad. All variables were measured using multiple item scales adapted from literature. Measurement equivalence across the five countries of the variables was supported. Relationships in the conceptual model were tested using multi-group SEM.

The results of this investigation suggest that, by incorporating a performance-oriented appeal in commercial messages, advertisers can positively influence the evaluation of those messages. As expected, data revealed a significant relationship between the perceived level of performance orientation in an ad and the overall evaluation of the ad. This proved to be true for every country. Because performance orientation is a positively held value in many countries, it can therefore be seen as an appeal type suitable for cross-cultural standardized advertising campaigns. Results also revealed that overall, a higher individual value of performance orientation increased the strength of the impact of percep-

tion of performance orientation as well as ad evaluation. Multi-group structural equation modelling revealed that the influence of the perceived level of performance orientation on the evaluation of the ad was highest in Thailand, followed by Spain and the US, and was lowest in Germany and France.

However, as with assertiveness, results of this investigation suggest that a given standardized ad incorporating a performance-oriented appeal may well be perceived quite differently in various markets. Here too, it is not consumers from the country with the highest performance orientation scores who perceived the highest level of performance orientation in the standardized advertisement. Instead, the countries with higher performance orientation in terms of societal practices perceived lower levels of performance orientation in the ad, and vice versa. The study's country scores of societal practices suggest that Thailand and the U.S. are the nations with the highest level of performance orientation, whereas Germany, Spain, and in particular, France, tend to have lower scores on societal practices. In line with expectations, U.S. subjects perceived the lowest level of performance orientation in the standardized ad, whereas the French, Spanish and Germany subjects perceived higher levels of performance orientation. The results for Thailand however were inconsistent – with Thais perceiving a much higher level of performance orientation than expected. It is of importance to note that in assessing performance orientation in this investigation, based on GLOBE measures, major differences were found in the societal practices of one country, underscoring the importance of replicating the cultural dimension in question for each investigation to be undertaken.

3.3 *The Cultural Dimension of Humane Orientation*

Humane orientation is the third GLOBE dimension examined to date (Diehl et al, 2012, 2013). Societies that score high on humane orientation “place importance on others (i.e. family, friends, community and strangers); believe that people are motivated by the need for belonging and affiliation; give high priority to values of altruism, kindness and generosity; and expect people to promote patronage norms and paternalistic relationships. Societies scoring low on this dimension believe that self-interest is important; that power and material possessions motivate people; people are expected to solve problems on their own; formal welfare institutions replace paternalistic norms and patronage relationships; and the state sponsors public provisions and sectors...” (House et al., 2010, p. 122). At the corporate level, altruism, caring and generosity are closely associated with efforts by advertisers to highlight their socially responsible activities. Today, more than ever, a company's reputation in the global marketplace is related to its social, as well as its financial performance. Consumers increasingly expect companies to be socially engaged (IB Times, 2011). Indeed, several recent marketplace polls have confirmed that a firm's social actions play a significantly greater role than anticipated in forming consumer impressions of

companies (see Nielsen Survey, 2012; Cone Communications/Echo Research 2011 Cone/Echo Global CR Opportunity Study; and Edelman good purpose Report, 2009). These surveys suggest that corporate social responsibility (CSR) as a marketing imperative has global consumer appeal. However, the findings also revealed important nuances by country – with consumers in some markets expressing significantly greater concern over CSR – and their willingness to act on these concerns – than those in others. This suggests that corporations must recognize that corporate responsibility strategies may well be perceived and evaluated differently in local markets. One explanation for the variation in consumer responses to the issue of CSR may be differences in their level of humane orientation. In this study, the influence of humane- oriented ad appeals on consumer attitudes toward the ad, as well as toward the product were examined.

As with assertiveness and performance orientation, it was proposed that perception of a higher level of humane orientation in an ad would lead to more positive evaluations of that ad. This relationship was expected to hold true in all countries examined, but that its strength would once again vary depending on the importance which individuals in each nation placed on this GLOBE dimension (individual humane orientation values). Further, it was proposed that the perception of a higher level of humane orientation in the ad would lead to a more positive attitude toward the product.

A non-student survey of 663 subjects (United States: 199, France: 163; Germany: 151, and Switzerland: 150) was conducted. A full-page ad was developed. Here too, the advertised product was a wristwatch employing the fictional brand name (“Schwartz”). One way of bringing together socially responsible behavior and consumption is cause-related marketing (CRM). In CRM campaigns, companies commit to donate a certain amount of money to a cause or charity per product sold. Nan and Heo (2007) demonstrated that an ad with an embedded CRM message elicited more favorable attitudes toward the company, as compared with one lacking such a message. The primary visual in the stimulus ad portrayed a young woman engaging with small children in a playground setting. The children appear to be from a developing country. The headline read “We take responsibility.” The body copy read: “Social responsibility is important to us at SCHWARTZ. And for that reason, we support children in Kindergarten and grade school in developing countries with the sale of each of our watches.” In this way a cause-related marketing message was both visually and verbally woven into the ad. A shot of the watch was also included. A structured questionnaire was developed and administered. Individual humane orientation values were conceptualized based on House et al (2004) and Kabasakal and Bodur (2004). Perceived level of humane orientation in the ad was measured via five question derived from descriptions of humane orientation provided by House et al (2010) and Kabasakal and Bodur (2004). Attitude toward the ad was assessed with four items adapted from MacKenzie and Lutz (1989). Attitude

toward the product was assessed with four items adapted from Mitchell and Olson (1981).

The results of this investigation once again revealed a significant relationship between the perceived level of humane orientation in an ad, and the overall evaluation of that ad. The higher the perceived levels of humane orientation in the ad, the more positive were the attitudes of subjects toward the ad. This held true for every nation in this investigation, which differed significantly with regard to their cultural background. Because it appears that humane orientation is regarded positively in many markets, it can be seen as a promising appeal type for standardized cross-cultural advertising campaigns. Partial confirmation was found for the moderating role of level of importance individuals place on humane orientation (individual humane orientation values) between perception of humane orientation in the ad and attitude toward the ad. Results also suggest that incorporation of CSR elements (i.e. here humane-orientated appeals) in an effort to increase ad evaluation appears to be particularly promising in those countries where individuals place greatest importance on humane orientation. It is of interest to note that similar results were found for the two German-speaking countries in this investigation (Germany and Switzerland), while the results for France and the US were significantly different. Finally, results also demonstrated that a higher perception of humane orientation in the ad also led to more favorable attitudes toward the advertised product.

3.4 *The Cultural Dimension of Future Orientation*

The most recent GLOBE dimension examined is future orientation (Diehl et al, 2013). The human species has always been fascinated with the concept of time. That cultures vary significantly in their conceptions of time has been noted by a variety of researchers from a number of different disciplines (Hall, 1959, 1983; Kluckhohn and Strodtbeck, 1961; Hofstede, 1980; and most recently House, 2004, 2010). Time orientation impacts a number of important consumer behavior related issues, including attitudes toward saving and spending. As such, the time orientation that dominates in a particular culture may influence consumer attitudes toward commercial messages that promote delaying spending versus those that encourage more impulsive (present-oriented) consumption behavior. As conceptualized by GLOBE investigators, cultures that report higher scores on future orientation show a propensity to save for the future, value the deferment of gratification and place a higher priority on long-term success. Societies reporting comparatively lower scores on this dimension have a propensity to spend now (rather than save), and value instant gratification (Ashkanasy et al. 2004).

This exploratory investigation examined the role that the GLOBE dimension of future orientation plays in consumer responses to advertisements. As previously mentioned, a major strength of the GLOBE framework is that it explicitly

distinguishes between societal values versus societal practices. While cultures may value planning and saving, its members may instead adopt “buy now, pay later” behaviors. Based on a non-student sample in two countries with distinct saving versus spending mindsets (Germany and the U.S.), attitudes toward an advertisement employing a future-oriented appeal were measured. Initial results indicate that, overall, future-oriented appeals were positively perceived in both countries, but surprisingly, appeared to be particularly promising in communicating with American consumers.

4 Modelling Culture’s Influence on Responses to Advertisements

As a starting point for further understanding of the processes by which societal culture influences responses to advertising, House et al. (2012, p. 78-81) propose three models. The first is a cross-level mediated effects model, in which societal cultures drives evaluation of the advertisement and intention to purchase through mediating effects. The second model outlined is a cross-level fit model. Here the authors suggest that an individual’s perceptions of an advertisement are independent of the effects of societal culture – but that these perceptions must be consistent with their view of their societal culture in order for the ad to be evaluated positively. The third model (the cross-level complex fit model) draws on the roots of the original GLOBE project and examines how implicit leadership theory can be applied in an advertising context. This model includes two variables based on implicit leadership theory: the culturally endorsed theory of the advertising message’s subject matter and individual-level perceptions of this culturally endorsed theory. It should be noted that none of these models have been tested to date.

Terlutter et al. (2010) also propose a culturally-based conceptual model that attempts to explain the role of GLOBE dimensions on the perception and evaluation of an advertisement. The basic concept of this model is that a given standardized advertising stimulus is likely to be perceived and evaluated differently in various cultures, dependent upon the level of importance that individuals place on a given cultural domain (the individual-level cultural value), and on the practices regarding the given cultural domain in the environment surrounding that individual (the societal-level cultural practice). Thus, the model explicitly differentiates between cultural dimensions on an individual level versus cultural dimensions on a societal level, and also incorporates the differentiation between cultural values and cultural practices. In contrast to the previous models, this one has been empirically tested. Figure 1 presents this conceptual model employing the dimension of assertiveness. Data from five countries (the United States, Germany, Great Britain, Austria and Argentina) confirmed the model to a large extent. The model was tested again, examining performance orientation and data were collected in the U.S, Germany, France, Spain and Thailand. Overall the conceptual model was supported by the data here as well.

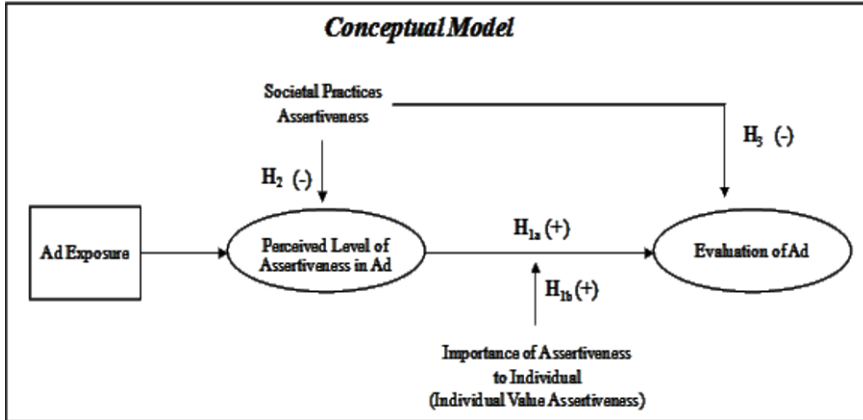


Figure 1: *Conceptual Culture Based Model: Responses to assertive appeals*

5 Directions for Future Research

In the academic investigations summarized above, just four of the nine GLOBE cultural dimensions have been explored. Without question, the remaining dimensions are deserving of attention as well. Future studies should examine the role of power distance, uncertainty avoidance, institutional collectivism, in-group collectivism and gender egalitarianism on consumer responses to commercial messages. To date, the number of product categories investigated has been quite limited (shoes and wristwatches). Only one service has been incorporated in the studies (banking). Globe dimensions should be analyzed in the context of ads for a wider variety of products (including both high and low involvement goods). The role of cultural dimensions in response to messages for services also deserves attention. Though a good number of markets have been explored to date (The United States, the United Kingdom, Germany, Austria, France, Switzerland, Spain, Argentina and Thailand), additional Latin American and Asian (both Southern Asian and Confucian Asian) markets should be examined, as well as countries that represent Eastern Europe, Africa, and the Middle East.

House et al. (2010) developed five research questions that address the ways in which the GLOBE study might be applied in future investigations: "1) What are the cross-level linkages between societal culture, organizational advertising practices and perceptions of global advertising effectiveness at the individual level? 2) Would the fit/match between advertising methods, societal expectations regarding communication and societal culture be an important predictor of advertising effectiveness? 3) Given that advertising often appeals to consumers'

aspirations, is it more important to consider the practices or values associated with societal culture dimensions in advertising communication? 4) What is the influence of multiple dimensions of culture on advertising effectiveness? and 5) How does consideration of the cultural differences between the ten country clusters identified by GLOBE shed light on standardization vs. localization debate in the global advertising literature?” (House et al., 2010, p. 129 – 131).

Above and beyond examining GLOBE dimensions not explored to date, incorporating a wider range of products and/or services, and a more varied list of markets, in addition to addressing the questions outlined by House et al. (2010) above, future investigators would do well to test the models proposed by House et al. (2012) as well as to apply the model developed by Terlutter et. al. (2010) to additional dimensions and in additional countries. International advertising researchers are also encouraged to expand upon these proposed models.

6 Summary

The development of culturally-based models contributes to the development of a more general theory of culture’s impact on advertising, which was identified as a key area for future research in international advertising (Taylor, 2005, 2007, 2010). The GLOBE cultural dimensions framework, as well as the models presented above are invaluable to international advertising researchers and practitioners alike. As culture is a highly complex construct, it seems likely that efforts to better understand cultural dimensions and their impact on advertising will continue for years to come.

7 References

- Ashkanasy, N., V. Gupta, M.S. Mayfield, and E. Trevor-Roberts (2004): Future Orientation, in: House, R.J., P.J. Hanges, M. Javidan, P. Dorfman, and V. Gupta (Eds.): *Culture, Leadership, and Organizations*, Thousand Oaks: Sage, 282-342.
- Cone Communications and Echo Research (2011). Cone/Echo Global CR Opportunity Study. October.
- Corporate.visa.com (2009). Visa Introduces First Global Advertising Campaign, Entitled “More People Go With Visa.” Corporate.visa.com/newsroom/press-releases/press916.jsp. Retrieved January 15, 2014.
- Diehl, S.; R. Terlutter, and B. Mueller (2008): The Influence of Culture on Responses to the GLOBE Dimension of Performance Orientation in Advertising Messages – Results from the U.S., Germany, France, Spain, and Thailand, in: *Advances in Consumer Research*, Vol. 35, 269-275.
- Diehl, S., B. Mueller and R. Terlutter (2013). The Influence of Demographic Factors on the Perception of Humane-oriented (CSR) Appeals in Advertisements: A Multi-Country Analysis. *Advances in Advertising Research*, Vol. 5, Springer, Gabler Publishers.
- Diehl, S., B. Mueller and R. Terlutter (2013). Attitudes toward Future Oriented Appeals in Saving Versus Spending Cultures: Preliminary Results Addressing GLOBE Values vs. Practices Distinctions. Proceedings of the International Conference on Research in Advertising (ICORIA). Zagreb, Croatia.

- Diehl, S., R. Terlutter and B. Mueller (2012). Corporate Social Responsibility and Advertising: The Influence of Humane Orientation Appeals on International Consumer Attitudes Toward the Ad and Product. Proceedings of the International Conference on Research in Advertising (ICORIA). Stockholm.
- Diehl, S., B. Mueller and R. Terlutter (2013). Attitudes Toward Future Oriented Appeals in Saving Versus Spending Cultures: Preliminary Results Addressing GLOBE Values vs. Practices Distinctions. Paper presented at the International Conference on Research in Advertising (ICORIA), Zagreb, Croatia, June.
- Edelman, good purpose Report (2009). Put Meaning into Marketing and Profit Through Purpose. Retrieved from Edelman Website 2 June, 2012.
- Gupta, V. and P.J. Hanges (2004). Regional and Climate Clustering of Societal Cultures. Culture, Leadership, and Organizations: The GLOBE Study of 62 Cultures, House, R. J., P.J. Hanges, M. Javidan, P.W. Dorfman and V. Gupta (eds.). Thousand Oaks, CA: Sage, 178-218.
- Hall, E. T. (1959). *The Dance of Life: Mother Dimensions of Time*, New York: Anchor Press/Doubleday.
- Hall, E. T. (1983). *The Dance of Life: The Other Dimension of Time*, Anchor Books, New York.
- Helson, H. (1948). Adaptation-level as a Basis for a Quantitative Theory of Frames of Reference. *Psychological Review*, 55, 297 – 313.
- Hofstede, G. (1980, 2001), *Culture's Consequences. International Differences in Work-Related Values*, 1. and 2. ed., Thousand Oaks: Sage.
- House, R.J.; N.R. Quigley, and M.S. de Luque (2010): Insights from Project GLOBE, in: *International Journal of Advertising*, 29, 1, 111-139.
- House, R.J. and P.J. Hanges (2004): Research Design, in: House, R.J., P.J. Hanges, M. Javidan, P. Dorfman, and V. Gupta (Eds.): *Culture, Leadership, and Organizations*, Thousand Oaks: Sage, 95-101.
- House, R.J., P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta, (2004, eds.), *Culture, Leadership, and Organizations*, Thousand Oaks: Sage.
- IB Times (2011). "Global Consumers Voice Demand for Greater Corporate Responsibility: Study." October 5. www.ibtimes.com/art/scservices/print?php?articleid=225722. Retrieved February 6, 2012.
- Inglehart, R. (1997): *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*, Princeton, NJ.
- Inglehart, R. and C. Welzel (2005): *Modernization, Cultural Change and Democracy: The Human Development Sequence*, Cambridge University Press: New York.
- Inglehart, R.; M. Basañez, and A. Moreno (1998): *Human Values and Beliefs: A Cross-Cultural Sourcebook*, Ann Arbor.
- Kabasakal, H. and M. Bodur (2004). Humane Orientation in Societies, Organizations and Leader Attributes. *Culture, Leadership and Organizations: The GLOBE Study of 62 Societies*, R. J. House, P.J. Hanges, M. Javidan, M. Dorfman and V. Gupta (eds.). Thousand Oaks, California: 564-601.
- Kluckhohn, F.R. and F.L. Strodtbeck (1961): *Variations in Value Orientations*, Evanston, Ill.: Row, Peterson.
- MacKenzie, S. B and R. J. Lutz (1989). An Empirical Examination of the Structural Antecedents of Attitude Toward the Ad in an Advertising Pre-testing Context. *Journal of Marketing*, 53(2), 48-65.
- Markus, H.R. and S. Kitayama (1991): Culture and the Self: Implications for Cognition, Emotion, and Motivation, in: *Psychological Review*, 98, 2, 224-253.
- McClelland, D. C. (1961). *The Achieving Society*. Princeton, New Jersey: Van Nostrand.

- Mitchell, A.A. and J. C. Olson (1981). Are Product Attribute Beliefs the Only Mediator of Advertising Effects on Brand Attitude? *Journal of Marketing Research*, 18(3), 318-332.
- Mueller, B and Taylor, C. R. (2013). Convergence in Global Markets: The Great Standardization Versus Localization Debate is (Finally) Put to Rest. In *Media and Convergence Management*, S. Diehl and M. Marmasin (eds), Heidelberg: Springer Verlag, 89 – 105.
- Nan, X. and K. Heo (2007). Consumer Responses to Corporate Social Responsibility (CSR) Initiatives. *Journal of Advertising*, 36(2), 63-74.
- Nielsen Survey (2012). The Global Socially-Conscious Consumer. March.
- Okazaki, S. and B. Mueller (2007): Cross-cultural Advertising Research: Where We Have Been and Where We Need to Go, in: *International Marketing Review*, 24, 5, 499-518.
- Parducci, A. (1965). Category Judgment: A Range-Frequency Model. *Psychological Review*, 72, November, 407-418.
- Pollay, R. B. and B. Mittal (1993). Here's the Beef: Factors, Determinants, and Segments in Consumer Criticism of Advertising. *Journal of Marketing*, 57(3), 99-114.
- PR Newswire (2007). Absolute launches Global Advertising Campaign.
www.printthis.clickability.com/pt/cpt?expire=&title=ABSOLUTE%28R%29+Launches+Global+ADvertising+Campaign+in+New+York%2C+April+27+%2. Retrieved January 15, 2014.
- Quigley, N. R., M. Sully de Luque and R. J. House (2012). Project GLOBE and Cross-Cultural Advertising Research: Developing a Theory-Driven Approach. *Handbook of Research on International Advertising*, S. Okazaki (ed.), Cheltenham, U.K.: Edward Elgar.
- Schein, E.H. (2010): *Organizational Culture and Leadership*, 4rd Edition, San Francisco: Jossey Bass.
- Schwartz, S.H. (1992): Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries, in: *Advances in Experimental Social Psychology*, Vol. 25, 1-65.
- Schwartz, S.H. (1994): Are There Universals in the Content and Structure of Values, in: *Journal of Social Issues*, 50, 19-45.
- Schwartz, S.H. (1999): A Theory of Cultural Values and Some Implications for Work, in: *Applied Psychology*, 48, 1, 23-47.
- Schwartz, S. H. and W. Bilsky (1987). Toward a Universal Psychological Structure of Human Values. *Journal of Personality and Social Psychology*, 53(3), 550-562.
- Terlutter, R., S. Diehl and B. Mueller (2012). Typologies of Cultural Dimensions and their Applicability to International Advertising. *Handbook of Research on International Advertising*, S. Okazaki (ed.), Cheltenham, U.K.: Edward Elgar.
- Terlutter, R.; S. Diehl, and B. Mueller (2010): The Cultural Dimension of Assertiveness in Cross-cultural Advertising – the Perception and Evaluation of Assertive Advertising Appeals, in: *International Journal of Advertising*, 29, 3, 369-399.
- Terlutter, R., S. Diehl and B. Mueller (2006). The GLOBE Study – Applicability of a New Typology of Cultural Dimensions for Cross-Cultural Marketing and Advertising Research. *International Advertising and Communication: Current Insights and Empirical Findings*, S. Diehl and R. Terlutter (eds.). Wiesbaden: Gabler Edition, 420 – 438.
- Terlutter, R., S. Diehl, and B. Mueller (2005): The Influence of Culture on Responses to Assertiveness in Advertising Messages, in: *Advertising and Communication – Proceedings of the 4th International Conference on Research in Advertising (ICORIA)*, Saarbruecken, 183-192.
- Trompenaars, F. (1993): *Riding the Waves of Culture: Understanding Cultural Diversity in Business*, London.

Advertising Adaptation versus Standardization Effectiveness in Open and Closed Markets

Mahdi Rajabi

Nathalie Dens

Patrick De Pelsmacker

1 Introduction

“The primary international advertising topic over the past five decades is the question of whether, and to what degree, advertising can and should be standardized” or adapted to be effective (Ford et al., 2011, pp. 27). The extent of adaptation of advertisement to the local environment of a society is a critical decision, as it can largely impact the effectiveness of advertising campaigns (De Pelsmacker and Geuens, 1998; Ko et al., 2007; Okazaki and Taylor, 2013). The levels of advertising adaptation have been defined on a continuum “ranging from worldwide standardization to national customization” (Merz et al., 2008; Ritzer, 2004). Advertising standardization uses a uniform advertising strategy for different countries (Kitchen and De Pelsmacker, 2004; Vrontis et al., 2009). This approach can reinforce a brand’s global identity and lead to cost reduction through economies of scale (Akaka and Alden, 2010; Zou and Volz, 2010). On the other hand, the differences between nations and consumers’ tastes around the world encourage marketers to tailor (adapt) their advertising to local cultures and tastes (Fastoso and Whitelock, 2010). A number of studies reveal that (at least some degree of) adaptation of advertising can benefit consumers’ attitudes and purchase intentions (e.g., Butt and De Run, 2011; Noriega and Blair, 2008).

This experimental study aims to fill two gaps in the literature on advertising adaptation. First, research has so far related the effectiveness of advertising adaptation vs. standardization to a number of individual-level moderators, such as ethnocentrism (Nijssen and Douglas, 2011), education (Hsu and Nien, 2008), or age and gender (Witkowski, 1998). We argue that besides these individual-level characteristics, the environmental variable of national openness to foreign markets has a strong predictive capability for consumer responses to advertising adaptation, which marketers can use for macro level segmentation and positioning. Openness to foreign markets is an environmental measure of the extent of a nation’s economic, social and political contact with foreign societies, in other words the extent of its globalization. It depends on several environmental factors such as worldwide investments, production, marketing, advances in telecommunication technologies, the Internet, increase in world travel and growth of global media (Alden et al., 2006; Dreher et al., 2008; Özsoy and Simonin, 2004). A relevant measure of a nation’s openness to foreign markets is the KOF

Index (KOF stands for “Konjunkturforschungsstelle” — Swiss Economic Institute), that measures a nation’s economic, social and political dimensions of openness to foreign markets. The index is based on actual economic flow, economic restrictions, data on information flows and personal cultural proximity (Dreher et al., 2008). To the best of our knowledge, the relationship between a country’s openness to foreign markets and consumer responses to different degrees of advertising adaptation is an unexplored research topic.

The present study was conducted among consumers in two countries with different levels of openness to foreign markets: Belgium (high openness) versus Iran (low openness). Iran represents an emerging market which has not received a lot of attention in the literature. Figure 1 shows the theoretical framework of the study.

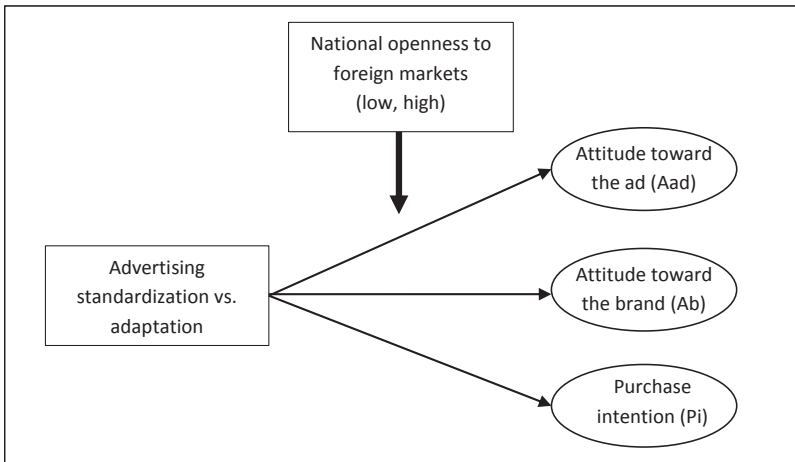


Figure 1: Study framework

Thus, the study contributes to research on the effectiveness of advertising standardization and adaptation levels (Melewar et al., 2009; Westjohn et al., 2012) and on the effect of national openness to foreign markets on responses to advertising. From a practitioner point of view, it aims to explore national openness to foreign markets as a determinant of the effectiveness of varying levels of advertising adaptation on consumer responses. The results can help marketers to select an optimal degree of advertising adaptation when approaching specific markets.

2 Literature Review

2.1 *Consumer Responses to Advertising Adaptation versus Standardization*

For nearly five decades, the effectiveness of advertising adaptation to cultural boundaries or its standardization across national borders has been a controversial issue in international marketing (Akaka and Alden, 2010; Elinder, 1965; Papavassiliou and Stathakopoulos, 1997). The controversy centers on whether ads need to be adapted to the cultural values and symbols of different societies (and so differ across different markets) to be effective. Advertising standardization uses a uniform advertising strategy for different countries (Kitchen and De Pelsmacker, 2004; Vrontis et al., 2009), which can be efficient by cost reductions through economies of scale (Akaka and Alden, 2010; Schilke et al., 2009; Zou and Volz, 2010) and creates a global brand identity (Akaka and Alden, 2010). Global Market Strategy (GMS) theory supports standardization as an efficient strategy because of its ability to exploit ideas on a global scale (Zou and Volz, 2010). In support of this idea, a number of experiments showed that consumer responses to a given ad are not affected by national cultural characteristics (Polyorat et al., 2005; Wilcox et al., 1996) and suggested that standardization could be used in several countries because culture does not seem to act as a cognitive and affective filter in individuals' judgments of ads.

However, a review of marketing literature including theoretical (e.g., Akaka and Alden, 2010; Alden et al., 2006; De Pelsmacker et al., 2007) and experimental (e.g., Aaker et al., 2000; Brumbaugh, 2002; Forehand et al., 2002) studies shows more evidence in favor of adaptation than against it. As a result, manifestations of culture (i.e., values, heroes, rituals, and symbols) will affect individuals' reactions to advertising (Hofstede and McCrae, 2004). The differences between consumers' tastes around the world make it unlikely that the same ad can be equally effective in all countries (Fastoso and Whitelock, 2010; Rugman, 2003). The majority of studies find that the same ad elicits significantly different consumer responses from consumers in different cultures (Bjerke and Polegato, 2006; De Pelsmacker and Geuens, 1998; Koslow and Costley, 2010).

Based on a meta-analysis, Hornikx and O'keefe (2009) reported that in most of the studies conducted in North America and Asia, adapted advertising appeals are more persuasive than standardized appeals. The effectiveness of adapting advertisements to the cultural characteristics of the target market has been explained in the literature by theories like self-congruity (e.g., Lee et al., 2002; Martin et al., 2004; Noriega and Blair, 2008), self-construal level (e.g., Aaker and Schmitt, 2001; Lau-Gesk, 2003; Wei and Yu, 2012), ease of information processing (e.g., Berger and Fitzsimons, 2008; Chattaraman et al., 2010) and consumer culture theory (e.g., Alden et al., 2006; Cleveland et al., 2011; Cleveland and Laroche, 2007). For example, Aaker et al. (2000) showed that

when the ad content (i.e., endorser, ad copy, symbols and signs) has characteristics that differ from those of the viewer (e.g., an endorser with a different ethnicity than the viewer), individuals may infer that their tastes and preferences are different from that of the intended target group, and thus fail to develop favorable attitudes. This result is also supported by other studies in consumer psychology (Brumbaugh, 2002; Forehand et al., 2002).

2.2 *National Openness to Foreign Markets*

The results of previous studies show that openness to foreign markets can positively affect consumer orientation to products with foreign images. For example, Alden et al. (2006) show that consumers' exposure to values, beliefs and lifestyles of foreign or out-group cultures can positively affect their orientation toward global product consumption. Consumers in societies with more exposure to global values hold positive attitudes to brands with a global image while societies that are isolated or deprived from the exposure to global values are more likely to evaluate products on the basis of the congruity between the image of the product and their own values (Westjohn et al., 2012). This can be explained by construal level theory. This theory proposes that the more distant an object is from the individual, the more abstract it will be thought of. In this theory, psychological distance (i.e., temporal, spatial and social) is associated with a higher level construal (Kim and John, 2008). Exposure to foreign values in societies with open markets reduces the consumers' perceptual distance with products having foreign images. In contrast, isolation from foreign values in societies which are not open to foreign markets increases their perceptual distance with products advertised with foreign images. Closed societies are more likely to prefer their own symbols and values over the cultural manifestations of other societies, to protect their own cultural purity (Huntington, 1993; Machida, 2012). Consequently, if a standardized ad is targeted to an isolated society, the individuals in that society will consider it as a distant object; they will process it with lower involvement and a higher level of abstract processing. By contrast, ads that are adapted to the environment of these societies are processed concretely, and perceived as more relevant (Lavine and Snyder, 1996), more important (Lee et al., 2000), and will be elaborated more thoroughly (Petty et al., 1983). Consumers in closed countries will prefer higher degrees of advertising adaptation to their local culture over standardization of advertisements because adapted advertisements are more congruous with their dominant national cultural value system (Wei and Yu, 2012). We hypothesize:

H1: Under low openness to foreign markets, individuals' responses (i.e., attitude to ad (Aad), brand (Ab) and purchase intention (Pi)) are more positive for adapted advertising appeals than for standardized advertising appeals.

Highly open-to-foreign-markets nations are in frequent contact with the values and norms of foreign cultures. In a study of 44 countries, Machida (2012) found that a nation's openness to foreign markets renders individuals "more tolerant toward foreign influences" (cultural integration) (Machida, 2012, p. 456) and results in cultural integration. In this scenario, foreign cultural manifestations are not considered as a threat to the local culture's purity or superiority (Pieterse, 2004), causing consumers to cooperate with foreign cultures and to disregard ethnic differences when making judgments. In support of this idea, Alden et al. (2006) report positive effects of individuals' travelling, mass media usage, and immigrant exposure on their attitude toward global brand consumption. This means that, in open markets, the adaptation of advertisements to the local cultural value system should not necessarily contribute to the formation of more positive attitudes and behavioral reactions compared to standardized appeals. In accordance with construal level theory, we do not expect any differences between adapted and standardized advertising with respect to their impact on consumer attitudes and purchase intentions in nations with a high openness to foreign markets.

H2: Under high openness to foreign markets, individuals' responses (i.e., Aad, Ab and Pi) do not differ between adapted and standardized ad appeals.

3 Research Method

3.1 Country Selection

To measure a nation's openness to foreign markets, we rely on the KOF index of globalization (Dreher, 2006). The KOF index measures the social aspect of openness by data on personal contact (i.e., outgoing telephone traffic, inflow and outflow of goods and services (transfers), international tourism, foreign population), information flow (i.e., telephone mainlines, Internet hosts, Internet users, cable television, daily newspapers, radios) and cultural proximity (i.e., the amount of contact of the individuals of a nation with multinational companies like McDonald's). The economic aspect of openness is measured by data on actual flows (i.e., trade, foreign direct investment, portfolio investment, income payments to foreign nationals) and data on economic restrictions (i.e., import barriers, mean tariff rate, taxes on international trade). The political aspect of openness is measured by data on political engagement with other countries (i.e., embassies in country, membership of international organizations, participation in UN Security Council missions) (Dreher, 2006). The index has been used in earlier research as a measure of national openness to foreign markets (Machida, 2012) and has a number of characteristics that makes it suitable for this study. First of all, it considers the social, the political as well as the economic dimen-

sions of a nation's openness to foreign markets. Second, the index is updated annually, which ensures that it is an up-to-date measure.

We selected two countries to represent the two extremes of openness to foreign markets, as measured by the KOF index (Dreher et al., "KOF Index of Globalization. ," 2012): Belgium, as a country with a high KOF rank (KOF = 92.76, rank 1st/187), and Iran, with a low KOF rank (KOF = 40.69, rank 156th/187).

3.2 *Pretest*

A pretest was conducted with 20 respondents in both countries. The first purpose of the pretest was to identify an appropriate product category for use in the main study. Previous research indicated that consumer durables offer a high potential for standardization across different markets (Melewar and Vemmervik, 2004). Therefore, in the pretest, we measured popularity (4 items – commonly used product category, I like the product category, most [Iranians/ Belgians] like the product category, most [Iranians/ Belgians] use the product category, $\alpha = .82$) (adapted from Duncan and Nelson, 1985) and product category involvement (4 items – means a lot, important, decision requires a lot of thought, matters to me, $\alpha = .96$) (adapted from Dens and De Pelsmacker, 2010) for several durable products. A home cinema system scored highly on popularity in the three countries involved in our study ($M_{Belgium} = 5.20$; $M_{India} = 5.07$; $M_{Iran} = 5.80$) and at least moderately on involvement ($M_{Belgium} = 3.59$; $M_{India} = 4.79$; $M_{Iran} = 4.79$). We therefore selected a home cinema system as the test product in our main study to ensure that the product category itself would be sufficiently attractive and involving, so as to avoid that advertising strategies would not have any impact because of low involvement.

3.3 *Procedure*

We invented a fictitious brand of home cinema systems, TFX, to avoid potential confounds of prior brand associations. Through discussion with Iranian and Belgian consumers, we ensured that the letter combination "TFX" did not entail any specific associations. We then created three advertisements, one fully standardized appeal (which was the same for both countries), and one adapted appeal per country. We operationalized the advertisements by manipulating two executional elements, the celebrity endorser and the verbal cues. The celebrity endorsers were chosen based on a pretest ($n = 20$ per country), in which we controlled for endorser characteristics that may bias the results (e.g., Till and Busler, 2000). Respondents rated a list of five local celebrities (adapted for each country) and five international celebrities (Hollywood actors) on seven-point Likert scales for endorser familiarity (3 items) (Kumar, 2005), attractiveness (3 items) (Ohanian, 1990), likeability (3 items) (Till, 1998) and match with the

advertised product (a home cinema system) (3 items) (Till and Busler, 2000). By means of a series of t-tests for the difference between the locally adapted and international celebrity's characteristics for each country, we selected Leonardo DiCaprio (international celebrity), Koen De Bouw (local Belgian celebrity) and Mohammad Reza Forootan (local Iranian celebrity). These celebrities are highly and equally familiar, attractive and likeable and show an equal match with the advertised product category in the two countries under study.

The standardized appeal was drafted in English, mentioning three international metropolitan cities (New York, London and Brussels/Tehran) and referring to a standardized website "tfx.com", and included Leonardo DiCaprio. The adapted appeal for Belgium was in Dutch, naming three local cities (Antwerp, Brussels, Ghent) and referring to a local website "tfx.be". As mentioned, it showed the local celebrity Koen De Bouw. The adapted appeal for Iran included a picture of Mohammad Reza Forootan, was in Farsi, named three local cities (Tehran, Esfahan and Shiraz) and referring to the local website "tfx.ir". The layout of the ads was identical (see Appendix). In order to ensure meaning equivalence, the ads were translated and back translated by four native speakers from each country.

Through an online survey, 217 respondents (Belgium: n=112; Iran: n=105), were randomly assigned to the standardized or adapted advertising appeal (see Table 1 for sample description).

Table 1: Sample characteristics

Country (Sample size)		Belgium (112)	Iran (105)
Gender	Male	34.8% (39)	41.0% (43)
	Female	47.3% (53)	46.7% (49)
	Not reported	17.9% (20)	12.4% (13)
Age	18 - 28 years	30.4% (34)	12.4% (13)
	29 - 42 years	28.6% (32)	51.4% (54)
	43 - 65 years	23.2% (26)	21.9% (23)
	Not reported	17.9% (20)	14.3% (15)
Education	High school diploma	34.8% (39)	14.3% (15)
	Bachelor's degree	18.8% (21)	41.0% (43)
	Master's degree or higher	28.6% (32)	32.4% (34)
	Not reported	17.9% (20)	12.4% (13)

The survey was conducted in Dutch for Belgium and in Farsi for Iran. Following Okazaki & Mueller's (2007) suggestion, the questionnaires were translated and back translated by four native Farsi and Dutch speakers to ensure meaning equivalence. The dependent measures (i.e., Aad, Ab and Pi) were measured on multi-item seven-point semantic differential or Likert type scales. The participants were randomly exposed to one of the test advertisements and

then answered questions about their Aad(8 items) (Williams and Drolet, 2005) with eight items, Ab (3 items) (Chattopadhyay and Basu, 1990) and Pi (3 items) (Putrevu and Lord, 1994). Scores on different items were averaged to compute the construct scores (all constructs have excellent reliabilities: $\alpha > .90$).

4 Results

The data from the three countries were combined for analyses. A 2 (Iran (low KOF or openness to foreign markets) vs. Belgium (high KOF)) x 2 (advertising adaptation vs. standardization) full-factorial MANOVA is run with the attitude toward the ad (Aad), the brand (Ab) and purchase intention (Pi) as the dependent variables. The MANOVA shows a multivariate significant main effect of national openness to foreign markets ($F = 3.21, p = .024$) and advertising adaptation vs. standardization ($F = 2.77, p = .042$). The two-way interaction of national openness to foreign markets and advertising adaptation (Figure 2) does not reach the level of significance ($F = .993, p = .397$). Planned comparison tests of the two way interaction are performed to test the hypotheses (Table 2 shows the means and standard deviations of consumer responses in the two countries). Considering that our hypotheses are one sided, the p -values were corrected for one-tailed hypotheses tests.

H1 states that responses of individuals from a nation with a low openness to foreign markets are more positive towards adapted compared to standardized ads. Results show that, in Iran, an adapted ad ($M_{Aad} = 4.79, M_{Ab} = 4.07, M_{Pi} = 4.02$) indeed receives more positive responses than a standardized ad ($M_{Aad} = 4.00, M_{Ab} = 3.40, M_{Pi} = 3.45$) on Aad ($p < .001$), Ab ($p = .026$) and Pi ($p = .025$). H1 is supported.

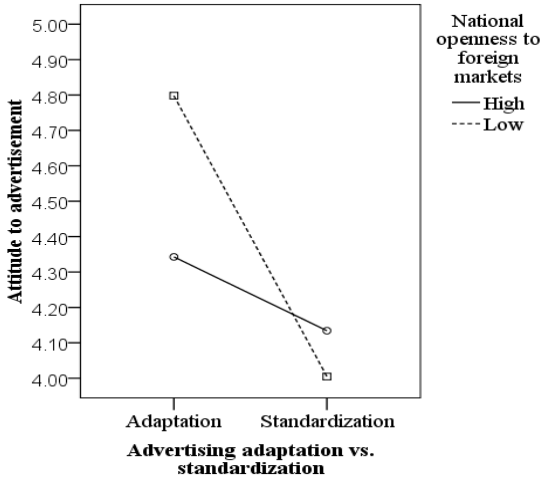


Figure 2: Advertising adaptation x national openness to foreign markets interaction on Aad.

H2 states that when national openness to foreign markets is high, consumer responses do not differ between standardized and adapted appeals. As expected, the results for Belgium show that consumer responses to an adapted ad ($M_{Aad} = 4.34$, $M_{Ab} = 4.08$, $M_{Pi} = 3.75$) and a standardized ad ($M_{Aad} = 4.13$, $M_{Ab} = 4.00$, $M_{Pi} = 3.45$) do not differ on Aad ($p = .207$), Ab ($p = .379$) and Pi ($p = .134$). H2 is accepted.

Table 2: Cell means and sizes per condition

National openness	High (Belgium)			Cell sizes	Low (Iran)			Cell sizes
	Aad	Ab	Pi		Aad	Ab	Pi	
Dependent								
Adaptation	4.34 (1.30)	4.08 (.94)	3.75 (1.08)	58	4.79 (1.38)	4.07 (1.58)	4.02 (1.48)	52
Standardization	4.13 (1.28)	4.00 (1.39)	3.45 (1.43)	54	4.00 (1.42)	3.40 (1.52)	3.45 (1.81)	53

Note: Figures between brackets indicate the standard deviation.

5 Discussion, Conclusion and Implications

In the current study, we investigate consumer responses toward advertising adaptation and standardization in two national environments that differ in terms of openness to foreign markets, which itself is a function of economic flows,

information flows, travelling and absence of economic restrictions (Dreher, 2006). The results support the fact that openness to foreign markets is a significant determinant of the consumers' attitudinal and behavioral responses to adapted versus standardized advertising appeals. Individuals' responses from societies open to foreign markets are indifferent to the degree of advertising adaptation. Although the adaptation of advertising appeals to the cultural environment of the targeted society has long been considered to be an effective strategy (Butt and De Run, 2011; Fastoso and Whitelock, 2010), the results of this study show standardization can be equally effective for a nation with a high level of openness to foreign markets. In societies with a high openness to foreign markets, individuals have frequent contact with the norms and values of other cultures. According to Machida (2012), this kind of environment promotes cultural integration and tolerance for foreign cultures. In line with this idea, our study shows that in a country with a high openness to foreign markets, consumer responses do not differ significantly between standardized and adapted ads. This finding contradicts older studies which suggest that openness to foreign markets may lead to the rejection of foreign cultures or a "clash of civilizations" (Holton, 2000; Huntington, 1993; Kellner, 2002). Societies isolated from the values and norms of global culture consider foreign values and norms as perceptually distant (Wei and Yu, 2012). In these societies, standardized ads with international elements are less positively received than completely adapted ad appeals. Individuals from these societies experience trouble finding a connection between their tastes and preferences and the international context of standardized ads, and therefore fail to develop favorable attitudes and behavioral intentions.

As our results support that national openness to foreign markets can have a substantial effect on the effectiveness of advertising adaptation, we suggest multinational companies to consider this factor in their advertising strategies. The national openness to foreign markets, as measured by the KOF index, is a more useful tool than individual-level characteristics to segment markets, as an up-to-date score is freely available (Dreher et al., "KOF Index of Globalization," 2012), and the score can be used for an entire nation, rather than for targeting individuals within one nation.

Approaching a country with a high national openness to foreign markets, like Belgium, does not require a noteworthy amount of adaptation of the advertisement (Roth, 1995). In these countries, marketers can benefit from the advantages of standardization. However, societies with a low openness to foreign markets, like Iran, do require a complete adaptation of advertisements.

6 Suggestions for Further Research

Future studies are recommended to investigate the effects of semi-adaptation (i.e., glocalization) compared to standardization for nations with different levels

of openness to foreign markets. The results of this study can be replicated by considering other nations with a high and low openness to foreign markets. The results of this study are mainly confined to promotional strategies and cannot be generalized to brand image strategies that are long term oriented and mostly related to quality and prestige of global brand names. Future research is recommended to explore the impact of adaptation and standardization of brand names in addition to other visual and verbal appeals on consumer responses.

7 References

- Aaker, J.; Brumbaugh, A. and Grier, S. (2000), "Nontarget Markets and Viewer Distinctiveness: The Impact of Target Marketing on Advertising Attitudes," in: *Journal of Consumer Psychology*, Vol. 9, 3, 127-140.
- Aaker, J. and Schmitt, B. (2001), "Culture-Dependent Assimilation and Differentiation of the Self Preferences for Consumption Symbols in the United States and China," in: *Journal of Cross-Cultural Psychology*, Vol. 32, 5, 561-576.
- Akaka, M. A. and Alden, D. L. (2010), "Global Brand Positioning and Perceptions: International Advertising and Global Consumer Culture," in: *International Journal of Advertising*, Vol. 29, 1, 37-56.
- Alden, D. L.; Steenkamp, J.-B. E. M. and Batra, R. (2006), "Consumer Attitudes toward Marketplace Globalization: Structure, Antecedents and Consequences," in: *International Journal of Research in Marketing*, Vol. 23, 3, 227-239.
- Berger, J. and Fitzsimons, G. (2008), "Dogs on the Street, Pumas on Your Feet: How Cues in the Environment Influence Product Evaluation and Choice," in: *Journal of Marketing Research*, Vol. 45, 1, 1-14.
- Bjerke, R. and Polegato, R. (2006), "How Well Do Advertising Images of Health and Beauty Travel across Cultures? A Self-Concept Perspective," in: *Psychology & Marketing*, Vol. 23, 10, 865-884.
- Brumbaugh, A. M. (2002), "Source and Nonsource Cues in Advertising and Their Effects on the Activation of Cultural and Subcultural Knowledge on the Route to Persuasion," in: *Journal of Consumer Research*, Vol. 29, 2, 258-269.
- Butt, M. M. and de Run, E. C. (2011), "Do Target and Non-Target Ethnic Group Adolescents Process Advertisements Differently?," in: *Australasian Marketing Journal (AMJ)*, Vol. 19, 2, 77-84.
- Chattaraman, V.; Rudd, N. A. and Lennon, S. J. (2010), "The Malleable Bicultural Consumer: Effects of Cultural Contexts on Aesthetic Judgments," in: *Journal of Consumer Behaviour*, Vol. 9, 1, 18-31.
- Chattopadhyay, A. and Basu, K. (1990), "Humor in Advertising - the Moderating Role of Prior Brand Evaluation," in: *Journal of Marketing Research*, Vol. 27, 4, 466-476.
- Cleveland, M.; Erdođan, S.; Arıkan, G. and Poyraz, T. (2011), "Cosmopolitanism, Individual-Level Values and Cultural-Level Values: A Cross-Cultural Study," in: *Journal of Business Research*, Vol. 64, 9, 934-943.
- Cleveland, M. and Laroche, M. (2007), "Acculturation to the Global Consumer Culture: Scale Development and Research Paradigm," in: *Journal of Business Research*, Vol. 60, 3, 249-259.
- De Pelsmacker, P. and Geuens, M. (1998), "Reactions to Different Types of Ads in Belgium and Poland," in: *International Marketing Review*, Vol. 15, 4, 277-290.
- De Pelsmacker, P.; Geuens, M. and Van den Bergh, J. (2007), *Marketing Communications*. London: Pitman.

- Dens, N. and De Pelsmacker, P. (2010), "Consumer Response to Different Advertising Appeals for New Products: The Moderating Influence of Branding Strategy and Product Category Involvement," in: *Journal of Brand Management*, Vol. 18, 1, 50-65.
- Dreher, A. (2006), "Does Globalization Affect Growth? Evidence from a New Index of Globalization," in: *Applied Economics*, Vol. 38, 10, 1091-1110.
- Dreher, A.; Gaston, N. and Martens, P. (2008), *Measuring Globalisation – Gauging Its Consequences*. New York: Springer.
- Dreher, A.; Gaston, N. and Martens, P. (2012), "KOF Index of Globalization." http://globalization.kof.ethz.ch/static/pdf/rankings_2012.pdf.
- ___ (2012), "KOF Index of Globalization.." http://globalization.kof.ethz.ch/static/pdf/rankings_2012.pdf.
- Duncan, C. P. and Nelson, J. E. (1985), "Effects of Humor in a Radio Advertising Experiment," in: *Journal of Advertising*, Vol. 14, 2, 33-64.
- Elinder, E. (1965), "How International Can European Advertising Be?," in: *The Journal of Marketing*, Vol. 29, 2, 7-11.
- Fastoso, F. and Whitelock, J. (2010), "Regionalization Vs Globalization in Advertising Research: Insights from Five Decades of Academic Study," in: *Journal of International Management*, Vol. 16, 1, 32-42.
- Ford, J. B.; Mueller, B. and Taylor, C. R. (2011), "The Tension between Strategy and Execution: Challenges for International Advertising Research," in: *Journal of Advertising Research*, Vol. 51, Mar2011 Supplement, 27-44.
- Forehand, M. R.; Deshpandé, R. and Reed II, A. (2002), "Identity Salience and the Influence of Differential Activation of the Social Self-Schema on Advertising Response," in: *Journal of Applied Psychology*, Vol. 87, 6, 1086.
- Hofstede, G. and McCrae, R. R. (2004), "Personality and Culture Revisited: Linking Traits and Dimensions of Culture," in: *Cross-Cultural Research*, Vol. 38, 1, 52-88.
- Holton, R. (2000), "Globalization's Cultural Consequences," in: *The Annals of the American Academy of Political and Social Science*, Vol. 570, 1, 140-152.
- Hornikx, J. and O'Keefe, D. J. (2009), "Adapting Consumer Advertising Appeals to Cultural Values," in: *Communication Yearbook* Vol. 33, 39-71.
- Hsu, J. L. and Nien, H. P. (2008), "Who Are Ethnocentric? Examining Consumer Ethnocentrism in Chinese Societies," in: *Journal of Consumer Behaviour*, Vol. 7, 6, 436-447.
- Huntington, S. P. (1993), "The Clash of Civilizations?," in: *Foreign affairs*, Vol., 22-49.
- Kellner, D. (2002), "Theorizing Globalization," in: *Sociological theory*, Vol. 20, 3, 285-305.
- Kim, H. and John, D. R. (2008), "Consumer Response to Brand Extensions: Construal Level as a Moderator of the Importance of Perceived Fit," in: *Journal of Consumer Psychology*, Vol. 18, 2, 116-126.
- Kitchen, P. J. and De Pelsmacker, P. (2004), *Integrated Marketing Communication: A Primer*. Routledge.
- Ko, E.; Kim, E.; Taylor, C. R.; Kim, K. H. and Kang, I. J. (2007), "Cross-National Market Segmentation in the Fashion Industry: A Study of European, Korean, and Us Consumers," in: *International Marketing Review*, Vol. 24, 5, 629-651.
- Koslow, S. and Costley, C. (2010), "How Consumer Heterogeneity Muddles the International Advertising Debate," in: *International Journal of Advertising*, Vol. 29, 2, 221-244.
- Kumar, P. (2005), "Brand Counterextensions: The Impact of Brand Extension Success Versus Failure," in: *Journal of Marketing Research*, Vol. 42, 2, 183-194.
- Lau-Gesk, L. G. (2003), "Activating Culture through Persuasion Appeals: An Examination of the Bicultural Consumer," in: *Journal of Consumer Psychology*, Vol. 13, 3, 301-315.

- Lavine, H. and Snyder, M. (1996), "Cognitive Processing and the Functional Matching Effect in Persuasion: The Mediating Role of Subjective Perceptions of Message Quality," in: *Journal of Experimental Social Psychology*, Vol. 32, 6, 580-604.
- Lee, A. Y.; Aaker, J. L. and Gardner, W. L. (2000), "The Pleasures and Pains of Distinct Self-Concepts: The Role of Interdependence in Regulatory Focus," in: *Journal of personality and social psychology*, Vol. 78, 6, 1122-1134.
- Lee, C.; Fernandez, N. and Martin, B. A. S. (2002), "Using Self-Referencing to Explain the Effectiveness of Ethnic Minority Models in Advertising," in: *International Journal of Advertising*, Vol. 21, 3, 367-380.
- Machida, S. (2012), "Does Globalization Render People More Ethnocentric? Globalization and People's Views on Cultures," in: *American Journal of Economics and Sociology*, Vol. 71, 2, 436-469.
- Martin, B. A. S.; Kwai-Choi, L. C. and Feng, Y. (2004), "The Influence of Ad Model Ethnicity and Self-Referencing on Attitudes: Evidence from New Zealand," in: *Journal of Advertising*, Vol. 33, 4, 27-37.
- Melewar, T. C.; Pickton, D.; Gupta, S. and Chigovanyika, T. (2009), "MNE Executive Insights into International Advertising Programme Standardisation," in: *Journal of Marketing Communications*, Vol. 15, 5, 345-365.
- Melewar, T. C. and Vemmervik, C. (2004), "International Advertising Strategy: A Review, Reassessment and Recommendation," in: *Management Decision*, Vol. 42, 7, 863-881.
- Merz, M. A.; He, Y. and Alden, D. L. (2008), "A Categorization Approach to Analyzing the Global Consumer Culture Debate," in: *International Marketing Review*, Vol. 25, 2, 166-182.
- Nijssen, E. J. and Douglas, S. P. (2011), "Consumer World-Mindedness and Attitudes toward Product Positioning in Advertising: An Examination of Global Versus Foreign Versus Local Positioning," in: *Journal of International Marketing*, Vol. 19, 3, 113-133.
- Noriega, J. and Blair, E. (2008), "Advertising to Bilinguals: Does the Language of Advertising Influence the Nature of Thoughts?," in: *Journal of Marketing*, Vol. 72, 5, 69-83.
- Ohanian, R. (1990), "Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness," in: *Journal of Advertising*, Vol. 19, 3, 39-52.
- Okazaki, S. and Mueller, B. (2007), "Cross-Cultural Advertising Research: Where We Have Been and Where We Need to Go," in: *International Marketing Review*, Vol. 24, 5, 499-518.
- Okazaki, S. and Taylor, C. R. (2013), "Social Media and International Advertising: Theoretical Challenges and Future Directions," in: *International Marketing Review*, Vol. 30, 1, 56-71.
- Özsomer, A. and Simonin, B. L. (2004), "Marketing Program Standardization: A Cross-Country Exploration," in: *International Journal of Research in Marketing*, Vol. 21, 4, 397-419.
- Papavassiliou, N. and Stathakopoulos, V. (1997), "Standardization Versus Adaptation of International Advertising Strategies: Towards a Framework," in: *European Journal of Marketing*, Vol. 31, 7, 504-527.
- Petty, R. E.; Cacioppo, J. T. and Schumann, D. W. (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," in: *Journal of Consumer Research*, Vol. 10, 2, 135-146.
- Pieterse, J. N. (2004), *Globalization or Empire?* : Routledge.
- Polyorat, K.; Alden, D. L. and Alden, D. L. (2005), "Self-Concept and Need-for-Cognition Effects on Brand Attitudes and Purchase Intentions in Response to Comparative Advertising in Thailand and the United States," in: *Journal of Advertising*, Vol. 34, 1, 37-48.
- Putrevu, S. and Lord, K. R. (1994), "Comparative and Noncomparative Advertising: Attitudinal Effects under Cognitive and Affective Involvement Conditions," in: *Journal of Advertising*, Vol. 23, 2, 77-91.

- Ritzer, G. (2004), "The "McDonaldization" of Society," in: *Journal of American Culture*, Vol. 6, 1, 100-107.
- Roth, M. S. (1995), "The Effects of Culture and Socioeconomics on the Performance of Global Brand Image Strategies," in: *Journal of Marketing Research*, Vol. 32, 2, 163-175.
- Rugman, A. M. (2003), "Regional Strategy and the Demise of Globalization," in: *Journal of International Management*, Vol. 9, 4, 409-417.
- Schilke, O.; Reimann, M. and Thomas, J. S. (2009), "When Does International Marketing Standardization Matter to Firm Performance," in: *Journal of International Marketing*, Vol. 17, 4, 24-46.
- Till, B. D. (1998), "Using Celebrity Endorsers Effectively: Lessons from Associative Learning," in: *Journal of Product & Brand Management*, Vol. 7, 5, 400-409.
- Till, B. D. and Busler, M. (2000), "The Match-up Hypothesis: Physical Attractiveness, Expertise, and the Role of Fit on Brand Attitude, Purchase Intent and Brand Beliefs," in: *Journal of Advertising*, Vol. 29, 3, 1-13.
- Vrontis, D.; Thrassou, A. and Lamprianou, I. (2009), "International Marketing Adaptation Versus Standardisation of Multinational Companies," in: *International Marketing Review*, Vol. 26, 4/5, 477-500.
- Wei, Y. and Yu, C. (2012), "How Do Reference Groups Influence Self-Brand Connections among Chinese Consumers?," in: *Journal of Advertising*, Vol. 41, 2, 39-54.
- Westjohn, S. A.; Singh, N. and Magnusson, P. (2012), "Responsiveness to Global and Local Consumer Culture Positioning: A Personality and Collective Identity Perspective," in: *Journal of International Marketing*, Vol. 20, 1, 58-73.
- Wilcox, J. S.; Ko, G.; Gentry, J. W.; Stricklin, M. and Jun, S. (1996), "Advertising Presentations of the Independent Versus Interdependent Self to Korean and Us College Students," in: *Advances in international marketing*, Vol. 7, 1, 159-175.
- Williams, P. and Drolet, A. (2005), "Age-Related Differences in Responses to Emotional Advertisements," in: *Journal of consumer research*, Vol. 32, 3, 343-354.
- Witkowski, T. (1998), "Consumer Ethnocentrism in Two Emerging Markets: Determinants and Predictive Validity," in: *Advances in Consumer Research*, Vol. 25, 1, 258-263.
- Zou, S. and Volz, Y. Z. (2010), "An Integrated Theory of Global Advertising: An Application of the GMS Theory," in: *International Journal of Advertising*, Vol. 29, 1, 57-84.

The Advertising Literacy of Primary School Aged Children

Suzanna J. Oprea
Esther Rozendaal

1 Why Study Children's Advertising Literacy?

Cohort studies have revealed that today's children are watching more television than ever before (Rideout, Foehr, & Roberts, 2010). An average child will spend two hours per day in front of the television screen (SKO, 2012). Most of this time is spent watching shows on commercial channels like Disney XD and Nickelodeon (Sikkema, 2012). The amount of advertising on commercial channels like these is restricted by law, but may still take up to 20% of the broadcasting time (Europe.eu). Hence, for each hour a child is watching television, he/she could be exposed to 12 minutes of advertising. While this is beneficial to companies trying to sell their products, many discard child-directed advertising as an unethical practice (Mayo & Nairn, 2009). Opponents of child-directed advertising claim that companies should not be allowed to target children. Their main argument is that, because children's literacy is still developing, they lack the ability to defend themselves against the persuasive appeal of advertising (Nairn & Fine, 2008).

This ethical debate has inspired many researchers to focus on children's advertising literacy (see John, 1999). Recently, Rozendaal et al. have provided a theoretical framework into the different dimensions of children's advertising literacy (Rozendaal, Lapierre, Van Reijmersdal, & Buijzen, 2011), and also introduced a practical tool to measure these (i.e., the Advertising Literacy Scale for Children, see Rozendaal, Oprea, & Buijzen, forthcoming). According to Rozendaal et al. (2011), children's advertising literacy consists of three dimensions: (1) conceptual advertising literacy (i.e., the ability to recognize and understand advertising messages), (2) attitudinal advertising literacy (i.e., having a critical attitude toward advertising), and (3) advertising literacy performance (i.e., the ability to actually use the conceptual and attitudinal advertising literacy when confronted with advertising).

The aim of this book chapter is two-folded: first, to provide insight into how children's performance on the three dimensions of advertising literacy progresses with age; second, to investigate the extent to which children's scores on the dimensions are interrelated. In order to achieve these goals, the data of Rozendaal et al. (forthcoming) have been re-analyzed. For a description of the scales used to measure the dimensions of children's advertising literacy, readers are referred to their article. The analyses in this chapter are conducted on a sample of 785 children aged 8 to 12 years old (51.7% boys; $M_{age} = 9.83$; $SD_{age} = 1.16$).

The children were divided into four groups, according to their grade level ($N_{grade3} = 143$, $M_{age} = 8.30$, $SD_{age} = 0.49$; $N_{grade4} = 222$, $M_{age} = 9.21$, $SD_{age} = 0.54$; $N_{grade5} = 224$, $M_{age} = 10.17$, $SD_{age} = 0.54$; $N_{grade6} = 196$, $M_{age} = 11.26$, $SD_{age} = 0.51$).

2 Conceptual Advertising Literacy

Children's conceptual advertising literacy refers to their recognition of advertising, understanding of selling intent, recognition of advertising's source, perception of intended audience, understanding of persuasive intent, and understanding of persuasive tactics (Rozendaal et al., 2011). In this study, the 21-item Conceptual Advertising Literacy subscale for children was used to measure children's scores on the conceptual advertising literacy dimension and its underlying six components (see Rozendaal et al., forthcoming).

Table 1: Children's Conceptual Advertising Literacy (ANOVA's; $DF1 = 3$, $DF2 = 781$)

Components	Mean	SD	F	Sig.
1. Recognition of Advertising ^a	3.73	0.25	20.15	.000
2. Understanding of selling intent	3.45	0.49	0.75	.525
3. Recognition of advertising's source	0.83	0.38	1.44	.230
4. Perception of intended audience	0.78	0.27	2.08	.101
5. Understanding of persuasive intent	3.43	0.52	.37	.775
6. Understanding of persuasive tactics	3.15	0.53	.35	.789
Overall Conceptual Advertising Literacy ^b	0.00	0.52	2.66	.047

Note. The scores on the components 1, 2, 5, and 6 vary from 1 (low) to 4 (high). The scores on the components 3 and 4 vary between 0 (low) and 1 (high). In order to compute children's overall score on conceptual advertising literacy, the scores on the subscales were standardized and averaged.

^a As suggested by Rozendaal, Buijzen, and Valkenburg (2010) this analysis is an ANCOVA, in which children's recognition of programs is included as a covariate.

Table 2: Children's Conceptual Advertising Literacy (means and SD's)

Components	Grade 3	Grade 4	Grade 5	Grade 6
1. Recognition of advertising	3.70 (.29)	3.72 (.25)	3.74 (.26)	3.76 (.23)
2. Understanding of selling intent	3.42 (.54)	3.44 (.50)	3.45 (.49)	3.49 (.45)
3. Recognition of advertising's source	0.83 (.38)	0.81 (.40)	0.80 (.40)	0.87 (.33)
4. Perception of intended audience	0.76 (.29)	0.76 (.29)	0.80 (.26)	0.81 (.23)
5. Understanding of persuasive intent	3.43 (.52)	3.45 (.53)	3.40 (.52)	3.44 (.51)
6. Understanding of persuasive tactics	3.14 (.49)	3.14 (.52)	3.14 (.50)	3.18 (.58)
Overall Conceptual Advertising Literacy	-0.06 (.60)	-0.04 (.53)	-0.01 (.50)	.08 (.48)

Table 1 shows the means and standard deviations for each of the components of conceptual advertising literacy for the entire sample. In general, these are quite high, exceeding the mid-points of the scales. Table 1 also contains the outcomes of the ANOVA's in which children's scores on the components were compared across grade levels. Significant differences were found for children's recognition of advertising and their overall level of conceptual advertising literacy. Bonferroni post-hoc comparisons indicated that for recognition of advertising children in the sixth grade scored significantly higher than those in the third and fourth grade ($M_{diff} = .10, p < .001$; $M_{diff} = .08, p < .01$), and that children in the fifth grade scored higher than those in the third grade ($M_{diff} = .07, p < .05$). Furthermore, post-hoc tests indicated that children in the sixth grade scored higher on overall conceptual advertising literacy than children in the third grade ($M_{diff} = .14, p = .082$). In Table 2, the means and standard deviations per component are presented separately for each grade level.

3 Attitudinal Advertising Literacy

Children's attitudinal advertising literacy refers to their understanding of advertising's bias, skepticism toward advertising, and disliking of advertising (Rozendaal et al., 2011). In this study, the 16-item Attitudinal Advertising Literacy subscale for children was used to measure children's scores on the attitudinal advertising literacy dimension and its underlying three components (see

Rozendaal et al., forthcoming). Table 3 shows the means and standard deviations for each of the components of attitudinal advertising literacy for the entire sample. As the table shows, children's scores on the separate components of attitudinal advertising literacy are only slightly higher than the mid-points of the scales. Table 3 also includes the outcomes of the ANOVA's in which children's scores on the components were compared across grade levels. It can be derived that children's understanding of advertising's bias, skepticism toward advertising, disliking of advertising, and overall attitudinal advertising literacy varied across the grade levels.

Bonferroni post-hoc comparisons indicated that children in the sixth grade had higher understanding of advertising's bias than children in the third grade ($M_{diff} = .16, p = .002$) and fourth grade ($M_{diff} = .14, p = .002$); that children in the sixth grade had higher skepticism toward advertising than children in the third grade ($M_{diff} = .24, p = .000$) and fourth grade ($M_{diff} = .22, p = .000$); children in the sixth grade had higher disliking of advertising than children in the third grade ($M_{diff} = .19, p = .002$) and fourth grade ($M_{diff} = .17, p = .002$); and, finally, that children in the sixth grade scored higher on overall attitudinal advertising literacy than children in the third grade ($M_{diff} = .43, p = .000$), fourth grade ($M_{diff} = .38, p = .000$), and fifth grade ($M_{diff} = .22, p = .024$), and that children in the fifth grade scored higher on overall attitudinal advertising literacy than children in the third grade ($M_{diff} = .21, p = .094$). The exact means and standard deviations on the different components of attitudinal advertising literacy are presented per grade in Table 4.

Table 3: Children's Attitudinal Advertising Literacy (ANOVA's; $DF1 = 3, DF2 = 781$)

Components	Mean	SD	F	Sig.
1. Understanding of advertising's bias	2.40	0.41	5.89	.001
2. Skepticism toward advertising	2.66	0.48	10.05	.000
3. Disliking of advertising	2.82	0.47	6.10	.000
Overall Attitudinal Advertising Literacy	0.00	0.81	11.09	.000

Note. The scores on the components 1, 2, and 3 vary from 1 (low) to 4 (high). In order to compute children's overall score on attitudinal advertising literacy, the scores on the subscales were standardized and averaged.

Table 4: Children's Attitudinal Advertising Literacy (means and SD's)

Components	Grade 3	Grade 4	Grade 5	Grade 6
1. Understanding of advertising's bias	2.33 (.39)	2.35 (.41)	2.41 (.40)	2.49 (.41)
2. Skepticism toward advertising	2.55 (.47)	2.58 (.53)	2.68 (.43)	2.79 (.45)
3. Disliking of advertising	2.75 (.48)	2.77 (.47)	2.82 (.46)	2.94 (.45)
Overall Attitudinal Advertising Literacy	-0.18 (.81)	-0.13 (.84)	0.03 (.74)	0.25 (.79)

4 Advertising Literacy Performance

According to Rozendaal et al. (2011), advertising literacy performance refers to children's ability to actually use their conceptual and attitudinal advertising literacy when confronted with advertising. One way to operationalize children's advertising literacy performance would be their use of resistance strategies. Resistance strategies are strategies that people can use to defend against persuasion attempts, such as advertising (Zuwerink Jacks & Cameron, 2003). Previous research shows there are seven strategies to resist persuasion: (1) selective exposure (i.e., paying no attention to advertisements), (2) counter arguing (i.e., rebutting the arguments in advertisements), (3) attitude bolstering (i.e., generating thoughts that are consistent with one's own attitude), (4) negative affect (i.e., getting irritated or angry), (5) assertions of confidence (i.e., asserting that the advertisement could never change one's opinion), (6) source derogation (i.e., dismissing the validity of the source of the advertisement), and (7) social validation (i.e., bringing to mind important others who share one's original attitude; Zuwerink Jacks & Cameron, 2003). In the current research, each strategy was measured with two items (see Rozendaal et al., forthcoming).

Table 5: Children's advertising literacy performance (ANOVA's; $DF1 = 3$, $DF2 = 781$)

Strategies	Mean	SD	F	Sig.
1. Selective exposure	2.30	0.68	14.93	.000
2. Counter arguing	2.00	0.60	11.20	.000
3. Attitude bolstering	2.08	0.59	3.37	.018
4. Negative affect	2.53	0.71	10.74	.000
5. Assertions of confidence	1.92	0.77	7.10	.000
6. Source derogation	1.47	0.57	1.82	.143
7. Social validation	1.52	0.56	1.05	.371
Overall Advertising Literacy Performance	0.00	0.66	11.57	.000

Note. The scores on the strategies vary from 1 (low) to 4 (high). In order to compute children's overall score on resistance strategies, the scores on the subscales were standardized and averaged.

From the means presented in Table 5, it may be derived that, generally speaking, children did not frequently apply resistance strategies. With the exception of negative affect, all means are below the mid-points of the scales. However, the ANOVA's in Table 5 indicate that children's selective exposure, counter arguing, attitude bolstering, negative effect, assertions of confidence, and overall advertising literacy performance differed across the grade levels. A series of Bonferroni post-hoc comparisons was conducted in order to determine which group scores were significantly different from each other.

With the post-hoc tests it was found that for selective exposure, children in the sixth grade scored higher than those in the third grade ($M_{diff} = .41, p = .000$), fourth grade ($M_{diff} = .38, p = .000$), and fifth grade ($M_{diff} = .19, p = .018$), and that children in the fifth grade scored higher than those in the third grade ($M_{diff} = .21, p = .017$) and fourth grade ($M_{diff} = .18, p = .025$). For counter arguing it was found that children in the sixth grade scored higher than those in the third grade ($M_{diff} = .35, p = .000$) and fourth grade ($M_{diff} = .19, p = .004$), and that children in the fifth grade scored higher than those in the third grade ($M_{diff} = .27, p = .000$). For attitude bolstering children in the fifth grade scored higher than children in the third grade ($M_{diff} = .19, p = .018$). For negative affect, children in the sixth grade scored higher than those in the third grade ($M_{diff} = .32, p = .000$) and fourth grade ($M_{diff} = .31, p = .004$), and children in the fifth grade scored higher than children in the third grade ($M_{diff} = .26, p = .004$) and fourth grade ($M_{diff} = .25, p = .001$).

Table 6: Children's advertising literacy performance (means and SD's)

Strategies	Grade 3	Grade 4	Grade 5	Grade 6
Selective exposure	2.13 (.66)	2.16 (.63)	2.34 (.66)	2.54 (.72)
Counter arguing	1.79 (.62)	1.94 (.62)	2.07 (.56)	2.14 (.57)
Attitude bolstering	1.99 (.64)	2.06 (.55)	2.18 (.64)	2.06 (.54)
Negative affect	2.37 (.68)	2.38 (.69)	2.63 (.68)	2.69 (.74)
Assertions of confidence	1.72 (.78)	1.86 (.72)	1.98 (.76)	2.08 (.77)
Source derogation	1.39 (.58)	1.47 (.59)	1.48 (.54)	1.53 (.56)
Social validation	1.46 (.58)	1.54 (.57)	1.51 (.54)	1.56 (.56)
Overall Advertising Literacy Performance	-0.21 (.70)	-0.08 (.68)	0.08 (.59)	0.16 (.64)

For assertions of confidence, children in the sixth grade scored higher than those in the third grade ($M_{diff} = .36, p = .000$) and fourth grade ($M_{diff} = .22, p = .017$), and children in the fifth grade scored higher than those in the third grade ($M_{diff} = .25, p = .012$). Finally, children in the sixth grade scored higher on overall advertising literacy performance than those in the third grade ($M_{diff} = .38, p = .000$) and fourth grade ($M_{diff} = .25, p = .001$), and children in the fifth grade scored higher than those in the third grade ($M_{diff} = .29, p = .000$) and fourth grade ($M_{diff} = .16, p = .057$). In Table 6 the means and standard deviations for each of the resistance strategies underlying children's advertising literacy performance.

5 Linking Conceptual Advertising Literacy, Attitudinal Advertising Literacy, and Advertising Literacy Performance

It is generally believed that children with higher conceptual and attitudinal advertising literacy will score higher on advertising literacy performance (Rozendaal et al., 2011). However, the results in Table 7 contradict this thought. Looking at the total sample of children, no correlation between children's conceptual advertising literacy and advertising literacy performance was found. Still, a moderate correlation was found between children's attitudinal advertising literacy and advertising literacy performance: the higher children's attitudinal advertising literacy, the greater the likelihood that they will engage in one or more resistance strategies when confronted with advertising.

Analyzing the data per grade level yields similar results: No correlations were found between children's conceptual and attitudinal advertising literacy ($r_{grade3} = .09, r_{grade4} = -.05, r_{grade5} = -.10, \text{ and } r_{grade6} = -.05$), or between children's conceptual advertising literacy and their advertising literacy performance ($r_{grade3} = -.09, r_{grade4} = -.03, r_{grade5} = -.10, \text{ and } r_{grade6} = -.01$). However, no matter which grade they are in, children's attitudinal advertising literacy is positively related to their advertising literacy performance ($r_{grade3} = .30, r_{grade4} = .45, r_{grade5} = .39, \text{ and } r_{grade6} = .34$).

In addition to the previous analysis, Table 8 provides the correlations between the different components of children's conceptual advertising literacy and attitudinal advertising literacy on the one hand and children's advertising literacy performance on the other hand. The only components of children's conceptual advertising literacy that are related to their advertising literacy performance are their understanding of advertising's selling and persuasive intent. Although the relation is weak ($r \leq .11$), children who understand that advertising aims to sell and persuade, are more likely to engage in counter arguing, attitude bolstering, and negative affect. Remarkably, a few negative correlations were found between children's conceptual advertising literacy and their advertising literacy performance. Finally, all components of children's attitudinal advertising literacy are positively related to their advertising literacy performance.

Table 7: Correlations between conceptual advertising literacy, attitudinal advertising literacy, and advertising literacy performance

	Conceptual Advertising Literacy	Attitudinal Advertising Literacy	Advertising Literacy Performance
CAL	-		
AAL	-.01	-	
ALP	-.04	.40***	-

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8: Linking children's conceptual and attitudinal advertising literacy with advertising literacy performance

	Selective exposure	Counter arguing	Attitude bolstering	Negative affect	Assertions of confidence	Source derogation	Social validation
Recognition of advertising	.05	.00	.02	.06	.03	-.07	-.06
Understanding of selling intent	.03	.07*	.11**	.09*	.01	-.04	-.07*
Recognition of advertising's source	.06	.00	.01	.03	.03	-.03	-.06
Perception of intended audience	.01	-.02	-.05	.00	-.04	-.07*	-.13***
Understanding of persuasive intent	-.01	.04	.13***	-.02	.00	-.06	-.06
Understanding of persuasive tactics	-.04	-.03	-.08*	-.10**	-.07	-.11**	-.10**
Understanding of advertising's bias	.22***	.29***	.01	.28***	.15***	.26***	.08*
Skepticism toward advertising	.29***	.41***	.09*	.37***	.22***	.29***	.03
Disliking of advertising	.41***	.24***	-.03	.58***	.19***	.18***	-.02

* $p < .05$. ** $p < .01$. *** $p < .001$.

6 Discussion

The first aim of the study presented in this book chapter was to provide insight into how children's levels of conceptual advertising literacy, attitudinal advertising literacy, and advertising literacy performance progress with age. The results of the study showed that children between the ages of 8 and 12 did not differ in their level of conceptual advertising literacy, except for their recognition of advertising. Specifically, the children from grade 5 and 6 (10-12 years) were better able to differentiate commercials from programs than children from

grade 3 and 4 (8-10 years). Overall, the children scored relatively high on all six conceptual advertising literacy components, indicating that they have a fairly good recognition and understanding of television advertising. This finding corroborates with earlier research on children's conceptual advertising literacy (see John, 1999, Rozendaal et al., 2010; Rozendaal, Buijzen, & Valkenburg, 2011).

Our study also demonstrated that children's level of attitudinal advertising literacy increased significantly with age. Results showed that the children from grade 6 (11-12 years) had more critical attitudes than the younger children. Overall, the children scored moderately on all three attitudinal components, indicating that they hold moderate critical attitudes toward television advertising. This is in line with findings of earlier research (see John, 1999).

In addition, significant age differences were observed for children's level of advertising literacy performance. That is, the older children (grade 5 and 6; 10-12 years) engaged in resistance strategies more often than the younger children (grade 3 and 4; 8-10 years). Our results showed that children use a broad range of resistance strategies when confronted with advertising. The two most often used strategies were negative affect and selective exposure. However, overall the children scored relatively low on all seven performance components, indicating that they do not engage in resistance strategies when confronted with advertising that often.

The second aim of this study was to investigate the relation between the three dimensions of children's advertising literacy. The results showed that the conceptual dimension is not related to the attitudinal and performance dimension. This implies that children with higher levels of advertising recognition and understanding do not hold more critical attitudes toward advertising and do not engage in resistance strategies more often than children with lower levels of advertising recognition and understanding. This finding is in line with earlier research on the link between children's conceptual advertising literacy and their susceptibility to advertising (e.g., Nairn & Fine, 2008; Rozendaal, Buijzen, & Valkenburg, 2009; Waiguny & Terlutter, 2011). The findings also showed that the attitudinal and performance dimension do positively relate to each other, which means that children who hold more critical attitudes toward advertising more often engage in resistance strategies.

In addition to this overall pattern, we also looked at the correlations between all individual conceptual and attitudinal advertising literacy components and all individual resistance strategies. The findings demonstrated a positive relationship between all three attitudinal advertising literacy components and six out of seven resistance strategies. This once again indicates that children who hold more critical attitudes toward advertising also engage in resistance strategies more often. In addition, the findings showed that most correlations between the conceptual advertising literacy components are non-significant. Remarkably, there are a few correlations that indicate a negative relationship between certain

conceptual advertising literacy components and the use of resistance strategies. For example, children who have a better understanding of persuasive tactics, engage less in resistance strategies (i.e., attitude bolstering, negative effect, social validation and source derogation). This could be explained by the fact that children who have better persuasion knowledge, feel more like an 'advertising expert' and therefore do not feel less need to engage in resistance strategies (see also Rozendaal et al., 2009, Sagarin, Cialdini, Rice, & Serna, 2002).

In conclusion, our findings have yielded important theoretical and societal insights. The study contributes to our theoretical understanding, as relating children's conceptual and attitudinal advertising literacy to their advertising literacy performance increases our understanding of the role of advertising literacy in children's processing and susceptibility to advertising. It also contributes to the public debate about children and advertising. Insights into children's levels of children's advertising literacy are needed to inform the ongoing debate on the fairness of advertising aimed at children. In many Western societies, public and political attention is increasingly drawn toward methods of reducing children's susceptibility to advertising, including advertising educational interventions aimed at increasing children's advertising literacy. Our study suggests that advertising interventions should not only focus on the conceptual dimension of advertising literacy, but also on its attitudinal dimension. In addition, advertising interventions should focus on stimulating and facilitating children's use of resistance strategies.

7 References

- Europe.eu (2014, January 29th). "Television Broadcasting Activities: "Television without Frontiers" (TVWF) Directive," downloaded from http://europa.eu/legislation_summaries/audiovisual_and_media/l24101_en.htm
- John, D. R. (1999). "Consumer Socialization of Children: A Retrospective Look at Twenty-Five Years of Research," in: *Journal of Consumer Research*, 26, 183-213.
- Mayo, E., & Nairn, A. (2009). "Consumer Kids: How Big Business is Grooming Our Children for Profit," London, UK: Constable & Robinson Ltd.
- Nairn, A., & Fine, C. (2008) "Who's Messing with My Mind? The Implications of Dual-Process Models for Ethics of Advertising to Children," in: *International Journal of Advertising*, 27, 447-470.
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). "Generation M2: Media in the Lives of 8- to 18-Year Olds," Menlo Park, CA: Henry J. Kaiser Family Foundation.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. M. (2010). "Comparing Children's and Adults' Cognitive Advertising Competences in the Netherlands," in: *Journal of Children and Media*, 4, 77-89.
- Rozendaal, E., Lapierre, M. A., Van Reijmersdal, E. A., & Buijzen, M. (2011). "Reconsidering Advertising Literacy as a Defense Against Advertising Effects," in: *Media Psychology*, 14, 333-354.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. M. (2009). "Do Children's Cognitive Advertising Defenses Reduce Their Desire for Advertised Products?," in: *Communications*, 34, 287-303.

- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2011). "Children's Understanding of Advertisers' Persuasive Tactics," in: *International Journal of Advertising*, 30, 329-350.
- Rozendaal, E., Oprea, S. J., & Buijzen, M. (forthcoming). "Development and Validation of a Survey Instrument to Measure Children's Advertising Literacy," in: *Media Psychology*.
- Sagarin, B. J., Cialdini, R. B., Rice, W. E., & Serna, S. B. (2002). "Dispelling the Illusion of Invulnerability: The Motivations and Mechanisms of Resistance to Persuasion," in: *Journal of Personality and Social Psychology*, 83, 526-541.
- Sikkema, P. (Ed.) (2012). "Kinderen en Jongeren. Positieve Kracht," [Kids and Youth. Positive Force] Amsterdam, The Netherlands: Qrius.
- SKO (2012). "Jubileumboek 2002-2011," [Anniversary Edition 2002-2011] Amstelveen, The Netherlands: Stichting Kijk Onderzoek.
- Waiguny, M. K. J., & Terlutter, R. (2011). "Differences in Children's Processing of Advergimes and TV Commercials," in: S. Okazaki (2011) (Ed.): *Advances in Advertising Research* (Vol. 2), Wiesbaden, Germany: Springer Gabler, 35-51.
- Zuwerink Jacks, J., & Cameron, K. A. (2003). "Strategies for Resisting Persuasion," in: *Basic and Applied Social Psychology*, 25, 145-161.

To Drink More Water or Less Coke? Promoting Healthy Eating among Children Using Regulatory Fit Theory

Benjamin Ka Lun Cheng

1 Introduction

Childhood obesity has become a focus of attention for policy makers, national administrators and health care providers around the world. A recent health report by the World Health Organization found that worldwide, over 42 million children aged under five years were overweight (World Health Organization, 2013). In the US, one third of children were found to be obese or overweight (Lobstein & Jackson-Leach, 2007). In China, around a quarter of children aged 12 years were found to be overweight (Bardsley, 2011). Although the problem among European children is slightly less severe, 20% of children were nevertheless categorized as overweight or obese (van der Kruk et al., 2013).

Previous studies have suggested that obesity is more than just a physical health problem. Psychologically, overweight children are more likely to experience discrimination and stigmatization leading to negative consequences such as lower self-esteem (e.g. Wallace et al., 1993). Obesity also creates a national financial burden. It is estimated that around 25% of US health care costs are related to obesity, while in Canada, the costs attributed to obesity accounted for 12% of national health expenditure (Batrina, 2013).

The mass media have been rigorously challenged for promoting unhealthy food consumption and undesirable food-related behavior (e.g. Harris et al., 2008). The bulk of the studies adopting content analysis suggest that food with poor nutritional values dominates most food advertising air-time during children's TV programs (e.g. Kline, 2011). Exposure to these advertisements not only stimulates immediate post-viewing snack food consumption (e.g. Halford et al., 2004), but also prompt children to pester their parents to purchase the unhealthy food items that they have seen on TV (e.g. Yavas & Abdul-Gader, 1993). TV advertising of unhealthy food has been criticized for undermining parents' attempts to feed their children with healthy diets (McDermott et al., 2006).

Given the prevailing problem of childhood obesity and the significant influence of the mass media on children's food consumption, this study adopts the regulatory focus and regulatory fit theories to test the interactive effects between the individual's focus, message focus and celebrity focus on children's responses to the promotion of healthy eating. This study is an innovative attempt to apply these theories to child consumers by directly measuring their regulatory

focus and its effects on responses to advertising. The study aims to encourage health promoters to develop an effective strategy for message design.

2 Theoretical Framework

This study adopts the regulatory focus and regulatory fit theories as its theoretical framework. Both theories have been gaining prominence in consumer research for the past two decades (e.g. Aaker & Lee, 2001; Pentina & Taylor, 2013). These theories have informed scholars in advertising and persuasion on how to improve effective message design by considering and matching the regulatory focus of the audience, the nature of products and the frames of persuasive messages.

2.1 *Regulatory Focus Theory*

Regulatory focus theory suggests that individuals, objects and messages can be classified as either promotion- or prevention-focused. People who are promotion-focused often use the ‘ideal-self’ as their reference. They are more motivated to achieve goals, aspiration and dreams. These individuals are more attentive to information that is positively framed (e.g. doing physical exercise helps enhance body functioning), and prefer to use approach strategies to complete a task (e.g. to gain more points in a course assessment). Promotion-focused individuals are more hedonistic, more ready to take risks and more impulsive. Individuals who are prevention-focused often use the ‘ought-self’ as their reference. They are more motivated to fulfil duties, obligations and responsibilities. These individuals are more attentive to information that is negatively framed (e.g. not doing sufficient physical exercise will weaken body functioning), and prefer to use avoidance strategies to complete a task (e.g. completing a course assessment carefully to avoid losing points). Prevention-focused individuals are more pragmatic, more risk-averse and have better self-control.

2.2 *Regulatory Fit Theory*

Regulatory fit theory is an extension of regulatory focus theory. It suggests that people are more motivated to complete a task and place higher value on objects and outcomes when they adopt strategies that fit their regulatory focus (e.g. Idson et al., 2000). People are better persuaded when they are exposed to regulatory fit messages (e.g. Pentina & Taylor, 2013). Followers also feel they are valued when leaders exhibit behavior that fits their followers’ regulatory focus (e.g. Hamstra et al., 2014).

Regulatory fit theory underpins the majority of studies that inform effective and persuasive message design by manipulating the message frame of a campaign. Aaker and Lee (2001) found that promotion-focused individuals were

more effectively persuaded by a gain-frame message, i.e. a promotion-focused message, to promote a brand of grape juice (e.g. highlighting the benefits of energy supply and immunity strengthening). Prevention-focused individuals, in contrast, were better persuaded by a non-loss-frame message, i.e. a prevention-focused message, to promote the same brand of product (e.g. emphasizing the benefits of antioxidants and preventing cardiovascular disease). A money-saving benefit (a prevention-focused message) to promote Groupon was found to be more persuasive among prevention-focused individuals, whereas a value-adding benefit (a promotion-focused message) was perceived to be more persuasive among promotion-focused individuals (Pentina & Taylor, 2013).

The theory has also been applied to studying social communication campaigns. In an experiment that tested the effectiveness of an anti-smoking campaign, greater motivation for anti-smoking behavior was generated in a regulatory fit condition (Zhao & Pechmann, 2007). Promotion-focused individuals displayed greater motivation when they were exposed to a gain-frame message (e.g. gaining more friends by remaining smoke-free) whereas the reverse trend was observed among prevention-focused individuals (e.g. annoying others by smoking). Nan (2012) found that promotion-focused young adults were more motivated to take the HPV vaccine when they were exposed to a gain-framed message (e.g. ‘by getting the HPV vaccine, you may make it less likely for you to develop genital warts and/or cervical cancer’), whereas prevention-focused young adults were more motivated when they were exposed to a loss-framed message (e.g. ‘by not getting the HPV vaccine, you may make it more likely for you to develop genital warts and/or cervical cancer’).

These studies generally support the notion of the regulatory fit theory that a fit condition generates better persuasive outcomes. Previous studies that have adopted regulatory fit theory have generally classified individuals, messages, and objects into two regulatory focuses. This study makes an innovative contribution by classifying celebrity endorsers of a campaign as either promotion- or prevention-focused (celebrity focus) and testing the interactive effects between celebrity focus, the regulatory focus of children (individual’s focus) and the message frame (message focus) on children’s responses to the promotion of healthy eating.

3 Hypotheses

As described above, this study aimed to test the interactive effects between the regulatory focus of children (individual’s focus), message frame (message focus) and the image of celebrity endorsers (celebrity focus) on children’s responses to the promotion of healthy eating. This section overviews the key variables and presents the hypotheses informed by the regulatory focus and regulatory fit theories.

3.1 Independent Variables

The first independent variable is children's individual's focus. Previous studies using regulatory focus and regulatory fit theories exclusively targeted young adults such as undergraduate students and adolescents aged 15 years or above (e.g. Zhao & Pechmann, 2007) or working people (e.g. Sue-Chan et al., 2012). This study investigated the regulatory focus of children using a well-established measurement instrument developed by Lockwood et al. (2002). The children were classified as either promotion- or prevention-focused.

The second independent variable is celebrity focus. This study proposes that celebrity endorsers can be classified as either promotion- or prevention-focused, depending on their public image. Some celebrities may be perceived as more fun loving, spontaneous and hedonistic. These celebrities may project an image of being vigorous, lively, outgoing and mischievous. These images and personalities are consistent with the characteristics of promotion focus. Other celebrities may be perceived as deliberate, steady and dependable and may project an image of being staid and giving others a sense of security. These traits are consistent with the characteristics of prevention focus.

The third independent variable is message focus. As previously reviewed, the regulatory focus of a message can be manipulated by altering the frame of the message. In the context of healthy eating promotion, a message can be presented in a gain-frame (e.g. consuming a variety of fruit helps to strengthen the immune system) or a non-loss frame (e.g. not eating too much food with a high fat content helps to maintain a desirable body weight). This study adopted this approach to manipulate the message focus.

3.2 Dependent Variables

Previous studies have suggested that in regulatory fit conditions, people remember informative data better (see Higgins, 1998 for a review), associate more positive feelings with a job (Idson et al., 2000), display more interest in a product (Werth & Förster, 2007), are convinced more effectively (e.g. Asker & Lee, 2001) and are more motivated to adopt behavior consistent with an advocated position (e.g. Zhao & Pechmann, 2007). Building on these results, this study tested the effects of regulatory fit on children's cognitive and affective responses to an advertisement, and their behavioral intent to take action in line with the advocated position on healthy eating. 'Cognitive response' refers to the evaluation of an advertisement in terms of its perceived usefulness, whether it is worth remembering and how easily it is forgotten. 'Affective response' refers to an individual's subjective feelings about an advertisement, such as how much he or she likes it, is interested in it and has good feelings about it. In this study, these variables were measured by modelling after the study by Chan (1996), which investigated viewers' attitudes towards advertising. 'Behavioral intent' refers to

the motivation of a person to take action towards an advocated position after being exposed to an advertising message. Based on the regulatory fit theory, the following hypotheses are proposed.

H1-3: A regulatory fit between (1) the individual's focus and the message focus, (2) the individual's focus and the celebrity focus and (3) the celebrity focus and the message focus will generate: (a) better cognitive response, (b) better affective response and (c) higher behavioral intent to adopt healthy eating than a non-fit condition.

H4: Cognitive and affective responses and behavioral intent to adopt healthy eating are expected to be best when the individual's focus, message focus and celebrity focus function synergistically (i.e. there is a three-way interaction effect).

4 Methodology

To test the hypotheses, a 2 (individual's focus) x 2 (message focus) x 2 (celebrity focus) factorial experiment was conducted. Prior to the main study, two focus groups, a screening test and a pilot study were conducted.

4.1 Stimuli

Eight versions of print advertisements (gender of celebrity x celebrity focus x message focus) were produced and adopted as the stimuli for the experiment. The four celebrities (promotion-focused male, prevention-focused male, promotion-focused female and prevention-focused female) were selected after two focus groups and a screening test. Fifteen focus group participants aged 13-15 were asked to suggest Hong Kong local celebrities whom they regarded as either 'vigorous and lively' (promotion-focused) or 'steady and staid' (prevention-focused). The names of 39 celebrities were suggested. Of the celebrities, 12 were selected for the screening. In the screening, 88 participants aged 11-15 years recruited from two churches and one junior high school were asked to rate each of the 12 celebrities on a 5-point semantic differential scale according to the perceived image of the celebrities (1=steady and staid; 5=vigorous and lively). The male and female celebrities who scored the lowest were selected to represent prevention focus (male: Chilam Cheung, $M=2.18$; female: Fala Chan, $M=2.17$), whereas the male and female celebrities who scored the highest were chosen to represent promotion focus (male: Sammy Leung, $M=4.40$; female: Kandy Wong, $M=4.19$). These celebrities were featured in the print advertisement to advocate either a promotion-focused message or a prevention-focused message.

To identify messages that represented the two regulatory focuses, and to ensure ecological validity, a search was conducted on the official website of the

Health Department of the Hong Kong government. This unit is responsible for health promotion in Hong Kong, including a series of healthy eating promotions among schools. Promotion-focused messages such as ‘eat more fruits and vegetables’, ‘drink more water and juice’ and ‘diversify food choices’ were identified and adopted. These messages represented the ‘approach’ promotion focus. The message ‘you will strengthen your health and achieve a desirable body weight’ was also included as the ‘gain’ of a desirable outcome. To make the poster stimulus complete, a headline ‘Three dos in healthy eating’ was added.

For prevention focus, messages including ‘don’t take excessive salt and sugar’, ‘don’t eat excessive fried food’ and ‘don’t practice picky eating’ or ‘don’t over eat’ were identified as the ‘avoidance’ strategic inclination. The message ‘you will avoid becoming ill and avoid being overweight’ was included as ‘non-loss’ of the desirable outcome. A headline ‘Three don’ts in healthy eating’ was added. All of the messages were presented in Chinese as the first language of the target respondents.

4.2 Instrument of Measurement

The experiment was administered through a set of questionnaires. The first part of the questionnaire consisted of 18 items that measured the regulatory focus of the participants (5-point Likert scale, 1=do not agree at all; 5=agree very much). These items were adopted from the study of Lockwood et al. (2002). Nine of the items measured promotion focus (e.g. ‘I often think about the person I would ideally like to be in the future’) and the other nine measured prevention focus (e.g. ‘I frequently think about how I can prevent failures in my life’). These items were created in English and translated into Chinese. The terms were then back-translated into English by the researcher and a research student. The Chinese version was adopted as Chinese was the first language of the child participants.

After responding to the 18 items, the participants were randomly exposed to one of the eight versions of the print advertisement. The participants were then asked to rate the items in the exposed print advertisement to measure the dependent variables. All of the items were measured on 5-point Likert scales (1=totally disagree; 5=totally agree). Five items (e.g., ‘The ad is useful to me’) measured participants’ cognitive responses and three items (e.g., ‘I feel good about this ad’) measured their affective responses. The item ‘I will follow the suggestion of the ad to adopt healthy eating in the coming three weeks’ was included to measure behavioral intent. As a manipulation check, participants were asked to evaluate the perceived image of the celebrity to whom they were exposed on a semantic differential scale (1=steady and staid; 5=vigorous and lively). Demographic data including gender, age and year of study were collected in the final part of the questionnaire.

5 Results

5.1 Sample Profile and Manipulation Check

Seven hundred and eighteen children aged 11-17 were recruited from two secondary schools in Hong Kong. There was an almost even distribution of girls and boys. All of the multi-item measurements were found to be reliable ($\alpha=.72-.84$). The data associated with the same-focused celebrities of the two genders were combined to form one factor (celebrity focus). For the manipulation check, the result of an independent samples t-test showed that the promotion-focused celebrities ($M=4.0$, $SD=0.95$) were rated significantly higher than the prevention-focused celebrities ($M=2.5$, $SD=0.95$, $t=21.8$, $p<.001$). The manipulation was found to be valid.

5.2 Hypotheses Testing

Hypotheses 1-3 predicted that the regulatory fit condition between (1) the individual's focus and the message focus (2) between the individual's focus and the celebrity focus and (3) between the celebrity focus and the message focus would generate (a) a better cognitive response, (b) a better affective response and (c) a higher behavioral intent to adopt healthy eating than in a non-fit condition. To test these hypotheses, two-way analyses of variance (ANOVAs) were performed. There were no significant interaction effects between the individual's focus and the message focus, between the individual's focus and the celebrity focus or between the celebrity focus and the message focus for each of the dependent variables ($p>.05$). Therefore, H1-3 were rejected.

Hypothesis 4 predicted that cognitive and affective responses and behavioral intent to adopt healthy eating would be highest when the individual's focus, message focus and celebrity focus functioned synergistically (i.e. a three-way interaction effect). To test this hypothesis, a three-way ANOVA was conducted. No significant interaction effects were found for any of the dependent variables ($p>.05$). H4 was rejected.

Given the rejection of all of the proposed hypotheses, and also because this was one of the few studies to apply the regulatory fit theory to studying child consumers as a group, it was worth testing the effects of other factors. Previous studies have found that the gender of the celebrity and of the young consumer affected young consumers' self-identification and social comparison processes (e.g. Chan, 2010). It is therefore possible that the young participants in the experiment may have reacted to the celebrities' gender rather than to their focus (operationalized as image). Therefore, the data for the two celebrities with the same gender were combined to form a new factor, 'celebrity gender'.

A two-way ANOVA was used to test the effects of individual's focus and celebrity gender on the dependent variables. There was a significant interaction effect for cognitive response ($F=7.2$, $p<.01$, $\eta^2=.01$) but not for affective response ($p=.17$) or behavioral intent ($p=.13$). Although the effect size was rather small, the result shows that promotion-focused participants gave better cognitive responses to advertisements that featured a male celebrity ($M=3.0$, $SD=0.8$) than to advertisements that featured a female celebrity ($M=2.8$, $SD=0.9$). The reverse was true among prevention-focused children, who gave a better cognitive response to advertisements that featured a female celebrity ($M=2.9$, $SD=0.8$) than to advertisements that featured a male celebrity ($M=2.8$, $SD=0.7$) (see Table 1). Planned contrasts revealed that the mean difference in cognitive responses to male and female celebrities was non-significant among the promotion-focused participants ($t=1.65$, $p=.09$), whereas it was significant among the prevention-focused participants ($t=-2.18$, $p=.03$).

Specifically, the results of the two-way ANOVA showed that the participants found the advert more worth remembering ($F=4.2$, $p<.05$, $\eta^2=.006$), more effective ($F=8.2$, $p<.01$, $\eta^2=.01$) and more useful ($F=7.5$, $p<.01$, $\eta^2=.01$) in these conditions.

Table 1: Mean value of the cognitive response, affective response and behavioral intent depending on the gender of the celebrity and the individual's focus (n=682)

	<u>Promotion-</u> <u>focused</u> <u>individuals</u>		<u>Prevention-</u> <u>focused</u> <u>individuals</u>		p-value for the interac- tion effect
	Male n=169	Female n=167	Male n=185	Female n=161	
Gender of celebrity					
Cognitive response	3.0 (0.8)	2.8 (0.9)	2.8 (0.7)	2.9 (0.8)	0.007**
Affective response	2.8 (0.9)	2.9 (0.9)	2.7 (0.8)	3.0 (0.9)	0.17
Behavioral intent	2.8 (1.0)	2.7 (1.1)	2.6 (1.0)	2.7 (1.0)	0.13

* $p < .05$; ** $p < .01$ (standard deviations in parentheses)

A two-way ANOVA was used to test the effects of celebrity gender and message focus. There was a significant interaction effect between the factors for cognitive response ($F=4.2$, $p<.05$, $\eta^2=.006$) but not for affective response ($p=.20$) or behavioral intent ($p=.12$). Although the effect size was rather small, the results show that a promotion-focused message endorsed by a female celebrity elicited a better cognitive response ($M=2.9$, $SD=0.9$) than that endorsed by a male celebrity ($M=2.8$, $SD=0.9$). A prevention-focused message endorsed by a

male celebrity elicited a better cognitive response ($M=2.9$, $SD=0.8$) than a message endorsed by a female celebrity ($M=2.8$, $SD=0.7$) (see Table 2). Planned contrasts revealed that although the interaction was significant, the mean difference in cognitive responses between male and female celebrities failed to reach a conventional level of significance in both message conditions. In these positive conditions, specifically, participants found the advertisement more worth remembering ($F=4.1$, $p<.05$, $\eta^2=.006$) and less easy to forget ($F=5.0$, $p<.05$, $\eta^2=.007$).

A three-way ANOVA was used to test the interaction effects of the three factors (celebrity gender, the individual's focus and the message focus) on the dependent variables. No interaction effects were found for cognitive response ($p=.57$), affective response ($p=.72$) or behavioral intent ($p=.10$).

Table 2: Mean value of the cognitive response, affective response and behavioral intent depending on the message focus and the gender of the celebrity (n=712)

	<u>Promotion-focused</u> <u>messages</u>		<u>Prevention-focused</u> <u>messages</u>		p-value for the interac- tion effect
	Male n=185	Female n=171	Male n=187	Female n=169	
Gender of the celebri- ty					
Cognitive response	2.8 (0.8)	2.9 (0.9)	2.9 (0.8)	2.8 (0.7)	0.04*
Affective response	2.7 (0.9)	2.9 (0.9)	2.8 (0.8)	2.8 (0.8)	0.20
Behaviour al intent	2.7 (1.0)	2.8 (1.1)	2.6 (1.0)	2.6 (1.0)	0.12

* $p < .05$; ** $p < .01$ (standard deviations in parentheses)

6 Discussion

Although none of the proposed hypothesis was confirmed in this study, a surprising result was the presence of interaction effects between the individual's focus and the gender of the celebrity. Promotion-focused children found an advertisement more worth remembering, effective and useful when it featured male celebrities; the reverse was true among prevention-focused children. This finding supports regulatory fit theory, which hypothesizes that males are more likely to be promotion-focused because they assume roles that emphasize success, achievement and dominance. Conversely, females are more likely to be prevention-focused as they assume roles that emphasize harmony and interpersonal relationships. These gender-focused associations were evident in this study, and in a previous study by McKay-Nesbitt et al. (in press). The children

felt right when they were exposed to celebrities whose focus was consistent with their own. This 'feeling-right' emotion is then used as a basis for judgment, thus increasing the perceived persuasiveness and value of the advertisement (Cesario et al., 2004).

This study also found that the gender of the celebrity and the focus of the message interacted to create an effect on the children's responses. A prevention-focused message that was endorsed by a male celebrity yielded better cognitive responses among children than a message endorsed by a female celebrity. A promotion-focused message endorsed by a female celebrity also yielded better cognitive responses among children than a message endorsed by a male celebrity. In these positive conditions, the respondents found that advertisements were more worth remembering and less easy to forget.

These results do not seem to support regulatory fit theory. If males are more promotion-focused, there should be a stronger effect when they endorse promotion-focused messages. Females, in contrast, should create better response when endorsing prevention-focused messages. However, the opposite effect was observed in this study. Such surprising results can probably be explained by the parents' adoption of different disciplinary styles toward their children. Burleson (1983) conceptualized *induction* and *power assertion* as two disciplinary styles. Parents who use an inductive style coach their children by providing rationales and consequences to support their claims for the correction of misbehavior. These parents set limits by eliciting ideas from the children and provide logical explanations and consequences. Power assertion, in contrast, is a style that focuses on coercion and punishment. Parents adopting this style enforce physical punishment, threats and directives to discipline their children. The inductive style is arguably promotion-focused, as it involves the elicitation of children's ideas to set behavioral limits that may prompt the children to be more individualistic and self-focused, which are characteristics consistent with promotion focus. Power assertion, however, can be argued to be a prevention-focused strategy. Higgins and Silberman (1998) suggested that parents who emphasize punishment socialize their children into prevention focus. Previous studies have shown that a father is more likely to adopt a power assertion style whereas a mother will adopt an inductive style (e.g. Hart & Robinson, 1994).

In this study, the advertisements were created to promote healthy eating, and this may be deemed to be a kind of teaching to encourage a desirable lifestyle among children. A male endorsing a prevention-focused message and a female endorsing a promotion-focused message were perceived as the most effective. The children may have found this endorsement more consistent with their daily lives as they are used to their fathers using power assertion (i.e. a prevention-focused strategy) and mothers using an inductive style (i.e. a promotion-focused strategy) to draw boundaries for their lives. This may also explain why the ef-

facts were observed in relation to cognitive responses but not affective responses: teaching and discipline do not tend to elicit positive feelings among children.

7 Social Implications

This study shows that regulatory focus can be used as a psychographic variable for market segmentation in relation to children. Marketers seem to assume that children are a homogeneous group of consumers and often view them as a mass audience (see Panwar & Agnihotri, 2006). This study provides insight for marketers, who could adopt a regulatory focus as a psychological factor in children's market segmentation. This responds to the call from researchers to use more sophisticated variables to segment the young consumer market (e.g. Chan & Ng, 2012).

Campaign planners can also gain insights from these results into the effective use of celebrity endorsers in various marketing situations. Communicators may not always be informed about the regulatory focus of the children they are targeting. In some situations they make use of the media to target a broad audience without fine segmentation. In these cases, the campaign planners could feature a male celebrity to advocate a prevention-focused message or a female celebrity to endorse a promotion-focused message to generate a better cognitive response. Specifically, the audience should find the advertising message more worthwhile to remember and less easy to forget. Campaign planners could use celebrity popularity to draw the attention of the audience and establish healthy lifestyles among children when the featured celebrity is in accordance with the message focus.

In some other marketing situations, the communicators are well informed about their target's regulatory focus. In this case, they could feature a celebrity with the gender that corresponds to the children's focus. The children will perceive an advertisement as more worth remembering, more effective and more useful when it features a celebrity of the same gender.

8 Conclusion

Childhood obesity is an alarming global challenge facing various stakeholders and health promoters around the world. The majority of studies suggest that children should establish healthy eating habits while they are young. Because the mass media have been rigorously criticized for promoting unhealthy food preferences and eating practices, health promoters should use them as a platform to convey effective messages to positively influence children's food choices and consumption. This study presents insights into message design. It finds that matching a celebrity's gender with the message frame and matching the gender of the celebrity with the children's regulatory focus can create a better cognitive response to an advertisement that is targeted at children. With the effective use

of such a strategy and other media campaigning, together with parental support (Raiha et al., 2006) and school intervention (Story et al., 2006), a healthy lifestyle can be established among children that will result in improved health and wellness in the later stages of their lives.

9 References

- Aaker, J.L. and A.Y. Lee. (2001). “‘I’ Seek Pleasure and ‘We’ Avoid Pains: The Role of Self-Regulatory Goals in Information Processing and Persuasion’, in *Journal of Consumer Research*, Vol. 28, 33-49.
- Bardsley, D. (2011). “Childhood Obesity on the Rise in China,” retrieved online at <http://www.thenational.ae/news/world/childhood-obesity-on-the-rise-in-china>, 24 January, 2014.
- Batrina, J. A. (2013). “Public Health and the Prevention of Obesity: Failure or Success?,” in *Nutrition Hospitalaria*, Vol. 28, 128-137.
- Burleson, B.R. (1983). “Interactional Antecedents of Social Reasoning Development: Interpreting the Effects of Parent Discipline on Children,” in Zarefsky, D., Sillars, M.O. and Rhodes, J.R. (1983) (Eds.), *Argument in Transition: Proceedings of the Third Summer Conference on Argumentation*, Speech Communication Association, Annadale, 597-610.
- Cesario, J., Grant, H. and E.T. Higgins. (2004). Regulatory Fit and Persuasion: Transfer from “Feeling Right?,” in *Journal of Personality and Social Psychology*, Vol. 86, 388-404.
- Chan, K. (2010). “Youth and Consumption,” The City University Press, Hong Kong.
- Chan, K., and Y.L. Ng. (2012). “Segmentation of Chinese Adolescents Girls Using Gender Roles and Ideal female Images,” in *Journal of Consumer Marketing*, Vol. 29, 521-531.
- Chan, K.K.W. (1996). “Chinese Viewers’ Perception of Informative and Emotional Advertising,” in *International Journal of Advertising*, Vol. 15, 152-166.
- Halford, J.C.G.; Gillespie, J.; Brown, V.; Pontin, E. E. and T. M. Dovey. (2004). “Effect of Television Advertisement for Foods on Food Consumption in Children”, in *Appetite*, Vol. 42, 221-225.
- Hamstra. M.R.W.; Sassenberg, K., Yperen, N.W.V. and B. Wisse. (2014). “Followers Feel Valued — When Leaders’ Regulatory Focus Makes Leaders Exhibit Behavior that Fits Followers’ Regulatory Focus,” in *Journal of Experimental Social Psychology*, Vol. 51, 34-40.
- Harris, J., Bargh, J.A. and K.D. Brownell. (2009). “The Impact of Corporate Credibility and Celebrity Credibility on Consumer Reaction to Advertisement and Brands,” in *Journal of Advertising*, Vol. 29, 43-54.
- Hart, C.H. and Robinson, C.C. (1994). “Comparative Study of Maternal and Paternal Disciplinary Strategies,” in *Psychological Reports*, Vol. 74, 495-498.
- Higgins, E.T. (1998). “Promotion and Prevention: Regulatory Focus as A Motivational Principle,” in Zanna, M.P. (1998) (Ed.), *Advances in Experimental Social Psychology*, Academic Press, San Diego.
- Higgins, E.T. and I. Silberman. (1998). “Development of Regulatory Focus: Promotion and Prevention as Ways of Living,” in Heckhausen, J. and Dwecks, C.S. (1998) (Eds.), *Motivation and Self-regulatory across the Life Span*, Cambridge University Press: New York.
- Kline, S. (2011). “Globesity, Food Marketing and Family Lifestyles,” Palgrave Macmillan, New York.
- Idson, L.C., Liberman, . and E.T. Higgins. (2000). “Distinguishing Gains from Nonlosses and Losses from Non-gains: A Regulatory Focus Perspective on Hedonic Intensity,” in *Journal of Experimental Social Psychology*, Vol. 36, 252-274.

- Lobstein, T. and R. Jackson-Leach. (2007). "Child Overweight and Obesity in the USA: Prevalence Rates According to USA Definitions," in *International Journal of Pediatric Obesity*, Vol. 2, 62-64.
- Lockwood, P., Jordan, C.H. and Kunda, Z. (2002). "Motivation by Positive or Negative Role Models: Regulatory Focus Determines Who Will Best Inspire Us," in *Journal of Personality and Social Psychology*, Vol. 83, 854-864.
- McDermott, L.; O'Sullivan, T.; Stead, M. and G. Hastings. (2006). "International Food Advertising and Pester Power and Its Effects", in *International Journal of Advertising*, Vol. 25, 513-539.
- McKay-Nesbitt, J., Bhatnagar, N. and M.C. Smith. (in press). "Regulatory Fit Effects of Gender and Marketing Message Content," in *Journal of Business Research*.
- Nan, X. (2012). "Communicating to Young Adults About HPV Vaccination: Consideration of Message Framing, Motivation, and Gender," in *Health Communication*, Vol. 27, 10-18.
- Panwar, J.S. and Agnihotri, M. (2006). "Advertising message Processing Amongst Urban Children: An Indian Experience with Special Reference to TV Advertising," in *Asia Pacific Journal of Marketing and Logistics*, Vol. 18, 303-327.
- Pentina, I. and D.G. Taylor. (2013). "Regulatory Focus and Daily-Deal Message Framing: Are We Saving or Gaining With Groupon?", in *Journal of Interactive Advertising*, Vol. 13, 67-75.
- Pollak, J. (2010). "It's Time to Eat! Using Mobile Games to Promote Healthy Eating," in *Pervasive Computing, IEEE*, Vol. 9, 21-27.
- Raiha, T., Tossavainen, K and H. Turumen. (2006). "Adolescents' Nutrition Health Issue: Opinion of Finnish Seventh-graders," in *Health Education*, Vol. 106, 114-132.
- Story M, Kaphingst K. M. and S. French. (2006). "The role of schools in obesity prevention," in *The Future of Children*, Vol. 16, 109-142.
- Sue-Chan, C., Wood, R.E. and G.P. Latham. (2012). Effect of a Coach's Regulatory Focus and an Individual's Implicit Person Theory of Individual Performance," in *Journal of Management*, Vol. 38, 809-835.
- van der Kruk, J.J.; Kortekaas, F.; Lucas, C. and H. Jager-Wittenaar. (2013). "Obesity: A Systematic Review on Parental Involvement in Long-term European Childhood Weight Control Interventions with a Nutritional Focus," in: *Obesity Reviews*, Vol. 14 (9), 745-760.
- Wallace, W. J.; Sheslow, D. and S. Hassink. (1993). "Obesity in Children: A Risk for Depression," in *Annals of the New York Academy of Sciences*, Vol. 699, 301-303.
- World Health Organization (2013). "Childhood Overweight and Obesity," retrieved online at <http://www.who.int/dietphysicalactivity/childhood/en/>, 09 January, 2014.
- Worth, L. and J. Förster. (2007). "How Regulatory Focus Influences Consumer Behavior," in *European Journal of Social Psychology*, Vol. 37, 33-51.
- Yavas, U. and A. Abdul-Gader. (1993). "Impact of TV Commercials on Saudi Children's Purchasing Behavior," in *Marketing Intelligence and Planning*, Vol. 11, 37-42.
- Zhao, G. and C. Pechmann. (2007). "The Impact of Regulatory Focus on Adolescents' Response to Antismoking Advertising Campaigns," in *Journal of Marketing Research*, Vol. 44, 671-687.

Brand Placements in Fashion TV Series

Marie-Selien Fakkert
Hilde A.M. Voorveld
Eva A. van Reijmersdal

1 Introduction

Recently Fashion TV series have gained more and more popularity among young women worldwide (Dehnart 2008; Seidman 2010). Fashion TV series are an immensely popular TV genre portraying the world of fashion and the accompanying glamorous lifestyle. Well-known examples of such series are *The Hills*, *The City* and *Gossip Girl*. The phenomenon of fashion TV series is potentially interesting for marketers. Considering that story lines are portrayed in a fashion minded environment, an exclusive platform is provided for the deliberate incorporation of brands into the editorial content of fashion TV series (i.e. brand placement; Van Reijmersdal, Neijens & Smit 2007). The increasing popularity of fashion TV series among young women provide an ideal setting for marketers to expose their brands, since young fashion-minded women might want to dress like the characters appearing in the series and therefore would like to buy similar brands and products to copy their favorite TV character.

Brands play an important role in fashion TV series, not only characters wear obviously branded clothing, but brands are integrated in the story lines as well. A plausible example of such brand integration can be found in *The City*, where one of the main characters has applied for a job at DVF (American fashion designer) and eventually starts to work at the DVF office during the series. In this case the brand is fully integrated into the plot of the series.

It is assumed that luxury goods, clothing and fashion play an important role in fashion TV series. However, academic studies have not yet focused on this TV genre. It is still unknown how many brands are actually integrated in these series, and how these brands are presented. Earlier studies call for research on the process of combining brands with actors, story lines and characters (Balasubramanian, Karrh & Patwardhan 2006). Considering this gap in literature, the current study on brand placement characteristics in fashion TV series, involving different characters and product types, would perfectly fit in. Hence, the aim of this study is to give insight in the prevalence of brand placements in fashion TV series and the characteristics of these placements.

More specifically, based on previous content analyses on brand placements (Ferraro & Avery, 2000; Smit, Van Reijmersdal & Neijens, 2009) this study focuses on four important aspects of the characteristics of brand placements in fashion TV series. Namely, to what extent the main characters of the fashion TV

series are involved in the brand placements, the length of the brand placements, the prominence of the brand placements and finally the different product types and the expensiveness of the products involved in the brand placements.

To fulfill the aim our study draws on a content analysis in which three seasons of three different fashion TV series (*The City*, *The Hills* & *Gossip Girl*) are analyzed. This design provides us with an opportunity to investigate the different characteristics of brand placements in fashion TV series. In the next sections we will expand on the definition of brand placement and on the different characteristics of brand placements appearing in fashion TV series, after which we will describe the design of our study. Finally, after reviewing the results, we will draw conclusions on the appearance of brand placements in fashion TV series.

2 Background

2.1 *Definition of Brand Placement*

In general advertisers spend large amounts of money to integrate their brands into media, especially into editorial media content (Van Reijmersdal, Neijens & Smit 2009). This phenomenon is commonly known as brand integration or product placement. According to Van Reijmersdal et al. (2009, p. 429) the following definition of brand placement can be used: “the purposeful incorporation of brands into editorial content” (Karrh 1998). In the context of our study this definition fits properly and is therefore maintained.

2.2 *Characteristics of Brand Placements in Fashion TV Series*

To provide insight into the prevalence of brand placements in fashion TV series, the following four concepts are explored: characters involved with the brand placements, the duration of the brand placement, how prominent the brands are placed in fashion TV series and finally, we investigate the product types and the expensiveness of the appearing brands. These different concepts will be further explained in the following sections.

2.2.1 Characters

The first characteristic of brand placement in fashion TV series that is central in our content analysis is the character associated with the placement. Different studies have shown that brand memory increases when an actor mentioned or showed the brands (Babin & Carder 1996; Brennan, Dubas & Babin 1999; Gupta & Lord 1998; Law & Braun 2000).

Studies about celebrity endorsement have shown that a celebrity’s credibility and attractiveness are important factors for effectiveness. The appearance of a celebrity in general has a positive effect on the brand (Dekker & Van Reijmers-

dal, 2013). This positive effect of a celebrity can be explained in terms of celebrity endorsement theory (Amos, Holmes & Strutton 2008; Lee & Thorson 2008; McCracken 1989; Till 1998; Till, Stanley & Priluck 2008). The use of celebrities to promote a certain brand came from the idea that associations with the celebrity can transfer to the products. Celebrities therefore can enhance positive feelings among consumers, which could lead to desirable affective reactions towards the brand (Amos et al. 2008; Lee & Thorson 2008; McCracken 1989; Till 1998; Till et al. 2008). The results of a study by Dekker and Van Reijmersdal (2013) concluded that greater perceived reliability and expertise of celebrities result in more convincing brand placements. Therefore, brand placement could benefit from celebrity endorsement. The fashion TV series in this study involved mainly brand placements with celebrities. Unlike brand placement in general, brand placement with celebrities in fashion TV series could lead to more effectiveness. It is therefore interesting to explore whether main characters in fashion TV series, which can be considered to be celebrities, are involved with brand placements.

2.2.2 Duration

Another characteristic of brand placement is the duration of a placement. Previous studies showed diverse results on effects of brand placements' duration. For instance, Singh et al. (2000) concluded that with respect to placement length no conclusion could be drawn because non-significant effects appeared just as often as significant effects. On the other hand, a study by Brennan et al. (1999) revealed that when a brand placement's duration increased to ten seconds, brand memory increased as well. For a longer placement, no increase in memory was shown (Brennan et al. 1999). It is plausible that a viewer had the opportunity to see the placement in ten seconds and that thereafter no additional recall can be achieved (Van Reijmersdal et al. 2009). Eventually, the effect of placement length was predicted to be negative; when a placement is too long, it is perceived as intrusive and distracting from the media experience (Hernandez, Chapa, Minor, Maldonado & Barranzuela 2004).

2.2.3 Prominence

Several studies examined the influence of prominence in brand placements. Prominence can be defined as "highly visible by virtue of size or position on the screen or its centrality towards the action in the scene" (Gupta & Lord 1998, p. 49). For instance, D'Astous and Chartier (2000) noted that audiences are more disturbed by prominent brand placements in movies than by less prominent placements. Several studies have, furthermore, shown that brand memory increased when a brand was prominently placed in the content (Babin & Carder 1996; Brennan, Dubas & Babin 1999; Gupta & Lord 1998; Law & Braun 2000).

Moreover, a study by Gupta and Lord (1998) showed that effects of program format on brand memory were moderated by prominence. Subtle brand placements scored actually worse than advertising. Nevertheless, prominent brand placements scored better on product and brand recall and equally on message recall.

Based on a literature review of earlier brand placement studies, Van Reijmersdal (2009, p. 152) summarized that “prominent brand placements affect memory more positively, but affects attitudes negatively when audiences were involved with the medium vehicle, when they like the medium vehicle, or when they become aware of a deliberate brand placement (selling attempt).” Since prominence is such an important factor influencing consumer responses to brand placements, we explore the prominence of brands placed in the fashion TV series in our content analysis.

2.2.4 Product Type and Expensiveness

Additional characteristics of brand placements are the product type of the brand in the placement and the expensiveness of that product. Earlier studies on the effects of product types focused mainly on differences between ethically charged products and neutral products (Van Reijmersdal et al. 2009). In general, people showed less concerns about placements with neutral products. These effects were moderated by sex. Men were more accepting of ethically charged products than women, though both were equally accepting brand placements with neutral products (Van Reijmersdal et al. 2009). However, it is unknown whether ethically charged products appear in brand placements in fashion TV series. It is expected that product types related to fashion, such as clothing and handbags will appear. Conducting a content analysis is therefore a necessity.

Regarding the influence of expensiveness of the product in a placement, a study by Gupta and Gould (2007) indicated that the price of placed brands positively affected brand memory. They stated that viewers were more involved with expensive products, which therefore led to better brand memory among viewers. This is an interesting aspect to measure in this study’s fashion TV series, since the characters in these series probably wear expensive high-end fashion brands.

3. Method

3.1 Sample and Procedure

For the content analysis in our study three fashion TV series were involved. The series were chosen on the basis of their many fashion aspects. The first series is MTV reality show *The Hills*. *The Hills* was aired from August 2007 until July 2010. Six seasons were aired during three years. The main characters

changed over the period of the different seasons (MTV 2011a). The careers in fashion achieved by the main characters and the high fashion outfits reflected the fashion aspect of the series. Additionally, *The Hills* is a reality series, indicating that the characters in the series were ‘real’ persons. The style and fashion sense of the characters were therefore also visible in other media outlets rather than only in the series. All episodes from the last season of *The Hills* were used as data for analysis. The last season was chosen since there is an overlap in time with the other two fashion series and this season is the most recent. The episodes are online available for streaming via a streaming website (<http://sidereel.com>).

The second fashion series is *The City*, another MTV reality series. *The City* was aired from October 2008 until July 2010 (MTV 2011b). *The City* is all about Whitney Port, the main character in this reality series. *The City* is considered to be a fashion TV series since Whitney starts her career in fashion at DVF. The data for the content analysis of *The City* was retrieved from the second and most recent season. All episodes of this season were included for this study.

The third fashion TV series involved is *Gossip Girl*. *Gossip Girl* is a teen-fiction TV series based on the novels from Cecily von Ziegesar. The series was aired from September 2009 until April 2011. The narratives in the series consider the lives of a group of wealthy teenagers who live in the Upper East Side in New York City (Toffoletti 2008). The two main characters in the series can be considered as the most important fashion aspects of the series. These two characters are seen as New York’s ‘it girls’ in the series. All episodes until the moment of analysis from the last season (season four) of *Gossip Girl* were used as data for the analysis.

As described above, the episodes of the last seasons of *The Hills*, *The City* and *Gossip Girl* were used as units of analysis for our content analysis. The content analysis is conducted in the period from April till May 2011. In sum, 30 episodes were coded. To check whether the coding sheet was sufficient and to resolve any problems with the coding, two coders coded two episodes of each fashion TV series. A coding scheme consisting out of a codebook and a coding form was developed to conduct the content analysis (Neuendorf 2002).

3.2 Coding Instrument

A coding instrument to conduct the content analysis of the fashion TV series was developed to measure characteristics of the specific brand placements and more general, the amount of brand placements. The specific placement characteristics were partly obtained from literature about brand placement in TV series (Van Reijmersdal et al. 2009). Van Reijmersdal et al. (2009) provided a literature overview on brand placement studies with their specific placement characteristics. A part of the selection of measures within this content analysis was

obtained from their brand placement overview. The different measures will now be explained.

3.2.1 Brand

This characteristic refers to the brand of the product pictured in the brand placement. If for example a character wears a clearly visible Chanel bag, Chanel is noted as the *brand* in that placement. The *brand* name is coded by the coder.

3.2.2 Character

The second measure of the placement characteristics refers to the *character* in the episode that is using or wearing the brand in a placement. Within this study, a difference between main characters and supporting characters in the brand placement was added. For example, in *The Hills*, Lauren, Kristin, Audrina, Lo and Heidi are considered to be main characters, all other characters who appear in a brand placement situation were coded as supporting characters. The main characters for *The City* are Whitney and Olivia; additionally the main characters in *Gossip Girl* were Serena and Blair.

3.2.3 Duration

Duration is another placement characteristic. Based on a study by La Ferle and Edwards (2006) *duration* refers to the length of the placement shown and/or talked about by the characters during one episode. This is coded in seconds as following: 0 to 5 seconds, 6 to 10 seconds and finally 11 to 15 seconds. A test coding indicated that there were no placements with a length longer than 15 seconds in the fashion TV series. Additionally, to be as accurate as possible in the measurement of the *duration* of a placement, the coder used a stopwatch to measure the length of the placement.

3.2.4 Prominence

The fourth measure is *prominence*, where the focus of the placements lies in being prominent or not. *Prominently visible* includes a placement on the foreground of a scene, during more than two seconds and focused on the placement in the scene (c.f. Ferraro & Avery 2000). Additionally, *subtle visible* refers to a placement shorter than two seconds, in the background of a scene and/or not essential in the scene.

3.2.5 Product Type and Expensiveness

This measure refers to the category of the product in the brand placement. Based on a study of La Ferle and Edwards (2006), in which they distinguished different product categories; the following categories were considered to be relevant for this study towards brand placement in fashion TV series: *clothing, shoes, shops, newspapers and magazines, media and entertainment, personal care* and *electronic equipment*. Additionally, an extra category for *handbags* was added on the basis of a test coding where a lot of brand *handbags* appeared.

After all episodes were analyzed, the brands appearing in the placements can be categorized in different price categories. The appearing brands are coded in categories as following: 1 (cheap: 0-100 Dollar), 2 (mid-price: 100-500 Dollar) or 3 (expensive: 500 Dollar and above).

3.3 Intercoder Reliability

An important aspect of a content analysis is the intercoder reliability. Neuendorf (2002, p. 141) defined intercoder reliability as “the amount of agreement or correspondence among two or more coders”. A reliability coefficient of .80 would be acceptable in most situations (Neuendorf 2002). For this content analysis the percent agreement is calculated. A second coder coded two episodes of the different fashion TV series. Only the agreement on the brand appearances in placements were compared between the coders, since for instance product type and character cannot be coded if the brand is not coded by the coder. For that reason the *brand* variable is considered to be a proper comparison variable. For every episode coded by two coders the percent agreement is calculated, subsequently the mean level of agreement is calculated. From the conducted content analysis the mean percent agreement was .79. This showed that the instrument as a whole could be applied in a reliable way.

4. Results

In general, the results from the content analysis showed a total amount of 350 brand placements in the three different fashion TV series that were analyzed. For *Gossip Girl*, the average amount of brand placements per episode is 10.1. Additionally, in *The City* appeared an average of 19.6 brand placements per episode. Furthermore, in *The Hills* appeared the least of all the brand placements with an average of 5.3 brand placements per episode. First we will discuss the results per series and compare these, then we will present the results for all three series together.

4.1 *Gossip Girl*

When considering *Gossip Girl* in particular, there appeared 101 brand placements in a total of ten episodes. The results of the content analysis showed that for *Gossip Girl* 22.8% were brand placements from Blackberry, additionally Chanel appeared in 7.9% of the brand placements, Prada for 8.9% and W (magazine) for 10.9%. The results showed furthermore that Blair is the character appearing the most in the brand placements (35.6%). From all the brand placements 57.4% were prominent placements. When considering the product types, the most appearing product type was electronic equipment (34.7%), followed by clothing (21.8%) and magazines (11.9%). Additionally, 63.4 % of the brands were categorized as expensive brands. From the brand placements with expensive brands, Blair showed the most of them (22.7%) Additionally, Blair appeared the most with Chanel and Blackberry (both 6.9%).

4.2 *The City*

The results of the content analysis showed 196 brand placements in a total of ten episodes *The City*. The results of the content analysis showed furthermore that 20.4% were brand placements from ELLE. Additionally, Apple appeared in 9.2% of the brand placements and Whitney Eve for 6.1%. The frequent appearance of Whitney Eve might be due to the fact that the main character of the series, Whitney, started her own fashion brand called Whitney Eve during the series. The results also showed that Whitney was the character appearing the most in the brand placements (22.5%), followed by Olivia (14.8%). Additionally, 68.9% of the brand placements were prominent placements. When considering the product types, the most appearing product type was clothing (42.5%), followed by magazines (26%) and electronic equipment (13.8%). In all the brand placements, 54.6% of the brands was categorized as expensive brands. When considering the two most appearing characters in the brand placements, Whitney and Olivia, Whitney showed the most expensive brands (58.9%). Notable is furthermore that Whitney and Olivia appeared both most with ELLE brand placements (13.64%; 23.1%).

4.3 *The Hills*

The results of the content analysis of *The Hills* showed 53 brand placements in a total of ten episodes. The results furthermore showed that for *The Hills* 45.3% were brand placements from Chanel. Additionally, Hermes appeared in 9.4% of the brand placements. BMW and Louis Vuitton shared a third place with both 7.6% of the total amount of brand placements. The results showed furthermore that Audrina was the character appearing the most in the brand placements (32.1%), followed by Kristin (16.9%). The majority of the place-

ments were prominent (52.5%). When considering the product types, the most appearing product type was handbags (67.9%), followed by cars (18.9%) and electronic equipment (5.7%). In all the brand placements, 96.2% of the brands were categorized as expensive brands. With regard to the two most appearing characters in the brand placements, Audrina and Kristin, it is notable that they appeared both most with Chanel handbag placements (88.2%; 44.4%).

Table 1 gives an overview of the most appearing brands, product types and characters appearing in the three analyzed fashion TV series.

Table 1: Overview top brands, product types and characters in the content analysis

	Top 4 brands	Top 3 product types	Top 2 characters
<i>Gossip Girl</i>	Blackberry Chanel Prada W	Electronic equipment Clothing Magazines	Blair Serena
<i>The City</i>	ELLE Apple Whitney Eve Rolex	Clothing Magazines Electronic equipment	Whitney Olivia
<i>The Hills</i>	Chanel Hermes BMW / Louis Vuitton	Handbags Cars Electronic equipment	Audrina Kristin

4.4 Differences between the Fashion TV series

Univariate analyses showed significant differences in the means of price class and time of appearance between the different fashion TV series. For instance, the Scheffe and Bonferroni post-hoc tests showed ($F(2) 11.06, p < .001$) that the means of the price class of products appearing in brand placements in *The City* differed significantly with the means of price class in *The Hills* ($M = 2.62, SD = .54, p < .001$). This implied that the average price class in a brand placement in *The Hills* was higher than the average price class in a brand placement in *The City* ($M = 2.53, SD = .56, p < .001$). For *Gossip Girl* ($M = 2.88, SD = .41, p = ns$) the mean did not significantly differ with the other two series.

4.5 Results for the Three Fashion TV Series Together

With regard to the earlier stated aim of this study, namely to provide insight in the prevalence of brand placements in fashion TV series and the characteristics of the placements appearing in these series, the following general results were found. Considering the brands that appear in brand placements in fashion TV series, the most appearing brands in the placements for all the series were ELLE (11.4%), Chanel (9.4%), Blackberry (8.9%) and Apple (6.6%). The first two are fashion related product types, while the other two have nothing to do with fashion in particular.

The results indicate, furthermore, that the brand placements in fashion TV series involve mostly the main characters of the series. In the three different analyzed fashion TV series it is always a main character that was most appearing in the brand placements. Moreover, almost half of the brand placements from all analyzed fashion TV series was shorter than two seconds (42%). Additionally, brand placements longer than five seconds seldom appeared in all series.

Regarding the prominence of the brand placements, the results showed that overall most of the placements were prominent (63.1%), indicating that the brand is shown more than two seconds and is visible on the foreground of a scene. Consequently, the most appearing product types in the brand placements are clothing (30.3%), electronic equipment (18.6%), magazines (18%) and handbags (12.3%). Notable is finally that 63.4% of the brands appearing in the different fashion TV series were categorized as expensive brands.

5. Conclusion and Discussion

As stated in the introduction, the main goal for this study was to gain more knowledge about the prevalence and characteristics of brand placements in fashion TV series. Earlier, content analyses on the characteristics of brand placements in TV series have been conducted, but the characteristics of brand placement in fashion TV series were never studied before.

The results from the content analysis indicated that in *The City* the most brand placements per episode appeared. Furthermore, ELLE, Chanel, Blackberry and Apple were the most appearing brands in all fashion TV series. The mere part of all brand placements was prominent, took no longer than two seconds, and mostly expensive brands appeared in the placements.

The results of this content analysis have various implications for marketers. For a start, brand placements of expensive brands in fashion TV series can increase the popularity of the brand and connect the brand to stylish characters. This is in line with celebrity endorsement theory (Amos, Holmes & Stratton 2008; Lee & Thorson 2008; McCracken 1989; Till 1998; Till et al 2008). Theory also suggested that more expensive brands in placements posi-

tively affect brand memory (Gupta & Gould 2007). The results of our study indicated that a lot of expensive brands appear in fashion TV series. Marketers therefore can integrate their expensive brands properly into fashion TV series.

Another relevant implication would be that the brands integrated into brand placements in fashion TV series do not have to be necessarily fashion related products. Our study showed that a lot of brand placements include brands concerning electronic equipment (e.g. cell phones and laptops). Since this seemed to be common for fashion TV series, marketers could also integrate brands matching that product type.

Nevertheless, to really lean on these implications further research on consumer reactions is necessary. A limitation of our research is that effects on the viewers of fashion TV series were left out of the study. Further research should combine different research methods, for instance a content analysis with a survey, to explore the effects of brand placements on consumer reactions. Interesting consumer reactions to study for fashion TV series could be purchase intention and a possible increase in materialism among young women.

Further research regarding fashion TV series should focus on a broader media spectrum. In our study only the content of fashion TV series was subject of study, though websites and social media of these fashion series are visited by young women a lot as well. It would be interesting to extend our study to these media outlets. Nevertheless, this study on brand placement in fashion TV series can be considered to be a good starting point to extend the unexplored research field of branding in and around fashion TV series.

6. References

- Amos, C., Holmes, G., & Strutton, D. (2008). Exploring the Relation Between Celebrity Endorser Effects and Advertising Effectiveness. A Quantitative Synthesis of Effect Size. *International Journal of Advertising*, 27(2), 209-234.
- Babin, L. A., & Carder, S. T. (1996). Viewers' Recognition of Brands Placed Within a Film. *International Journal of Advertising*, 15(2), 140-151.
- Balasubramanian, S. K., Karrh, J. A., & Patwardhan, H. (2006). Audience Response to Product Placements: An Integrative Framework and Future Research Agenda. *Journal of Advertising*, 35(3), 115-141.
- Brennan, I., Dubas, K. M., & Babin, L. A. (1999). The Influence of Product Placement Type and Exposure Time on Product Placement Recognition. *International Journal of Advertising*, 18(3), 323-337.
- D'Astous, A., & Chartier, F. (2000). A Study of Factors Affecting Consumer Evaluations and Memory Product Placements in Movies. *Journal of Current Issues and Research in Advertising*, 22(2), 31-40.
- Dehnart, A. (2008). The Hills is more popular than Gossip Girl. Retrieved at April 4, 2013 from: http://www.realityblurred.com/realitytv/archives/the_hills/2008_Apr_23_ratings_gossip_girl
- Dekker, K. & Van Reijmersdal, E. A. (2013). Disclosing celebrity endorsement in a television program to mitigate persuasion: How disclosure type and celebrity credibility interact. *Journal of Promotion Management*, 19(2), 224-240.

- Ferraro, R. & Avery, R. J. (2000). Brand appearances on prime-time television. *Journal of Current Issues and Research in Advertising*, 22(2), 1-15.
- Gupta, P. B., & Gould, S. J. (2007). Recall of Products Places as Prizes Versus Commercials in Game Shows. *Journal of Current Issues and Research in Advertising*, 29(1), 43-53.
- Gupta, P. B., & Lord, K. R. (1998). Product Placement in Movies: The Effect of Prominence and Mode on Audience Recall. *Journal of Current Issues and Research in Advertising*, 20(1), 47-59.
- Hernandez, M. D., Chapa, S., Minor, M. S., Maldonado, C., & Barranzuela, F. (2004). Hispanic Attitudes Toward Advergaming: A Proposed Model of Their Antecedents. *Journal of Interactive Advertising*, 5(1), 116-131.
- Karrh, J. A. (1998). Brand Placements: A Review. *Journal of Current Issues and Research in Advertising*, 20(2), 31-49.
- La Ferle, C., & Edwards, S. M. (2006). Product Placement: How Brands Appear on Television. *Journal of Advertising*, 35(4), 65-68.
- Law, S., & Braun, K. A. (2000). I'll Have What She's Having: Gauging the Impact of Product Placements on Viewers. *Psychology & Marketing*, 17(12), 1059-1075.
- Lee, J. G., & Thorson, E. (2008). The Impact of Celebrity-Product Incongruence on the Effectiveness of Product Endorsement. *Journal of Advertising Research*, 48(3), 433-449.
- McCracken, G. (1989). Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. *Journal of Consumer Research*, 16(3), 310-321.
- MTV (2011a). *The Hills season one*. Retrieved April 20, 2011, from http://www.mtv.com/shows/the_hills/season_1/series.jhtml
- MTV (2011b). *The City*. Retrieved April 20, 2011 from http://www.mtv.com/shows/the_city
- Neuendorf, K. A. (2002). *The Content Analysis Guidebook*. Thousand Oaks: Sage Publications.
- Seidman, R. (2010). The CW's 'Gossip Girl' Climbs to Season Highs. Retrieved on April 4, 2013 from <http://tvbythenumbers.zap2it.com/2010/10/05/the-cws-gossip-girl-climbs-to-season-highs/66854/>
- Smit, E. G., Van Reijmersdal, E. A., & Neijens, P. C. (2009). Today's practice of brand placement and the industry behind it. *International Journal of Advertising*, 28(5), 761-782.
- Till, B. D. (1998). Using Celebrity Endorsers Effectively: Lessons from Associative Learning. *Journal of Product and Brand Placement*, 7(5), 400-409.
- Till, B. D., Stanley, S. M., & Priluck, R. (2008). Classical Conditioning and Celebrity Endorsers: an Examination of Belongingness and Resistance to Extinction. *Psychology & Marketing*, 25(2), 179-196.
- Toffoletti, K. (2008). Gossip Girls in a Transmedia World: The Sexual and Technological Anxieties of Integral Reality. *Papers*, 18(2), 71-77.
- Van Reijmersdal, E. A. (2009). Brand Placement Prominence: Good for Memory! Bad for Attitudes? *Journal of Advertising Research*, June(2009), 151-153.
- Van Reijmersdal, E. A., Neijens, P. C., & Smit, E. G. (2007). Effects of television brand placement on brand image. *Psychology & Marketing*, 24(5), 403-420.
- Van Reijmersdal, E. A., Neijens, P. C., & Smit, E. G. (2009). A New Branch of Advertising. Reviewing Factors That Influence Reaction to Product Placement. *Journal of Advertising Research*, December, 2009, 429-449.

Part V

Branding Challenges

How to Avoid Brand Dilution: The Use of Conjunctive Cues in Advertisements for Brand Extensions

Verena Hüttl
Heribert Gierl

1 Introduction

The extension of successful brands into new product categories is a widely used strategy that offers potential growth for companies. However, negative feedback effects on brand evaluations have been described in literature as a negative aspect of this strategy, even when the extension products are successfully adopted by the market (Aaker, 1990; Chang, 2002). Brand dilution exists if consumers evaluate a desirable brand less favorably when new products of the brand are introduced into the market. Some authors hypothesize that especially extensions with low fit to the category the core products belong to cause brand dilution, i.e., a devaluation of the brand (e.g., Morrin, 1999; Martínez and Pina, 2003; Martínez and de Chernatony, 2004). However, fit between the extension product and the brand's core product is not only determined by the product category but also by additional pieces of information. Providing information that increases fit could reduce or even avoid brand dilution. We consider conjunctive cues as pieces of information that may counteract brand dilution. Conjunctive cues are peripheral ad cues such as testimonials, music, brand slogans, symbols, mascots, or key visuals that have been used in the advertisements for the core products and thus are strongly associated with the brand (Lane, 2000). For instance, if a celebrity promotes both the core product and the extension product, a conjunctive cue exists that may enhance perceptions of fit of the extension and the core product. Until now, there is no research about whether including conjunctive cues in ads for extension products can diminish brand dilution that results from low category-fit. There is only research on the effect of a conjunctive cue in a condition where the brand dilution effect was not observed (Jap, 1993).

Literature assumes that the majority of new products introduced into the market are brand extensions (Keller and Sood, 2003; Keller and Lehmann, 2009). Moreover, some authors report that a large portion of new products are extensions with a low category-fit which could dilute the brand. However, the brand is commonly denoted as the most valuable asset of many firms (Martínez and Pina, 2003). Thus, research on whether conjunctive cues can protect the brand from dilution is an important issue in marketing and advertising practice. We contribute to research by investigating the interaction effect of category-fit

of extension products and the presence of conjunctive cues on brand evaluations. To our knowledge, there are no findings on this issue thus far.

2 Theoretical Considerations

2.1 *Assimilation and Accommodation*

Based on categorization and schema theories, literature on brand extensions postulates that exposure to information about brand extensions elicits the mental processes of assimilation or accommodation (e.g., Park et al., 1991; Park et al., 1993). Assimilation is expected to occur when the extension is highly similar to the core product (i.e., when fit is high). Accommodation is likely to happen when this similarity (i.e., fit) is low. Literature hypothesizes that there are numerous sources of fit (e.g., Barsalou, 1983; Fiske and Pavelchak, 1986). For instance, fit could result from similar features of the core product and the extension, similar usage situations, or similar goals. According to the brand extension literature, marketers could also emphasize that the core product's features are integrated in the extension product (Bridges et al., 2000) or could point to existing common benefits or usage situations (Aaker and Keller, 1990; Boush, 1993) to enhance fit perceptions.

In the case of high fit, the extension can easily be integrated into the existing brand schema and does not alter this schema essentially. This mental process is denoted assimilation. The brand evaluation is not expected to be affected by offering high-fit extensions. In the case of low fit, the extension cannot be integrated into the existing brand schema. Hence, the brand schema has to be altered to accommodate the new product provided by the brand. This process is described as an accommodation whereby numerous pieces of new information are added to the brand schema. When brands are evaluated favorably, it is expected that positive brand knowledge is predominant in the brand schema. When being exposed to a low-fit extension, it is very likely that additional information which is added to the schema does not only consist of information with a positive value. The new information might be partly positive due to first positive impressions of the product (e.g., "the product looks nice"). Usually, there is also neutral information about certain features of the extension. Moreover, the consumer may think about the firm's reasons for launching the extension product (e.g., "Why are they launching different products now?"); these thoughts can be neutral as well in the sense that they neither possess a positive nor a negative valence. Especially in cases of low-fit extensions, negative thoughts or feelings are likely to occur and these thoughts and feelings also will become part of the brand schema. People might be confused or irritated or may have doubts concerning the skills of the firm for manufacturing the dissimilar product. When all these pieces of information are mixed with the brand knowledge which was initially predominantly positive, the evaluation of a desirable brand will deteriorate.

2.2 *Category Fit*

The fit between the category of the extension product and the category of the brand's core products is a major source for consumers' overall fit perceptions. We expect:

H1: In cases of desirable brands, brand evaluations (a) are not deteriorated by extensions into high-fit categories but (b) are deteriorated by extensions into low-fit categories (brand-dilution effect).

2.3 *Conjunctive Cues*

Literature describes several types of information that can be used to enhance fit between the extension products and core products. In this paper, we consider conjunctive ad cues, i.e., peripheral advertising cues that are used both in the ads for core products and the new extension products of the brand. Thereby, perceptions of fit may be affected as well. We test:

H2: Inserting a conjunctive cue in an ad that promotes an extension of a desirable brand reduces the brand-dilution effect.

In Figure 1, we summarize our theoretical considerations.

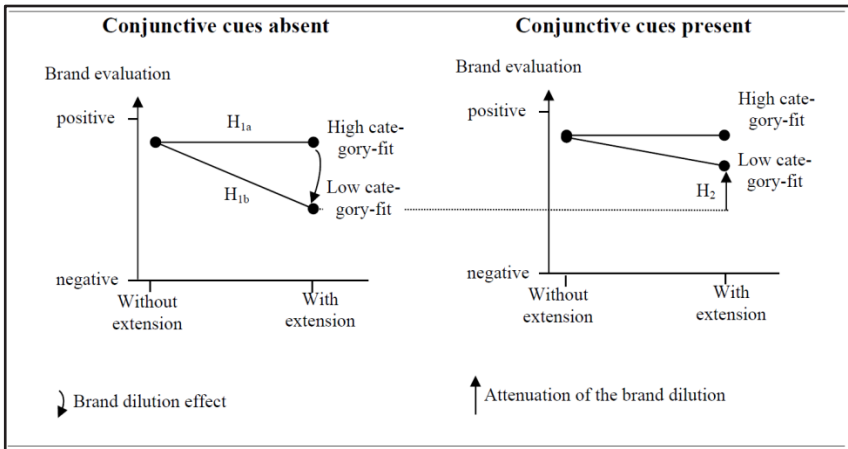


Figure 1: Illustration of the hypothesized effects

3 **Prior Research**

There are numerous studies on the effect of information about brand extensions on brand beliefs and brand evaluations. Mostly, the researchers investigat-

ed the effects of certain pieces of information about the brand extension such as the extension quality (Romeo, 1991), extension features (Jap, 1993; Loken and John, 1993; Gürhan-Canli and Maheswaran, 1998; John et al., 1998), market success of the extension (Leong, Ang, and Liau, 1997; Ng, 2010; Swaminathan et al., 2001), and good or bad customer experience with the extension (Sood and Keller, 2012). Martínez and Pina (2003) investigated the effect of the category-fit on the evaluations of neutrally or unfavorably evaluated brands. For our research, we focus on studies investigating the effect of category fit and the presence of conjunctive cues on brand evaluations.

3.1 *Category Fit of Extension Products*

There are studies that used either real brands or fictitious brands as test objects. All authors exposed respondents to fictitious brand extensions that differ regarding fit to the brand's core product and assessed attitudes towards the brand.

First, we report the findings from experiments that considered fictitious extensions of real and favorably evaluated brands. Milberg et al. (1997), Chang (2002), and Pina et al. (2006) offered insights into the relationship postulated in H1. The details of these studies and the findings are shown in Table 1.

Milberg et al. (1997) considered the favorably evaluated brands Timex and Polaroid and investigated consumer responses to extensions into the clock-radio and the photocopier category. The clock radios had a high fit with Timex (wrist watches), and the photocopiers had a high fit with Polaroid (instant camera). The authors reported brand evaluations obtained for control conditions in which the participants were not exposed to extensions and brand evaluations obtained for experimental conditions in which the participants received information about the extension products but no additional information about extension quality. The authors found that the high-fit extensions did not affect brand evaluations whereas the low-fit extensions deteriorated brand evaluations. These results are in line with the Hypotheses H1a and H1b.

Chang (2002) asked students to imagine that the Sprite brand extended into the orangeade category (high-fit condition) or into the washing-up liquid category (low-fit condition), respectively. Each person evaluated Sprite twice: before being informed about the extension and after this information (before-after design). When the authors provided information about the high quality of the extension products, they neither found an effect of the high-fit nor an effect of the low-fit extension on brand evaluations. This result is in line with H1a and contradicts H1b.

Pina et al. (2006) also applied the before-after procedure and used two banks and two telecommunication companies that are well-known in the Spanish market as test objects. They asked participants to imagine high-fit and low-fit exten-

sions of these favorably evaluated brands or companies and did not reveal any systematic effects of category fit on brand evaluations.

Table 1: Prior research on the effect of extensions into high-fit and low-fit categories on the evaluations of desirable real brands

Authors	Experimental design; sample size; measures	Brand	$E_{\text{brand, without}}$	Extension category	Category-fit	$E_{\text{brand, after}}$	Test for dilution
Milberg et al., 1997	6 experimental groups selected; $N \approx 20$ per group; likeable, favorable	Timex	4.95	Clock radio	5.20 (H)	5.28	n.s.
				Photocopier	1.60 (L)	3.68	$p < .001$
		Polaroid	4.96	Photocopier	4.90 (H)	4.86	n.s.
				Clock radio	1.65 (L)	2.98	$p < .001$
Chang, 2002	Before-after; 2 exp. groups; $N \approx 16$ per group; good, likeable, favorable, quality, likely to try, superior	Sprite	5.30	Orangeade	5.48 (H)	5.71	n.s.
			4.99	Washing-up liquid	2.14 (L)	5.19	n.s.
Pina et al., 2006	Before-after; 8 experimental groups; $N \approx 50$ per group; professional, regarded, successful, well-established, stable, trustworthy, dependable, concerned about customers, etc.	BBVA	5.90	Accounting service	5.50 (H)	5.65	$p < .05$
			6.22	Parcel service	2.86 (L)	5.72	$p < .10$
		Banes-to	5.39	Accounting service	4.74 (H)	6.22	$p < .05$
			5.13	Parcel service	2.15 (L)	5.22	n.s.
		Telefónica	5.26	Techn. Consulting	5.85 (H)	5.75	$p < .05$
			5.31	Insurance	3.70 (L)	5.31	n.s.
Vodafone	5.89	Techn. Consulting	5.02 (H)	5.89	n.s.		
	5.82	Insurance	2.95 (L)	5.31	$p < .05$		

$E_{\text{brand, without}}$: Brand evaluation without extension information.

$E_{\text{brand, after}}$: Brand evaluation when receiving extension information.

H = high-fit extension, L = low-fit extension.

Scale to assess attitudes and fit ranges from 1 (negative, low) to 7 (positive, high).

It should be noted that there are additional studies that investigated brand dilution by using real brands. We cannot use these findings to provide answers to the question about whether category fit affects evaluations of desirable brands due to the following reasons: Park et al. (1993) aggregated the data across the extension products; thus, the effect of fit cannot be examined. Chen and Chen (2000) reported data without providing information about the range of the scales.

Second, we report the findings of a study of Keller and Aaker (1992) who used fictitious brand names and assessed the effect of low-fit vs. high-fit extensions on brand evaluations. Respondents were informed about a fictitious potato chips brand (either Medallion or Crane) and received information that this brand extends in another product category with more or less fit to the potato chips category. The authors used a between-subjects design (Table 2).

Table 2: Findings of Keller and Aaker (1992) on the effect of extensions into high-fit and low-fit categories on the evaluations of favorably evaluated fictitious brands

Fictitious potato chips brand name	Brand evaluation without extension information	Extension category	Category-fit	Brand evaluation when receiving extension information
Medallion	5.70	Crackers	High	5.83
		Cookies	Moderate	5.89
		Ice-cream	Low	5.62
Crane	4.99	Crackers	High	4.66
		Cookies	Moderate	4.30
		Ice-cream	Low	4.30

Scale to assess attitudes ranges from 1 (negative) to 7 (positive).

Items were “quality”, “likely to try”, and “superior. $N = 221$ (selected here).

Unfortunately, these authors refrained from providing test statistics on the effect of the fit between the extension product and core product. However, H1a seemingly is supported because brand evaluations in the conditions of high-fit extensions are very similar to evaluations in the extension-absent conditions (5.83 vs. 5.70, 4.66 vs. 4.99). On the contrary, H1b seemingly is only supported for the “Crane” brand because the evaluation of this brand is lower in the low-fit conditions (4.30 vs. 4.99); for the “Medallion” brand, data do not support H1b. A weakness of this study might be the fact that participants were asked imagining a virtual brand whose supplier launches virtual extensions which might have caused difficulties to understand the scenario.

In sum, the findings from prior research on the effect of category fit of extensions of brands on brand evaluations are inconsistent. Thus, it seems to be beneficial to test the brand dilution effect in this study again.

3.2 *Conjunctive Cues*

To the best of our knowledge, there is only one study that investigated the effect of conjunctive cues on the strength of the brand dilution effect. Jap (1993) tested whether including a conjunctive cue in the ads for extension products affects brand evaluations. In the control condition, people reported their attitude toward the Coast brand. The authors state that this brand is known for its core product (soap) and its unique benefit (clean scent). In the experimental condi-

tions, people were exposed to three extension products of the Coast brand: shampoo, anti-perspirant, and sunblock. To induce the low-fit condition, the authors additionally provided information that the extensions have benefits which differ strongly from the benefits of the core product (e.g., “the body building shampoo”). To induce the high-fit condition, the information was given that the unique benefit of the extensions is “clean scent” as well. The authors found no significant effects of this manipulation on brand evaluations ($M_{\text{without extensions}} = 5.5$, $M_{\text{high fit}} = 6.2$, $M_{\text{low fit}} = 5.5$ on a seven-point scale). The category-fit was not additionally varied in Jap’s experiment.

Thus, it is unclear whether a brand-dilution effect due to low category fit can be reduced by the increasing fit with the means of conjunctive cues. Therefore, we aim at answering this question in our empirical study.

4 Study

In the new study, we examine the brand-dilution effect due to category fit and the attenuation of this effect through conjunctive cues.

4.1 Experimental Design

We used a 2 (category fit: low vs. high) \times 2 (conjunctive cue: absent vs. present) between-subjects \times 3 (brand: Kellogg’s, Persil, and Blend-a-med) within subjects factorial design to test our hypotheses. The experiment was conducted in Germany.

4.2 Identification of Desirable Brands

Because we aim at analyzing the brand-dilution effect, we need to focus on favorably evaluated brands. Thus, we started our investigations with identifying a sample of brands that meets this requirement. We asked students ($N = 36$, $M_{\text{age}} = 24.31$ years, 53% females) to rate a list of brands by agreeing or disagreeing with “I like this brand” on a seven-point scale. We selected Persil (detergent), Blend-a-med (toothpaste), and Kellogg’s (cereals). For all brands, average evaluations were significantly higher than the scale center, i.e., the value 4 (see Table 3). All participants stated to know the brands.

4.3 Identification of High-Fit and Low-Fit Categories

To identify high-fit and low-fit categories for extensions of the selected brands, we used the same sample of students that rated the brands and asked them to respond to “Does this product fit to the brand?” on a seven-point scale. Based on this pre-test’s results, we selected a high-fit and a low-fit product category for each of the brands (see Table 3).

4.4 Identification of Conjunctive Cues

Additionally, we analyzed which visual cues are strongly associated with the brands. Using the same sample, we asked the participants to indicate the degree to which they associated cues that we presented to them with the brands. We selected cues that are seemingly appropriate (Persil: red bow and ribbon tied around a box; Blend-a-med: brand logo, Kellogg's: cock's head; see Table 3).

Table 3: Pretest results

Brand	Brand liking		High-fit category		Low-fit category		Conjunctive cue	
	$M_{\text{brand liking}}$	One-sample t -test $M > 4$	Extension	M_{Fit}	Extension	M_{Fit}	Picture	$M_{\text{brand-cue-fit}}$
Persil	5.11	$t_{35} = 4.537^{***}$	Sofa spray	5.11	Outdoor textiles	1.89	Red bow	4.63
Blend-a-med	4.69	$t_{35} = 2.997^{**}$	chewing gum	5.78	Hair gel	1.86	Brand symbol	4.28
Kellogg's	5.56	$t_{35} = 5.739^{***}$	breakfast bowls	4.72	Board game	1.47	Cock's head	5.50

Scale ranges from 1 = low to 7 = high. $^{**} p < .01$, $^{***} p < .001$.

4.5 Test Stimuli

In the next step, we created two versions of print advertisements for each brand extension. In one of the versions, the conjunctive cue was absent, and in the other version, it was present. For the purpose of illustration, we show the test stimuli used for extensions of the Kellogg's brand in Figure 2.

	Conjunctive cue absent	Conjunctive cue present
Low category-fit extension (board game)	<p>Das neue Abenteuer-Brettspiel von Kellogg's! Jetzt mit allen bekannten Figuren zum Spielen und Sammeln!</p> 	 <p>Das neue Abenteuer-Brettspiel von Kellogg's! Jetzt mit allen bekannten Figuren zum Spielen und Sammeln!</p>
High category-fit extension (breakfast bowls)	<p>Jetzt gibt es von Kellogg's WIRKLICH alles für die wichtigste Mahlzeit des Tages</p>  <p>Die neuen Frühstücksschüsseln von Kellogg's</p>	 <p>Jetzt gibt es von Kellogg's WIRKLICH alles für die wichtigste Mahlzeit des Tages</p> <p>Die neuen Frühstücksschüsseln von Kellogg's</p>

Figure 2: Advertisement versions for extensions of the Kellogg's brand

4.6 Sample and Procedure

We used a sample of 140 students in the field of business administration ($M_{age} = 24.24$ years, 50% females) and assigned them to the four experimental conditions resulting from the category fit and conjunctive cue manipulations. The questionnaire was composed of three parts. In the first section, the participants indicated their attitude toward all brands that are considered here. Subsequently, they completed tasks that are not relevant for this study. In the second part, they had contact to an ad version that promoted an extension of the Persil brand. They evaluated this extension (either sofa spray or outdoor textiles) and subsequently reported their attitudes toward the Persil brand again. Finally, they indicated their attitude toward the ad. This procedure was replicated for Blend-a-med and Kellogg's. In the third step, the participants were asked to indicate the fit between the extension they were exposed to in the second part and the brands, the frequency of using products from the categories the extensions belong to, their age, and gender. Data were collected in the computer rooms of a university.

4.7 Measures

As indicated above, we assessed the attitudes toward the brand twice, i.e., before and after the contact to the ad that promoted the extension product. We used four items (likeable, interesting, high quality, and good) to assess brand attitudes. The participants agreed or disagreed to these statements on seven-point scales (before: $\alpha = .895$, after: $\alpha = .899$). The fit of the extension product with the brand was assessed by adopting the items suggested by other researchers (e.g., Joiner, 2006; Keller and Aaker, 1992; Lane, 2000); we asked the participants to agree or disagree with “The core product and this extension are very similar/not at all similar”, “The core product and this extension possess a very high/very low fit”, “I can understand the connection very easily/not at all”, and “The extension is logical and makes sense to a very high/very low degree” on a seven-point scale ($\alpha = .946$).

4.8 Manipulation Check

As described above, we asked the participants to assess the fit between the extensions and the respective brand. We pooled the data across the brands and found the following: For the low-category-fit extensions, the perceptions of fit were higher when the conjunctive cue was present ($M_{\text{cue absent}} = 2.13$ and $M_{\text{cue present}} = 2.71$). For the high-category-fit extensions, the perceptions of fit turned out to be generally higher; additionally, the conjunctive cue increased fit ($M_{\text{cue absent}} = 4.24$, $M_{\text{cue present}} = 4.86$). The data show that both the chosen extension categories and the presence vs. absence of the conjunctive cue affected fit as intended.

4.9 Results

We calculated the mean difference score of the brand attitude (i.e., $M_{\text{after}} - M_{\text{before}}$) across the participants per brand and then averaged this difference across the brands because we used the brand as a within-subject replicate factor. The results are summarized in Figure 3. According to H1a, we expected no dilution effect in the high-category-fit/cue-absent condition. Indeed, brand evaluations were not affected by the extension ($M_{\text{after}} - M_{\text{before}} = +.25$, $t_{34} = 1.360$, n.s.). According to H1b, we expected a dilution effect in the low-category-fit/cue-absent condition. Our results are in line with this hypothesis ($M_{\text{after}} - M_{\text{before}} = -.69$, $t_{34} = -4.644$, $p < .001$). In H2, we expected that the presence of the conjunctive cue reduces the brand dilution. This expectation was also confirmed because we did not find the brand dilution in the low-category-fit/cue-present condition ($M_{\text{after}} - M_{\text{before}} = -.19$, $t_{34} = -.863$, n.s.).

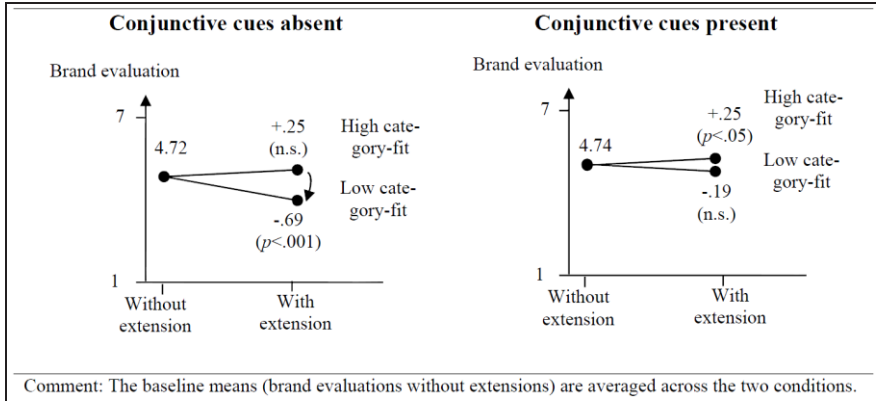


Figure 3: Results on the hypothesized effects

In a supplementary analysis, we investigated factors that strengthened or reduced the size of the dilution effect in the conjunctive-cues-absent condition and found that the frequency of consumption of products from the extension category fosters the dilution effect. Heavy users of products from categories such as outdoor textiles, chewing gum, hair gel, and sofa spray evaluated the brands with dissimilar core products more unfavorably than consumers that less frequently consumed such products. Thus, the brand dilution effect tends to be stronger if the low-fit extension targets consumers with a high consumption frequency.

5 Implications

5.1 Implication for Marketing Theory

Our review of previous studies revealed that no consistent conclusions about the existence of a brand dilution effect caused by dissimilar extension products can be drawn. Theory suggests that high-fit extension do not dilute brand evaluations; the findings of Keller and Aaker (1992), Milberg et al. (1997), and Chang (2002) were in line with this hypothesis. Only the findings of Pina et al. (2006) did not conform to this theory. Moreover, theory indicates that low-fit extensions deteriorate brand evaluations. The findings of these authors concerning this aspect were mixed. Only the half of the experiments turned out to conform to this hypothesis. We added to the research by replicating these studies. We found support for the brand dilution effect which was presented in Figure 1. As a consequence, we can demonstrate that brand dilution is a real-world phenomenon.

More important, our study aimed to show how this dilution effect can be avoided or decreased by market communication. We argued that similarity perceptions do not only stem from core-product/extension-product similarity but also from surrounding information such as peripheral cues that are known from advertisements for the brand's core products. We found that brand dilution can be avoided by using these cues.

5.2 *Implication for Marketing Practice*

Our research demonstrates how marketers can launch low-fit extensions without causing harmful dilution effects for a favorably evaluated brand. We recommend them to consider including conjunctive cues into their ads for extension products in order to protect the brand from dilution. Although our experiment tested only a small number of conjunctive cues, we suppose that numerous peripheral cues exist that can cause the same effect. We used visual cues like brand symbols or characteristic visual elements that are associated with a brand or core product for years or even decades such as the red bow for the Persil brand which have been present in all forms of marketing communication and are even part of the product's packaging design. The strong associations between the cue and the brand are assumed to enable the transfer of brand associations. If a brand is not yet associated with a characteristic cue, marketers should anticipatory include suitable cues in their market communication before they start with the launch of extensions. When consumers have learned the connection between the cue and the brand, it can be used to support the launch of extension products by integrating it in the market communication for the extensions.

Besides the cues we considered in our experiment, many other categories of cues can be used. Suitable cues cover a wide range of ad execution elements such as brand slogans, typical color schemes, or brand mascots. Even celebrity endorsers can be used as conjunctive cues under conditions in which the person is really strongly associated with the brand. A celebrity endorser as a real person might be especially effective in tying a dissimilar extension to its brand, because a person could probably best explain the connection between the brand and the new product in the eyes of consumers. However, many celebrities endorse multiple brands at the same time and often quickly change their commitment with a certain brand. These aspects limit the suitability of celebrity endorsers as conjunctive cues; one may hardly find an endorser who acts as a brand ambassador and is indeed able to transfer the brand image. The appearance of the product itself or its packaging is another communication element that can serve as conjunctive cue. However, not only the visual appearance but also haptic features may be able to remind potential consumers of an extension product to the core product. Other non-visual cues firms can use are acoustic cues such as jingles or a song that has been used in commercials promoting the core product or the brand in general. An advantage of using music as conjunctive cue is its ability to

evoke arousal and affect to a greater extent than other ad cues (e.g., Morris and Boone, 1998). The same feelings that are evoked by ads for the core product could be aroused by ads for the extension products by using the same song and, thus, making the products more similar in the perceptions of consumers. Especially when the positioning of the brand is strongly emotion-driven, music should be used as conjunctive cue. Finally, the rather scarcely used marketing cue scent can be mentioned as well. Theoretically, the same scent could also make products appear more similar; however, its applicability in advertising or other forms of market communication is limited.

6 Notes

The authors wish to thank Christian Aicham and Markus Dudek for assisting us collecting the data. This paper extends the presentation held at ICORIA 2013 by expanding the review of prior research, the data analyses, and the implication section.

7 References

- Aaker, D. A. (1990), "Brand extension: The good, the bad and the ugly," in: *Sloan Management Review*, 31(4), 47-56.
- Aaker, D. A. and K. L. Keller (1990), "Customer evaluations of brand extensions," in: *Journal of Marketing*, 54(1), 27-41.
- Barsalou, L. W. (1983), "Ad hoc categories," in: *Memory and Cognition*, Vol. 11 (3), 211-227.
- Boush, D. M. (1993), "How advertising slogans can prime evaluations of brand extensions," in: *Psychology and Marketing*, 10(1), 67-78.
- Bridges, S.; Keller, K. L. and S. Sood (2000), "Communication strategies for brand extensions: Enhancing perceived fit by establishing explanatory links," in: *Journal of Advertising*, 29(4), 1-11.
- Chang, J. W. (2002), "Will a family brand image be diluted by an unfavorable brand extension? A brand trial-based approach," in: Broniarczyk, S. M.; Nakamoto, K. (2002) (eds.): *Advances in Consumer Research*, Vol. 29, Association for Consumer Research, Valdosta, GA, 299-304.
- Chen, A. C.-H. and S. K. Chen (2000), "Brand dilution effect of extension failure – a Taiwan study," in: *Journal of Product & Brand Management*, 9(4), 243-254.
- Fiske, S. T. and M. A. Pavelchak (1986), "Category-based versus piecemeal-based affective responses: Development in schema-triggered affect," in: Sorrentino, R. M.; Higgins, E. T. (1986) (eds.): *The handbook of motivation and cognition*, Guilford, New York, NY, 167-203.
- Gürhan-Canli, Z. and D. Maheswaran (1998), "The effects of extensions on brand name dilution and enhancement," in: *Journal of Marketing Research*, 35(4), 464-473.
- Jap, S. D. (1993), "An examination of the effects of multiple brand extensions on the brand concept," in: McAlister, L.; Rothschild, M. L. (1993) (eds.): *Advances in Consumer Research*, Vol. 20, Association for Consumer Research, Provo, UT, 607-611.
- John, D. R.; Loken, B. and C. Joiner (1998), "The negative impact of extensions: Can flagship products be diluted?" in: *Journal of Marketing*, 62(1), 19-32.
- Joiner, C. (2006), "Existing products and brand extension judgments: Does brand category context matter?" in: Pechmann, C.; Price, L. L. (2006) (eds.): *Advances in Consumer Research*, Vol. 33, Association for Consumer Research, Duluth, MN, 76-81.

- Keller, K. L. and D. A. Aaker (1992), "The effects of sequential introduction of brand extension," in: *Journal of Marketing Research*, 29(1), 35-50.
- Keller, K. L. and D. R. Lehmann (2009), "Assessing long-term brand potential," in: *Journal of Brand Management*, 17(1), 6-17.
- Keller, K. L. and S. Sood (2003), "Brand equity dilution," in: *Sloan Management Review*, 45(1), 12-15.
- Lane, V. R. (2000), "The impact of ad repetition and ad content on consumer perceptions of incongruent extensions," in: *Journal of Marketing*, 64(2), 80-91.
- Leong, S. W.; Ang, S. H. and J. Liau (1997), "Dominance and dilution: The effects of extending master brands," in: *Journal of Consumer Marketing*, 14(5), 380-390.
- Loken, B. and D. R. John (1993), "Diluting brand beliefs: When do brand extensions have a negative impact?" in: *Journal of Marketing*, 57(3), 71-84.
- Martínez, E. and J. M. Pina (2003), "The negative impact of brand extensions on parent brand image," in: *Journal of Product & Brand Management*, 12(7), 432-448.
- Martínez, E. and L. de Chernatony (2004), "The effect of brand extension strategies upon brand image," in: *Journal of Consumer Marketing*, 21(1), 39-50.
- Milberg, S. J.; Park, C. W. and M. S. McCarthy (1997), "Managing negative feedback effects associated with brand extensions: The impact of alternative branding strategies," in: *Journal of Consumer Psychology*, 6(2), 119-140.
- Morrin, M. (1999), "The impact of brand extensions on parent brand memory structure and retrieval processes," in: *Journal of Marketing Research*, 36(4), 517-525.
- Morris, J. D. and M. A. Boone (1998), "The effects of music on emotional response, brand attitude, and purchase intent in an emotional advertising condition", in Alba, J.W.; Hutchinson, J. W. (1998) (eds.): *Advances in Consumer Research*, Vol. 25, Association for Consumer Research, Provo, UT, 518-526.
- Ng, S. (2010), "Cultural orientation and brand dilution: Impact of motivation level and extension typicality," in: *Journal of Marketing Research*, 47(1), 186-198.
- Park, C. W.; McCarthy, M. S. and S. J. Milberg (1993), "The effects of direct and associative brand extension strategies on consumer response to brand extensions," in: McAlister, L.; Rothschild, M. L. (1993) (eds.): *Advances in Consumer Research*, Vol. 20, Association for Consumer Research, Provo, UT, 28-33.
- Park, C. W.; Milberg, S. J. and R. Lawson (1991), "Evaluations of brand extensions: The role of product feature similarity and brand concept consistency," in: *Journal of Consumer Research*, 18(2), 185-193.
- Pina, J. M.; Martínez, E., de Chernatony, L. and S. Drury (2006), "The effect of service brand extensions on corporate image," in: *European Journal of Marketing*, 40(1/2), 174-197.
- Romeo, J. B. (1991), "The effect of negative information on the evaluations of brand extensions and the family brand," in: Holman, R. H.; Solomon, M. R. (1991) (eds.): *Advances in Consumer Research*, Vol. 18, Association for Consumer Research, Provo, UT, 399-406.
- Sood, S. and K. L. Keller (2012), "The effects of brand name structure on brand extension evaluations and parent brand dilution," in: *Journal of Marketing Research*, 49(3), 373-382.
- Swaminathan, V.; Fox, R. J. and S. K. Reddy (2001), "The impact of brand extension introduction on choice," in: *Journal of Marketing*, 65(4), 1-15.

Brands and Consumer Relationships

Don E. Schultz
Martin P. Block

1 Introduction

Brands, no matter how defined, have been identified by marketers as a primary ingredient in effectively and efficiently differentiating their products and services from those of competitors, thus, gaining marketplace advantage (Aaker, 1996). Marketers' brand-building activities have assumed increasingly important relationships between brand owners and brand buyers/users and that they are critical to their ongoing success. (McEwen, 2005) Some experts have even suggested that brands and brand relationships are the most ubiquitous and useful forms of marketing and communication available to any organization. (Gronroos, 1994). This chapter, however, looks at brands and brand relationships in a new and different way.

The idea of brand relationships has a long history of being the connective tissue between the buyer and seller (Aaker, 2009). One of the key elements used in developing these brand building activities came from Belk in the 1980s based on his concepts of material possessions making up part of the consumer's "outer self" (Belk, 2010). Fournier (1998) enhanced that concept by developing a theory of brand relationships. Those two concepts have been expanded and extended in many ways over time. Lastovicka and Sirianni (2011) suggested relationships were evident when customers were in the "throes of material possession love"; Rahinel and Redden (2012) argued that "brands are the consumer's product coordinators"; Aggarwal and McGill (2007) extended those brand and branding concepts suggesting customer relationships are "anthropomorphic". Aaker, Vohs and Mogilner (2010) went further, suggesting "nonprofits are warm and for-profits are competent". Clearly, these and a multitude of other concepts and approaches, have tried to take the concept of brands, and their personification, personalization and relationships to ever more complex levels of interactions and affiliations.

Business-to-business (B2B) organizations have not been immune to this extended brand relationship concept. Blocker, Houston and Flint (2012) have discussed "unpacking what a 'relationship' means to commercial buyers" moving B2B ever closer to the emotional bonds that previously had been assumed to exist only with consumer products. Even the professional community bought into the brand relationship idea with Roberts (2004) suggesting the idea of "brand lovemarks", which he argued were the ultimate sign of a customer-brand relationship.

Inherent in idea of customer brand relationships (CBR) is the output or outcome of that relationship in the form of brand loyalty, i.e., a consumer's consistent purchase and use of a single brand in a particular category over time. That replaced the managerial concept of simply satisfying customer needs which is not sufficient in today's highly competitive marketplace (Christopher, Payne and Ballantyne, 2012). In today's product and service rich environment, simply providing the basic satisfaction of consumer's wants or needs may not be enough (Oliver, 1997). Thus, to justify branding investments, managers believe they must move buyers from "product satisfaction" to some level of ongoing "brand loyalty" or continuing purchase to offset competitive challenges (Oliver, 1997). Alden, Steenkamp, and Batra (2006) argued much the same point, while Shimp (2007) suggested simply "satisfying a customer" is not enough – brand relationships must have firmer roots. And, Stewart raised some important questions when he stated "the assumption that (customer) 'satisfaction' and loyalty move in tandem, is simply not correct." (1995). Thus, while much has been written, there appear to be few firm directions for managers.

In spite of the inherent challenges of building and demonstrating brand loyalty, Oliver, (1999) in his landmark article "Whence Consumer Loyalty" relied on examples developed by Reichheld (Reichheld, 1996; Reichheld and Sasser, 1990) who argued that customer retention, i.e., continuing customer loyalty, was really the most important end goal for most marketers. While brand relationships may be a part of any brand loyalty equation, Reichheld found that retaining customers, even in small numbers (brand loyalty) resulted in substantial financial returns. Increasingly, the use of behavioral data to illustrate the financial returns on marketing investments has changed many brand managers' views of the value of brand relationships, particularly if they lead to ongoing customer brand loyalty (Chaudhuri and Holbrook, 2001).

For the past decade, brand management focus has been on measurement and evaluation of attitudinal relationships between the brand and the customer with strong arguments, suggesting that was the basis for brand loyalty. Thus, brand relationships are increasingly used more as explanatory and support variables than for prediction. This move from customer satisfaction, to the development of brand relationships and finally to brand loyalty, and the now, the apparent decline in those critical brand relationships are the focal points of this paper.

2 Premise of the Research

Using the Reichheld-developed concept of "the one number managers need to know", i.e., the Net Promoter Score, (NPS) for the brand or retail organization, (2003) the work of Fournier, Oliver, Reichheld and many others have been combined and extended to provide a better understanding of current day brand relationships and brand loyalty in an interactive marketplace. The base of the approach is Fournier's 1998 discussion of brand relationships being based on

four (4) pillars, i.e. (a) relationships which involve reciprocal exchange, (b) relationships that are purposive, (c) relationships as a multiplex phenomenon and (d) relationships as a process phenomenon. This study focused on the 4th pillar, i.e., process phenomena, for development of these ideas.

If indeed brand relationships are a process, as Fournier's 4th premise suggests, i.e., "they evolve and change over a series of interactions, and in response to fluctuations in the contextual environment" (1998), then the rapidly changing communication marketplace demands that marketers continuously monitor their brand concepts through customer research (McKenna, 2002). Marketing communication has, therefore, moved from a primarily marketer-controlled set of outbound communication tools to an almost unlimited milieu of marketer and consumer interactive communication systems driven by both buyers and sellers (Kitchen, 2004). It is understanding this interactive system, that becomes the brand manager's most pressing issue, that is, how to understand and develop effective brand marketing programs for today and tomorrow.

Many of the same tools Reichheld used in his studies are used in this methodology, i.e., the development, prediction and verification of how brand loyalty might be initiated, built and maintained over a period of time. Thus, Reichheld's Net Promoter Score (NPS) concept is the base for our research. While there have been concerns about the validity of NPS measures, (Keiningham et al, 2008; Kristensen and Eskildsen, 2011) its widespread global use by thousands of marketing organizations provides face validity for this concept and its use in this chapter. (Sheth, 201; Owen and Brooks, 2009).

3 Consumer Brand Preference Is Declining: The Basic Findings

The research, which forms the basis for this chapter, found that consumer brand preference for fast-moving-consumer-goods (fmcg) brands, i.e., those sold through supermarkets, mass merchandisers and other food stores in the U.S., may well have passed their zenith in terms of their ability to build ongoing relationships with customers and prospects. That relationship is key, since it has long been hypothesized that relationships lead to long-term brand loyalty. Our premise, coming from the research, is that declining consumer scores in a brand preference study signal trouble ahead for brands across the board. As a result, it may be that current concepts of brand relationships and loyalty may no longer be relevant in explaining how consumers select and neither value brands (Kay, 2006), nor what continues to encourage them to buy.

The basis for this lack of brand preference appears to be a feeling of commoditization among consumers, that is, there is a lack of differentiation between brands. Thus, if no brand preference is being developed among consumers, brands face a bleak future. That seems to be particularly true in our findings on consumer views of fmcg (fast moving consumer goods) products in the U.S. That would suggest that the brands in the study have developed much more

limited brand relationships, and by implication, less brand loyalty than in the past. So, despite many glowing trade and industry reports about increased brand value, (Holt, 2004); and inherent brand relationships (Lindgreen, 2012) and even brand loyalty (Esch, et al, 2006), this study suggests directly opposite findings. Additionally, even by employing new data analytic tools capable of focusing the firm's marketing efforts on best or most likely to buy customers and prospects coming from new big data resources, (Sterne, 2010), consumer brand preference still appears to be declining among the brands measured. This study is quite comprehensive since it includes analysis and valuation of many of the new interactive communication tools such as Facebook, Twitter, You Tube and the like. These new communication systems are often viewed as "brand saviors" by industry experts (Hendricks, 2010). This study, however, does not generate those same views.

Based on the findings in the study, the decline, and perhaps demise of all the brand concepts that have been so carefully developed over the last half-century may be incorrect or no longer relevant. (Haig, 2011). The result? The huge brand and branding investments being made today in advertising, marketing communication, product placement, events, public relations and the like, may no longer be generating the returns marketers have historically experienced. If this decline in brand preference, which we argue is the precursor to brand purchase and loyalty among customers and prospects, is evident today, it will only likely grow in the future. Certainly our data trend lines suggest that. Thus, all the research focus on brands and branding, and the massive investments in brand promotion and differentiation over the years may be for naught if consumer preference is indeed declining. In short, the "brand party may be over". Thus, marketers may need to re-think how they develop new, more relevant and impactful tools to differentiate their products and services in an increasingly globalized and interactive marketplace (Gummeson, 2007).

The above is the basic premise of this paper. In the follow paragraphs, we provide the evidence to support these premises. We start first with evidence of the decline in manufacturer brand preference. Some speculation is then offered on why that situation has developed. Some additional steps being taken to verify these initial findings are then described. Following that, a set of recommendations on the type, form and format of research needed to confirm and validate the problem is suggested so that a new set of solutions might be developed. A suggested research agenda to assist in development of a new direction for brand and branding research concludes the chapter.

4 Is Brand Preference Actually Declining?

At the 2012 ICORIA Conference in Stockholm, Schultz and Block (2012) presented a paper based on their analysis of Net Promoter Scores (NPS) and MBI (Media Behaviors and Influence) (BIGinsight.comTM) data, that consumer

preference for fmcg Manufacturer Product Brands in the U.S. was declining. It was being replaced by the growth of the Retail Store Brand preference (although not by retail store private label or brands). The issue was further illustrated by the increased consumer stated choice of “No Brand Preference” in the two major categories they investigated. In that paper, they argued that the two fmcg product categories were seemingly become “commoditized”, i.e., no differentiation in the minds of consumers. They further speculated that brands in those two product categories were likely increasingly being chosen by customers based on price or some type of promotional activity.(Schultz and Block, 2011; Schultz and Block, 2012)

Although their findings were based on only two broad fmcg product categories, and only over a one year time period, they suggested that some of the observed Manufacturer Product Brand Preference declines might be attributed to changes in consumer media consumption, more specifically the increased use of social media by the reporting panel, i.e., they defined that as more time spent with Facebook, Twitter, You Tube, etc., compared to traditional mass market, brand-building media activities, such as television, magazine and newspaper advertising. They further argued that brand-destroying price promotions in the two product categories may also have contributed to their findings.

The study presented here is an extension and expansion of that general notion of declining Manufacturer Product Brand Preference in fmcg product categories. This study, however, was conducted over a longer period of time (10 years), with a massive number of respondents (over 1,100,000 individual responses), in 73 grocery and food store product categories, representing over 1,500 brands. Thus, it provides substantial support for the initial Schultz and Block (2012) study and extends those results longitudinally to a large number of brands and product categories. It also provides more insights into the possible reasons for these reported changes.

5 The Data Source

Prosper Business Development (www.goProsper.com), based in Worthington, Ohio, in the U.S., has developed and provided business development services and market intelligence to a wide variety of U.S. and global retailers, brand manufacturers, financial services and media organizations since 2002 (BIGinsight.com™). They have developed the same services in China since 2006 (prosperchina.com). Conducting these monthly, quarterly and semi-annual on-line consumer data gathering studies, they have become a major supplier to many professional organizations. The study results have been made available to various academic institutions through research grants and have been widely used in various types of academic research (Bickle, 2012; Schultz and Block, 2010, 2011, 2013).

This study uses the results from the BIGinsight™ CIA Monthly Consumer Studies, (BIGinsight.com™) on-line consumer questionnaire, distributed and responded to by approximately 8,000 U.S. respondents each time it is conducted (BIGinsight.com™). The data set used in this analysis is based on the aggregated results of 130 months of questionnaires (January, 2002 through October, 2012). Those questionnaires generated a total of 1,101,375 responses, (an average of 8,472 respondents per questionnaire wave).

Consumer responses to questions in 16 broad consumer product departments found in retail food stores are the base for this study. These product departments included such aisles and categories as household cleaning products, snack foods, frozen foods, breakfast cereal and the like. Although not all food stores use the same categorization system, consumers seem to accept them in the same way to fill their shopping needs. We use that same organizational structure in this discussion.

The 16 food store departments included a total of 131 product ranges and 73 specific product categories. Each range and category is made up of additional data on individual brands. The file therefore consists of brand usage, brand preference, brand purchased last and a number of other factors for the 1,526 individual brands studied. (We should note here that the definition of a “brand” is based on a write-in response from consumers. Thus, to consumers, the product line identified is a brand whether technically it is or not). This level of data gathering enabled us to drill down into specific brand data on products and categories as desired. It is therefore possible to further differentiate the marketplace situation of brands in a wide variety of product categories. Unfortunately, the size and scope of the consumer reported data creates reporting complications. Thus, only summary data is provided in this chapter.

6 Data Analysis

The analysis used was based on the survey respondent’s answers to a number of questions on brands and branding, i.e., how they are viewed, how they are used, what influences their brand choice, usage and the like. Critical were the questions relating to whether or not the respondent recommended various brands to friends, relatives, acquaintances and others. By knowing respondent product usage, and whether or not those experiences were shared with others, it was possible to create a Net Promoter-type Score (NPS) for each Manufacturer Product Brand and for each Retail Store Brand. That data was then aggregated up into product line, product categories and the like.

In developing the NPS number, the same format developed by Reichheld (Reichheld, 2003) and employed by Satmetrix (2012) for commercial purposes in creating and measuring NPS ratings, was used. (The general calculation is based on a 10 point scale where respondents complete a form to record their level of satisfaction with the brand or store with which they interacted. Con-

sumer rating scores of 10 and 9 are combined for all respondents to create a total “promoter” score. Those giving recommendation scores of 0 to 6 are then totaled as “detractor” scores. Those are then deducted from the “promoter” total which provides the “Net Promoter Score - ”the one number you need to know” as advocated by Reichheld (2003). The NPS process is sufficiently robust to provide the information required in this report.

Using these approaches and calculations, the NPS score for each of the individual Manufacturer Product Brand in all of the 73 individual product categories and for all of the 1,526 brands included in this study, were calculated. Since respondents reported where the Manufacturer Product Brand was purchased, it was also possible to calculate an NPS for each of the Retail Stores named by respondents (identified as “Store” in the tables and discussion).

This individual Retail Store Brand and its NPS score were the key ingredients in the overall analysis. It allowed the indexing of the NPS Retail Store score against the NPS score for the individual Manufacturer Product Brand. It was, therefore, possible to identify which manufacturer brands are stronger than the store brand, and, of course, the alternative view. Again, this data and data matrix, when indexed and categorized, is so large and complex that only aggregated data can be provided in this chapter.

7 Findings

In measuring the Net Promoter Scores for the 1,526 Manufacturer Product Brands represented in the 73 individual product categories, it was found that many of them had lower NPS scores than the Retail Store Brand where respondents said they purchased the brand. In other words, the Retail Store Brand NPS score was commonly higher than that of the Manufacturer Product Brand. From this analysis, it appears consumers are first selecting the retail store (higher Retail Store preference) and then, selecting from the array of Manufacturer Product Brands the retailer has assembled. That’s illustrated in Table 1 below.

Table 1 provides an aggregated comparison of the reported shares of each individual Manufacturer Product Brand in each product category along with both the Retail Store Brand. The calculation was simple: the leading Manufacturer Product Brand in each of the 73 product categories, and the leading Retail Store Brand were calculated, and then, averaged to provide the data in the chart. (The Share Leading Brand should be read as “the share of preference for the leading Retail Brand in that category” and, the Product line should be read as “the share of preference for the leading Manufacturer Product Brand in that category”). As can be seen, the share of preference for the leading Retail Store Brand is generally substantially higher than that of the Manufacturer Product Brand in this aggregated total. More evidence of that difference is shown by the AGR (Average Growth Rate) for the Retail Store Brands, all of which are posi-

tive (+0.54%), while the AGR for Manufacturer Product Brands is decreasing on average over the ten years by -1.68%.

Table 1: Market performance of stores and products

	Stores*	Products**
Share Leading Brand	26.52	15.89
AGR Leading Brand	0.54	-1.68
Share No Preference	25.66	50.22
AGR No Preference	1.21	1.38
Competitive Index	0.097	0.061
Net Promoter Score	19.48	-9.07
*Preferred store where product purchased		
**73 product categories averaged over 10 years		

What should be more disturbing for the Manufacturer Product Brand managers, however, is the growth of the “No Brand Preference” choice by respondents. In the CIA Monthly Consumer Survey (MCS) (BIGinsight.com™) data, this consists of a consumer reported choice of “No Brand Preference” in this product category. Thus, they had to actively indicate they have NBP. As can be seen, while the share of No Brand Preference is growing for both Retail Store Brands and Manufacturer Product Brands, the percentage reporting this occurred in only about 25% of the sample base for the Retail Store Brands, while it was just over one-half of the respondents for the Manufacturer Product Brand. That simply means that over 50% of all consumer responses, over the 10 year period, reported they had “No Brand Preference” in the average Manufacturer Product Brand category. (We should note again: This is an average score with some brands being higher rated and some lower). Again, what is most disturbing for both Retail Store Brands and Manufacturer Product Brands is that the AGR for both, when stated as “No Brand Preference”, continued to increase during the ten year survey period.

A final point is relevant. The Average Net Promoter Score for the Retail Store Brands was +19.48, a very strong showing in the NPS system, while the aggregated Manufacturer Product Brand NPS score was a negative -9.07. This means the recommendations consumers gave to their Manufacturer Product Brands, in terms of “Detractors” scores, was greater than that of “Promoters” for all the brands in all the categories, when averaged over the ten year period. Thus the growth of “No Brand Preference” is broad scale and pervasive among all these food store stocked brands. This is, and should be, a disturbing finding for all brand managers, no matter what brand they represent, or, in which field.

In a majority of the 1,526 individual Manufacturer Product Brands, when compared to the scores of the Retail Store Brands, the preference for the individual Manufacturer Product Brand was consistently lower than it was for the Retail Store Brand. The aggregated data in Table 1 clearly points that out. Thus, responding consumers in these ongoing studies place more faith in the Retail Store Brand, and are more willing to recommend it to others, than they are for the Manufacturer Product Brands which are stocked in those same stores. This issue of store loyalty vs. brand loyalty has been a recurring theme in both academic and practitioner research for some time (Keller, 1998; Kumar, 2008). This finding does help clarify somewhat that unresolved question in the literature. From this data, it appears consumers are placing more brand faith in the retailer, that is, letting the retailer make the first level brand decision for them, and then selecting from the product shelf array available when doing their actual shopping. Table 2 and 3 support that view.

In Tables 2 and 3, all category and brand data has been aggregated into quintiles for easier analysis and explanation. In Table 2, the quintile with the Manufacturer Product Brand category showing the highest share of preference (in this case, the share of brand preference was calculated by summing all consumer Manufacturer Product Brand mentions in each category and then ranking those numbers to identify the brand with the most mentions, thus creating a share of preference for this analysis). Using the 73 product categories as the base, five deciles (groups of 20 brands) were created that resulted in 14 Product categories in the highest and lowest quintiles and 15 Product categories in each of the other three, i.e., the middle deciles.

In Table 2 this first decile consisted of 14 product categories. The leading Manufacturer Product Brand, in terms of percentage of preference in each of the product categories, is shown in the table. In this example, Clorox is the leading brand in the Bleach category with a “preference share” of 42.01%. (Note: this preference share is based on consumer responses to the CIA-MCS questionnaires, not on actual marketplace sales) The Clorox share of customer preference declined by -3.36% over the ten year study period. The Retail Store Brand, where the Clorox product was purchased, had a much lower share of preference, on average 8.61%, but, the Retail Store Brand share of consumer preference by mention, increased by +4.95% during the decade. What is most interesting in this example, however, is that the No Brand Preference rating share was almost the same as that of the Clorox Brand, i.e., Clorox = 42.01%, No Brand Preference = 40.21%. In other words, there were almost as many respondents who said they had No Brand Preference in the Bleach category as said they preferred the leading brand, Clorox. More important, however, is the fact that No Brand Preference was growing in market preference share over the period, while Clorox consumer preference was declining, i.e., Clorox AGR = -3.36%, No Brand Preference +4.15%.

Table 2: Top leading brand categories

Category	Leading Brand	Leading Share	AGR Leading	Store Brand	AGR Store	No Preference	AGR No Pref.
Bleach	Clorox	42.01	-3.36	8.61	4.95	40.21	4.15
Glass Cleaners	Windex	40.89	-4.39	5.19	-2.81	43.42	6.3
Razors	Gillette	35.84	-1.76	3.46	5.65	33.88	1.79
Aluminum Foils	Reynolds	35.84	-2.24	10.95	-3.33	42.22	3.13
Facial Tissue	Kleenex	34.98	1.14	5.79	4.41	34.38	-2.71
Dish Detergents	Dawn	30.88	-2.21	2.50	-3.06	41.76	6.45
Toothpaste	Crest	29.01	-2.69	0.65	4.50	24.23	6.64
Baby Shampoo	John & John	28.88	-3.36	2.09	-4.77	50.42	2.43
Insect Repellent	OFF!	27.63	-3.16			56.61	1.47
Tooth Brushes	Oral B	27.51	-1.21	2.70	1.74	32.60	2.25
Sports Drink	Gatorade	26.53	0.34			61.20	-1.15
Laundry Detergent	Tide	26.46	-3.40	2.13	2.03	32.85	12.06
Food Storage Bags	Ziploc	25.81	-2.38	9.08	-0.90	40.60	3.34
Toilet Tissue	Charmin	24.75	3.46	4.95	4.66	26.88	-4.78

Similar comparisons can be made with other Manufacturer Product Brands, Retail Store Brands and the No Brand Preference ratings found in Table 2. Only three of the 14 Brands in this quintile increased their share of brand preference over the ten year period Kleenex in Facial Tissues, Gatorade in Sports Drinks and Charmin in Toilet Tissues. In all three of those instances, No Brand Preference actually declined when compared to the Manufacturer Product Brand, i.e., -2.71% for the Kleenex brand in that category, -1.15% for the Gatorade brand in their category and -4.78% for the Charmin brand in their category. Thus, there is evidence that, while on average, all brands are declining in terms of share of market preference in the CIA-MCS data, some brands have been able to maintain, and even increase, their consumer franchise. These anomaly brands are ones that should be further studied to determine how they were able to accomplish that feat.

Even in the Manufacturer Product Brands where growth occurred, not all the findings are positive. For example, in the Sports Drink category, 61.20 % of the respondents said they had No Brand Preference in that category. Thus, while Gatorade is the dominant brand, a majority of the consumers say they simply don't have a strong enough brand preference to encourage them to buy Gatorade or any other branded Sports Drink. Thus, they opted for No Brand Preference. Overall, survey respondents seem to be increasingly ambivalent about brands in these and the other product categories as well.

Table 3 shows the reverse side of the Manufacturer Product Brand Loyalty coin. This summary calculation shows those Manufacturer Product Brands in

the quintile which have the lowest share of brand preference by category across the entire study.

Table 3: Lowest leading brand categories

Category	Leading Brand	Leading Share	AGR Leading	Store Brand	AGR Store	No Preference	AGR No Pref.
Cough Medicine - Child	Robitussin	3.14	-8.29	1.69	-4.92	82.79	0.39
Fiber Supplements	Metamucil	3.64	-3.17	2.29	-1.83	80.25	-0.21
Pain Relievers - Creams	Icy/Hot	3.71	6.24	2.94	-2.90	76.94	0.31
Cold & Flu - Children	Tylenol	3.88	-4.70	1.51	-4.89	85.30	0.3
Sinus or Allergy	Benadryl	4.74	-1.28	5.24	-2.74	65.11	1.51
Mousse/Styling Gel	Suave	5.15	-4.44	0.75	-2.66	65.08	0.32
Baby Bottles	Gerber	5.26	9.15	1.26	-12.81	70.63	-2.41
Non-Disp. Containers	Rubbermaid	5.58	-6.17	4.59	-0.80	68.57	1.3
Dinner Entrees	Stouffers	6.19	-7.67	1.57	4.59	50.95	1.95
Facial Cleansers	Oil of Olay	6.28	-3.95	0.32		54.54	-0.42
Coloring/Rinses	Clairol	6.29	-6.58			74.32	-0.02
Breakfast Bars	Quaker	6.30		1.37		62.38	
Napkins	Bounty	6.40	12.49	14.85	-0.25	55.71	-0.39
Hair Spray	Suave	6.92	-3.56	0.51	1.21	63.11	0.51

All the Manufacturer Product Brands shown in Table 3 have brand preference shares of less than 7% in the category. (Recall, in this calculation that means the brand received the most mentions in that category. The percentage is that of all mentions. Other brands in the same category had lower brand preference scores). Some of these low preference scores in the category may have occurred because there are multiple brands competing in that category and thus, no single brand stands out. Alternatively, it may well be that the Manufacturer Product Brands in these categories are more specialized, i.e., patent medicines, hair coloring and rinses, and baby products. Thus, they appeal to a limited number of customers since they may have low penetration scores or are infrequently purchased. Whatever the reason, however, it is clear that, in spite of the substantial amounts of money that have been, and are still being spent to promote those brands in these categories, little brand preference has been developed. While the Manufacturer Product Brands are well known and easily recognized by the lay reader, such as Gerber, Stouffers, Oil of Olay and Clairol, they have not created sufficient demand to overcome the consumer vote of “No Brand Preference” in their particular product category. In fact, in almost all No Brand Preference ratings, the scores are in the 70% to 80% range. And, for the most part, the AGR of No Brand Preference is continuing to grow.

What is interesting in this analysis, however, is the much lower Retail Store Brand market share when compared to that in Table 2. In this quintile, many

Retail Store Brand categories fall in the single digits, and in almost all cases, they have been declining over the entire survey period. One of the reasons for these low Retail Store Brand scores may well be that the food store is not the primary retail outlet for these Manufacturer Product Brands; for example, the consumers may prefer drug retailers or mass merchandisers as their primary purchasing location for these categories and these brands. That finding raises an interesting question: while Manufacturer Product Brand managers commonly value broad brand distribution, and see it as a marketplace advantage, the CIA-MCS data seems to say that the broader the distribution base, the lower the Manufacturer Product Brand preference in this study and the higher the No Brand Preference. That's certainly true in the food/grocery stores where the brand is stocked in this study. This is a most interesting finding and one that deserves future research attention.

When these findings are broadly extrapolated, it means the methods and approaches historically used to develop and build Manufacturer Product Brand preference likely need to be re-thought. Several other researchers have raised these same issues so there seems to be convergence of this idea. Another paper extending these ideas and approaches has been completed and is now available (Schultz, et al, 2013). In that study, the data reported here was compared with that of two other major consumer brand research organizations, BAV (www.bavconsulting.com) and Brand Keys Customer Loyalty Engagement Index (www.brandkeys.com). Comparisons in three primary consumer product categories in three product categories confirmed the findings in this study and report. Thus, it is believe that NBP is indeed declining in multiple categories across fmcg products in the U.S. (Gerzema, 2013; Passikoff, 2013).

8 Why Is Product Brand Preference Declining and Why Now?

While this study clearly suggests that Manufacturer Product Brand preference is declining, it is more important to determine if that is occurring on an individual brand basis or more widespread across all categories. Tables 2 and 3 clearly show the decline of Manufacturer Product Brand Preference in many categories. Some reviewers have raised questions about the study and its results since it contradicts generally accepted managerial wisdom. Therefore, two additional analyses were conducted.

First, there is obviously a question about the 10 year data set. In this paper, we have presented the comparisons between the first and last years, i.e. Years 1 and 10. If there has been a consistent decline in Manufacturer Product Brand preference scores that is one thing. If there have been major variations in scores over time that would lead to another conclusion. Figure 1 answers that question.

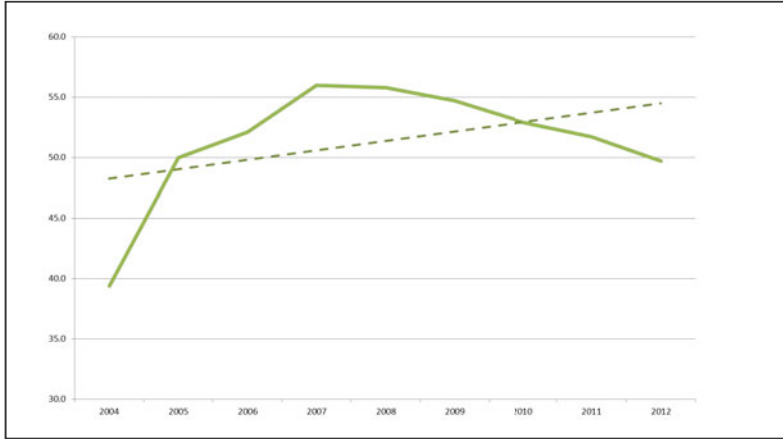


Figure 1: Trend in no brand preferences

In the figure above, the specific findings for each year during the analysis period is charted. Even though the No Brand Preference share of responses has decreased a bit since about 2007, it still is hovering around the 50% mark. When a trend line is calculated, it is clear that is still trending upward. Thus, we likely can rule out any influence or impact of year-to-year measures of No Brand Preference in terms of its impacting the study findings or results.

Perhaps more important is whether the findings represent all or only a few of the Manufacturer Product Brands. The second analysis looked at that by reviewing all the Manufacturer Product Brands upon which the study was based. All the Manufacturer Product Brands in the 73 individual product categories were aggregated and analyzed. Additionally, all the NPS findings for individual Retail Store Brands were aggregated in a separate file. The two data sets were then merged. The result is the aggregated report shown as Table 5.

As shown, using quintile analysis, five basic product groups were created. As before, those were constructed by using the leading Manufacturer Product Brands, based on share of preference in each of the 73 product categories. The Manufacturer Product Brand share was then used to create an array of Manufacturer Product Brands with the highest product brand preference in the top quintile (#5) and the others following in descending order. Fifteen (15) product lines fell in each of the three middle groups and 14 product lines fell in the first and last quintiles for a total of 73.

Table 4: Leading share quintiles categories

Quintile	Leading Share	AGR Leading	Store Brand	AGR Store	No Preference	AGR No Pref.
5 (Top)	31.22	-1.80	4.15	0.93	40.09	2.96
4	20.05	-1.91	3.05	0.27	46.77	1.00
3	13.61	-2.51	3.51	-1.30	42.95	2.23
2	9.64	-0.41	3.82	-2.24	53.55	0.32
1	5.25	-1.57	2.78	-2.00	68.26	0.22
Total	15.89	-1.64	3.46	-0.88	50.22	1.34

The quintiles were then arrayed based on the descending mean score of the Manufacturer Product Brands within each of the categories. As shown, quintile #5 (the top quintile) had an average mean Manufacturer Product Brand share of 31.22% while the lowest Manufacturer Product Brand quintile had a mean product brand preference share of only 5.25%. We further calculated the AGR (Average Growth Rate) for all the brands in the Manufacturer Product Brand quintile. In each case, over the ten year period, as shown, all declined.

The same analysis was conducted on the Retail Store Brands during the reporting period, using the same data set. While the mean Retail Store Brand, on average, was much lower, in the top two quintiles, the Retail Store Brand preference did indeed grow over the decade. What is most interesting about these calculations is that of No Brand Preference. In all five quintiles, No Brand Preference was above 40% in overall consumer selections with decile #1 registering 68% based on consumer rankings. That was higher in brand preference share than any Manufacturer Product Brand preference share. Most importantly, however, is that in all five quintiles, the No Brand Preference AGR increased over the ten year measurement period, in one case, that of the highest Product Brand quintile, by nearly +3%.

Clearly, based on this longitudinal analysis, Manufacturer Product Brands are losing consumer preference. Their share of preference, as reported over time, is declining. Retail Store Brand preference, as indicated by the NPS scores, seems to be increasing but only slightly. The most important issue is the continuing growth of consumer No Brand Preference in most categories. As shown in Table 3, that has risen from roughly 38% of consumer responses in 2004 to nearly 50% in 2012.

The question is: what seems to be causing this decline in consumer brand preference for Manufacturer Product Brands? If we can identify some relevant explanations, perhaps a start on some solutions can be made. Before addressing that issue, some additional verification of these findings need to be discussed.

9 Verification of the Findings

The findings of this study have already met with substantial opposition from branding advocates, experts and those with vested interests in brands and branding. That has been particularly true among those who use or rely in attitudinal data such as brand tracking studies as support for their views. Therefore another step was taken to help validate these results.

In the consumer products field, the Brand Asset Valuator organization (BAV) has been conducting consumer studies of brand impacts on business metrics such as pricing, loyalty and P/E ratios for more than 20 years. This research organization collects 75 metrics on 40,000 brands in 50 countries each year; thus, they have one of the largest and most complete brand databases in the world. In their most recent study, their findings confirm that brand value for the fmcg brands included in their analysis is indeed declining. They attribute that decline to falling confidence in the overall business community. (Gerzema, 2013). Similarly, Brand Keys, the New York-based brand consulting organization, has been conducting their Customer Loyalty Engagement Index for the past thirteen years. Their annual studies cover 39,000 questionnaire respondents in the U.S. In their most recent study, they report: "Brand Keys identified 11 product categories, mostly CPG (fmcg) where the value of the brand or emotional brand value has decreased. It is the first time we have seen such consumer reaction." (Passikoff, 2013)

The authors of this study contacted the principles of BAV and Brand Keys studies. A triangulated study that is, combining the three data sets was conducted. The results of those studies can be found in 'Brand Preference Being Challenged', presented at the International Consumer Brand Relationship Conference, Winter Park Florida (Shultz, et al, 2013). Findings from that additional research project confirmed the data found in the Prosper Studies conducted by Schultz and Block (2012, 2013).

10 Conclusions and Next Steps

From all this material and analyses, some conclusions are offered along with some suggestions for new and different methods of studying and understanding brands in an interactive marketplace.

10.1 A Consistent and Continuing Decline in Manufacturer Product Brand Preference and Major Growth of No Brand Preference

In most all categories investigated, it was found that Manufacturer Product Brands were declining in preference during the measurement period, some as much as -5 to -7% during the ten year period. At the same time, most Retail Store Brand preference scores were growing, albeit slowly. Thus, it seems con-

sumers are shifting their loyalty to the retail store and away from manufacturer branded products. That same result is being found by other researchers and analytical companies. Most disturbing is that this seems to be true for almost all Manufacturer Product Brands across all the 73 product categories. More disturbing, however, is the rapid and continual growth of the No Brand Preference choice in the category by consumers as is reflected in the NBP Net Promoter Scores. Thus, while Manufacturer Brand Preference is declining, it is seemingly being replaced, to a small extent, by a shift to Retail Store Brand preference. We should note here: this does not mean a shift to private label or retailer own brand. It is seemingly more a rejection of the idea that brands are an acceptable method of differentiating products in specific categories. Thus, in spite of the enthusiasm of brand managers for their brands, they seem to be increasingly meaningless to consumers.

The shifts identified, however, do not explain all the Manufacturer Product Brand preference losses. What is or should be of more concern to brand managers is the continuing shift from Manufacturer Product Brand preference to a stated consumer choice of No Brand Preference. Based on this data, Manufacturer Product Brands would seem to be in decline across the board and the current efforts by brand marketers do not seem to be having any influence on this decline, at least over the last ten years as reported in the CIA-MCS data.

While there have been attempts to explain or define why and how brand loyalty has or is eroding (Rundle-Thiele and Bennett, 2001; Kapferer, 2005; Dekimpe, Steenkamp, Mellems and Abeele, 1997) among others, most have approached the question in terms of the impact on the brand owner, and have neglected to consider the changes consumers have made. Thus, perhaps a new and more relevant measurement and evaluation tool is or may be required. Some experimental work has been done with Kahneman's System 1 and System 2 concepts (Kahneman, 2011). From that, it appears that there are major questions on how consumers process and use external information compared to what is found in the traditional branding literature. That certainly deserves more investigation.

10.2 Retail Store NPS Is Increasing, but not as Rapidly as Manufacturing Product Brand Preference Is Declining

A common explanation for the decline in Manufacturer Product Brand preference is often attributed to a shift of consumer preference to the Retail Store Brand, i.e. simply a shift away from the Manufacturer Product Brand. Often this is based on the supposed consumer preference for private label or retailer own label products. The implication generally drawn is that the consumers are downgrading to lower priced Retail or private label brand products. While there is some evidence of that in some categories, particularly in the lowest Manufacturer Product Brand Categories (Table 3), it does not explain the overall decline in

Product Brand Preference across all product categories. That seems to be occurring in spite of the fact that many of the leading brands, in the categories which are declining the most, are familiar to many consumers. They are well known and often highly promoted, i.e., Tylenol, Stouffers, Oil of Olay, Bounty, Metamucil and the like. Thus, it appears that whatever and however Manufacturer Product Brands are being promoted, that or those promotional or brand-building activities are not protecting the Manufacturer brands from perceived commoditization, i.e., the growth of No Brand Preference for their product in their category.

In other reviews of this work, suggestions have been made that the decline in Manufacturer Product Brand preference may be explained through the use of choice models or other analytical or statistical techniques. (Ben-Akiva, et al, 2002; Stern and Hammond, 2004; Oliver, 1999) While these approaches may provide some insights, a reliance on a statistical methodology, rather than actual consumer reports, seems less likely to provide answers. Some pursuit of these alternative approaches is certainly warranted, however.

10.3 Some Brands Are Weathering the Storm

A few Manufacturer Product Brands seemingly have become the de facto product leaders for their product categories. Examples include Gatorade in Sports Drinks and Clairol in Coloring Rinses. In these cases, the Store Brand or private label or even the brand of the retailer does not seem to be a factor. In those few instances, while No Brand Preference is high, it is declining. It would seem that major research emphasis going forward should be on these “exceptional brands” and efforts made to determine how and why these category leader brands have managed to continue to compete in their categories and not be impacted as much by Retail Store Brand preference nor by the overall growth of No Brand Preference.

10.4 Is a New Brand Calculus Measurement Needed?

Over the past 30 years or so, Consumer Brand Equity, has been thought of as a management measurement tool and has been used to determine the brand’s organizational value (Rust, Lemon and Zeithaml, 2004; Keller, 2003; Cable and Turban, 2003). Other tools such as consumer brand tracking have been used as well. Those tools have posited that psychological brand values, such as awareness, recall, conviction, preference and the like are the most relevant tools for determining how individual customers value brands. They have lent major support to the concepts of brand loyalty (Oliver, 1999, Reichheld, 2003) and brand relationships (Fournier, 1998). Our research indicates that those may not be the most relevant tools for brand evaluation going forward. The increasing shift of brand preference away from Manufacturer Product Brands to No Brand Prefer-

ence seems to signal a more complex marketplace measurement system is needed. Indeed, the question of the growth of No Brand Preference seems to indicate an increasing commoditization of the marketplace. It is likely more sophisticated analytical and measurement tools, ones which go far beyond individual customer responses and include a wider variety of alternatives such as customer behavioral measures such as those proposed by the behavioral economics groups may well be needed. While brands are clearly image-driven and those images are assembled in the mind of the customer, it may well be that customers simply can't articulate their views and preferences through attitudinal studies. Thus, brand managers may be better served by starting with brand behaviors and working back to what created or caused those behaviors rather than trying to predict from questionnaires, focus groups and the like what they might do in the future.

10.5 Causal Factors Must Dominate

Our present explanations and measures of brands and branding seem far too simplistic for the more complex, interactive marketplace in which they now exist and compete. Simple linear relationships, constructed from a limited number of consumer personal interviews, focusing primarily on consumer attitudes and impressions, may not be powerful enough to answer the questions raised in this study. Behavioral models, where actual consumer activities occur, seem to offer the best potential for research today and going forward. We know far too little about why and how consumers make brand decisions when faced with multiple alternatives, i.e., competitive brands, retail choices, multiple external inputs, suggestions and recommendations from other sources and the like. From this mix of attitudinal and behavioral data, perhaps new tools and methodologies can be created. That is what is seemingly needed in today's marketplace. One alternative might be an attempt to de-construct what caused or created those identified and reported behaviors.

Some work has been done in the use of neuro and neural marketing (Morin, 2011) and behavioral economics (Pykett, 2012). Both seem to have great potential for helping to understand the very complex and complicated system consumers use to make brand decisions. Research emphasis should, therefore, be devoted to developing new and more rigorous approaches in these areas, with less emphasis on filling in the gaps of past research or extending our knowledge of what apparently is not working or has not worked historically.

Today, a new view and understanding of how consumers make and maintain brand relationship decisions is needed. Longitudinal studies such as this one, including a number of variables, are likely the right path. Large and complex data sets such as the one used in this study may be the answer. A combination of the data found in the three major consumer databases, i.e., BAV, Brand Keys and this Prosper data set may well contain some answers, or, at least provide

new directions for research. We hope this study provides a base for encouraging marketing, communication and consumer behavior scholars to move forward into what appears to be a radically different brand marketing world than we have presently imagined, using new and more relevant tools than have been employed in the past.

11 References

- Aaker, David A. (1996) *Building Strong Brands*, (New York, NY: The Free Press)
- Aaker, D. A. (2004) "Leveraging the Corporate Brand," *California Management Review* 46(3): 6-18
- Aaker, D. A. (2009), *Managing brand equity*, Simon and Schuster, New York, NY
- Aaker, Jennifer, Kathleen D. Vohs, and Cassie Mogilner (2010), "Nonprofits are Seen as Warm and For-Profits as Competent: Firm Stereotypes Matter," *Journal of Consumer Research*, 37(August), 224-237
- Aggarwal, P., & McGill, A. L. (2007), Is That Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products, *Journal of Consumer Research*, 34, 468-479
- Alden, Dana L., Jan-Benedict E.M. Steenkamp, and Rajeev Batra (2006), "Consumer Attitudes toward Marketplace Globalization: Structure, Antecedents, and Consequences," *International Journal of Research in Marketing*, 23, 227-39
- Belk, R. 2010, *Possessions and Self*, Wiley International Encyclopedia of Marketing, Hoboken, NJ
- Ben-Akiva, M., McFadden, D., Train, K., Walker, J., Bhat, C., Bierlaire, M. & Munizaga, M. A. (2002), Hybrid choice models: Progress and challenges, *Marketing Letters*, 13(3), 163-175
- Bickle, M (2012) *the Changing American Consumer*, Prosper Publishing, Worthington, OH
- Blocker, C. P., Houston, M. B., & Flint, D. J. (2012) Unpacking What a "Relationship" Means to Commercial Buyers: How the Relationship Metaphor Creates Tension and Obscures Experience, *the Journal of Consumer Research*, 38(5): 886-908
- Cable, D. M., & Turban, D. B. (2003) the value of organizational reputation in the recruitment context: A brand equity perspective. *Journal of Applied Social Psychology*, 33: 2244-2266
- Chaudhuri, A., & Holbrook, M. B. (2001), The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty, *The Journal of Marketing*, 81-93
- Christopher, Martin, Adrian Payne, and David Ballantyne (2012), *Relationship Marketing*, Oxford: Butterworth-Heinemann Ltd.
- Dekimpe, M. G., Steenkamp, J. B. E., Mellens, M., & Vanden Abeele, P. (1997) Decline and variability in brand loyalty, *International Journal of Research in Marketing*, 14(5), 405-420
- Esch, F.-R., Langner, T., Schmitt, B.H., & Geus, P. (2006) Are brands forever? How brand knowledge and relationships affect current and future purchases. *Journal of Product & Brand Management*, 15(2), 98-105
- Fan, Ying, (2006) Nation branding: what is being branded? *Journal of Vacation Marketing*, 12:1, pp. 5-14
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*. 24 (March), pp.343-73
- Gerzema, John (2013) from personal correspondence from John Gerzema, CEO, Y&R BAV Consulting, March 7, 2013
- Gronroos, Christian (1994), "From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing," *Asia- Australia Marketing Journal*, 2 (August), 9-29
- Gummesson, E. (2007), "Exit services marketing – enter service marketing", *Journal of Customer Behaviour*, Vol. 6 No. 2, pp. 113-41

- Haig, Matthew (2011), *Brand Failures: The Truth about the 100 Biggest Branding Mistakes of All Time*. Sterling, VA: Kogan
- Hendricks, J. A. (2010), *The Twenty-first-century Media Industry: Economic and Managerial Implications in the Age of New Media*. Lexington Books
- Holt, Douglas B. (2002) *Brands and Branding*. Harvard Business School Note #503045, Cambridge, MA: Harvard Business School Publishing.
- Holt, Douglas B. (2004), *How Brands Become Icons: The Principles of Cultural Branding*, Cambridge, MA: Harvard Business School Press
- Kahneman, D. (2011), *Thinking, fast and slow*, Farar, Straus and Giroux, New York, NY
- Kapferer, J.N. (1992), *Strategic Brand Management*, Kogan Page, London
- Kapferer, J. N. (2005). The roots of brand loyalty decline: An international comparison. *Ivey Business Journal*, 69(4), 1-6
- Kay, M. (2006) "Strong brands and corporate brands", *European Journal of Marketing*. Vol. 40 No. 7/8, pp. 742-760
- Keiningham, T. L., Aksoy, L., Cooil, B., Andreassen, T. W., & Williams, L. (2008) A holistic examination of Net Promoter, *Journal of Database Marketing & Customer Strategy Management*, 15(2), 79-90
- Keller, K.L. (1998), *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, Upper Saddle River, NJ: Prentice-Hall
- Keller, Kevin Lane (2003), *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, 2d ed. Upper Saddle River, NJ: Prentice Hall
- Keller, Kevin and Donald R. Lehmann (2006), "Brands and Branding: Research Findings and Future Priorities," *Marketing Science*, 25(6), pp.740-759
- Kitchen, P.J. (2004), in de Pelsmacker, P. (Ed.), *Integrated Marketing Communication: A Primer*, Taylor & Francis, London
- Kristensen, K., & Eskildsen, J. (2011), Is the Net Promoter Score a reliable performance measure? In *Quality and Reliability (ICQR)*, 2011 IEEE International Conference on pp. 249-253, IEEE
- Kumar, V (2008), *Managing Customers for Profit*. Upper Saddle River, NJ: Wharton School Publishing
- Lastovicka, John L. and Nancy J. Sirianni (2011) "Truly, Madly, Deeply: Consumers in the Throes of Material Possession Love," *Journal of Consumer Research*, 38 (August), 323-42
- Lilleker, Darren G. (2005) 'The Impact of Political Marketing on Internal Party Democracy', *Parliamentary Affairs* 58 (3): 570-584
- Lindgreen, A. (2012), *Managing Market Relationships: Methodological and empirical insights*, Gower Publishing, Ltd., Surrey, England
- McDonald, Heath and Julian Vieceli (2005) *Personal Branding: an introduction*, Magnus School of Business, Hyderabad, India
- McEwen, W.J. (2005) *married to the brand, why consumers bond with some brands for life*, New York, NY: Gallup Press
- McKenna, R (2002), *Total access*, Boston: Harvard Business School Press
- Morin, C. (2011, March). *Neuromarketing: The new science of consumer behavior*. *Society*, 131-135
- Oliver, Richard L. (1997), *Satisfaction: A Behavioral Perspective on the Consumer*, New York: McGraw-Hill
- Oliver, Richard L. (1999) "Whence Consumer Loyalty" *Journal of Marketing* 63 (Special Issue): 33-44
- Owen, Richard, and Laura Brooks (2009), *Answering the Ultimate Questions: How Net Promoter Can Transform Your Business*, San Francisco, CA: John Wiley and Sons, Jossey-Bass

- Passikoff, Robert (2013) personal correspondence with Robert Passikoff, CEO, Brand Keys, Managing Director, 6 March, 2013
- Prosper Business Development (2012) <http://www.goprosper.com/>
- Pykett, J (2012) Neurocapitalism and the new neuros: using neuroeconomics, behavioral economics and picoeconomics for public policy, *Journal of Economic Geography*, First published online: December 10, 2012
- Rahinel, R. and Joseph P. Redden (2012) Brands as Product Coordinators: Matching Brands Make Joint Consumption Experiences More Enjoyable, *Journal of Consumer Research, Inc.*, Vol. 40
- Reichheld, F. R., and Sasser Jr., W. (1990) Zero Defections: Quality Comes to Services. *Harvard Business School Review*, 1990(5): pp. 105-111
- Reichheld, Frederick F. (1996) *the Loyalty Effect*, Boston: Bain
- Reichheld, Fredrick F. (2003), "The One Number You Need," *Harvard Business Review*, 81 (December), pp.46-54
- Reichheld, Fredrick F. (2006) *the Ultimate Question: Driving Good Profits and True Growth* Cambridge, MA: Harvard Business School Press
- Roberts, Kevin (2004), *Lovemarks: The Future Beyond Brands*, New York: Powerhouse Books
- Rundle-Thiele, S., & Bennett, R. (2001), A brand for all seasons? A discussion of brand loyalty approaches and their applicability for different markets, *Journal of Product & Brand Management*, 10(1), 25-37
- Rust, Roland T., Katherine N. Lemon, and Valarie A. Zeithaml (2004), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, 68 (January), 109–128
- Satmetrix (2012) <http://www.satmetrix.com/>
- Schultz, D.E., Block, M.P (2010) "Retail communities: Customer-driven retailing", Worthington, OH: Prosper Publishing
- Schultz, D.E. and Martin Block (2011) Understanding customer brand engagement behaviors in today's interactive marketplace *Micro & Macro Marketing*, Number: 2, pp. 227-244
- Schultz, D.E. and Martin P. Block (2012) Re-Thinking Brand Loyalty in an Age of Interactivity, presented at the International Conference on Research in Advertising (ICORIA), Stockholm, Sweden
- Schultz, D.E. and Martin P. Block (2013) Killing Brands...Softly, presented at AAA Asia Pacific Conference, Honolulu Hawaii
- Schultz, D.E., Martin P. Block and Vijay Viswanathan (2013) 'Brand Preference being Challenged' Presented at International Consumer Brand Relationship Conference, Winter Park Florida. September, 2013
- Sheth, J. N. (2011). Impact of emerging markets on marketing: Rethinking existing perspectives and practices. *Journal of Marketing*, 75(4), 166
- Shimp, T. A. (2007). *Advertising, promotion, and other aspects of integrated marketing communications*, Mason, OH: Thomson/South-Western
- Stern, P., & Hammond, K. (2004) the relationship between customer loyalty and purchase incidence, *Marketing Letters*, 15(1), 5-19
- Sterne, Jim (2010) *Social Media Metrics: How to Measure and Optimize Your Marketing Investment*, John Wiley & Sons
- Stewart, B. (1995), *Packaging as an Effective Marketing Tool*, Surrey, U. K.: Pira International, p.

Electric Car Extensions of Car Brands: Impact on Brand Personality, Extension Evaluation and Parent Brand Feedback

Ingrid Moons

Patrick De Pelsmacker

1 Introduction and Purpose of the Study

Different major car manufacturers, such as Nissan (Leaf) and Opel (Ampera) have developed fully electric car alternatives that are already for sale. When an established car brand launches an electric variant, it is extending its product line. A brand is a psychological carrier of meaning (e.g. Aaker, 2004; Esch, 2004; Keller, 2008). Car brands carry a symbolic meaning and brand personality is an important component of this meaning (Midgley, 1983). The purpose of the present study is to investigate how adding various personality types of electric car models to the product line of existing car brands with existing brand personalities, affects the perceived personalities of these extensions and of the parent brand. We also investigate how brand personality characteristics affect the attitude towards electric extensions and parent brands for existing car brands. Brand personality has not been studied often as a factor in brand extension studies (Diamantopoulos et al., 2005; Lau and Phau, 2007). The study adds to our understanding of the effect of extensions varying in personality, on the personality and evaluation of existing car brands and provide insights into how different positioning and advertising of electric extensions can have a differential effect on brand personality.

2 Literature Background and Research Questions

Product categories and brands can either be functional (e.g., lawnmowers) or symbolic (e.g., cars) (Midgley 1983; de Ruyter and Wetzels, 2000; Park and Young, 1986). A functional product possesses mainly product-related or concrete, functional associations (de Ruyter and Wetzels, 2000; Park et al., 1986). Products with a symbolic positioning usually entail non-product-related or abstract, image-based associations (Bhat and Reddy, 2001; de Ruyter and Wetzels, 2000). Brand personality is a major symbolic component of brand identity and image (Diamantopoulos et al., 2005). It is 'the set of human personality traits that are both applicable to and relevant for brands' (Azoulay and Kapferer, 2003, p. 151). Brand personality can build unique and favorable associations in consumer memory and thus plays a major role in advertising (Diamantopoulos et al., 2005; Pandey, 2013). The work of Aaker (1997) inspired the majority of the research on brand personality to date (Aaker, 1997, 1999, Aaker et al., 2001;

Kim et al., 2001). One of the major criticisms on the Aaker scale is that it is a mixture of personality and other image dimensions. Geuens et al. (2009) developed a scale that consists of only personality dimensions and is a better representation of the brand personality concept. The scale consists of five factors that show an affinity with the Big Five human personality dimensions: Responsibility, Activity, Boldness, Simplicity and Emotionality. The present study uses the Geuens et al. (2009) brand personality dimensions.

Adding an electric car model to a product line of an existing car brand is an extension. One of the factors that has emerged as most important in determining extension and parent brand feedback evaluation by consumers is the perceived fit between the extension and the parent brand (Aaker and Keller, 1990; Patro and Jaiswal, 2003). Extension evaluation is positively influenced when consumers perceive the extension to fit with the parent brand (Bottomley and Holden, 2001; Czellar, 2003; Martinez and Pina, 2003; Martinez and de Chernatony, 2004; Lau and Phau, 2007; Jeong and Jung, 2013). Perceived fit between the parent brand and the extension can also be an important antecedent of positive or negative parent brand image and evaluation after an extension (Martínez and de Chernatony, 2004; Martínez et al., 2009; Aaker and Keller, 1990; Diamantopoulos et al., 2005; Dens and De Pelsmacker, 2010, Supphellen et al., 2004; Swaminathan et al., 2003; Keller and Sood, 2003; Martínez and Pina, 2003). According to categorization theory, people faced with an evaluative task will first attempt to classify the object within a certain category on the basis of salient cues by computation of individual feature matches and mismatches (Fiske and Pavelchak, 1986; Park et al., 2002). If the categorization is successful, affect and beliefs associated with the category in memory will be transferred to the object. Categorization theory is also frequently applied to understanding the dynamics of post-extension parent brand evaluations or feedback effects (Milberg and Sinn, 2008; Roedder John et al., 1998). Beliefs about a category (i.e. the parent brand) change in response to the degree that a new instance (i.e. an extension) is inconsistent with a person's existing brand schema (Milberg and Sinn, 2008; Keller and Sood, 2003).

Especially in case of symbolic products or brands, the fit at the level of imagery or personality is often a determinant of brand extension success than the degree of physical similarity (Batra et al., 2010; Bhat and Reddy (2001). Jeong and Jung (2013) investigated two dimensions of brand personality ('sincere' and 'prestige') and concluded that a non-fitting extension of sincere brands may alter brand personality, as opposed to extending a prestige brand in which case the extension leaves the brand personality unaffected. Also Lau and Phau (2007) found that extensions that had a high fit with the parent brand were most positively evaluated. On the other hand, most research to date shows that extensions that are non-fitting in terms of brand personality do not lead to parent brand dilution effects (Lau and Phau, 2007; Diamantopoulos et al., 2005). Parent

brands may be immune to such dilution effects when these brands have a high familiarity and well-established brand personalities.

Brand personality characteristics are relatively abstract associations that have to be evoked by concrete and specific attributes by means of design elements and advertising appeals. The challenge for existing brands is to emphasize those attributes that evoke a specific brand personality, and lead to a positive evaluation of the extension and to positive parent feedback effects. One of the aims of this study is to design branded electric car concepts and develop advertising story boards that evoke different types of personality. These story boards are used to measure the effect of various personality types of electric variants on the perceived personality of the extension and the parent brand and how these extensions affect extension and parent brand evaluations:

RQ1: How do different personality types of electric car extensions for existing car brands affect the personalities of the extensions and the parent brands?

RQ2: How do responses to the electric car extension and perceived personality characteristics of the extension affect the attitude towards the extension and towards the parent brand for different existing car brands?

3 Research Method

3.1 *Pretests*

A focus group and two online quantitative studies resulted in a selection of four brands that have substantially different personalities. Alfa Romeo is most strongly associated with 'emotional' and 'bold', and least often with 'simple' and 'responsible'. BMW is most often referred to as responsible, active and bold, but not as simple. Toyota is described as simple and not at all active or emotional. Volvo's main characteristic is responsible, and not at all active, bold or emotional (Table 1). In a second series of pretests, possible product features of electric cars were generated that evoke different personalities. From six brainstorming sessions it became clear that it was impossible to develop attributes that were typical of each of the five personality dimensions. What came out clearly, though, was the distinction between attributes that evoke a more rational (simple, responsible) and a more emotional (active, emotional, bold) type of car. It was therefore decided to develop two electric car story boards along the lines of these two types. Per type, the six most frequently mentioned attributes were selected and for each of them a story board was made in which these six attributes were shown (pictures) and explained (text). In a pretest with 60 participants, these two unbranded story boards were tested to check to what extent they evoked different car personalities. In this test, the rational car type indeed scores higher on the dimension 'responsible' ($p=.037$), and that the emotional type scores higher on 'bold' ($p=.097$).

Table 1: Differences in brand personality between Alfa, BMW, Toyota, Volvo

	Alfa	BMW	Toyota	Volvo	p
Responsible	2.94 <B,T,V	3.81 <V	3.84 <V	4.44 >A,B,T	<.001
Active	3.83 >T	4.20 >T,V	3.10 <A,B	3.47 <B	<.001
Bold	3.33 >T,V	3.31 >T,V	2.23 <A,B	2.07 <A,B	<.001
Simple	1.80 <T,V	1.48 <T,V	3.63 >A,B,V	2.65 <T, >A,B	<.001
Emotional	2.97 >B,T,V	2.26 <A	2.22 <A	1.88 <A	.001

Scores on 5-point scales in cells. Significance based on ANOVA-analyses with Bonferroni post-hoc tests. <B,T,V in the first cell means that Alfa (A) scores significantly ($p < .05$) lower on this brand personality characteristics than BMW (B), Toyota (T) and Volvo (V).

3.2 Main Study

The main study was a 4 X 4 between subjects design tested in a sample of Belgian consumers. For each of the four brands (factor 1) four conditions (factor 2) were tested: a rational electric car stimulus, an emotional one, an electric car extension without showing a stimulus, and a condition in which only brand responses were measured without any reference to an electric extension. The first three conditions contained 60 participants each (male-female owners of a driver's license and aged between 18 and 65). Each group contains 30 owners and 30 non-owners of the brand concerned. The fourth condition (only brand measures) contained 15 brand owners and 15 non-brand owners in each of the four groups. Each of the participants in the first two conditions (rational and emotional stimulus) were exposed to a set of 8 pictures: one general picture of a car with six distinct characteristics, six pictures highlighting the details of each of the six characteristics, and the general picture again. They were told that the brand was going to launch an electric extension like the one they just saw. In the third condition, no stimulus was shown and the participants were just told that the brand was going to launch an electric extension. In the fourth condition, no mention of an electric car was made.

The following dependent variables were measured in the first three conditions of factor 2: attitude towards the electric extension, emotional response to the extension, cognitive response towards the extension, fit of the extension with the parent brand, personality of the branded extension, attitude towards the parent brand after the electric extension, and parent brand personality after the electric extension. The latter three scales measure parent brand feedback effects.

In the fourth condition only parent brand attitude and brand personality were measured (see appendix for details).

4 Results

The first research question is to what extent different personality types of electric car extensions for existing car brands affect the personalities of the extensions and the parent brands. The personality scores of the first three conditions were compared per brand (ANOVA with post-hoc Bonferroni tests), and their effect on extension and parent brand feedback personalities are studied (Table 2). Adding an emotional or a rational stimulus, compared to just presenting an electric car extension without a stimulus, significantly alters the personality of the extension. For Alfa, adding either of the two stimuli makes the extension more responsible, more active and more sophisticated (less simple). For BMW and Volvo, as compared with a rational stimulus or no stimulus, an emotional stimulus makes the extension more responsible, active and bold, while a rational stimulus makes the extension less sophisticated than an emotional and an extension without a stimulus. For Toyota, adding stimuli makes the extension more responsible, active and bold. The effect of adding stimuli on parent brand feedback personalities is very limited. In a second ANOVA-analysis, brand personality scores were compared across three conditions: rational and emotional stimulus, and only brand measures without electric extension (Table 3). For Alfa owners, adding a rational extension makes the brand more active, and makes it more sophisticated and less bold and emotional. Since bold and emotional are two distinct dimensions of Alfa, it appears that adding an electric car makes the extension less fitting with the brand. Adding a rational extension makes BMW look less active, emotional and bold, but adding an emotional or a rational extension makes it more sophisticated. Responsible and active/bold are two distinct dimensions of BMW. Adding an emotional electric extension enhances the important dimension of sophistication. An emotional extension seems to be reasonably fitting for BMW. An emotional extension makes Toyota look more active, while any extension, but especially an emotional one, makes it more sophisticated. Since responsibility, and more importantly, simplicity are the key personality dimensions of Toyota, any electric extension does not seem very fitting. Finally, Volvo is seen as a simple and responsible brand. Adding any electric variant makes extension look less responsible, and adding an emotional extension makes it less simple. Consequently, if any, a rational extension seems to fit the brand best, but no electric extension seems even better.

Table 2: Differences between emotional, rational and no-stimulus electric extensions in terms of extension brand personality and parent feedback personality

Dependent variables		Alfa		BMW		Toyota		Volvo	
		scores	p	scores	p	scores	p	scores	p
PRespons	E	3.25	.004	3.60	.032	3.59	.022	3.54	.390
	R	(>N)		(>N)		(>N)		3.64	
	N	3.46		3.44		3.55		3.45	
		(>N)		3.18		(>N)			
		2.93	(<E)			3.21	(<E,R)		
		(<E,R)				(<E,R)			
PActiv	E	3.63	.000	3.88	.006	3.90	.000	3.71	.030
	R	(>N)		(>R,N)		(>R,N)		(>N)	
	N	3.53		3.50		3.61		3.76	
		(>N)		(<E)		(<E, >N)		(>N)	
		2.93	3.39	3.18		3.40	(<E,R)		
		(<E,R)	(<E)	(<E,R)		(<E,R)			
PBold	E	2.49	.342	2.81	.002	2.45	.002	2.43	.042
	R	2.26		(>R,N)		(>N)		(>N)	
	N	2.37		2.28		2.20		2.38	
				(<E)		1.94		(>N)	
			2.34	(<E)		2.08	(<E,R)		
		(<E)	(<E)			(<E,R)			
PSimple	E	2.27	.070	2.27	.149	2.29	.160	2.09	.061
	R	2.53		(<N)		2.54		(<N)	
	N	2.68		2.58		2.59		2.34	
				(<N)				2.46	
			2.46	(>E,R)		(>E)			
		(>E,R)							
PEmotional	E	2.14	.435	2.26	.906	2.24	.778	2.20	.403
	R	(<N)		2.19		2.28		2.09	
	N	2.37		2.20		2.16		1.99	
		2.30	(>E)						
		(>E)							
PRespons	E	2.93	.467	3.59	.661	3.71	.087	3.86	.810
	R	3.09		3.56		3.78		3.80	
	N	3.14		3.45		(>N)		3.90	
						3.46			
			(<R)						
PPActiv	E	3.56	.315	3.99	.215	3.52	.265	3.54	.985
	R	3.73		3.97		3.45		3.55	
	N	3.46		3.74		3.28		3.57	
PPBold	E	2.83	.105	3.26	.620	2.27	.904	2.25	.872
	R	(<R)		3.07		2.21		2.33	
	N	3.26		3.20		2.27		2.27	
		(>E)							
		3.07							

PPSimple	E	1.98 (<N)	.024	2.01	.717	2.76	.559	2.27	.612
	R	1.93 (<N)		1.92		2.77		2.34	
	N	2.35 (>E,R)		2.04		2.91		2.42	
PPEmotional	E	2.61	.436	2.49	.748	2.23	.996	2.23	.288
	R	2.74		2.38		2.23		2.14	
	N	2.86		2.38		2.22		2.00	

E=emotional extension, R=rational extension, N=no stimulus. Cells indicate significance based on two-by-two Bonferroni post-hoc tests, e.g. in the first cell, first column: PRespons E: 2.35 (>N) means the emotional stimulus leads to a more responsible brand personality than no stimulus.

Table 3: Differences between emotional and rational electric extensions and brand control measure (without electric extension) in terms of extension brand personality and parent feedback personality

Dependent variables		Alfa		BMW		Toyota		Volvo	
		scores	p	scores	p	scores	p	scores	p
PRespons	E	3.25	.039	3.60	.157	3.59	.185	3.54	<.001
	R	3.46		3.43		3.55		<B	
	B	>B 2.94 <R		3.80		3.84		3.64 <B 4.44 >E,R	
PActiv	E	3.63	.319	3.88	.001	3.90	<.001	3.71	.246
	R	3.53		>R		>R,B		3.76	
	B	3.83		3.50 <E,B 4.20 >R		3.61 <E, >B 3.10 <E,R		3.47	
PBold	E	2.49	<.001	2.81	<.001	2.45	.208	2.43	.159
	R	R,<B		2.20		2.38	
	B	2.25 <B 3.33 >E,R		2.28 <E,B 3.31 >R,E		2.23		2.07	
PSimple	E	2.28	.006	2.27	<.001	2.29 <B	<.001	2.09	.021
	R	>B		>B		2.54 <B		<B	
	B	2.53 >B 1.80 <E,R		2.58 >B 1.48 <E,R		3.63 >E,R		2.34 2.65 >E	
PEmotional	E	2.14	.003	2.26	.909	2.24	.951	2.20	.248
	R	<B		2.19		2.28		2.09	
	B	2.37 <B 2.97 >E,R		2.26		2.22		1.88	

PPRespons	E	2.93	.624	3.60	.444	3.71	.726	3.86	.002
	R	3.09		3.56		3.78		<B	
	B	2.94		3.81		3.84		3.80 <B 4.44 >E,R	
PPActiv	E	3.56	.372	3.99	.413	3.52 >B	.058	3.54	.908
	R	3.73		3.97		3.45 >B		3.55	
	B	3.83		4.20		3.10 <E,R		3.47	
PPBold	E	2.83	.054	3.26	.511	2.27	.937	2.25	.399
	R	<R,B		3.08		2.21		2.33	
	B	3.26 >E 3.33 >E		3.31		2.23		2.07	
PPSimple	E	1.98	.678	2.01	.019	2.76 <B	<.001	2.27	.168
	R	1.93		>B		2.77 <B		2.34	
	B	1.80		1.91 >B 1.48 <E,R		3.63 >E,R		2.65	
PPEmotional	E	2.61	.361	2.49	.554	2.23	.997	2.23	.172
	R	2.74		2.38		2.23		2.14	
	B	2.97		2.26		2.22		1.88	

E=emotional extension, R=rational extension, B=only brand. E.g. in the first cell, first column: PPRespons R: 3.46 (>B) means the rational stimulus leads to a more responsible brand personality than the brand without electric extension.

RQ2 explores how responses to the electric car extension and perceived personality characteristics of the extension affect the attitude towards the extensions and towards the parent brands. This is done by means of a regression analyses in which the attitude towards the extension is predicted by the personality of the extension, the emotional and cognitive reactions towards the extension and extension-parent brand fit (Table 4). A second regression analysis predicts the attitude towards the parent brand by means of the attitude towards the extension, extension-parent brand fit and extension brand personality (Table 5). The most important driver of extension evaluation for each brand is the emotional response to the extension. The second most important factor is the extent to which the extension is felt to increase the ‘responsible’ personality of the car. Also positive cognitions and brand fit play a significant role for all brands. Whether or not the electric extension personality fits with the parent brand personality does not really seem to matter in terms of parent brand feedback effects for most individual brands. There is, however, a marked effect of the attitude towards the extension, signaling significant parent brand feedback effects of the extension. It is remarkable that parent brand feedback for BMW is more positive the more the extension evaluation is perceived as less ‘active’. For Volvo, par-

ent brand feedback is more positive if the extension is seen as more bold and emotional.

Table 4: Attitude towards the electric brand extension as a function of emotional and cognitive responses to the extension, parent brand fit and extension personality – regression analyses

Independent variables	All brands	Alfa	BMW	Toyota	Volvo
EmoExtension	.435 ($<.001$)	.398 ($<.001$)	.482 ($<.001$)	.476 ($<.001$)	.347 ($<.001$)
CogExtension	.173 ($<.001$)	.186 (.006)	.165 (.009)	.145 (.007)	.180 (.007)
Parentfit	.163 ($<.001$)	.146 (.014)	.079 (.186)	.127 (.008)	.217 ($<.001$)
PRespons	.172 ($<.001$)	.172 (.014)	.168 (.020)	.227 ($<.001$)	.161 (.030)
PActiv	.035 (.328)	.070 (.382)	.021 (.799)	.071 (.279)	.026 (.724)
PBold	.054 (.018)	.041 (.426)	.057 (.248)	.075 (.077)	.093 (.056)
PSimple	.046 (.055)	.039 (.451)	.001 (.984)	.110 (.013)	.014 (.778)
PEmotional	.023 (.343)	.011 (.841)	.035 (.475)	.028 (.523)	.004 (.938)
R ²	.679	.645	.659	.733	.642

Cells are standardized Betas (significance level in brackets)
All models are significance at $p>.001$.

5 Discussion and Conclusions

Adding an electric extension to a well-established brand significantly alters the personality of the extension. An emotional extension seems to be a very fitting extension for BMW and outperforms a rational one in terms of emotional and cognitive response and attitude towards the extension. A rational extension seems to fit Volvo best and outperforms an emotional one. This supports the notion that extension-parent brand fit leads to more positive responses. None of the extensions lead to important differences in parent brand attitudes. This also confirms previous research (Lau and Phau, 2007). The most important driver of extension evaluation for each brand is the emotional response to the extension. This confirms the important role emotions play in consumer behavior, even for high involvement innovative products (Bagozzi et al., 1999, Moons and De

Pelsmacker, 2012). What makes people appreciate an electric extension for any car brand is the extent to which it fits the parent brand, but even more the extent to which it leads to positive feelings and thoughts, and adds to the responsible personality of the car brand. The attitude towards the parent brand after launching an electric extension is partly influenced by the attitude towards the extension and brand fit. This confirms traditional parent brand feedback effects. Part of the results suggest that consumers appreciate a parent brand more if it launches an extension that not so much enhances the brand's distinctive personality dimensions, but rather 'corrects' dimensions that are (too) outspoken or (too) less developed. Non-fitting extensions can have positive parent brand feedback effects by using an extension strategy that modifies the original brand personality in a positive sense (Pandey, 2013).

Table 5: Attitude towards the parent brand as a function of the attitude towards the extension, parent brand fit and extension personality – regression analyses

Independent variables	All brands	Alfa	BMW	Toyota	Volvo
AttExtension	.106 (.001)	.099 (.091)	-.036 (.548)	.255 ($<.001$)	.120 (.114)
Parentfit	.074 (.027)	.005 (.934)	.135 (.023)	.002 (.978)	.122 (.132)
PRespons	.355 ($<.001$)	.299 ($<.001$)	.404 ($<.001$)	.163 (.063)	.386 ($<.001$)
PActiv	.303 ($<.001$)	.393 ($<.001$)	.371 ($<.001$)	.407 ($<.001$)	.075 (.465)
PBold	-.036 (.255)	.081 (.190)	-.087 (.116)	-.101 (.093)	-.013 (.846)
PSimple	-.093 (.001)	-.167 (.001)	-.021 (.710)	-.121 (.025)	-.069 (.304)
PEmotional	.078 (.007)	.061 (.291)	.057 (.296)	.088 (.145)	.069 (.304)
R ²	.536	.635	.600	.547	.388

Cells are standardized Betas (significance level in brackets)

All models are significance at $p > .001$.

The results of this study inform marketers of car brands on how to design their electric car model and which arguments to use in advertising in order to maximize the changes of success without jeopardizing the existing brand image. Future research could extend the investigation to more car brands. The electric car extension was limited to two types of personality design and advertising story boards, using a limited number of concrete attributes to evoke these per-

sonalities. Electric car propositions could also be differentiated on the basis of rational, utilitarian and functional elements rather than brand personality ones. The importance and appeal of these more functional attributes relative to personality elements could also be studied. Finally, the study could be replicated for different product categories and in different countries.

6 References

- Aaker, D. A. and K.L. Keller (1990), "Consumer evaluations of brand extensions," in: *Journal of Marketing*, 54 (1), 27-41.
- Aaker, J.L. (1997), "Dimensions of brand personality," in: *Journal of Marketing Research*, 34 (3), 347-356.
- Aaker, J.L. (1999), "The Malleable Self: The Role of Self Expression in Persuasion," in: *Journal of Marketing Research*, 36 (1), 45-58.
- Aaker, J.L.; Benet-Matinez, V.; and J. Garolera (2001), "Consumption of symbols as carriers of culture: a study of Japanese and Spanish brand personality constructs," in: *Journal of Personality and Social Psychology*, 81, 492-508.
- Aaker, D. (2004), "Brand Portfolio Strategy," New York, Free Press.
- Azoulay, A. and J.N., Kapferer (2003), "Do brand personality scales really measure brand personality?," in: *Brand management*, 11, 143-155.
- Bagozzi, R.P.; Gopinath M. and P.U. Nyer (1999), "The role of emotions in marketing," in: *Journal of the Academy of Marketing Science*, 27(2), 184-206.
- Batra, R.; Lenk, P. and M. Wedel (2010), "Brand extension: brand-category personality fit," in: *Journal of Marketing Research*, 47(2), 335-347.
- Bhat, S. and S.K. Reddy (2001), "The impact of parent brand attribute associations and affect on brand extension evaluation," in: *Journal of Business Research*, 53 (3), 111-122.
- Bottomley, P. A. and S.J.S. Holden (2001), "Do we really know how consumers evaluate brand extensions? Empirical generalizations based on secondary analysis of eight studies," in: *Journal of Marketing Research*, 38 (4), 494-500.
- Caubergh, V. and P. De Pelsmacker (2011), "Adoption intentions toward interactive digital television among advertising professionals," in: *Journal of Interactive Advertising*, 11(2), www.jiad.org.
- Czellar, S. (2003), "Consumer attitude toward brand extensions: An integrative model and research propositions," in: *International Journal of Research in Marketing*, 20 (1), 97-115.
- Dens, N. and P. De Pelsmacker (2010), "Attitudes toward the extension and parent brand in response to extension advertising," in: *Journal of Business Research*, 63 (11), 1237-1244.
- de Ruyter, K. and M. Wetzels (2000), "The role of corporate image and extension similarity in service brand extensions," in: *Journal of Economic Psychology*, 21 (6), 639-659.
- Diamantopoulos, A.; Smith, G. and I. Grime (2005), "The impact of brand extensions on brand personality: Experimental evidence," in: *European Journal of Marketing*, 39 (1/2), 129-149.
- Ehrenfeld, J.R. (2008), "Sustainability by design," New Haven, Yale University Press.
- Esch, F.R. (2004), "Strategie und Technik der Marken Führung," München, Vahlh.
- Fiske, S. T. and M.A. Pavelchak (1986), "Category-based versus piecemeal-based affective responses: Developments in schema-triggered affect," in: Sorrentino R. M. and Higgins E. T. (Eds.), *The handbook of motivation and cognition, volume 1: Foundations of social behavior*, New York, Guilford, 167-203.
- Geuens, M.; Weijters, B. and K. De Wulf (2009), "A New Measure of Brand Personality," in: *International Journal of Research in Marketing*, 26 (1), 97-107.

- Jeong, S. and K. Jung (2013), "Effects Of Brand Personality Attitude, Perceived Quality On Brand Extension Evaluations And Brand Personality Changes," [http://wbiconpro.com/london%20management/Chi\(431\).pdf](http://wbiconpro.com/london%20management/Chi(431).pdf), accessed 20 February 2013.
- Keller K.L. (2008), "Strategic Brand Management. Building, measuring and managing brand equity," Upper Saddle, River NJ, Prentice Hall.
- Keller, K. L. and S. Sood (2003), "Brand equity dilution," in: *MIT Sloan Management Review*, 45 (1), 12-15.
- Kim C.K.; Han D. and S.B. Park (2001), "The effect of brand personality and brand personification on brand loyalty.: Applying theory of social identification," *Japanese Psychological Research*, 43, 195-206.
- Lau, K.C. and I. Phau (2007), "Extending symbolic brands using their personality: Examining antecedents and implications towards brand image fit and brand dilution," in: *Psychology & Marketing*, 24 (5), 421-444.
- Martinez, E. and L. de Chernatony (2004), "The effect of brand extension strategies upon brand image," in: *Journal of Consumer Marketing*, 21 (1), 39-50.
- Martínez, E.; Montaner, T. and J.M. Pina (2009), "Brand extension feedback: The role of Advertising," in: *Journal of Business Research*, 62 (3), 305-313.
- Martínez, E. and J.M. Pina (2003), "The negative impact of brand extension on parent brand Image," in: *Journal of Product & Brand Management*, 12 (7), 432-446.
- Midgley, D. F. (1983), "Patterns of interpersonal information seeking for the purchase of a symbolic product," in: *Journal of Marketing Research*, 20 (1), 74-83.
- Milberg, S. J. and F. Sinn (2008), "Vulnerability of global brands to negative feedback effects," in: *Journal of Business Research*, 61 (6), 684-690.
- Moons, I. and P. De Pelsmacker (2012), "Emotions as determinants of electric car usage intention," *Journal of Marketing Management*, 28 (3-4), 195-237.
- Pandey, A. (2009), "Understanding consumer perception of brand personality," <http://dx.doi.org/10.2139/ssrn.1441824>, accessed 20 February 2013.
- Park, C. W.; Jaworski, B. J. and D.J. MacInnis (1986), "Strategic brand concept-image management," in: *Journal of Marketing*, 50 (4), 135-145.
- Park, J.-W.; Kim, K.-H. and J. Kim (2002), "Acceptance of brand extensions: Interactive influences of product category similarity, typicality of claimed benefits, and brand relationship quality," in: *Advances in Consumer Research*, 29 (1), 190-198.
- Park, C. W. and S. Young (1986), "Consumer response to television commercials: The impact of involvement and background music on brand attitude formation," in: *Journal of Marketing Research*, 23 (1), 11-24.
- Patro, S. K. and A.K. Jaiswal (2003), "Consumer evaluations of brand extensions: Evidence from India," in: *Journal of the Academy of Business and Economics*, 1, 1-13.
- Roedder John, D.; Loken, B. and C. Joiner (1998), "The negative impact of extensions: Can flagship products be diluted?," in: *Journal of Marketing*, 62 (1), 19-32.
- Supphellen, M.; Eismann, Ø. And L.E. Hem (2004), "Can advertisements for brand extensions revitalize flagship products? An experiment," in: *International Journal of Advertising*, 23 (2), 173-196.
- Swaminathan, V.; Fox, R. J. and S.K. Reddy (2001), "The impact of brand extension introduction on choice," in: *Journal of Marketing*, 65 (4), 1-15.

Appendix: scales, scale items, sources, and alphas

Scale and items	Source	Alpha
1. Attitude towards the branded electric extension (AttExtension) <ul style="list-style-type: none"> • I am positive about the electric BRAND shown • The electric BRAND shown is a good car • I like the electric BRAND shown 	Cauberghe and De Pelsmacker (2011)	.92
2. Emotions towards the branded electric extension (EmoExtension) <ul style="list-style-type: none"> • The electric BRAND shown evokes positive feelings in me • I would find it very pleasant it to drive the electric BRAND shown • Driving the electric BRAND shown could frustrate me (r) • Driving the electric BRAND shown could easily bore me (r) • The electric BRAND shown gives me a negative feeling (r) 	Cauberghe and De Pelsmacker (2011)	.85
3. Cognitions towards the branded electric extension (CogExtension) <ul style="list-style-type: none"> • This electric BRAND provides me with a lot of advantages • I find this electric BRAND innovative • The media will promote this electric BRAND • The government will take measures to stimulate the use of this electric BRAND 	Moons and De Pelsmacker (2012)	.82
4. Intention to use the branded electric extension (Intention) <ul style="list-style-type: none"> • I have the intention to drive this electric BRAND in the near future • I will promote the use of this electric BRAND with other people • I expect to drive this electric BRAND in the near future 	Cauberghe and De Pelsmacker (2011)	.90
5. Personality of the branded extension Responsible (PRespons) <ol style="list-style-type: none"> 1. Responsible 2. Down to earth 3. Stable 	Geuens, Weijters and De Wulf (2009)	.86

<p>Active (PActiv) 4. Active 5. Dynamic 6. Innovative</p> <p>Bold (PBold) 7. Aggressive 8. Bold</p> <p>Simple (PSimple) 9. Ordinary 10. Simple</p> <p>Emotional (PEmotional) 11. Romantic 12. Sentimental</p>		.85
<p>6. Fit between the electric extension and the parent brand (Parentfit)</p> <ul style="list-style-type: none"> • This is very fitting for BRAND • This is very logical for BRAND • This is very appropriate for BRAND 	Dens and De Pelsmacker (2010)	.94
<p>7. Attitude towards parent brand after electric extension (ParentAb)</p> <p>Same scale as 1, but applied to brand in general after electric extension</p>	Cauberghe and De Pelsmacker (2011)	.94
<p>8. Intention to use parent brand after electric extension (ParentPI)</p> <p>Same scale as 4, but applied to brand in general after electric extension</p>	Cauberghe and De Pelsmacker (2011)	.96
<p>9. Parent brand personality after electric extension (PPResponsible – PPEmotional)</p> <p>Same scale as 5, but applied to brand in general after electric extension</p>	Geuens, Weijters and De Wulf (2009)	>.86
<p>10. Attitude towards parent brand</p> <p>Only in condition 4, same scale as 7 without mentioning electric extension</p>	Cauberghe and De Pelsmacker (2011)	.91
<p>11. Intention to use parent brand</p> <p>Only in condition 4, same scale as 8 without mentioning electric extension</p>	Cauberghe and De Pelsmacker (2011)	.88
<p>12. Parent brand personality after electric extension (PPResponsible – PPEmotional)</p> <p>Only in condition 4, same scale as 9 without mentioning electric extension</p>	Geuens, Weijters and De Wulf (2009)	>.79

All scales are five category Likert scales

Part VI

IMC

Is Management Involvement in Integrated Marketing Communications Reasonable?

Vesna Zabkar
Damijan Mumel
Nina Vanita

1 Introduction

From 1989, when researchers at Northwestern University developed the first definition of integrated marketing communications (IMC), this concept evolved from tactical coordination of marketing communication activities to strategic, measurable, customer-oriented approach in integrated communication planning. The development of marketing communications into IMC offered a wide range of research themes, including benefits brought by IMC (Kitchen et al., 2004; Duncan and Everett, 1993; Kitchen and Schultz 1999; Shimp, 2010), perceptions of IMC by organizations (Kitchen and Li, 2005), barriers for implementation of IMC (Ewing, de Bussy and Caruana, 2000; Pettigrew, 2001), relationship between IMC and CRM (Schultz, 2005), consumer-centric approach to marketing communications (Finne, Gronroos, 2009), management of IMC (Beard, 1996, McArthur and Griffin, 1997; Low, 2000; Swain 2004) and IMC in relation to business success (Cornelissen et al., 2001; Zahay et al., 2004).

While the literature investigates the management of IMC and a relationship between the IMC implementation and business performance separately, there is a lack of research that would connect the two streams and investigate how management of marketing communications influences the level of marketing communication integration and in turn business performance.

Recent paper by Christensen and Cornelissen (2011) explores gaps in corporate and organizational communication literature and calls for more research into the organizational dimensions of corporate communication, including (management) participation in communication projects, which is the topic of this paper. We develop a conceptual model and empirically examine paths between management involvement in marketing communications, the level of marketing communication integration (MCI) and resultant business performance.

Our research objective is to connect management involvement with IMC, the level of marketing communication integration and business performance to add to the understanding of the IMC management. According to Kitchen and Schultz (2009), more insights into in-company organizational structures with regard to implementation and management of IMC are needed.

2 The Two Key Concepts – IMC and MCI

Kliatchko (2005) recognizes strategic roles of a variety of communication tools which are strategically coordinated to provide clear, consistent, and maximal communication impact. IMC is therefore a concept of marketing communications planning and implementation. It is as an audience-driven business process with “four pillars”: stakeholders, content, channels, and results of brand communication programs (Kliatchko, 2008).

Marketing managers differ in their time and attention devoted to IMC, various IMC activities considered in campaign planning, coordination of IMC activities and sources for IMC activities (McArthur, Griffin, 1997). The higher level of marketing communication integration (MCI) means that measurable objectives are set for marketing communication activities, marketing communication messages are consistent with company mission and values, interactivity with customers through various brand contact points is in place and marketing communication strategy is in line with the company strategy. Duncan and Moriarty (1997) developed an instrument for measuring the level of MCI (named as IMC audit). This is a diagnostic tool which evaluates (a) organizational structure, (b) a degree of understanding marketing communications goals and strategies performed by organization, and (c) a degree of strategic consistency of marketing communication messages. With this instrument one can analyze organizational structure and see (1) to what degree the marketing communication goals and strategies are understood and to (2) what degree the messages sent out are strategically consistent (Duncan, 2005).

3 Basis for the Hypotheses Formulation

Management involvement in marketing communications refers to the role of management in decision-making, coordination and control of marketing communications (Duncan and Everett 1993; McArthur and Griffin 1997; Low 2000); the extent to which top management is involved in decisions about target groups, marketing communication objectives, activities, budgeting and control. Kliatchko (2005) argues that involvement of top management is a necessity for integrated marketing communications. The control of IMC can lead to a higher level of marketing communication integration in a company.

Involvement in the formation of strategy is in general associated with improved organizational performance (Wooldrige & Floys, 1990, Basu et al., 2002), setting appropriate targets and systematic performance monitoring (Bloom & Rennen, 2010). Management should take a leading role in strategic decisions and take over the responsibility for management of IMC processes in order to successfully integrate marketing communications. So far, research was mostly focused on who in the company is engaged in the implementation of IMC and where marketing communication activities are executed (in-company

or outside company). Assumptions about a relationship between the level of marketing communication integration and management of marketing communications were so far tested in the context of public relations agencies and their clients (Swain, 2004). Based on this the following hypothesis was formulated:

H1: Management involvement in marketing communications influences the level of marketing communication integration.

Measuring performance of a company, the challenge is to apply a balanced set of financial and non-financial criteria. Rust et al. (2004) designed a model that connects strategies and tactical marketing actions (including marketing communications) to customer equity (customer satisfaction and loyalty) and market position (market share, sales value). Research in those phenomena Reid (2003, 2005) found positive effects of IMC on performance of a company, measured by brand performance, customer satisfaction and market performance. One group of authors uses market share as a criteria for market performance (Horsky, 1977; Assmus et al., 1984; Reid et al., 2001), while others use also sales performance (Reid 2003, 2005).

Measures for financial performance include achieved profit, profitability and return on investment (Hooley et al., 2005). It is evident, so Reid et al. (2005), that measuring performance and results of marketing communication programs is a motivator for planning IMC programs. Following this, Reinold and Tropp (2012) propose further development of measures of IMC effectiveness. Reid et al. (2001) connect IMC with higher market share, sales value and profitability. Low (2000) shows a positive correlation between the degree of IMC and profit and confirms a positive correlation between the IMC, market share and sales value. Based on this the following hypotheses were formulated:

H2a: The level of marketing communication integration influences the company performance in terms of market performance.

H2b: The level of marketing communication integration influences the company performance in terms of financial performance.

4 Research Design

First we applied a qualitative approach. In the qualitative research, in-depth interviews with managers or heads of marketing department in four companies and three advertising agencies were carried out. The aim of this phase was to test managers' understanding of marketing communication integration and to what degree they are involved in marketing communication planning and implementation.

4.1 Instrument

In the second phase we conducted a quantitative research approach. Based on in-depth interviews and literature review the structured measurement instrument was designed. A self-administered questionnaire was preliminary tested on a sample of 17 relevant respondents; phrasing of the items was modified to improve managers' understanding of concepts. Results of internal consistency testing for the constructs were adequate. Based on results, minor changes were introduced to the questionnaire.

Indicators for the construct of management involvement were developed in line with McArthur and Griffin (1997), Schultz (1998), Kitchen and Schultz (1999), Low (2000) and Swain (2004). The notion of (a) management involvement in decisions about target groups, (b) marketing communication objectives, (c) strategies, (d) different marketing communication tools, (e) budgeting, and (f) control of marketing communications were included in the instrument (for operationalization of research constructs see table 1).

The level of marketing communication integration was measured in line with Duncan and Moriarty (1997) model with dimensions of (a) interactivity, (b) strategic consistency, (c) organizational infrastructure, (d) mission communications and (e) planning and evaluation. Respondents were asked to mark how often they perform a certain activity. The level of marketing communication integration was measured as an aggregated response over all dimensions.

Business performance as an outcome in our model refers to two separate constructs: (1) market performance and (2) financial performance. Market performance was measured through reported sales performance and market share (Reid, 2003, 2005). Financial performance was measured with reported profit, profitability and ROI (Hooley et al. 2005; Low 2000).

Table 1: CFA for the Modified Measurement Model (N = 175)

<i>Constructs and indicators</i>	<i>Completely standardized loading</i>	<i>Construct and indicator reliability</i>	<i>Variance extracted and error variance</i>
Management involvement		0.94	0.63
.. in decisions about target groups	0.764	0.583	0.417
.. in decisions about MC objectives	0.860	0.740	0.260
.. in decisions about strategies of MC	0.832	0.693	0.307
.. in decisions about advertising	0.809	0.655	0.345
.. in decisions about sales promotion	0.816	0.667	0.333
.. in decisions about public relations	0.773	0.597	0.403
.. in decisions about direct marketing	0.764	0.583	0.417
.. in decisions about the budget for MC	0.758	0.574	0.426
.. in control of marketing communications	0.735	0.541	0.459

<i>Constructs and indicators</i>	<i>Completely standardized loading</i>	<i>Construct and indicator reliability</i>	<i>Variance extracted and error variance</i>
<i>Interactivity (ED)</i>			
		0.84	0.64
We keep record of the information gained through dialog with our customers.	0.859	0.738	0.262
When planning MC, we take into account information gained through dialog with customers.	0.920	0.847	0.153
We are aware of all intrinsic brand contact points for our products.	0.577	0.332	0.668
<i>Strategic consistency/organizational infrastructure</i>			
		0.86	0.61
Employees taking part at planning and realization of marketing communication strategies.	0.652	0.425	0.575
Managers know strengths and weaknesses of all important marketing communication tools	0.729	0.531	0.469
We follow long term strategy for marketing communications.	0.839	0.705	0.295
We select common strategy to coordinate our marketing communication activities.	0.883	0.780	0.220
<i>Mission communications</i>			
		0.90	0.75
Communicate company's mission to consumers.	0.830	0.689	0.311
Messages are consistent with company's mission.	0.956	0.915	0.085
Messages are consistent with company values.	0.808	0.653	0.347
<i>IMC planning</i>			
		0.90	0.65
When planning MC activities, we set a measurable objective.	0.845	0.715	0.285
When planning advertising, we set a measurable objective.	0.837	0.700	0.300
When planning sales promotion, we set a measurable objective.	0.808	0.652	0.348
When planning public relations, we set a measurable objective.	0.805	0.649	0.351
When planning direct marketing, we set a measurable objective.	0.744	0.553	0.447
<i>Market performance (market share)</i>			
		0.89	0.72
Achieved market share for current year vs. year before	0.860	0.740	0.260
Achieved market share vs. key competition	0.771	0.595	0.405
Achieved market share vs. planned	0.915	0.837	0.163
<i>Financial performance (profitability)</i>			
		0.87	0.64
Achieved profit for current year vs. year before	0.633	0.401	0.599

Achieved profit vs. planned profit	0.705	0.498	0.502
Return on investment for current year vs. year before	0.911	0.830	0.170
Achieved return on investment vs. planned	0.907	0.822	0.178

Notes: MC – marketing communications

4.2 Sample

Sampling frame consisted of middle size and large companies in Central-European country. Together, 1700 companies from diverse industries were included. Self-administered questionnaire was addressed to marketing managers of these companies. More than 10 % of questionnaires were returned (175 responses; for structure of the sample, see Table 2). The majority of respondents were from service industry companies (60%). Comparison of responses between service and manufacturing companies showed significant differences in evaluations of IMC planning (higher for services) and management involvement (higher for manufacturing companies). Comparison of early and late respondents did not show significant differences in responses. A failure to respond was proportionate across groups of companies of different industries. In addition to reducing nonresponse bias, a substantial effort was put into avoiding coverage bias or selection bias, resulting in generalizable results (Blair, Zinkhan, 2006). Respondents were marketing managers (42%), CEOs (16%) or sales managers (16%).

Table 2: Sample structure ($N = 175$)

<i>Variable</i>	<i>Sample structure</i>
<i>Size of the company</i>	Large: 54% Medium: 46%
<i>Position of respondents</i>	Marketing manager: 33% CEO: 16% Sales manager: 16% Managers for other functional areas: 6% Marketing department: 9% Other: 9% N/A: 11%
<i>Industry</i>	Manufacturing: 40% Retail: 19% Financial services: 9% Construction: 7% Transportation: 6% Personal services: 5% Other services: 14%

5 Data Analysis and Results

To test the measurement model with covariance matrix as an input to LISREL 8.8, we performed confirmatory factor analysis (CFA). The maximum likelihood (ML) method of estimation was adopted. Based on exploratory factor analysis, two dimensions of marketing communication integration (organizational structure and strategic consistency) were combined into one common factor, strategic organization (Reid 2005).

The goodness-of-fit indices for the CFA were within an acceptable range (Chi-Square = 699.8, $df=413$, $p=0.0$, RMSEA = 0.06, SRMR = 0.06, NFI = 0.92, NNFI = 0.96, CFI = 0.98; Bollen, 1989). All items were reliable and all values for composite reliability were above the critical limit (see Table 1). All t -values of the loadings of measurement variables on respective latent variables were statistically significant. Thus, convergent validity was supported. Discriminant validity was assessed with a χ^2 -test for pairs of latent variables with constraining correlation coefficient between two latent variables (ϕ_{ij}) to 1 (Anderson and Gerbing, 1988). All unconstrained models had a significantly lower value of χ^2 than the constrained models; therefore we can conclude that discriminant validity exists (Bagozzi and Phillips, 1982). Data was also tested for common method bias using correlational marker technique (Lindell, Whitney, 2001). The correlations between the marker variable (estimation of educational days per company employee) and outcome variables were not significant. After removing observed correlation between substantive and marker variable, correlations between management involvement, marketing communication integration and business performance remained significant. Common method bias is therefore not present.

The structural model consists of management involvement as an exogenous latent variable and the level of marketing communication integration, financial and market performance as endogenous latent variables. The model has acceptable global fit measures (Chi-Square = 751.3, $df=427$, $p=0.0$), $\chi^2/df=1.7$, RMSEA = 0.06, NFI = 0.91, NNFI=0.97; CFI = 0.96). The level of marketing communication integration is a second order factor and has a positive impact on interactivity (35% of variance explained), strategic consistency/organizational infrastructure (73% of variance explained), mission communications (44% of variance explained) and marketing communication planning (56% of variance explained). The construct of marketing communication integration has partial and positive influence on financial and market performance. With management involvement we explain 8% of variance in the level of marketing communication integration which in turn explains 13% of variance in financial performance and 13% of variance in market performance.

The hypotheses about the relationships among the constructs tested in the final model are supported (see Table 3 and Figure 1). Parameter estimates for the

relationships of the management involvement, level of marketing communication integration and business performance were statistically significant and consistent with the proposed direction in the hypotheses. The effects of management involvement on the level of marketing communication integration is positive, although moderate, as well as the effect of the level of marketing communication integration on financial performance and market performance.

Table 3: Tests of the Hypotheses

Path	Proposed direction	Standardized path coefficients (t-test)	Result
H1 Management involvement → Level of IMC implementation	+	0.27 (2.5, $p=0.01$)	Supported
H2 Level of IMC implementation → Market performance (market share)	+	0.36 (3.9, $p=0.00$)	Supported
H3 Level of IMC implementation → Financial performance (profitability)	+	0.36 (3.5, $p=0.00$)	Supported

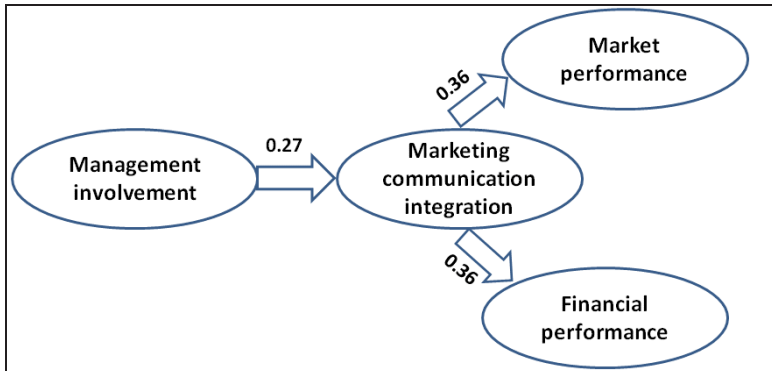


Figure 1: Model of management involvement, level of IMC and performance

6 Discussion and Implications

The main topic for this paper was to explore the impact of management involvement on the level of marketing communication integration and company financial and market performance. We focus on managerial view of integrated marketing communications (IMC) and management involvement with marketing communications (MCI). The article connects the literature streams on management of IMC and on relationships between the IMC and business performance.

The results of our research suggest that management involvement indeed positively influences the level of marketing communication integration. Yet the impact is not very strong. Nevertheless, it shows the relative importance of management decisions in this area and justifies management involvement in marketing communication integration.

The results also show the industry specific effects in IMC involvement. Top management of manufacturing companies seems to be more involved in decisions about target groups, marketing communication objectives, budgeting and control. Manufacturing companies reveal higher level of involvement than services companies. This finding is somehow surprising given that service companies typically have greater direct access to consumer information and higher integration than it would be expected in product-oriented companies (Low, 2000; Reid, 2005).

Since the higher level of integration positively influences organization's business performance, management involvement in integrated marketing communication is reasonable. Managers should be actively involved in order to improve the level of marketing communication integration and business performance. The impact on market and financial success raises the importance of different dimensions of the level of marketing communication integration (interactivity, strategic consistency/organizational infrastructure, mission communications, and communication planning), since the development of these reflects a higher level of marketing communication integration. More management interaction with customers through diverse contact points and more application of information obtained from customers in marketing communication planning can result in better business performance. Also, management concern for strategic consistency of marketing communications and coordinated marketing communication activities should result in positive business outcome. Managerial efforts to put organizational infrastructure in place and to coordinate diverse agencies and company employees in planning and implementation of marketing communications should have similar effects.

This paper offers some practical implications to theory of marketing communications integration. However, our understanding of management in this area is still limited. Additional insights into management decision making (degree of centralization, multiple-respondents for each company) would be needed to further advance the field. Recent paper by Christensen and Cornelissen (2011), as mentioned, calls for more research into the organizational dimensions of corporate communication, including (management) participation and responsibility in communication projects, relevant for this paper.

Finally, it is advisable to managers to plan marketing communication activities with measurable objectives and care for consistency of marketing communications with company mission and values. Most important in this regard are strategic organization and marketing communication planning, including long-

term strategy of marketing communications. These should certainly be a concern of company management.

Findings in our research are based on a single sample of companies from Central and Eastern Europe which is one of the main limitations of the research. We can argue that the conceptualization and validity of marketing communication theories and models is generalizable to the examined cultural context. Although our findings are reliable and internally valid, their external validity (cross-national generalizability) calls for further study. Furthermore, the research is of a cross-sectional nature; longitudinal approach would be useful to better understand the dynamics of the management involvement in marketing communications and business performance. A limitation of the paper is also the fact that we use subjective judgment or managers' perceptions for all constructs under review, and lack of objective measures for business performance. Low response rate (10%) was expected due to the length of the questionnaire and chosen form of a mailed survey. Nevertheless, the response rate is within the range for management survey response rates and acceptable in terms of the sample size (Baruch, Brooks, 2008).

Last but not least, the understanding of how to measure IMC is still developing. A call for better instruments to measure the IMC (Reid 2005) is still relevant; specifically for instruments connecting the level of marketing communication integration with managerial view of IMC and effectiveness of communication activities (Gould, 2004). Further testing of measures is therefore essential.

7 References

- Anderson, J. C. and Gerbing, D. W. (1988), "Structural Equation Modeling in Practice: A Review of Recommended Two-Step Approach," in: *Psychological Bulletin*, Vol. 103 (3), 411-423.
- Assmus, G., Farley, J. U., and Lehmann, D. R. (1984), "How advertising affects sales: Meta-analysis of Econometric Results," in: *Journal of Marketing Research*, Vol. 21 (2), 65-74.
- Bagozzi, R. P. and Phillips, L.W. (1982), "Representing and Testing Organizational Theories: A Holistic Construal," in: *Administrative Science Quarterly*, Vol. 27 (3), 459-489.
- Baruch, Y. and B. C. Holtom (2008), "Survey response rate levels and trends in organizational research," in: *Human Relations*, Vol. 61 (8), 1139-1160.
- Basu, V., Hartono, E., Lederer, A. L., and Sethi, V. (2002), "The impact of organizational commitment, senior management involvement, and team involvement on strategic information systems planning," in: *Information & Management*, Vol. 39 (6), 513-524.
- Beard, F. (1996), "Integrated marketing communications: New role expectations and performance issues in the client-ad agency relationship," in: *Journal of Business Research*, Vol. 37, 207-215.
- Blair, E. and G. M. Zinkhan (2006), "Nonresponse and Generalizability in Academic Research," in: *Academy of Marketing Science Journal*, Vol. 34 (1), 4-7.
- Bloom, N. and J. Reenen (2010), "Why Do Management Practices Differ across Firms and Countries?" in: *Journal of Economic Perspectives*, Vol. 24 (1), 203.
- Bollen, K. A. (1989), "Structural Equations with Latent Variables", John Wiley & Sons, New York.

- Christensen, L. T. and J. Cornelissen (2011), "Bridging corporate and organizational communication: review, development and a look to the future," in: *Management Communication Quarterly*, Vol. 25 (3), 383-414.
- Cornelissen, J. P., Lock, A. R., and Gardner, H. (2001), "The organization of external communication disciplines: an integrative framework of dimensions and determinants," in: *International Journal of Advertising*, Vol. 20 (1), 67-88.
- Duncan T. and Everett S. (1993), "Client perceptions of integrated marketing communications," in: *Journal of Advertising Research*, Vol. 33 (3), 30-39.
- Duncan, T. and Moriarty, S. (1997), "Driving brand value: using integrated marketing to manage profitable stakeholder relationships", New York: McGraw-Hill.
- Duncan, T. (2005), "IMC In Industry: More Talk Than Walk," in: *Journal of Advertising*, Vol. 34 (4), 5-6.
- Ewing, M., de Bussy, N., and Caruana, A. (2000), "Perceived agency politics and conflicts of interest as potential barriers to IMC orientation," in: *Journal of Marketing Communications*, Vol. 6, 107-119.
- Finne, Å. and C. Grönroos (2009), "Rethinking marketing communication: From integrated marketing communication to relationship communication," in: *Journal of Marketing Communications*, Vol. 15 (2-3), 179-195.
- Gould, S. J. (2004), "IMC as Theory and as a Post structural Set of Practices and Discourses: A Continuously Evolving Paradigm Shift," in: *Journal of Advertising Research*, Vol. 44 (1), 66-70.
- Hooley, G. J., Greenley, G. E., Cadogan, J. W., and Fahy, J. (2005), "The performance impact of marketing resources," in: *Journal of Business Research*, Vol. 58, 18-27.
- Horsky, D. (1977), "Market Share Response to Advertising: An Example of Theory Testing," in: *Journal of Marketing Research*, Vol. 14 (2), 10-21.
- Hoyle, R. H. (1995), "Structural Equation Modeling: Concepts, Issues, and Applications", Sage Publications, Thousand Oaks.
- Kitchen, P. J. and Schultz, D. E. (1999), "A Multi-Country Comparison of the Drive for IMC," in: *Journal of Advertising Research*, Vol. 39 (1), 21-38.
- Kitchen, P. J. and D. E. Schultz (2009), "IMC: New horizon/false dawn for a marketplace in turmoil?" in: *Journal of Marketing Communications*, Vol. 15 (2/3), 197-204.
- Kitchen, P. J. and Tao Li (2005), "Perceptions of Integrated Marketing Communications: a Chinese ad and PR agency perspective," in: *International Journal of Advertising*, Vol. 24 (1), 51-78.
- Kitchen, P. J., Brignell, J., Tao, L. and Jones, G. S. (2004), "The Emergence of IMC: A Theoretical Perspective," in: *Journal of Advertising Research*, Vol. 44 (1), 19-30.
- Kliatchko J.(2005), "Towards a new definition of Integrated Marketing Communications (IMC)," in: *International Journal of Advertising*, Vol. 24 (1), 7-34.
- Kliatchko, J. (2008), "Revisiting the IMC construct: A revised definition and four pillars," in: *International Journal of Advertising*, Vol. 27 (1), 133-160.
- Lindell, M. K. and Whitney, D. J. (2001), "Accounting for common method variance in cross-sectional research designs," in: *Journal of Applied Psychology*, Vol. 86 (1), 114-121.
- Low S. (2000), "Correlates of Integrated Marketing Communications," in: *Journal of Advertising Research*, Vol. 40, January-February, 27-39.
- McArthur, D. N., & Griffin, T. (1997), "A Marketing Management View of Integrated Marketing Communications," in: *Journal of Advertising Research*, Vol. 37 (5), 19-26.
- Pettigrew, L. S. (2001), "If IMC is so good: why isn't it being implemented?", in: *Journal of Integrated Communications*, Vol. 35, 29-37.
- Reid, M. (2003), "IMC-performance relationship: further insight and evidence from the Australian marketplace," in: *International Journal of Advertising*, Vol. 22 (2), 227 - 248.

- Reid, M. (2005), "Performance Auditing Of Integrated Marketing Communication (IMC) Actions And Outcomes", in: *Journal of Advertising*, Vol. 34 (4), 41-54.
- Reid, M., Johnson, T., Ratcliffe, M., Skrip, K. and Wilson, J. (2001), "Integrated marketing communications in the Australian and New Zealand wine industry," in: *International Journal of Advertising*, Vol. 20 (2), 239-262.
- Reid, M., Luxton, S. and Mavondo, F. (2005), "The Relationship Between Integrated Marketing Communication, Market Orientation, And Brand Orientation," in: *Journal of Advertising*, Vol. 34 (4), 11-23.
- Reinold, T. and J. Tropp (2012), "Integrated marketing communications: How can we measure its effectiveness?" in: *Journal of Marketing Communications*, Vol. 18 (2), 113-132.
- Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V., & Srivastava, R. K. (2004), "Measuring Marketing Productivity: Current Knowledge and Future Directions," in: *Journal of Marketing*, Vol. 68 (4), 76-89.
- Schultz D. E.(1998), "Determining How Brand Communication Works in the Short and Long Terms," in: *International Journal of Advertising*, Vol. 17 (4), 403 – 426.
- Schultz, D. (2005), "IMC Research Must Focus More On Outcomes," in: *Journal of Advertising*, Vol. 34 (4), 6-7.
- Shimp, T. A. (2010), "Integrated Marketing Communications in Advertising and Promotion", 8e, South-Western. Cengage Learning.
- Swain W. N. (2004), "Perceptions of IMC after a Decade of Development: Who's at the Wheel? and How Can We Measure Success?" in: *Journal of Advertising Research*, Vol. 44 (1), 46-65.
- Wooldridge, B. and Floyd, S. W. (1990), "The strategy process, middle management involvement, and organizational performance," in: *Strategic Management Journal*, Vol. 11 (3), 231-241.
- Zahay, D., Peltier, J., Schultz, D. E. and Griffin, A. (2004), "The Role of Transactional versus Relational Data in IMC Programs: Bringing Customer Data Together," in: *Journal of Advertising Research*, Vol. 44 (1), 3-18.

What is the Effect of Third-Party Organization Endorsement on Perceptions? The Structural Modelling Approach

Morikazu Hirose
Kei Mineo
Keiya Tabe
Kanji Yanagidate

1 Introduction

In many competitive product categories advertisers find it difficult to inform consumers about their products. This is particularly true for experiential goods. In order to draw attention from the target audience and reduce the perception of purchase related risks, advertisers take advantage of third-party organizations (TPO) as an endorser of their products.

Today, many advertisers integrate TPOs like Michelin, ZAGAT, and Consumer Reports into their marketing communications using a type of credentialing called TPO endorsement. For example, Goodyear, a large manufacture of tires, places a TPO logo for their products in their own website (Goodyear, 2014). The logo is evidence that the product has been awarded a 'Best Buy' by Consumers Digest, a TPO which evaluates automobiles and related goods. TPO endorsement advertising is defined as "product advertising that incorporates the name of a TPO and a positive evaluation of the advertised product that is attributed to the TPO" (Dean and Biswas, 2001, p. 42).

This type of appeal is considered a cognitive appeal. It is effective when consumers seek an objective benefit claim before their purchase decision. Especially in a high-involvement situation, Rossiter and Percy (1997) recommend advertising tactics that convince the audience of the benefit. They indicate that expertise and objectivity are essential endorser characteristics for gaining a favorable reaction. In a high-involvement situation, expertise helps "increase the acceptance of claims supporting brand attitude" (Rossiter and Percy, 1997, p. 264). In addition, objectivity is also important because the benefit should be convincingly presented. Given their suggestion, we assumed that TPO endorsements would improve advertising perceptions, because the TPO is seen as an expert who provided objective information.

From the consumers' point of view, TPO endorsement provides value several ways. First, a TPO endorsement can be a quality cue for consumers. Since consumers cannot physically evaluate a product's quality before they purchase it, the TPO cue is especially valuable (Boulding and Kirmani, 1993). The presence of a TPO, however, usually indicates high product qualities such that consumer purchasing risk is reduced at the same time that perceived quality in-

creases. Second, TPO endorsement can have a positive influence on the consumer's attitude toward the advertisement. Because consumers are often skeptical of advertisers, TPO endorsements help them distinguish reliable information and sources. Consequently, by improving prepurchase evaluations and perceptions toward the advertising, TPO endorsements may motivate consumer purchase intention.

Although many advertisers take advantage of TPO endorsement advertising, few empirical research studies have revealed its effects (e.g., Dean, 1999; Dean and Biswas, 2001; Peterson et al., 1992). Dean (1999) studied the effects of ads containing a TPO endorsement on consumer perceptions. However, other research studies have focused on the differences between endorsements types. Therefore, we think it is valuable to reveal how TPO endorsement advertising leads to purchase behavior in a causal relationship model.

2 Research Background and Hypotheses

2.1 The Components of Third-Party Organization Credibility

The studies of TPO endorsements to date have been conducted in the context of explaining how endorsement impacts consumers. Researchers have examined endorser credibility as the major factor that influences consumer behavior, and endorser credibility in turn has been explained using information credibility models. Based on this theory, Hovland and Weiss (1951) proposed that the notion of source credibility consists of two factors, namely, expertise and trustworthiness. Hovland et al. (1953) defined expertise as "the extent to which a communicator is perceived to be a source of valid assertions", whereas trustworthiness is "the degree of confidence in the communicator's intent to convey the assertions he considers most valid" (p. 21). Both components, expertise and trustworthiness are important to the concept of credibility and contribute to the effect of endorsements.

Endorsement studies have classified three types of endorsements: celebrity, expert, and typical consumer (Dean and Biswas, 2001). Celebrity endorsement research identified attractiveness as an additional factor explaining the effects of celebrity endorsements (McGuire, 1985). TPO, however, is kind of a corporation independent from advertisers and consumers. Therefore, it is not appropriate to apply physical attractiveness to the evaluation of a corporation. Goldsmith et al. (2000) measured corporate credibility by using two factors, expertise and trustworthiness, and they excluded attractiveness.

Moreover, in a TPO endorsements study, Dean and Biswas (2001) indicated that TPO credibility can be explained by TPO trustworthiness (unbiased communication of knowledge) and expertise (expert knowledge). They tested the effects of each variable separately. And, no study has ever tried to regard TPO credibility as a single construct including these two factors. Therefore, we have

conceptualized TPO credibility as consisting of two factors, trustworthiness and expertise, as follows;

H1a: TPO credibility consists of TPO trustworthiness.

H1b: TPO credibility consists of TPO expertise.

2.2 *Signaling Theory*

Signaling theory was originally developed in information economics by Spence (1973). It was used to explain behavior when there are two parties with different amounts of information, and how they attempt to reduce the information asymmetry between them (Spence, 2002). One party, the sender, generally has more information, and the receiver has less information. The sender must choose whether and how to communicate (or signal) that information and the receiver must choose how to interpret the signal (Connelly et al., 2011).

Prior research has extensively applied this theory to disciplines such as finance and management as a framework for understanding how two parties address limited or hidden information in precontractual contexts (Wells et al., 2011). Some marketing studies have applied this theory to studies of prepurchase contexts as well. In the marketing context, senders are generally sellers (or advertisers), and the receivers are buyers (or consumers). Kirmani and Rao (2000) pointed out that adverse selection is the key issue in information asymmetry. Signaling theory is most relevant to the purchase of experiential goods (Nelson, 1974), whose quality is unobservable and therefore difficult to evaluate before purchase. When such an information gap exists, adverse selection is likely to occur. If consumers lack information about a product, they risk buying a poor-quality product.

In these situations, consumers may make inferences from a quality cue provided by an advertiser. Consumers tend to use the advertiser's signals to infer the quality of the product and to reduce the risk of making a wrong choice. Quality signals used in marketing research can be transmitted in many forms, including brand name, price, warranty, and advertising expenditures (Kirmani and Rao, 2000). These extrinsic cues are easier to process than intrinsic cues like specifics of the products. That is the reason why consumers use quality cues before searching for the product in detail.

Over the past few decades, several TPO endorsements studies have been conducted by applying this theory (e.g., Dean and Biswas, 2001; Feng et al., 2008; Akdeniz et al., 2013). The research by Dean and Biswas (2001) is the first study that concluded TPO endorsements function as a quality cue. They indicated that consumers also recognize the advantage of TPO endorsements as a quality cue, and that consumers estimate their prepurchase evaluations by referring to quality cues. Prior studies suggested quality cues have a positive influence on perceived quality, and negative influences increase perceived risk be-

fore a purchase. Perceived quality has been defined as “the consumer’s judgment about a product’s overall excellence or superiority” (Zeithaml, 1988, p. 2), and perceived risk has been defined as “the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision” (Cox and Rich, 1964, p. 33). Based on signaling theory, we propose the following hypotheses:

- H2a: The credibility of TPO directly and positively influences perceived quality.
H2b: The credibility of TPO directly and negatively influences perceived risk.

After forming a prepurchase evaluation, consumers buy products or services if they are inclined to do so. Thus, these evaluations directly influence purchase behavior. This theoretical relationship has been supported in empirical marketing research. According to these studies, perceived product quality is positively associated with purchase intentions (Boulding and Kirmani, 1993; Dodds et al., 1991; Rao et al., 1999) and perceived risk is negatively associated with purchase intentions (Mitchell, 1999; Wood and Scheer, 1996). Therefore, we propose the following hypotheses:

- H3a: Perceived quality directly and positively influences purchase intention.
H3b: Perceived risk directly and negatively influences purchase intention.

2.3 *Third-Party Organization Endorsement and Aad framework*

Subsequently, we examined how TPO credibility might influence advertising effectiveness, based on the framework proposed by the ‘attitude toward the advertisement’ (Aad) model. The framework of Aad is used to explain advertising effectiveness. It describes the process of advertising effectiveness by using three related variables, namely, Aad, attitude toward the brand, and purchase intention. Aad can be defined as “recipients’ affective reactions (e.g., like-dislike) to the ad itself” (Lutz, 1985, p. 533). Therefore, Aad indicates how consumer perceptions are influenced by their response to the advertisement.

In the endorsement literature, several prior studies have investigated the relationship between endorser credibility and the Aad framework. Goldsmith et al. (2000) explored both the endorser’s and corporation’s roles in the advertisement. They found that the endorser’s credibility positively influenced Aad, and indirectly, but positively, influenced attitude toward the brand and purchase intentions. They also reported that corporate credibility positively influences Aad, attitude toward the brand, and purchase intention. We noted earlier that TPO would be regarded as a kind of corporation. However within the context of endorsement effects, TPO credibility could be viewed as an expert endorser. That is because TPO is an organization with multiple experts able to evaluate a product’s quality. Therefore, the impact of TPO credibility should be considered as a credible endorser based on expertise.

In researching TPO endorsements, Peterson et al. (1992) examined the influence of endorsement type on Aad, attitude toward the brand and purchase intention. In the present study, we apply this framework to explain these relationships. Although previous studies also pointed out endorsement effects on attitude toward brand and purchase intention, the purpose of this study is to reveal how TPO endorsements improve Aad. Thus, we only considered the endorsement effect on Aad (Goldsmith et al., 2000). Therefore, we proposed the following hypothesis:

H4: The credibility of TPO directly and positively influences attitude toward the advertisement.

Next, we suggested what relationships might be found among the three variables that are included in Aad frameworks. According to Lutz et al. (1983), Aad works as the antecedent to purchase intentions. Shimp and Preston (1981) suggested the process whereby Aad influences attitude toward the brand, then attitude toward the brand influences brand selection (purchase intention). Mackenzie and Lutz's (1989) conceptual model implied strongly positive relationships between Aad and attitude toward the brand. Thus, Aad positively influences purchase intention via attitude toward the brand. Brown and Stayman (1992), in turn, conducted a meta-analysis involving Aad and verified the path model of the effects of Aad. They formally supported the mediator role of attitude toward the brand between Aad and purchase intention. Here, we propose these hypotheses explaining TPO endorsement effects on the Aad framework;

H5a: Attitude toward the advertisement directly and positively influences attitude toward the brand.

H5b: Attitude toward the brand directly and positively influences purchase intention.

H5c: Attitude toward the advertisement directly and positively influences purchase intention.

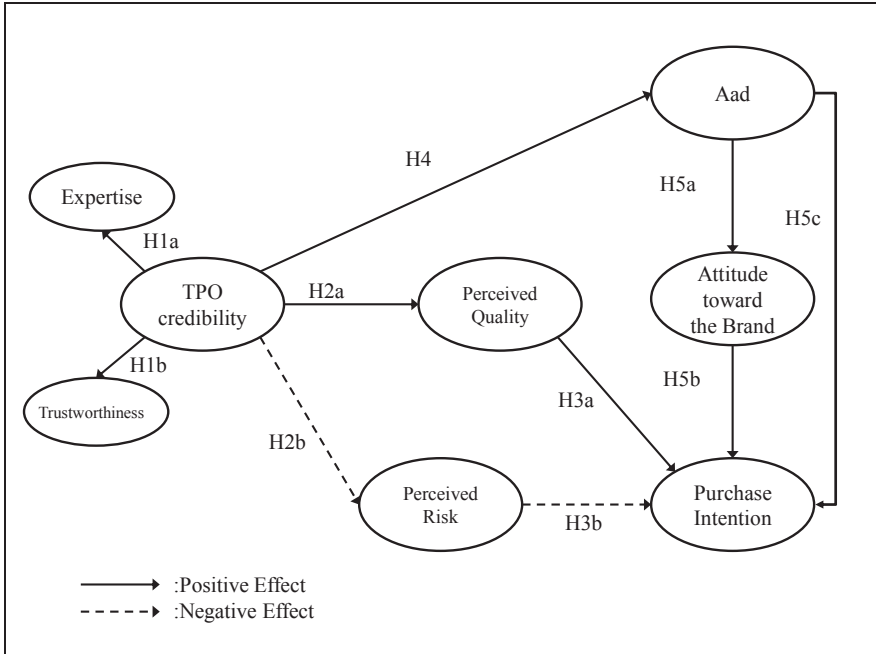


Figure 1: Proposed research model

3 Methodology and Results

To investigate how a particular TPO endorsement might impact advertisement perceptions, we prepared a fictitious advertisement. Since TPO endorsement advertisements are effective for experiential goods (Boulding and Kirmani, 1993), we adopted a product category and brand that were unfamiliar to the respondents; that is, whiskey. In Japan, whisky is not a popular drink choice for young people, so it would be difficult for our respondents to imagine its quality in advance. Next, in order to investigate the effectiveness of the TPO endorsement, the sample advertisement carried a quality label that the respondents would immediately recognize as a TPO. We used a quality label by a specific TPO—"Monde Selection". Founded in 1961 in Brussels, the Monde Selection is a popular rating organization in Japan. They test consumer goods to grant them an internationally renowned quality award (Monde Selection, 2014). Hence, many advertisers, especially alcohol and food companies, frequently make use of the quality ratings of Monde Selection. Finally, in order to create a realistic situation, a scenario method was employed. In the scenario, the respondents were asked to imagine searching for a whisky to give as a gift. Since it is common for members of Eastern cultures to gift frequently, the scenario matched

our research objectives. To avoid color bias, the sample advertisement was printed in black and white.

To address the hypotheses, a research survey was conducted in Japan. An instrument was developed to measure each of the variables described in the preceding section. TPO Expertise was measured by 4 items adapted from Erdogan, et al. (2001). TPO Trustworthiness was measured by 4 items adapted from Ohanian (1990). Perceived Quality was measured by 3 items adapted from Zeithaml (1988); Dean and Biswas (2001). Perceived Risk was measured by 4 items adapted from Dean and Biswas (2001). Attitude toward the advertisement was measured by 4 items adapted from Bezjian-Avery et al. (1998). Attitude toward the brand was measured by 4 items adapted from Lee (2000). And finally, Purchase Intention was measured by 4 items adapted from Grewal et al. (1998). All the scale items were translated into Japanese and back-translated to ensure consistency and accuracy of meaning. To check the wording and reliability of the question items, a group of academics in advertising checked the questionnaire. In addition, it was pretested with 50 potential respondents.

The actual survey produced a total of 616 responses from among university students in the Tokyo metropolitan area. In this research, we eliminated anyone who was under age (20 years old in Japan). As a result, the final sample size was 458 (male: 302, female: 154, unknown: 2).

To test the model, we followed a two-step approach recommended by Anderson and Gerbing (1988). First, we conducted a confirmatory factor analysis (CFA), which was composed of 7 latent constructs and a total of 27 variables. The maximum likelihood method was used with AMOS 19.0 (Byrne, 2010). Following the recommendations of Bagozzi and Yi (1989), multiple indexes, including χ^2 statistics, CFI, TLI, and RMSEA, were used to assess the proposed model's goodness of fit. All the indices except the χ^2 statistic fell within an acceptable range (χ^2 303 = 746.053; CFI = 0.96; TLI = 0.96; and RMSEA = 0.057) (Hair et al., 2010). However, the literature has suggested that the index tends to be substantial against a larger sample size (Byrne, 2010). Thus, the measurement model was deemed acceptable.

Next, Cronbach's alpha (α), composite reliability (CR), and average variance extracted (AVE) were calculated to determine the level of reliability and convergent validity (see Table 1). All scores except CR for Aad (0.69) exceeded the recommended minimum level (Hair et al., 2010), with α and AVE falling within an acceptable range. Based on the overall statistics, we accepted the CFA model. Then, discriminant validity was assessed following the Fornell-Larcker criterion (Fornell and Larcker, 1981). All the square roots of AVE exceeded the bivariate correlations between the constructs. Therefore, all the constructs were confirmed to be valid.

Table 1: Constructs with reliability and validity

		α	CR	AVE	E	T	PQ	PR	Aad	Ab	PI
TPO	Expertise (E)	0.93	0.80	0.78	0.88	0.85	0.40	-0.31	0.64	0.17	0.31
	Endorsement Trustworthiness (T)	0.95	0.85	0.84		0.91	0.41	-0.40	0.65	0.19	0.31
	Perceived Quality (PQ)	0.91	0.80	0.78			0.88	-0.29	0.48	0.55	0.47
	Perceived Risk (PR)	0.92	0.76	0.74				0.86	-0.50	-0.31	-0.35
	Attitude toward the advertisement (Aad)	0.87	0.69	0.64					0.80	0.43	0.47
	Attitude toward the brand (Ab)	0.92	0.76	0.73						0.86	0.44
	Purchase Intention (PI)	0.95	0.84	0.82							0.91

Note: Diagonal elements are the square root of AVE and highlighted in bold. Off diagonal elements are simple bivariate correlations between the constructs

Given the results of the CFA model, structural equation modeling was conducted. The proposed model posits that TPO credibility influences purchase intention via Aad, attitude toward the brand, perceived quality and perceived risk. To explore our hypothesized relationships, the structural paths between the proposed constructs were examined using the maximum likelihood method. Again, all fit indexes except the χ^2 statistics were statistically acceptable (χ^2 314 = 921.641; CFI = 0.95; TLI = 0.94; and RMSEA = 0.065). All paths were statistically significant (see Figure 2). These results support H1 through H5.

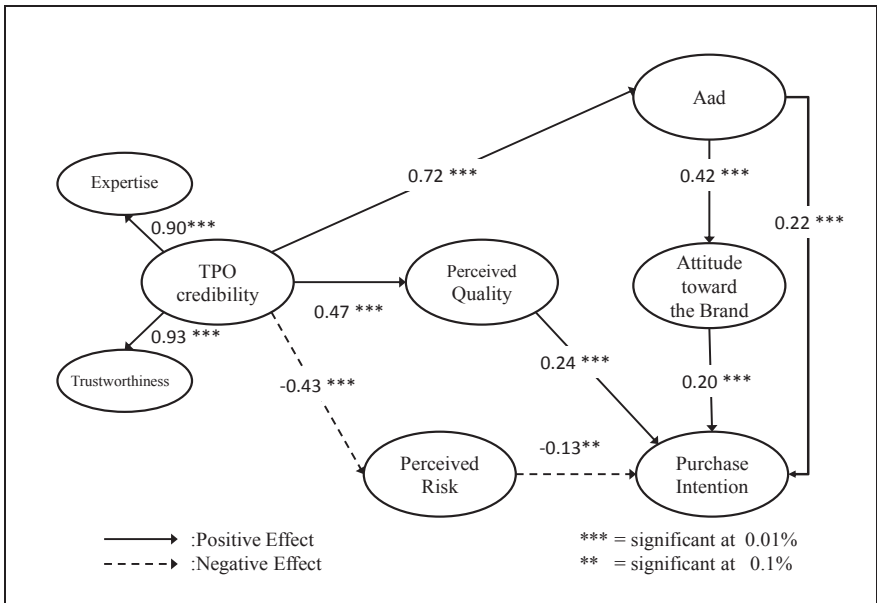


Figure 2: Model result

4 Discussion and Conclusion

The present study investigated the effectiveness of a TPO endorsement on the consumer purchase process in high-involvement situations. Based on signaling theory and the Aad model, the study examined causal relationships among TPO endorsement credibility, prepurchase evaluations, and the Aad framework. TPO credibility was found to have a moderate influence on both perceived quality and perceived risk. It also had a strong, positive relationship with Aad. In our data, TPO credibility had a strong relationship compared to prepurchase evaluations. The path from Aad to attitude toward the brand was positive and moderate. The paths to purchase intention were statistically significant as expected. However, the relationships were relatively weak. These relationships seem to be reasonable because this study employed a scenario method in which an advertised product was unfamiliar to respondents. The empirical results reveal that TPO credibility impacts consumer purchase intentions via the Aad framework, perceived quality, and perceived risk.

From an academic perspective, following other studies on TPOs, we conceptualized TPO endorsement effects by two factors, namely, expertise and trustworthiness. Although prior studies suggested these two dimensions, little empirical research had examined their effects using a structural model. In addition, our model integrates different TPO endorsement influences on purchase intention. The results indicate that TPO endorsement enhances prepurchase evaluations as well as Aad, both of which are major dependent variables in advertising models. Our results are consistent with prior studies of endorsement effects, signaling theory, and the Aad framework. By integrating these frameworks, we provide a comprehensive model of how TPO endorsement in advertising works.

From a managerial perspective, the results indicate how advertisers can develop effective TPO endorsements. TPO credibility is strongly related to Aad. To develop effective endorsements, therefore, advertisers should select reliable TPOs and explain why TPOs can be trusted in advertisements that include them. Moreover, perceived quality and risk work as mediators of the effects of TPO endorsements, even though these relationships are not strong. If a gap exists between perceived quality and actual product quality, for example, advertisers can use the TPO endorsement to increase the advertisements effect on prepurchase evaluations.

As with all research, the present study has several limitations. First, this study used a student sample, and is subject to sample bias. Second, we used a scenario method and this can introduce methodological bias. Third, this study focuses only on TPO endorsements to isolate their impact. To generalize our results, other advertising elements should be considered. Even if we used a reasonable situation and proper methodology, this model should be tested in different situations and/or with different groups. Finally, the present study does not consider consumer characteristics. Prior studies indicate that the more con-

sumers use information from a TPO, the less knowledge they have of the products and services about which they seek information (Aiken et al., 2003). Therefore, characteristics such as consumer knowledge of products and services are likely to influence consumer perceptions toward TPO endorsements.

For future research, our model should be tested in other product categories. Although this study examined the effectiveness of TPO endorsements in high-involvement situations (Rossiter and Percy, 1997), it is uncertain whether our findings fit low-involvement purchasing situations.

5 References

- Aiken, K. D.; Osland, G.; Liu, B. and Mackoy, R. (2003), "Developing Internet Consumer Trust: Exploring Trustmarks as Third-party Signals," in: G. R. Henderson, and M. C. Moore (eds.): *Marketing Theory and Applications*, 14, American Marketing Association, Chicago, Illinois, 145-146.
- Akdeniz, B.; Calantone, R. J. and Voorhees, C. M. (2013), "Effectiveness of Marketing Cues on Consumer Perceptions of Quality: The Moderating Roles of Brand Reputation and Third-party Information," in: *Psychology & Marketing*, 30 (1), 76-89.
- Anderson, J. C. and Gerbing, D. W. (1988), "Structural Equation Modeling in Practice - A Review and Recommended 2-step Approach," in: *Psychological Bulletin*, 103 (3), 411-423.
- Bagozzi, R. P. and Yi, Y. J. (1989), "On the Use of Structural Equation Models in Experimental Designs," in: *Journal of Marketing Research*, 26 (3), 271-284.
- Bezjian-Avery, A.; Calder, B. and Iacobucci, D. (1998), "New Media Interactive Advertising vs. Traditional Advertising," in: *Journal of Advertising Research*, 38 (4), 23-32.
- Boulding, W. and Kirmani, A. (1993), "A Consumer-side Experimental Examination of Signaling Theory - Do Consumers Perceive Warranties as Signals of Quality," in: *Journal of Consumer Research*, 20 (1), 111-123.
- Brown, S. P. and Stayman, D. M. (1992), "Antecedents and Consequences of Attitude toward the Ad - A Meta-analysis," in: *Journal of Consumer Research*, 19 (1), 34-51.
- Byrne, B. M. (2010), "Structural Equation Modeling With AMOS: Basic Concepts, Applications, and Programming," 2nd ed., Routledge Academic, New York.
- Connelly, B. L.; Certo, S. T.; Ireland, R. D. and Reutzel, C. R. (2011), "Signaling Theory: A Review and Assessment," in: *Journal of Management*, 37 (1), 39-67.
- Cox, D. F. and Rich, S. U. (1964), "Perceived Risk and Consumer Decision-Making - The Case of Telephone Shopping," in: *Journal of Marketing Research*, 1 (4), 32-39.
- Dean, D. H. (1999), "Brand Endorsement, Popularity, and Event Sponsorship as Advertising Cues Affecting Consumer Pre-purchase Attitudes," in: *Journal of Advertising*, 28 (3), 1-12.
- Dean, D. H. and Biswas, A. (2001), "Third-party Organization Endorsement of Products: An Advertising Cue Affecting Consumer Prepurchase Evaluation of Goods and Services," in: *Journal of Advertising*, 30 (4), 41-57.
- Dodds, W. B.; Monroe, K. B. and Grewal, D. (1991), "Effects of Price, Brand, and Store Information on Buyers Product Evaluations," in: *Journal of Marketing Research*, 28 (3), 307-319.
- Erdogan, B. Z.; Baker, M. J. and Tagg, S. (2001), "Selecting Celebrity Endorsers: The Practitioner's Perspective," in: *Journal of Advertising Research*, 41 (3), 39-48.
- Feng, J.; Wang, K. Y. and Peracchio, L. A. (2008), "How Third-party Organization (TPO) Endorsement Advertising Works: Do Consumers Perceive TPO Endorsement as Signals of Quality?," in: *Advances in Consumer Research*, 35, 616-623.

- Fornell, C. and Larcker, D. F. (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," in: *Journal of Marketing Research*, 18 (1), 39-50.
- Goldsmith, R. E.; Lafferty, B. A. and Newell, S. J. (2000), "The Impact of Corporate Credibility and Celebrity Credibility on Consumer Reaction to Advertisements and Brands," in: *Journal of Advertising*, 29 (3), 43-54.
- Goodyear. (2014), Available at: <http://www.goodyear.ca/en-CA/tires-home> [Accessed 25 January 2014].
- Grewal, D.; Krishnan, R.; Baker, J. and Borin, N. (1998), "The Effect of Store Name, Brand Name and Price Discounts on Consumers' Evaluations and Purchase Intentions," in: *Journal of Retailing*, 74 (3), 331-352.
- Hair, J. F.; Black, W. C.; Babin, B. J. and Anderson, R. E. (2010), "Multivariate Data Analysis," 7th ed., Prentice Hall, Upper Saddle River, New Jersey.
- Hovland, C. E.; Janis, I. L. and Kelly, H. H. (1953), "Communication and Persuasion: New Haven," Yale University Press, Connecticut.
- Hovland, C. I. and Weiss, W. (1951), "The Influence of Source Credibility on Communication Effectiveness," in: *Public Opinion Quarterly*, 15 (4), 635-650.
- Kirmani, A. and Rao, A. R. (2000), "No Pain, No Gain: A Critical Review of The Literature on Signaling Unobservable Product Quality," in: *Journal of Marketing*, 64 (2), 66-79.
- Lee, Y. H. (2000), "Manipulating Ad Message Involvement through Information Expectancy: Effects on Attitude Evaluation and Confidence," in: *Journal of Advertising*, 29 (2), 29-43.
- Lutz, R. J. (1985), "Affective and Cognitive Antecedents of Attitude toward the Ad: A Conceptual Framework," in: L. F. Alwitt and A. A. Mitchell (eds.): *Psychological Processes and Advertising Effects: Theory, Research and Application*, Lawrence Erlbaum Associates, Hillsdale, 45-63.
- Lutz, R. J.; Mackenzie, S. B. and Belch, G. E. (1983), "Attitude Toward the Ad as a Mediator of Advertising Effectiveness - Determinants And Consequences," in: *Advances in Consumer Research*, 10, 532-539.
- Mackenzie, S. B. and Lutz, R. J. (1989), "An Empirical-Examination of the Structural Antecedents of Attitude Toward and Ad in an Advertising Pretesting Context," in: *Journal of Marketing*, 53 (2), 48-65.
- McGuire, W. J. (1985), "Attitudes and Attitude Change," in: G. Lindzey and E. Aronson (eds.): *Handbook of social psychology*, 3rd ed., 2, Random House, New York.
- Mitchell, V. W. (1999), "Consumer Perceived Risk: Conceptualizations and Models," in: *European Journal of Marketing*, 33 (1), 163-195.
- Monde Selection. (2014), Available at: <http://www.monde-selection.com/en/> [Accessed 25 January 2014].
- Nelson, P. (1974), "Advertising as Information," in: *The Journal of Political Economy*, 82 (4), 729-754.
- Ohanian, R. (1990), "Construction and Validation of A Scale to Measure Celebrity Endorsers Perceived Expertise, Trustworthiness, and Attractiveness," in: *Journal of Advertising*, 19 (3), 39-52.
- Peterson, R. A.; Wilson, W. R. and Brown, S. P. (1992), "Effects of Advertised Customer Satisfaction Claims on Consumer Attitudes and Purchase Intention," in: *Journal of Advertising Research*, 32 (2), 34-40.
- Rao, A. R.; Qu, L. and Ruckert, R. W. (1999), "Signaling Unobservable Product Quality through a Brand Ally," in: *Journal of Marketing Research*, 36 (2), 258-268.
- Rossiter, J. and Percy, L. (1996), "Advertising Communications and Promotion Management," McGraw-Hill, New York.
- Shimp, T. A. and Preston, I. L. (1981), "Deceptive and Nondeceptive Consequences of Evaluative Advertising," in: *Journal of Marketing*, 45 (1), 22-32.

- Spence, M. (1973), "Job Market Signaling," in: *The Quarterly Journal of Economics*, 87, August, 355-374.
- Spence, M. (2002), "Signaling in Retrospect and the Informational Structure of Markets," in: *American Economic Review*, 92 (3), 434-459.
- Wells, J. D.; Valacich, J. S. and Hess, T. J. (2011), "What Signal Are You Sending? How Website Quality Influences Perceptions of Product Quality And Purchase Intentions," in: *MIS Quarterly*, 35 (2), 373-396.
- Wood, C. M. and Scheer, L. K. (1996), "Incorporating Perceived Risk into Models of Consumer Deal Assessment and Purchase Intent," in: *Advances in Consumer Research: Research Frame Synergies*, 23, 399-404.
- Zeithaml, V. A. (1988), "Consumer Perceptions of Price, Quality, and Value - A Means-end Model and Synthesis of Evidence," in: *Journal of Marketing*, 52 (3), 2-22.

How Consumers' Media Usage Influences the Advertising Media Mix that Maximizes Campaign Recognition

Leonids Aleksandrov

Peter Goos

Nathalie Dens

Patrick De Pelsmacker

1 Introduction

Advertisers have to decide on the total amount of an advertising campaign budget and how to allocate this budget across media. Despite its relevance to advertisers and media planners, research on the optimal allocation of advertising budgets across different media is lacking (Schultz, Block and Raman, 2012). The present study's first objective is to fill this void by investigating how advertising campaign recognition is affected by total campaign budget and by its allocation across print magazine and television advertising. Our second objective is to investigate whether and how the optimal allocation of media-mix investments is moderated by consumers' media consumption. As suggested by several authors, we study media usage intensity at the individual level (Enoch and Johnson, 2010; Hallward, 2008; Hung, Gu and Tse, 2005; Pilotta and Schultz, 2005; Schultz, Block and Raman, 2012; Wang, 2006; Wendel and Dellaert, 2005).

The study is managerially relevant because it provides advertisers with in-depth information on how to optimize their media mix as a function of their target group's media-usage profile. Our study also makes a methodological contribution to the field of cross-media advertising research by applying a mixture-amount model (see below) including media usage interaction effects. Also, unlike our study, most published studies on media-mix effects are experimental, as a result of which they do not entirely capture the effects of cross-media advertising campaigns in a naturalistic setting. Moreover, they do not allow predictions on how shifting budgets across the components of the media mix impacts advertising effects, such as campaign recognition. Lastly, there is little knowledge on how consumers with different media usage profiles respond to cross-media advertising efforts. The present study attempts to fill also these gaps in the literature.

2 Cross-media Effects in Advertising and Media Usage Intensity

The beneficial impact of a cross-media approach in advertising is usually referred to as a synergistic effect. Synergy is the interaction of multiple elements in a system (in this case, different media), to produce an effect greater than the

sum of their individual effects. Existing cross-media synergy studies can be classified into two broad categories: (1) studies involving real-life data concerning media-mix effects and (2) experimental studies to explore synergies.

Most real-life data studies search for an aggregated direct relation between cross-media ad spends, on the one hand, and product sales or other returns on investment (such as shop visits), on the other. The outcomes of these studies is usually a single optimal media-mix allocation for one budget level (e.g., Färe, Grosskopf, Seldon and Tremblay, 2004). In contrast with real-life studies, experimental studies usually do not investigate traditional returns on investment such as sales, but test synergy effects by exposing individuals to advertising stimuli in different media and measure their responses in terms of attitudes and intentions. A number of studies have used experiments to investigate advertising effectiveness after exposure to ads in various media. Most scholars find that advertising campaigns involving multiple media produce better results than advertising in just one medium (Chang and Thorson, 2004; Havlena, Cardarelli and De Montigny, 2007; Naik and Raman, 2003; Reynar, Phillips and Heumann, 2010; Vakratsas and Ma, 2005; Voorveld, Neijens and Smit, 2011). For instance, Chang and Thorson (2004) found that using more media led to higher attention, higher perceived message credibility, and a greater number of total and positive thoughts. In an experimental study by Voorveld, Neijens and Smit (2011), exposure to cross-media advertising resulted in a more positive attitude toward the brand, a more positive attitude toward the TV commercial, and a larger purchase intention than single-medium exposure. However, some studies have found negative cross-media synergy effects. This scenario is called cross-media cannibalization (Dijkstra, Buijtelts and van Raaij, 2005; Godfrey, Seiders and Voss, 2011; Tsao and Sibley, 2004). For example, Dijkstra, Buijtelts and van Raaij (2005) demonstrate the superiority of TV-only campaigns over cross-media campaigns in evoking ad recall, brand affect and purchase intention.

Our study uses real-life aggregated advertising campaign data, and, hence, can be classified in the first category. However, none of the real-life data studies has investigated the impact of varying allocations of advertising investments across multiple media on advertising effectiveness. At the same time, our study uses measures of individual responses to advertising campaigns. The present study thus bridges the two research streams as it combines both advertising investment and cross-media allocation data and individual consumer response data to study advertising effectiveness for different levels of advertising budgets and different media mixes.

It can be expected that media usage intensity has an impact on the effectiveness of campaigns using different types of media. Most previous studies that investigate the impact of media use intensity have used an experimental approach to study the effect of individuals' different levels of usage intensity on

advertising responses. For instance, Krugman, Cameron and White (1995) found that the longer a person attends to television, the more ads he or she remembers. Danaher and Mullarkey (2003) examined how factors such as webpage viewing duration and viewing mode impact web advertising recall and recognition. However, none of these studies has investigated the effect of consumers' media usage intensity on the optimal media mix to maximize advertising effects. Hence, there is little knowledge on how consumers with different media usage profiles respond to cross-media advertising efforts.

The research question we tackle in the present study is: How does the magazine and television media mix impact campaign recognition and how is this impact moderated by consumers' media usage?

3 Mixture-Amount Models

Mixture-amount models (MAMs) have previously been applied in the food industry, pharmaceutical science, biology and agricultural sciences. In biology and agriculture, MAMs are used to determine the optimal doses of fertilizers and/or pesticides (which are mixtures of various ingredients), and to decide on the optimum proportions of their ingredients. The assumption is that the optimal proportion of ingredients depends on the dose (Cornell, 2002). For instance, choosing the right amount of fertilizer and the right proportion of the different ingredients given the amount of fertilizer may lead to an improved plant growth (Niedz and Evens, 2011). Just like farmers must decide on how much fertilizer to use, marketers must decide on how much to spend on an advertising campaign and on how to allocate the budget to different media. As a matter of fact, the effect of a campaign is influenced by the total advertising spends, as well as by the allocation of this investment to different media. The effect can be modeled using a special type of regression model, called a MAM.

In general, a MAM is a regression model involving two types of independent or explanatory variables, namely the ingredients of the mixture and the amount of the mixture. In this chapter, we denote the number of ingredients by q , the proportion of the i th ingredient in the mixture by x_i and the total amount of the mixture by A . As an illustration, to model linear and nonlinear mixing effects among the q mixture components, the MAM is:

$$\eta = \sum_{i=1}^q \beta_i x_i + \sum_{i=1}^{q-1} \sum_{j=i+1}^q \beta_{ij} x_i x_j + A \left(\sum_{i=1}^q \gamma_i x_i + \sum_{i=1}^{q-1} \sum_{j=i+1}^q \gamma_{ij} x_i x_j \right), \quad (1)$$

where β_i and β_{ij} represent the effects of the mixture composition, and γ_i and γ_{ij} represent the interaction effects of the amount A with the mixture's composition. The model does not contain an intercept because the sum of all ingredient proportions equals 1, i.e.

$$\sum_{i=1}^q x_i = 1. \quad (2)$$

The MAM in Equation (1) involves several terms which capture interaction effects between different ingredient proportions and interaction effects between the total amount and the ingredient proportions.

In the context of advertising, q corresponds to the number of media types utilized, while each x_i corresponds to the proportion of advertising in the i th media type, A is a measure of the total advertising investment, and η is the outcome in case of linear regression, or a linear predictor for the outcome in case of generalized linear regression. In this paper, η is the linear predictor for the binary outcome variable, campaign recognition.

4 Data Collection and Measures

Advertising campaign data and consumer responses were collected for 52 skin and hair care (shampoo, facial cream, soap) campaigns that ran in magazines and/or on television in the Netherlands and Belgium between June and December 2011, using a panel of female respondents. To quantify the advertising effort in each campaign, we use Gross Rating Points (GRPs). GRPs are the number of contacts of a campaign with members of the target group, expressed as a percentage of this target group (De Pelsmacker, Geuens and Van den Bergh, 2010). GRPs are more suitable for our study than campaign budgets, because the latter are biased by the discounts offered by media companies that typically vary across campaigns, brands and media. For each campaign, data were available on the number of GRPs that were invested in TV advertising and in magazine advertising. They were calculated over a period of six weeks preceding the data collection.

To measure recognition of the advertising campaigns by individuals and media usage intensity of these individuals, we used panel data collected in cooperation with GfK. Consumer responses to the selected advertising campaigns were obtained by means of an online survey at 5 different points in time (waves), with approximately 4 weeks in between waves. In Belgium, data were collected separately for Flanders (the northern part of Belgium) and Wallonia (the southern part). Together with the Netherlands, this resulted in 3 regions. In each region, about 500 respondents were recruited per wave. In Flanders, campaigns were evaluated for 13 brands from 4 mother brands (e.g., Youth Code and Revitalift, both L'Oreal Paris), yielding a total of 9490 individual responses. The campaigns in Wallonia involved 11 brands from 4 mother brands ($n = 7786$). The campaigns in the Netherlands involved 15 brands from 6 mother brands ($n = 9509$). Some brands had multiple campaigns in the tested period, and were included several times. Advertising effectiveness is likely to vary from campaign to campaign, across as well as within brands (Aurier and Broz-

Giroux, 2013). Since our model includes a random effect for each brand (see below), we correct for correlation between multiple usages of the same brand. In total, the analyzed dataset contains 26785 responses from 6679 respondents. A subset of data, corresponding to the campaigns, is displayed in Table 1. In the table, x_{mag} and x_{TV} represent the proportions of magazine and TV advertisement investments, respectively.

Recognition of the advertising campaign is used as the central outcome variable. This response is a binary variable indicating whether or not an ad was recognized by the respondent. A 1 means that the respondent recognized the advertisement and a 0 means that she did not. The two media usage moderators were measured as follows. Respondents' magazine usage intensity was measured on a 5-point scale, where 1 means that a respondent leafs through magazines without actually reading them and 5 means that a respondent reads them thoroughly from cover to cover. The TV media usage measure involved a 9-point scale, a 1 meaning that the respondent generally watches TV less than 30 minutes per day and a 9 meaning that the respondent watches TV eight or more hours per day.

Table 1: Structure of the campaign data

Campaign	Brand	Parent Brand	Region	Wave	GRP	x_{mag}	x_{TV}
1	1	2	Netherlands	2	124.5	0.25	0.75
2	3	1	Netherlands	6	157.3	1	0
3	3	1	Netherlands	5	405.2	0.11	0.89
...
19	23	4	Netherlands	2	379.2	0.02	0.98
20	2	1	Flanders	6	457.8	0.14	0.86
21	3	1	Flanders	3	328.9	0	1
22	3	1	Flanders	5	351.7	0.25	0.75
...
37	24	4	Flanders	2	95.6	0.20	0.80
38	2	1	Wallonia	6	192.5	0	1
39	3	1	Wallonia	5	190.6	0.28	0.72
40	3	1	Wallonia	3	215.1	0	1
...
52	23	4	Wallonia	2	255.6	0.13	0.87

5 Model Construction and Estimation

As the measured outcome variable is binary, we assume that the responses follow a Bernoulli distribution and use a logistic regression approach for estimating the MAM (Hardin and Hilbe, 2012). To capture all the dependencies

between the responses in the data, we include various kinds of random effects in the MAM. Random effects are included to model the dependence between answers from the same respondent and to capture the dependence between all answers for the same campaign and for the same brand. In the same way, random effects are included for the regions and the waves. Hence, we adopt a multi-level (or mixed-effects) logistic regression approach when estimating the MAM. Our MAM (1) allows advertising in magazines and on TV to have a different impact, (2) allows for a possible interaction effect between magazine and TV advertising, (3) for a possible interaction effect between advertising expenditure and the proportion of magazine versus TV advertising, and lastly (4) for possible interactions between the proportions of magazine advertising and TV advertising, and spends, on the one hand, and respondents' media usage, on the other hand. Ignoring the random effects, the linear predictor in our logistic regression model, which is the logarithm of the odds in favor of recognition, is given by

$$\begin{aligned} \eta = & \beta_{mg} x_{mg} + \beta_{TV} x_{TV} + \gamma_{mg} x_{mg} A + \gamma_{TV} x_{TV} A + \beta_{int} x_{mg} x_{TV} + \gamma_{int} x_{mg} x_{TV} A \\ & + \lambda_{mg} x_{mg} m_{mg} + \lambda_{TV} x_{TV} m_{TV} + \phi_{mg} x_{mg} A m_{mg} + \phi_{TV} x_{TV} A m_{TV} + \lambda_{int} x_{mg} x_{TV} m_{mg} + \phi_{int} x_{mg} x_{TV} A m_{mg} \\ & + \kappa_{mg} x_{mg} m_{TV} + \kappa_{TV} x_{TV} m_{TV} + \varphi_{mg} x_{mg} A m_{TV} + \varphi_{TV} x_{TV} A m_{TV} + \kappa_{int} x_{mg} x_{TV} m_{TV} + \varphi_{int} x_{mg} x_{TV} A m_{TV}, \end{aligned} \quad (3)$$

where x_{mg} and x_{TV} represent the proportions of magazine and TV advertising, A is the natural logarithm of the total GRP value. The second and the third line in Equation (3) describe how the media mix effects and the effect of the amount of advertising are moderated by the magazine usage intensity m_{mg} and TV usage intensity m_{TV} , respectively. To interpret the predicted recognition results, we derive the probability of campaign recognition $P(r=1)$ using an inverse logit link function:

$$P(r=1) = \frac{\exp(\hat{\eta})}{1 + \exp(\hat{\eta})}. \quad (4)$$

The random part of the linear predictor consists of the random effects for the region, wave, parent brand, brand and respondent. To estimate the model, we used the SAS procedure GLIMMIX. Due to the multicollinearity in the data, a typical problem for regression models involving proportions (Cornell, 2002), it is neither useful to interpret the individual estimates nor to focus on individual p-values. However, the estimated regression model is useful for making predictions concerning ad recognition, since multicollinearity has little impact on the accuracy of a prediction (Verbeek, 2012).

6 Results

The estimates of the fixed model coefficients are displayed in Table 2.

Table 2: Parameter estimates for the MAM in Equation (3)

Effect	Estimate	Standard Error	t Value	Pr> t
$\beta_{mg}x_{mg}$	-3.2134	1.6327	-1.97	0.0491
$\beta_{TV}x_{TV}$	-4.2235	2.0251	-2.09	0.0370
$\gamma_{mg}x_{mg}A$	0.1370	0.3596	0.38	0.7031
$\gamma_{TV}x_{TV}A$	0.4206	0.3573	1.18	0.2392
$\beta_{int}x_{mg}x_{TV}$	9.4444	9.3109	1.01	0.3104
$\gamma_{int}x_{mg}x_{TV}A$	-0.9420	1.7160	-0.55	0.5830
$\lambda_{mg}x_{mg}m_{mg}$	0.05817	0.3522	0.17	0.8688
$\lambda_{TV}x_{TV}m_{mg}$	0.4487	0.4386	1.02	0.3063
$\phi_{mg}x_{mg}Am_{mg}$	0.04668	0.07854	0.59	0.5523
$\phi_{TV}x_{TV}Am_{mg}$	-0.05564	0.07787	-0.71	0.4749
$\lambda_{int}x_{mg}x_{TV}m_{mg}$	-2.9446	1.9828	-1.49	0.1375
$\phi_{int}x_{mg}x_{TV}Am_{mg}$	0.5371	0.3651	1.47	0.1412
$\kappa_{mag}x_{mag}m_{TV}$	0.2318	0.2103	1.10	0.2702
$\kappa_{TV}x_{TV}m_{TV}$	-0.1022	0.2498	-0.41	0.6824
$\varphi_{mag}x_{mag}Am_{TV}$	-0.03189	0.04666	-0.68	0.4943
$\varphi_{TV}x_{TV}Am_{TV}$	0.05234	0.04451	1.18	0.2396
$\kappa_{int}x_{mag}x_{TV}m_{TV}$	0.4597	1.1294	0.41	0.6840
$\varphi_{int}x_{mag}x_{TV}Am_{TV}$	-0.07241	0.2085	-0.35	0.7284

We visualize the estimated regression model using the prediction profiler embedded in the software package JMP. In Figures 1-8, we display prediction profiler outputs for various scenarios and conditions. The figures are built using the MAM's parameter estimates from Table 2. In the figures, the probability of ad recognition is displayed on the vertical axis. The horizontal axes show the levels of the five explanatory variables in the MAM: the proportion of magazine advertising, the proportion of TV advertising, total campaign weight in GRPs, consumers' magazine usage intensity and TV usage intensity. In each of the panels of the figure, the dashed vertical lines indicate the current levels of the explanatory variables. The solid convex curves in the first two panels show how the probability of ad recognition changes as a function of the allocation of campaign spends.

Each figure corresponds to a different scenario. In Table 3, the key indicators and results for each scenario are summarized. The first scenario involves moderate levels of magazine ('I read a few articles and leaf through the rest') and television (3 to 4 hours per day) usage and a campaign weight of 50 GRPs. Figure 1 shows that, in this scenario, a media mix of 50% magazines and 50% TV leads to the highest ad recognition probability (41%). In scenario 2, where the campaign weight is 620 GRPs, given the same media usage values, an allocation of 40% to the campaign weight in magazines and 60% to television maximizes recognition probability (66%) (Figure 2). In case of high levels of magazine ('I read it thoroughly from the first to the last page') and television ('8 hours or more per day') usage, for a campaign weight of 620 GRPs (Scenario 3), the predicted recognition is 87%. The optimal media mix involves 40% of magazine advertising and 60% of TV advertising (Figure 3). In case of low levels of magazine ('I leaf through it without actually reading it') and high level of television ('8 hours or more per day') usage, and a campaign weight of 620 GRPs (Scenario 4), the predicted recognition probability drops to 69%, while the optimal media mix changes to 19% of magazine advertising and 81% of TV advertising (Figure 4). When consumers use magazines with high intensity and TV with low intensity (Scenario 5), the predicted recognition probability remains 69%, while the optimal media mix becomes 53% magazines and 47% TV (Figure 5). Given a campaign weight of 50 GRPs (Scenarios 6, 7 and 8), the optimal media mix involves 50% of magazine advertising and 50% of TV advertising for any media usage intensity (Figures 6, 7 and 8). The probability of ad recognition, however, does depend quite strongly on the pattern in media usage in case the GRP value is only 50 (57% of ad recognition in case of high media usage intensity versus 29% in case of low media usage intensity).

Table 3: Overview of the 8 scenarios

Scenario	1	2	3	4	5	6	7	8
GRP	50	620	620	620	620	50	50	50
Mag. proportion	50%	40%	40%	19%	53%	50%	50%	50%
TV proportion	50%	60%	60%	81%	47%	50%	50%	50%
Magazine usage	3	3	5	1	5	5	1	5
TV usage	5	5	9	9	1	9	9	1
Recognition	41%	66%	87%	69%	69%	57%	54%	29%

The conclusion that can be drawn from the 8 scenarios is that the proportions of media mix investments that lead to the highest recognition are influenced by consumers' media usage intensity whenever the total spends are substantial, since, in that case, the optimal media mix changes as a function of media usage. However, no moderation effect on media mix can be observed when advertising

investments are low (only 50 GRP). Hence, the media usage intensity's moderating effects increase with advertising effort: in case of high GRP values, the optimal media mix varies across different media usage intensities, while it is stable in case of low GRP values. Additionally, in each scenario, the results show a strong positive synergistic effect of cross-media campaigns. In each scenario, combining television and magazine advertising leads to higher campaign recognition than using just one of the two media.

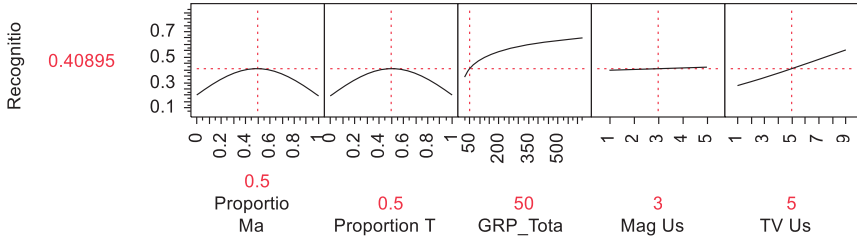


Figure 1: Ad recognition following an advertising effort of 50 GRPs in case of moderate media usage (Scenario 1)

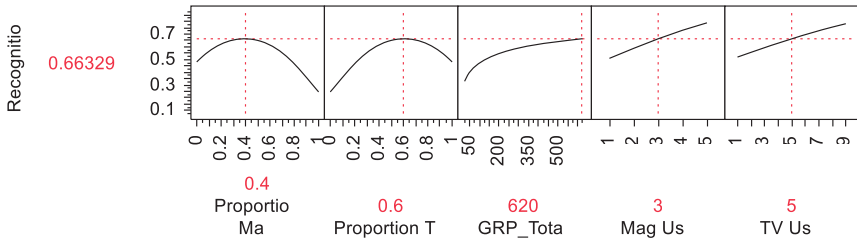


Figure 2: Ad recognition following an advertising effort of 620 GRPs in case of moderate media usage (Scenario 2)

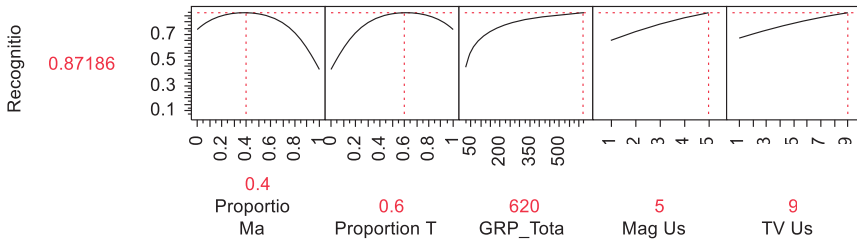


Figure 3: Ad recognition following an advertising effort of 620 GRPs in case of high media usage (Scenario 3)

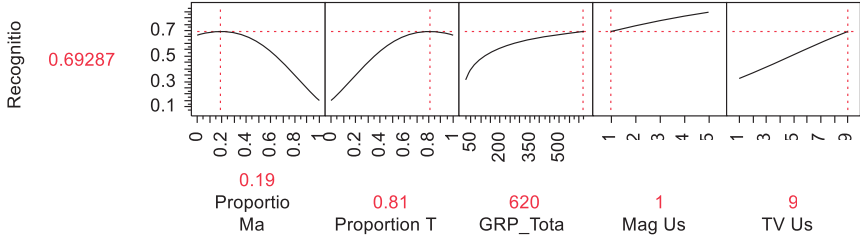


Figure 4: Ad recognition following an advertising effort of 620 GRPs in case of low magazine usage and high TV usage (Scenario 4)

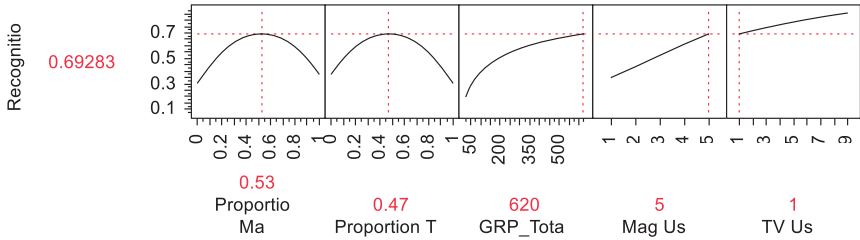


Figure 5: Ad recognition following an advertising effort of 620 GRPs in case of high magazine usage and low TV usage (Scenario 5)

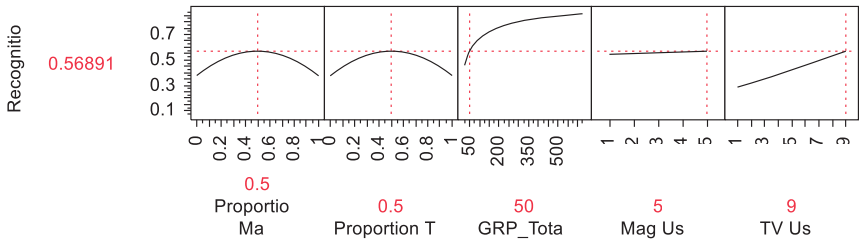


Figure 6: Ad recognition following an advertising effort of 50 GRPs in case of high media usage (Scenario 6)

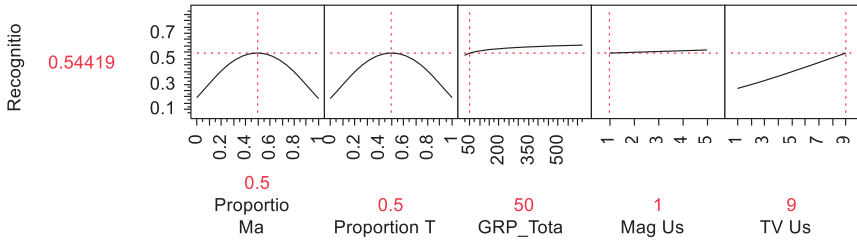


Figure 7: Ad recognition following an advertising effort of 50 GRPs in case of low magazine usage and high TV usage (Scenario 7)

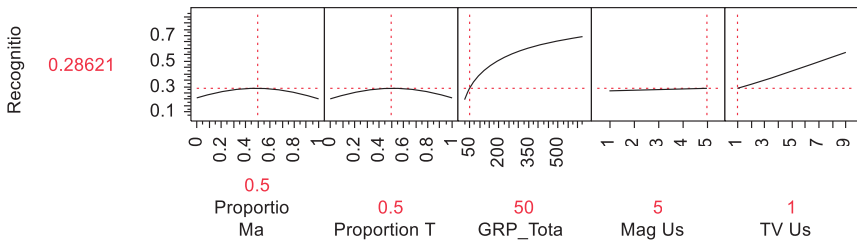


Figure 8: Ad recognition following an advertising effort of 50 GRPs in case of high magazine usage and low TV usage and (Scenario 8)

7 Conclusion and Discussion

Consistent with the majority of previous studies, a positive synergistic effect of a TV and magazine advertising mix on campaign recognition is found (Havlena, Cardarelli and De Montigny, 2007; Reynar, Phillips and Heumann, 2010; Vakratsas and Ma, 2005).

Additionally, our results also show that the optimal media mix changes as a function of the total number of GRPs invested. This insight is new to the literature. The optimal media mix also changes as a function of the magazines and TV usage intensities, especially when the GRP value of a campaign is substantial. In case the GRP value of a campaign is small, the optimal media mix is insensitive to the media usage.

Our results indicate that, when magazine and television usage intensity are comparable, a balanced media mix (50-50 or similar) leads to the highest probability of ad recognition. Obviously, ad recognition is more likely whenever the GRP value of a campaign is higher and when consumers use magazines and television more intensely. For consumers with high magazine usage intensity and low TV usage intensity, a larger share of the advertising investments should be allocated to magazines. In summary, heavy usage of a medium implies allo-

cating a larger portion of the advertising budget to that medium in order to maximize campaign recognition.

The impact of an intense use of TV on the optimal media mix is much larger than the impact of an intense use of magazines. For the high magazine/low TV usage intensity group, the optimal media mix is still relatively balanced (53% for magazines and 47% for TV). For the low magazine/high TV usage intensity group, the optimal media mix strongly favors TV advertising (81% for TV and 19% for magazines). This may suggest a greater impact of TV advertising for high intensity television viewers.

Clearly, mixture-amount models are useful to determine optimal cross-media investments to maximize campaign effectiveness. In particular, they help advertisers to determine optimal advertising investment allocation. The models also quantify to what extent the optimal allocation of advertising efforts (i.e., the media mix) changes with media usage intensity and campaign weight. Hence, the results of our study allow practitioners to tailor their media mix to consumer groups with a specific pattern of media usage. The model is quite flexible in the sense that it can handle any number of regions or media, and it can be used for any type of product or service, as well as using different moderators.

In future research, we intend to study other advertising effectiveness measures, such as consumer activation measures, ad likeability, word-of-mouth effects, brand attitudes and purchase intention and to investigate the moderating effects of other relevant factors, such as personal care products usage and buying experience.

8 Acknowledgement

The work that led to this paper is financially supported by the Research Fund Flanders (FWO-Vlaanderen).

9 References

- Aurier, P., Broz-Giroux, A. (2013). Modeling advertising impact at campaign level: Empirical generalizations relative to long-term advertising profit contribution and its antecedents, *Marketing Letters*, online first, DOI: 10.1007/s11002-013-9252-3.
- Bronner, F., Neijens, P. (2006). Audience experiences of media context and embedded advertising: A comparison of eight media, *International Journal of Market Research*, 48(1), 81-100.
- Chang, Y., Thorson, E. (2004). Television and web advertising synergies, *Journal of Advertising*, 33(2), 75-84.
- Cornell, J. A. (2002). *Experiments with mixtures: Designs, models, and the analysis of mixture data*: Wiley.
- Danaher, P. J., Mullarkey, G. W. (2003). Factors affecting online advertising recall: A study of students, *Journal of Advertising Research*, 43(03), 252-267.
- De Pelsmacker, P., Geuens, M., Van den Bergh, J. (2010). *Marketing communications: A european perspective*: Financial Times/Prentice Hall.

- Dijkstra, M., Buijtelts, H., van Raaij, W. F. (2005). Separate and joint effects of medium type on consumer responses: A comparison of television, print, and the internet, *Journal of Business Research*, 58(3), 377-386.
- Enoch, G., Johnson, K. (2010). Cracking the cross-media code: How to use single-source measures to examine media cannibalization and convergence, *Journal of Advertising Research*, 50(2), 125-136.
- Färe, R., Grosskopf, S., Seldon, B. J., Tremblay, V. J. (2004). Advertising efficiency and the choice of media mix: A case of beer, *International Journal of Industrial Organization*, 22(4), 503-522.
- Godfrey, A., Seiders, K., Voss, G. B. (2011). Enough is enough! The fine line in executing multichannel relational communication, *Journal of Marketing*, 75(4), 94-109.
- Hallward, J. (2008). "Make measurable what is not so": Consumer mix modeling for the evolving media world, *Journal of Advertising Research*, 48(3), 339-351.
- Hardin, J. W., Hilbe, J. (2012). *Generalized linear models and extensions*, third edition: Stata Press.
- Havlena, W., Cardarelli, R., De Montigny, M. (2007). Quantifying the isolated and synergistic effects of exposure frequency for tv, print, and internet advertising, *Journal of Advertising Research*, 47(3), 215-221.
- Hung, K., Gu, F. F., Tse, D. K. (2005). Improving media decisions in china: A targetability and cost-benefit analysis, *Journal of Advertising*, 34(1), 49-63.
- Kanso, A. M., Nelson, R. A. (2004). Internet and magazine advertising: Integrated partnerships or not?, *Journal of Advertising Research*, 44(4), 317-326.
- Krugman, D. M., Cameron, G. T., White, C. M. (1995). Visual attention to programming and commercials: The use of in-home observations, *Journal of Advertising*, 24(1), 1-12.
- Naik, P. A., Raman, K. (2003). Understanding the impact of synergy in multimedia communications, *Journal of Marketing Research*, 40(4), 375-388.
- Niedz, R. P., Evens, T. J. (2011). Mixture screening and mixture-amount designs to determine plant growth regulator effects on shoot regeneration from grapefruit (*Citrus paradisi* Macf. Epicotyls), *In Vitro Cellular & Developmental Biology-Plant*, 47(6), 682-694.
- Pilotta, J. J., Schultz, D. (2005). Simultaneous media experience and synesthesia, *Journal of Advertising Research*, 45(1), 19.
- Reynar, A., Phillips, J., Heumann, S. (2010). New technologies drive cpg media mix optimization, *Journal of Advertising Research*, 50(4), 416-427.
- Schultz, D. E., Block, M. P., Raman, K. (2012). Understanding consumer-created media synergy, *Journal of Marketing Communications*, 18(3), 173-187.
- Tsao, J. C., Sibley, S. D. (2004). Displacement and reinforcement effects of the internet and other media as sources of advertising information, *Journal of Advertising Research*, 44(1), 126-142.
- Vakratsas, D., Ma, Z. (2005). A look at the long-run effectiveness of multimedia advertising and its implications for budget allocation decisions, *Journal of Advertising Research*, 45(2), 241-254.
- Verbeek, M. (2012). *A guide to modern econometrics*, Hoboken, NJ: Wiley.
- Voorveld, H. A., Neijens, P. C., Smit, E. G. (2011). Opening the black box: Understanding cross-media effects, *Journal of Marketing Communications*, 17(2), 69-85.
- Wang, A. (2006). When synergy in marketing communication online enhances audience response: The effects of varying advertising and product publicity messages, *Journal of Advertising Research*, 46(2), 160-170.
- Wendel, S., Dellaert, B. G. (2005). Situation variation in consumers' media channel consideration, *Journal of the Academy of Marketing Science*, 33(4), 575-584.

“Does it Pay off to Introduce my Partner?” The Role of Stakeholder Cocreation in Consumers’ Willingness to Pay

Kande Kazadi
Annouk Lievens
Dominik Mahr

1 Introduction

Firms cocreate new products and services by interacting with multiple types of external stakeholders (Chesbrough, Vanhaverbeke, & West, 2008; Hoyer, Chandy, Dorotic, Krafft, & Singh, 2010; Mahr & Lievens, 2012). For example, Nivea’s Black and White was developed by tapping into consumers’ ideas about the most important features of a deodorant. Yet rather than using traditional market research, Nivea relied on input from consumers, through online communities, during the development process. Research has examined the cocreation phenomenon from a firm perspective quite extensively (Mahr, Lievens, & Blazevic, 2013; Nambisan & Baron, 2009; Payne, Storbacka, & Frow, 2008). However, research that examines whether cocreation with external stakeholders during the innovation process influences consumer attitudes and behavior remains scant (Fuchs, Prandelli, Schreier, & Dahl, 2013; Schreier, Fuchs, & Dahl, 2012; Troye & Supphellen, 2012). Yet, such insight could help managers make decisions on whether and how to communicate about the firm’s cocreation activities.

Extant research has predominantly addressed one type of external partner in cocreation: consumers. Yet, what is notable in recent years is that firms have started to involve multiple stakeholders during the innovation process. For example, Heineken brought consumers, professional designers, and internal Heineken employees together to cocreate a new type of bar. The rationale was that bringing together this seemingly unrelated, diverse group of stakeholders would yield creativity and new insights.

So far, scholars have not addressed the impact of these activities, where multiple stakeholders are involved, on consumers valuation of a product. Thus, little insight is available on the impact of *stakeholder cocreation* activities on consumer attitudes. We aim to address this issue. We are specifically interested in three aspects. First, what is the effect of communication about the involvement of multiple stakeholders during the innovation process on a consumer’s valuation of the product in question? Second, what is the moderating role of product complexity on the relationship between stakeholder involvement and product valuations? Third, is the relationship between stakeholder involvement and product valuations explained through a change in brand attitude?

In doing so, we address three gaps in extant literature. First, as mentioned earlier, research on the effects of cocreation on consumers' valuations of products is limited to consumer cocreation (Schreier et al., 2012; Troye & Supphellen, 2012). Yet, because a wide range of stakeholders are becoming more empowered and willing to cocreate, firms are often becoming the orchestrators of a cocreation process with multiple stakeholders. This involvement of multiple types of stakeholders might lead to a different valuation by consumers than the case where only consumers are involved in the cocreation process.

Second, previous works have mainly focused on examining effects on those consumers that were part of the cocreation process (Schreier et al., 2012). These are often so-called 'lead-users' (Von Hippel, 2009). This small group of lead-users is fairly different from 'observing' consumers, who in fact represent the mass of potential buyers of a product (Fuchs & Schreier, 2011). Insight in the effects of various types of cocreation on this large group of 'passive' consumers is valuable for practice.

Third, previous work remains ambiguous on the role of product complexity in cocreation. On the one hand studies have shown that consumers' perceived ability to contribute is low for complex products (Schreier et al., 2012). On the other hand, many successful complex products have been developed with consumer input (e.g. open-source operating systems) (Bagozzi & Dholakia, 2006).

This study addresses the three issues outlined above. More specifically, we investigate and compare the effects of both consumer cocreation and stakeholder cocreation on consumers' willingness to pay for a new product. As price is a key element in the profit equation, and is directly linked to profitability, this relationship is of considerable interest for research and practice (Homburg, Koschate, & Hoyer, 2005). Then, we assess the moderating impact of product complexity. Additionally, we explore the underlying process that illustrates how increased valuation for stakeholder cocreated products is driven by an increase in brand attitude.

2 Theoretical Background and Hypothesis Development

2.1 Cocreation and Product Valuations

Previous studies have shown that consumers, who actively cocreate new products with firms, have higher valuations for the resulting product (Auh, Bell, McLeod, & Shih, 2007; Chan, Yim, & Lam, 2010). Field data also reveal that products based on users' ideas perform better financially (Nishikawa, Schreier, & Ogawa, 2013). This means that these products are also valued higher by consumers who were not actively involved in their development (Fuchs & Schreier, 2011). We posit that this higher valuation stems from the fact that consumers may identify with those consumers that are part of the cocreation process.

People see themselves and others as part of social categories, such as religious systems, age cohorts, and consumption groups. These social categories provide meaning and connectedness (O'Reilly, Chatman, & Caldwell, 1991). Consumers that were not part of the cocreation process may see those consumers that did actively participate as part of their social category. Therefore, they may infer that their needs and preferences are better reflected through their peers than through the internal engineers of a firm (Schreier et al., 2012). Therefore, we predict the following:

H1: Consumers are willing to pay more for new products cocreated with consumers than for internally developed products.

A firms' stakeholders can have a significant impact on the acceptance and adoption of new products. Likewise, stakeholders such as special interest groups can mobilize a firm's consumers against certain new products or the firm as a whole (Driessen & Hillebrand, 2013). Thus, various stakeholders have the potential to influence consumers' purchase behavior.

Previously, these stakeholders would voice their support (or dislike) for a new product after the product launch. Yet nowadays, firms are starting to integrate multiple stakeholders during their innovation process. This stakeholder cocreation may influence a consumers' valuation for a new products in two ways.

First, as mentioned earlier, the fact that stakeholders were already involved in the development phase of the product may act as a proverbial “seal of approval”. Second, as opposed to consumer cocreation, stakeholder cocreation brings a multitude of views and expertise together. Involving different types of stakeholders such as special interest groups, governments, suppliers and competitors brings more diverse knowledge in the innovation process. Thus, consumers may believe that, through complementary expertise, this results in more creative and more valuable products (Stahl, Maznevski, Voigt, & Jonsen, 2009). Thus, we predict the following:

H2: Consumers are willing to pay more for new products cocreated with stakeholders than for internally developed products.

H3: Consumers are willing to pay more for new products cocreated with stakeholders than for products developed with consumers.

2.2 *The Role of Product Complexity*

Product complexity varies across a number of dimensions such as number of components, number of possible design choices and skills required for manufacturing (Hobday, 1998). With regard to cocreation activities, extant work has shown that consumers put less confidence in other consumers' ability to cocre-

ate complex products than the ability of internal firm employees (Schreier et al., 2012). The underlying assumption is that the tasks to be executed in the development of a complex product are too difficult for untrained consumers (as opposed to skilled internal employees).

Yet, product complexity might trigger different mechanisms in the case of stakeholder cocreation. When a firm keeps close contacts with various stakeholders, it builds up a so called 'network competence' (Ritter & Gemünden, 2003). This is a complex network of complementary skills. Therefore, consumers may perceive a high level of competence in the development process when multiple types of stakeholders are involved. Therefore, valuations for complex products developed with stakeholders may be higher. Hence, we hypothesize:

H4: When product complexity is high, consumers are willing to pay less for new products cocreated with consumers than for new products developed internally.

H5: When product complexity is high, consumers are willing to pay more for new products cocreated with stakeholders than for new products developed internally.

2.3 The Underlying Process: Stakeholder Cocreation and Brand Attitude

Successful marketing requires constant dialogue between a brand and its different stakeholders (Hatch & Schultz, 2003; Reid, Luxton, & Mavondo, 2005). Traditionally, this dialogue was predominantly a one-way communication from the firm towards its stakeholders. However, through the active involvement of multiple stakeholders during the innovation process, firms can signal that their brand has two-way dialogue with its external stakeholders in its core beliefs and capabilities (Reid et al., 2005). Indeed, successfully integrating different stakeholders in the new product development process has been identified as an option for a brand to reduce stakeholder tension (Driessen & Hillebrand, 2013). This may drive increased brand attitudes. Such an increase in attitude toward the brand may in turn drive the willingness to pay a price premium (Del Rio, Vazquez, & Iglesias, 2001). Therefore, we hypothesize:

H6: The positive effect of stakeholder cocreation on willingness to pay is mediated by an increase in attitude towards the brand.

3 Methodology

3.1 Participants and Design

We conducted an experiment on a sample of randomly recruited participants from two panel databases of a European university ($n = 163$; 62% female, mean

age = 36 years old). The experiment employed a 3 (internal development, consumer cocreation, stakeholder cocreation) x 2 (low product complexity, high product complexity) between-subjects design. Table 1 provides an overview of the experimental conditions.

Participants were shown a press article informing them about the launch of a new product by a fictional company. We chose olive oil to reflect a low complexity product and a laptop as a high complexity product. The first paragraph of each press article contained information about the product’s development process. In particular, participants were either provided with a text stating that the product was developed internally, with customers or with various stakeholders (in particular customers, suppliers and activists).

Table 1: Overview of experimental conditions

<i>Experimental treatment</i>	<i>N</i>
Internal development + Low product complexity	25
Consumer cocreation + Low product complexity	33
Stakeholder cocreation + Low product complexity	23
Internal development + High product complexity	30
Consumer cocreation + High product complexity	23
Stakeholder cocreation + High product complexity	29

3.2 Measures

To measure consumers’ willingness to pay, we asked each participant how much they would be willing to pay for the product they were shown (Homburg et al., 2005). The amounts were standardized to allow comparison across product categories. We used a seven-point Likert scale comprising 3 items based on Sengupta and Johar (2002) to measure attitude towards the brand ($\alpha = .89$).

To warrant the internal validity of the results, we measured a host of control variables. First, we measured product involvement. Product involvement has been shown to have a significant influence on consumers’ willingness to pay (Lichtenstein, Bloch, & Black, 1988). To measure product involvement, we used a seven-point Likert scale comprising 4 items based on Bower and Landreth (2001) ($\alpha = .94$). Additionally we captured respondents’ task involvement, a situational variable known to affect purchase behavior (Belk & Clarke, 1978), with a three item, seven-point scale ($\alpha = .79$). After measuring the dependent variable and covariates, participants were asked to indicate the complexity of the product shown and the number of parties involved in its development (manipulation check).

4 Results

4.1 Manipulation Checks

The manipulation of internal development, consumer/stakeholder cocreation was successful ($F(2,163) = 16.684, p < 0.001$). In addition, the product complexity manipulation was also successful ($F(1,163) = 13.528, p < 0.001$). Participants reported higher levels of complexity for the laptop conditions ($M_{\text{laptop}} = 3.07$) than for the olive oil conditions ($M_{\text{olive}} = 2.48$).

4.2 Tests of Hypotheses

An analysis of covariance (ANCOVA) was conducted with product involvement and task involvement as covariates. The results, illustrated in figure 1, show support for the main effect of the type of collaboration during the product development process on willingness to pay ($F(2,163) = 2.383, p < .10$). However there is no overall support for the interaction effect between type of collaboration and product complexity ($F(2,163) = 1.536, p > .2$).

Planned contrasts reveal that there is a significant difference in willingness to pay for products developed internally ($M_{\text{internal}} = -.218$) and products developed with consumers ($M_{\text{consumers}} = .112$) at the .10-level. This supports hypothesis 1. In support of hypothesis 2, the difference in willingness to pay for products developed internally ($M_{\text{internal}} = -.218$) and products developed with stakeholder ($M_{\text{stakeholders}} = .163$) is significant at the .05-level. The difference between products developed with consumers and products with stakeholders however is not-significant. As a result, hypothesis 3 is not supported.

Further inspection of the results led us to perform additional analysis. Simple contrasts (Wendorf, 2004) reveal significant differences between the low complexity condition and the high complexity condition. The main effects, which were found across conditions, are not significant within the low complexity group ($p > .30$ and $p > .80$). In the high complexity group, the difference in willingness to pay between internally developed products and products developed with consumers is not significant ($p > .10$), while the difference in willingness to pay between internally developed products and products developed with stakeholders is significant at .01 level.

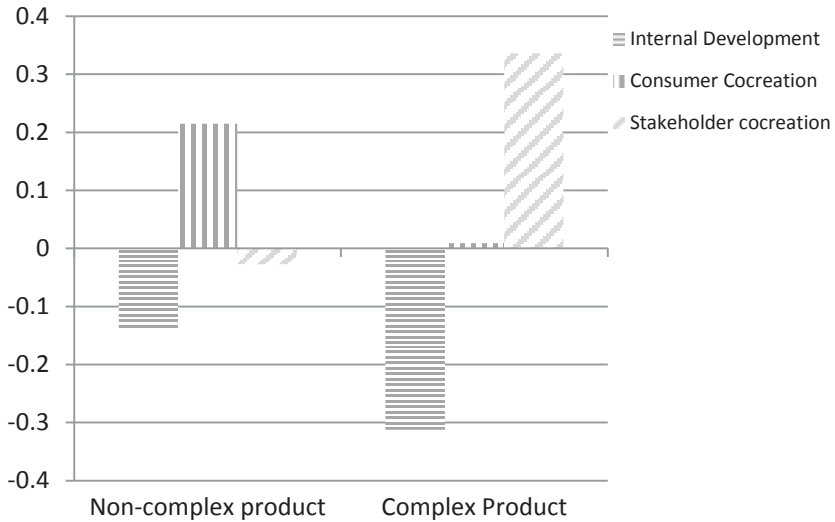


Figure 1: Simple contrasts analysis of standardized willingness to pay

To test hypothesis 6, we employ mediation analysis. We assess the significance of the indirect effect of stakeholder cocreation on willingness to pay through brand attitude. To do so, we employ bootstrapped standard errors and bias corrected 95% confidence intervals (CI) (Preacher & Hayes, 2008; Preacher, Rucker, & Hayes, 2007). The results show that stakeholder cocreation has a significant effect on willingness to pay through increased brand attitude (95% CI excludes zero; .0001 to .3729). This supports hypothesis 6. Additionally, we employed moderated mediation analysis to explore the indirect effects contingent on the type of product (non-complex vs. complex). The results show that for non-complex products, the indirect effect is not significant (90% CI includes zero; -.0144 to .0605). Yet, when the product is complex, the indirect is significant (90% CI excludes zero; .0035 to .1052).

5 Discussion

The results of our study show that some of the positive effects of consumer cocreation, found in previous research (Fuchs & Schreier, 2011; Schreier et al., 2012; Troye & Supphellen, 2012), need a more nuanced view. Consumers who were not involved in the cocreation process do not value all cocreated products higher than internally developed products. The effect is contingent on product complexity. Indeed, they are willing to pay more when a firm communicates about how complex products were cocreated with multiple stakeholders.

Differences in the type of cocreation and the population under investigation might offer a possible explanation for this contrast with previous studies. First, previous studies have predominantly focused on the involvement of consumers in (aesthetic) design or the final assembly of a new product (Schreier et al., 2012; Troye & Supphellen, 2012). Yet, the focus of this study is on the development phase of the innovation process. Therefore, consumers might not value consumer cocreation to the same extent as they do not perceive consumers to have enough expertise to contribute to this phase of the innovation process. Second, previous works have often exclusively studied individuals who were part of the cocreation process (Sawhney, Verona, & Prandelli, 2005; Troye & Supphellen, 2012; Von Hippel, 2009). These empowered consumers may have very different characteristics than the broader group of 'passive' consumers who were not involved in the cocreation process themselves.

Additionally, our analysis reveals that the underlying process, that explains the significant relationship between stakeholder cocreation and product valuations, is an increase in brand attitude. This implies that communication about the cocreation activities a firm undertakes may change consumers' attitudes towards a specific brand as a whole. This apparent spillover is interesting for marketing research and practice.

Our findings offer several important implications for managers. First, in recent years, business and academic literature has shown quite a debate on the question whether or not to involve consumers in firms' innovation processes (Fuchs et al., 2013; Gebauer, Füller, & Pezzeri, 2013). Our findings do not show that the broad market in general has a higher valuation for consumer cocreated products as opposed to internally developed products. Therefore, firms might benefit from targeting their communication, related to consumer cocreation efforts, only to active participants in the cocreation process.

Second, our findings show that consumers are willing to pay 33% more for complex products developed in cocreation with multiple stakeholders. Therefore, firms who cocreate products with multiple stakeholders, not only consumers, should benefit from explicitly communicating this. Managers should stress the multitude of parties involved in the innovation process of a new product in their marketing communications.

Our study has three important limitations that warrant discussion and provide opportunities for further research. First, while our study manipulates the parties involved in the development of a product, we only have one composition of stakeholders. It is plausible, that consumers' valuation of a new product is dependent upon the different stakeholders involved (e.g. all profit oriented or a mix of profit- and non-profit oriented). Second, our stakeholder involvement condition has more parties involved in the innovation process. Therefore, it is also possible that our effect stems from having more parties involved as opposed to having different types of stakeholders involved. A follow-up study

might manipulate the types of stakeholders involved and their numbers. Third, our complexity manipulation was quite black-and-white. It might be worthwhile to investigate an experimental design with more moderate levels of product complexity.

6 References

- Auh, S., Bell, S. J., McLeod, C. S. and Shih, E. (2007). "Co-Production and Customer Loyalty in Financial Services." in: *Journal of Retailing*, Vol. 83 (3), 359-370.
- Bagozzi, R. P. and Dholakia, U. M. (2006). "Open Source Software User Communities: A Study of Participation in Linux User Groups." in: *Management Science*, Vol. 52 (7), 1099-1115.
- Belk, R. W. and Clarke, T. K. (1978). "The Effects of Product Involvement and Task Definition on Anticipated Consumer Effort" Vol. 06. Association for Consumer Research, MI.
- Bower, A. B. and Landreth, S. (2001). "Is Beauty Best? Highly Versus Normally Attractive Models in Advertising." in: *Journal of Advertising*, Vol. 30 (1), 1-12.
- Chan, K. W., Yim, C. K. and Lam, S. S. (2010). "Is Customer Participation in Value Creation a Double-Edged Sword? Evidence from Professional Financial Services across Cultures." in: *Journal of Marketing*, Vol. 74 (3), 48-64.
- Chesbrough, H., Vanhaverbeke, W. and West, J. (2008). "Open Innovation: Researching a New Paradigm: Researching a New Paradigm". OUP, Oxford.
- Del Rio, A. B., Vazquez, R. and Iglesias, V. (2001). "The Effects of Brand Associations on Consumer Response." in: *Journal of Consumer Marketing*, Vol. 18 (5), 410-425.
- Driessen, P. H. and Hillebrand, B. (2013). "Integrating Multiple Stakeholder Issues in New Product Development: An Exploration." in: *Journal of Product Innovation Management*, Vol. 30 (2), 364-379.
- Fuchs, C., Prandelli, E., Schreier, M. and Dahl, D. W. (2013). "All That Is Users Might Not Be Gold: How Labeling Products as User-Designed Backfires in the Context of Luxury Fashion Brands." in: *Journal of Marketing*, Vol. 77 (5), 75-91.
- Fuchs, C. and Schreier, M. (2011). "Customer Empowerment in New Product Development." in: *Journal of Product Innovation Management*, Vol. 28 (1), 17-32.
- Gebauer, J., Füller, J. and Pezzer, R. (2013). "The Dark and the Bright Side of Co-Creation: Triggers of Member Behavior in Online Innovation Communities." in: *Journal of Business Research*, Vol. 66 (9), 1516-1527.
- Hatch, M. J. and Schultz, M. (2003). "Bringing the Corporation into Corporate Branding." in: *European Journal of Marketing*, Vol. 37 (7/8), 1041-1064.
- Hobday, M. (1998). "Product Complexity, Innovation and Industrial Organisation." in: *Research policy*, Vol. 26 (6), 689-710.
- Homburg, C., Koschate, N. and Hoyer, W. D. (2005). "Do Satisfied Customers Really Pay More? A Study of the Relationship between Customer Satisfaction and Willingness to Pay." in: *Journal of Marketing*, Vol. 69 (2), 84-96.
- Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M. and Singh, S. S. (2010). "Consumer Cocreation in New Product Development." in: *Journal of Service Research*, Vol. 13 (3), 283-296.
- Lichtenstein, D. R., Bloch, P. H. and Black, W. C. (1988). "Correlates of Price Acceptability." in: *Journal of Consumer Research*, Vol. 15 (2), 243-252.
- Mahr, D. and Lievens, A. (2012). "Virtual Lead User Communities: Drivers of Knowledge Creation for Innovation." in: *Research policy*, Vol. 41 (1), 167-177.

- Mahr, D., Lievens, A. and Blazevic, V. (2013). "The Value of Customer Co-created Knowledge During the Innovation Process." in: *Journal of Product Innovation Management*, Vol. Forthcoming, n/a-n/a.
- Nambisan, S. and Baron, R. A. (2009). "Virtual Customer Environments: Testing a Model of Voluntary Participation in Value Co-Creation Activities." in: *Journal of Product Innovation Management*, Vol. 26 (4), 388-406.
- Nishikawa, H., Schreier, M. and Ogawa, S. (2013). "User-Generated Versus Designer-Generated Products: A Performance Assessment at Muji." in: *International Journal of Research in Marketing*, Vol. 30 (2), 160-167.
- O'Reilly, C. A. I., Chatman, J. and Caldwell, D. F. (1991). "People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit." in: *The Academy of Management Journal*, Vol. 34 (3), 487-516.
- Payne, A. F., Storbacka, K. and Frow, P. (2008). "Managing the Co-Creation of Value." in: *Journal of the Academy of Marketing Science*, Vol. 36 (1), 83-96.
- Preacher, K. J. and Hayes, A. F. (2008). "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models." in: *Behavior Research Methods*, Vol. 40 (3), 879-891.
- Preacher, K. J., Rucker, D. D. and Hayes, A. F. (2007). "Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions." in: *Multivariate Behavioral Research*, Vol. 42 (1), 185-227.
- Reid, M., Luxton, S. and Mavondo, F. (2005). "The Relationship between Integrated Marketing Communication, Market Orientation, and Brand Orientation." in: *Journal of Advertising*, Vol. 34 (4), 11-23.
- Ritter, T. and Gemünden, H. G. (2003). "Network Competence: Its Impact on Innovation Success and Its Antecedents." in: *Journal of Business Research*, Vol. 56 (9), 745-755.
- Sawhney, M., Verona, G. and Prandelli, E. (2005). "Collaborating to Create: The Internet as a Platform for Customer Engagement in Product Innovation." in: *Journal of Interactive Marketing*, Vol. 19 (4), 4-17.
- Schreier, M., Fuchs, C. and Dahl, D. W. (2012). "The Innovation Effect of User Design: Exploring Consumers' Innovation Perceptions of Firms Selling Products Designed by Users." in: *Journal of Marketing*, Vol. 76 (5), 18-32.
- Sengupta, J. and Johar, G. V. (2002). "Effects of Inconsistent Attribute Information on the Predictive Value of Product Attitudes: Toward a Resolution of Opposing Perspectives." in: *Journal of Consumer Research*, Vol. 29 (1), 39-56.
- Stahl, G. K., Maznevski, M. L., Voigt, A. and Jonsen, K. (2009). "Unraveling the Effects of Cultural Diversity in Teams: A Meta-Analysis of Research on Multicultural Work Groups." in: *Journal of International Business Studies*, Vol. 41 (4), 690-709.
- Troye, S. V. and Supphellen, M. (2012). "Consumer Participation in Coproduction: 'I Made It Myself' Effects on Consumers' Sensory Perceptions and Evaluations of Outcome and Input Product." in: *Journal of Marketing*, Vol. 76 (2), 33-46.
- Von Hippel, E. (2009). "Democratizing Innovation: The Evolving Phenomenon of User Innovation." in: *International Journal of Innovation Science*, Vol. 1 (1), 29-40.
- Wendorf, C. A. (2004). "Primer on Multiple Regression Coding: Common Forms and the Additional Case of Repeated Contrasts." in: *Understanding Statistics*, Vol. 3 (1), 47-57.