CrossMark

Measuring brand image: a systematic review, practical guidance, and future research directions

Anja Plumeyer[1] · Pascal Kottemann[1] ·
Daniel Böger[1] · Reinhold Decker[1]

Abstract Measuring and understanding brand image is crucial for both branding research and practice. Empirical studies focusing on brand image reveal a large number of techniques for measuring brand image, highlighting the need to organize them. However, no comprehensive review of brand image measurement techniques can be found in the existing literature. Therefore, this article seeks to contribute to the extant knowledge of brand image by systematically reviewing the related literature, providing a comprehensive discussion and characterization of brand image measurement techniques, offering recommendations for measuring brand image through a roadmap, and suggesting directions for future research. Our systematic literature review identified 224 high-quality scholarly articles published between 1991 and 2016 using 12 main techniques for measuring brand image. This article may aid both researchers and brand managers in selecting and applying appropriate brand image measurement techniques for their specific research context.

✉ Anja Plumeyer
   aplumeyer@wiwi.uni-bielefeld.de

[1] Department of Business Administration and Economics, Bielefeld University, Universitaetsstrasse 25, 33615 Bielefeld, Germany

🍀 Springer

1 Introduction

Exploring consumers' brand perceptions is an important field of marketing and consumer research (see e.g., Keller 2016). In this regard, brand image can be seen as a key element indicating how consumers feel about a brand and whether a positive relationship exists between the brand and consumers. By measuring brand image, managers can identify both desirable and undesirable brand associations and address these associations in their branding efforts. Thus, from a managerial point of view, understanding how consumers perceive brands is essential for successful brand management.

Over the last decades, a large body of research has focused on brand image. In 1990, Dobni and Zinkhan published their review of definitions, components, and measurement techniques of brand image. Starting with Gardner and Levy's (1955) seminal article, their search encompassed a period of 35 years. Subsequent to the publication of their work, the field of branding received considerable attention and continued to grow. Aaker's (1991) and Keller's (1993) seminal works on brand management became milestones that gave new impetus to research in the field.

These two authors proposed a similar definition of brand image, but differed regarding its components and underlying mental representations of knowledge. Aaker (1991) defined brand image as a set of associations that are usually organized in a meaningful way. Brand associations may take the form of anything that can be linked to the memory of a brand, such as product attributes, customer benefits, or relative price. In contrast to Aaker's perspective, Keller's customer-based brand equity (CBBE)-approach was derived from cognitive psychology and built on the associative network memory model (see e.g., Anderson 1983). According to Keller (1993), brand image consists of consumers' perceptions about a brand that reflect the brand's meaning and are held in memory in the form of a network of associations. These brand associations may take the form of attributes, benefits, or attitudes.

Beside this theoretical development of brand image, various studies have empirically examined the relationship between brand image and different marketing constructs. It has been shown that brand image has a positive influence on, for example, brand trust (see e.g., Esch et al. 2006), customer satisfaction (see e.g., Cretu and Brodie 2007), brand equity (see e.g., Faircloth et al. 2001), and willingness to pay a price premium (see e.g., Anselmsson et al. 2014). These findings supported the idea that brand image is essential for building and managing brands and, therefore, it should be carefully monitored and targeted.

In research, a large number of techniques for measuring brand image have been used. However, no comprehensive review of brand image measurement techniques can be found in the extant literature. Most research has focused only on a selection of techniques. Joyce (1963) concentrated on scaling and sorting techniques, while John et al. (2006) focused on techniques that derive brand maps (i.e., networks of brand associations). Driesener and Romaniuk (2006) provided an empirical comparison of three commonly used techniques for measuring brand image, and a study by Gensler et al. (2015) categorized several brand image measurement

techniques according to their data source and ability to extract a brand association network. To the best of our knowledge, no previous studies have either systematically reviewed the different techniques used in the literature for measuring brand image or provided practical guidance for selecting a brand image measurement technique.

The aims of this paper are threefold: first, via a systematic literature review, we identify high-quality scholarly articles published between 1991 and 2016 that measure brand image. To provide an overview of the brand image measurement techniques used most frequently in marketing research, 224 articles were identified and analyzed. Second, we discuss the benefits and drawbacks of the reviewed techniques and derive various features (i.e., association-specific, output-specific, practical, knowledge-specific and context-specific) to characterize them. Furthermore, we develop a roadmap and present recommendations to help researchers and brand managers select appropriate brand image measurement techniques. Third, we identify existing research gaps and suggest directions for future research.

Section 2 explains the search process of the systematic literature review. In Sect. 3, we present the results of the review, including our identification of the most frequently used brand image measurement techniques. Section 4 provides an overview of the identified techniques. In Sect. 5, we discuss the techniques in detail and critically compare them. In Sect. 6, we suggest future research directions. The article ends with a conclusion and a brief discussion of the article's limitations.

2 Identification of brand image measurement techniques

We followed the three stages proposed by Tranfield et al. (2003) to conduct a systematic, evidence-informed literature review identifying brand image measurement techniques used in marketing research. These three stages are (1) planning, (2) conducting, and (3) reporting and disseminating the review. In the first stage, we explained the motivation for the systematic literature review, derived our research question, and prepared a review protocol. In the second stage, we identified all articles published between 1991 and 2016 through a multi-step approach (see Fig. 1).

First, we searched journal abstracts for the term "brand image." We relied on this term because we wanted to narrow our search to those articles that explicitly addressed brand image and used this term in their abstracts. We selected the year 1991 as the starting point for our search process for two reasons: first, Dobni and Zinkhan (1990) have already provided a detailed overview of brand image research in preceding years (i.e., 1955–1990). Thus, this article can be seen as a continuation of Dobni and Zinkhan's (1990) work. Second, Aaker (1991) and Keller (1993) published their seminal works on brand image in the early 1990s, which provided a new impetus for brand image research in following decades.

We focused on the most important, international peer-reviewed journals in the field of marketing according to three different journal rankings. In line with Sageder
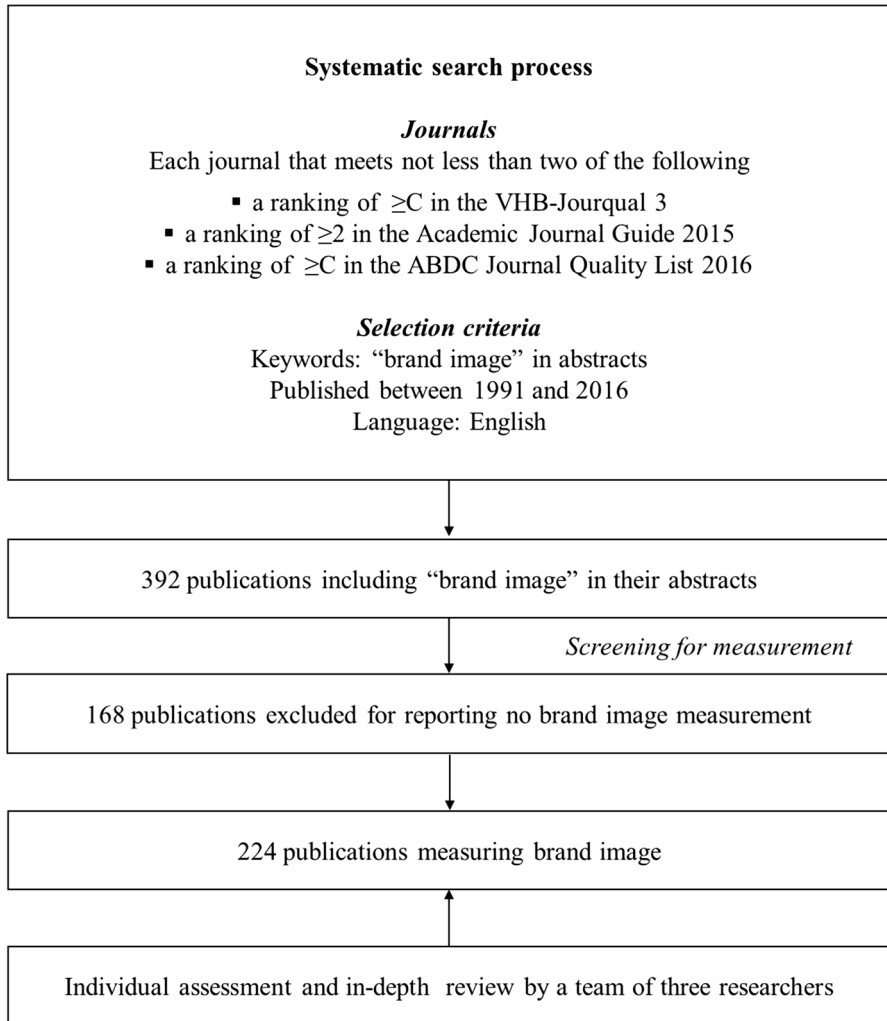
Systematic search process

Journals
Each journal that meets not less than two of the following

- a ranking of ≥C in the VHB-Jourqual 3
- a ranking of ≥2 in the Academic Journal Guide 2015
- a ranking of ≥C in the ABDC Journal Quality List 2016

Selection criteria
Keywords: "brand image" in abstracts
Published between 1991 and 2016
Language: English

392 publications including "brand image" in their abstracts

Screening for measurement

168 publications excluded for reporting no brand image measurement

224 publications measuring brand image

Individual assessment and in-depth review by a team of three researchers

Fig. 1 Systematic search process

et al. (2016), the journals were identified according to (1) the German Academic Association for Business Research (VHB) "JOURQUAL 3," with the cut-off of ≥C; (2) the British Association of Business Schools' (ABS) "Academic Journal Quality Guide 2015," with the cut-off of ≥2; and (3) the "ABDC Journal Quality List 2016" of the Australian Business Deans Council, with the cut-off of ≥C. We considered each journal that appeared in at least two of the three rankings, which allowed us to overcome potential drawbacks from the use of only one journal ranking and reduce subjectivity. In sum, we identified 50 journals, which we then examined individually using electronic databases.

To reduce the risk of overlooking relevant articles, we screened references of already-identified publications, as suggested by Fink (2010).[1] Overall, our search procedure resulted in an initial sample of 392 publications using the term "brand image" in their abstracts.

Next, we thoroughly screened full texts of the 392 articles to determine whether each article explicitly reported on brand image measurement, which resulted in the exclusion of 168 articles from further analysis. We thus identified 224 articles[2] that explicitly measured brand image. A full list of all journals considered and the number of articles per journal can be found in the "Appendix" (see Table 4).

In the third stage, we synthesized findings featuring both descriptive and thematic analyses of the field. We achieved this by using a set of categories (e.g., journal title, definition of brand image, type of brand image measurement) with the use of extraction forms (Tranfield et al. 2003; Booth et al. 2016). A team of three independent researchers screened the articles according to these categories and, while doing so, assessed the type of brand image measurement applied in each article. Whenever two researchers disagreed on an applied technique, the third researcher was consulted for the final decision.

3 An overview of measuring brand image in research

The work of Dobni and Zinkhan (1990) has already revealed that brand image measurement has a long tradition in research. Although first approaches date back to the late 1960s, our results show that interest in measuring brand image has increased over time. Figure 2 shows the temporal development of the field from 1991 to 2016. We found that only 23 articles were published between 1991 and 1999. Subsequently, 79 articles were published in the following decade, from 2000 to 2009. From 2010 until the end of 2016, 122 articles were published. As can be seen in Fig. 2, these years demonstrate the current attention given to brand image measurement in research, except for the year 2013.

The results also reveal a broad variation among the selected journals. Whereas our search covered a set of 51 scientific, peer-reviewed journals, the results derive from 36 journals. Figure 3 shows the journals with the highest numbers of identified publications within our investigation. The journals with the most publications are the *Journal of Product & Brand Management* (12.9%), the *Journal of Business Research* (10.7%), the *Journal of Brand Management* (8.0%), and *Psychology & Marketing* (7.1%).

Although this article focuses on brand image measurement techniques, we also analyzed each publication's definition of brand image and underlying theoretical background. The publications were assigned a theoretical foundation of brand image based on the author's definition. Figure 4 shows the most frequently used definitions

---

[1] This enabled us to identify another important, international peer-reviewed journal, the *Journal of Business Research*, which met our quality criteria, except for its categorization in another research area according to two of the three rankings. The *Journal of Business Research* is included in the subject area "General Management, Ethics and Social Responsibility" according to the ABS, and it can be found in the area "General Business Administration" according to the VHB.

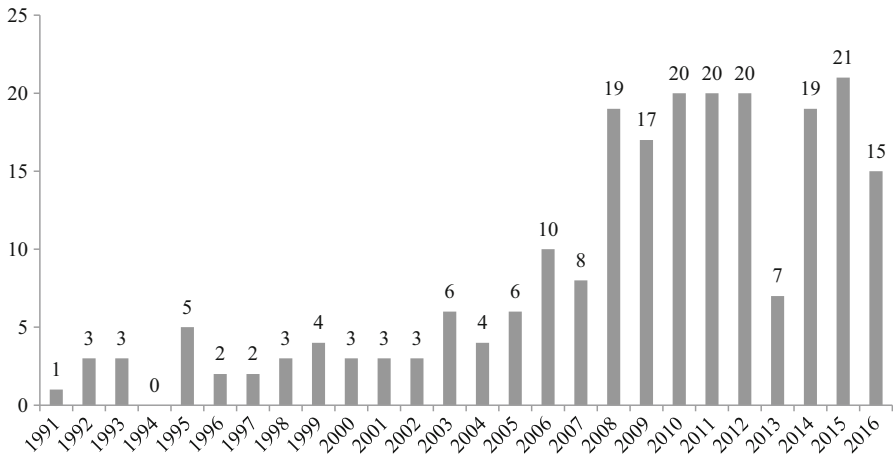[2] These articles are listed in the reference section of this paper, marked by an asterisk.

Fig. 2 Temporal development of the number of identified publications in scientific journals, 1991–2016 (n = 224)
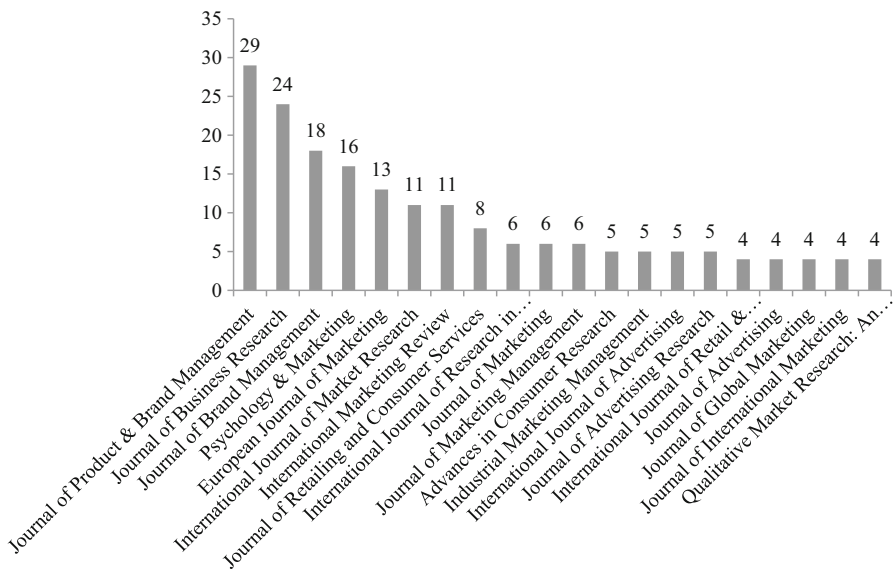

Fig. 3 Number of publications per journal (≥4)

of brand image and their respective frequencies. While some articles named more than one source of their definition of brand image, many articles lacked a clear definition. A possible explanation is that brand image was not these articles' primary focus.

Two authors are of particular relevance when it comes to defining "brand image." The most frequently cited definition comes from the seminal work by Keller (1993), which focuses on conceptualizing, measuring, and managing
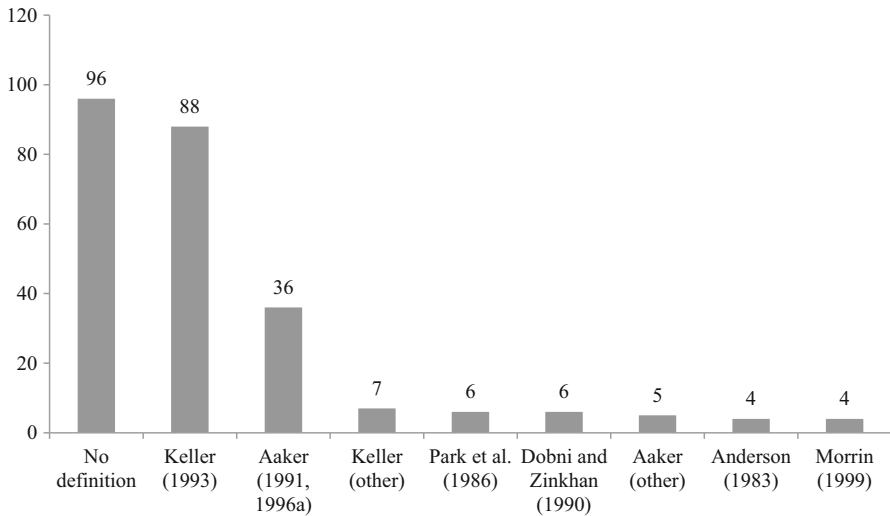
Fig. 4 Number of articles per definition of brand image

customer-based brand equity. Other publications by the same author (e.g., 2003) were cited in seven articles for the definition of brand image. Aaker's (1991, 1996a) definitions of brand image are the second most cited. They appear in 21 (1991) and 15 (1996a) articles, respectively.

From the considered set of articles, our search revealed 12 different brand image measurement techniques applied in at least two different articles. In alphabetical order, they are brand concept maps, constant-sum method, dichotomous scaling, focus group, free-association technique, free-choice technique, in-depth interview, Likert scaling, projective techniques, ranking, repertory grid, and semantic differential scaling. Figure 5 shows the techniques with their corresponding frequency of use.

As seen in Fig. 5, Likert scaling was most widely used for brand image measurement (50.9% of articles), and semantic differential scaling was the next most widely used (14.3%). Although scaling techniques appeared predominant, a combination of techniques was frequently observed, as well.[3] Several studies combined Likert scaling with techniques that directly elicit brand associations from consumers, such as the free-association technique (e.g., Lange and Dahlén 2003; Danes et al. 2012), in-depth interviews (e.g., Michel and Rieunier 2012; Cho et al. 2015), and focus groups (e.g., Power et al. 2008; Bian and Moutinho 2009). Similarly, semantic differential scaling was used in combination with the free-association technique (e.g., Low and Lichtenstein 1993; Batra and Homer 2004). Eighteen other techniques were applied only once in the identified articles, and therefore were not considered.[4] The vast majority of articles (215) we analyzed

---

[3] Consequently, the numbers provided in Fig. 5 do not add up to 224.

[4] These techniques include conjoint analysis, CoreBrand Power, laddering, network analysis, and the Zaltman metaphor elicitation technique (ZMET), to name just a few.
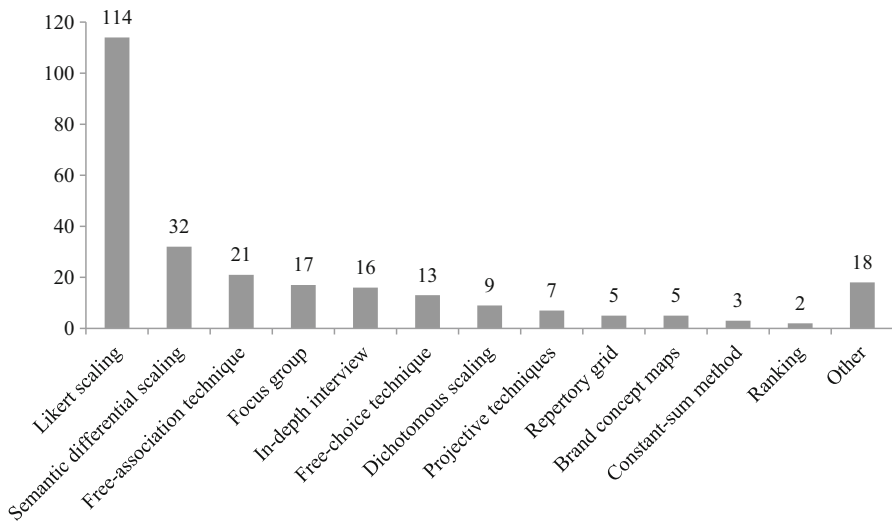
Fig. 5 Number of applications per technique

sourced primary data to measure brand image, and of these, 13 articles used panel data. Only nine articles were found to have used secondary data.

We also identified the most influential article for each technique according to citation counts.[5] We gathered these counts manually via the citation database Google Scholar, which has the best journal coverage (Meho and Yang 2007). Citation counts were collected until the end of 2016. To account for the impact of publication age on citation counts, we divided the citation counts by article age to compute mean counts per year (Harzing 2010). Table 1 highlights the most influential article for each technique.

4 Review of brand image measurement techniques

In the following section, we provide a short description of the 12 techniques that were used at least twice in the identified articles. In addition, we present an overview of the different (Likert) scales that were predominantly used in our sample.

---

[5] Citation counts are the most objective and frequently used metric for measuring scientific impact (Nair and Gibbert 2016) and are considered the "building block" of all indicators in bibliometric analyses (Wildgaard et al. 2014, p. 127). Nevertheless, some researchers question what citation counts really measure. The probability of being cited depends on many time-, field-, journal-, or article-dependent factors beyond scientific impact (see Bornmann and Daniel 2008, for an overview). Moreover, using only citation counts could be misleading, as it would favor older publications (Quental and Lourenço 2012). To avoid this drawback, we considered the mean citation counts per year (i.e., citation counts divided by the age of the publication).

Table 1 The most influential article per technique

Technique	References	Citations	Mean citations per year
Likert scaling	Cretu and Brodie (2007)	572	57.2
Semantic differential scaling	Hosany et al. (2006)	601	54.6
Free-association technique	Batra and Homer (2004)	259	19.9
Focus group	Bian and Moutinho (2011)	143	23.8
In-depth interview	Thompson et al. (2006)	587	53.4
Free-choice technique	Swait et al. (1993)	369	15.4
Dichotomous scaling	Hsieh et al. (2004)	399	30.7
Projective techniques	Hogg et al. (2000)	265	15.6
Repertory grid	Hankinson (2005)	376	31.3
Brand concept maps	John et al. (2006)	274	24.9
Constant-sum method	Roth (1995a)	603	27.4
Ranking	Driesener and Romaniuk (2006)	80	7.3
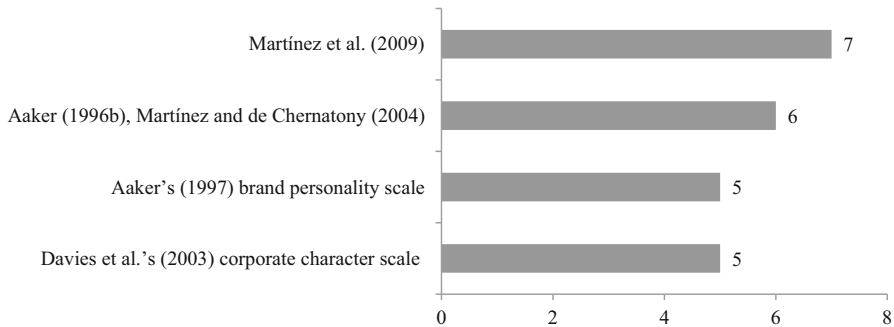
Fig. 6 Number of articles per Likert scale

4.1 Likert scaling

Between 1991 and 2016, Likert's method of summated ratings (1932), known as Likert scaling, was most frequently applied to measure brand image. This technique asks respondents to indicate the extent to which they agree or disagree with a series of statements about the stimulus object, that is, the target brand or its associations. Each statement usually has five or seven response categories in a forced-choice format ranging from "strongly disagree" to "strongly agree." After respondents assess their statements, each statement is assigned a numerical score that enables a total summated score or a mean score to be calculated for each respondent, indicating his or her attitude towards the brand (Hair et al. 2009).

The results of our literature review revealed a lack of consensus in the application of Likert scaling to measure brand image, as the majority of scales were applied in one article only. Figure 6 shows the most frequently used Likert scales.

Although relatively new, the scale by Martínez et al. (2009) was most frequently applied to measure brand image. Their scale considers three dimensions that attempt to assess tangible (i.e., functional image) and intangible (i.e., affective image) attributes and benefits, as well as overall attitudes toward the brand (i.e., reputation). It derives specific items from scales suggested in previous research (i.e., Martin and Brown 1990; Aaker 1996b; Weiss et al. 1999). Aaker's (1996b) scale was the second most frequently applied Likert scale. For example, Martínez and de Chernatony (2004) used it to measure general brand image (in contrast to product brand image). An overview of the statements used in the scales listed above can be found in the "Appendix" (see Table 5). Other Likert scales that were frequently used to measure brand image were Aaker's (1997) 42-item brand personality scale and Davies et al.'s (2003) 49-item corporate character scale. The brand personality scale involves five dimensions of brand personality (sincerity, excitement, competence, sophistication, and ruggedness), while the corporate character scale includes seven dimensions (agreeableness, competence, enterprise, chic, ruthlessness, machismo, and informality).

4.2 Semantic differential scaling

Semantic differential scaling, introduced by Osgood et al. (1957), was the second most frequently used brand image measurement technique in marketing research. This scaling technique uses bipolar adjectives or adverbs as endpoints of a symmetric continuum. Typically, respondents rate the target brand on a number of itemized scales, each bounded by one of two bipolar adjectives (Malhotra 2010) or phrases (Aaker et al. 2011). Each response is quantified by a numerical score, and thus, mean responses can be calculated.

We repeated our analysis of the articles that used semantic differential scaling to provide an overview of most frequently used scales. However, we could not find any consensus for this technique as no semantic differential scale was used more than twice.

4.3 Free-association technique

Another frequently applied technique for investigating brand image and eliciting brand associations was the free-association technique. Within this technique, respondents receive a stimulus (e.g., a brand name) and must spontaneously name or write down everything that comes to mind regarding it. The primary goal of the free-association technique is to identify easily accessible verbal associations from consumer memories (Deese 1965; Koll et al. 2010).

4.4 Focus groups

The focus group approach is a more or less open-ended, informal discussion about a target (e.g., a brand) among a small group of respondents (i.e., 8–10) in a relaxed atmosphere (Calder 1977). In general, focus group participants should be homogeneous in demographic and socioeconomic characteristics and, hence, they

must be screened carefully in advance. A key characteristic of focus groups is a skilled moderator who guides the conversation and ensures that participants focus on the topic of interest. The moderator has to stimulate the discussion and evoke ideas, opinions, beliefs, feelings, or attitudes from the participants. After a predetermined period (e.g., 45–90 min), the moderator ends the discussion, summarizes the key findings, and, if possible, draws a conclusion in an additional research report from what was said or left unsaid (Calder 1977).

4.5 In-depth interview

In-depth interviews in the branding context are used to elicit in-depth information on brand associations. They involve a trained interviewer asking a respondent a set of semi-structured, probing questions, typically in a face-to-face setting (Hair et al. 2009). According to Legard et al. (2003), in-depth interviews have several key characteristics. First, the interview is intended to combine structure with flexibility to uncover associations concerning the target brand. Second, the interview is interactive in nature; that is, it relies on the interaction between the interviewer and the respondent, with the interviewer encouraging the respondent to answer freely. Third, the interviewer uses a range of probing questions to achieve deeper understanding in terms of penetration, exploration, and explanation. Fourth, in-depth interviews are generative in the sense that new knowledge or thoughts can be created.

4.6 Free-choice technique

The free-choice or "pick any" technique can be technically described as a free-choice affirmative binary (Dolnicar et al. 2012). The interviewer presents respondents with an attribute and asks them which, if any, of the listed brands they associate with that attribute (Barnard and Ehrenberg 1990). To avoid order and priming effects, the attributes and the brand list should be randomized (Nenycz-Thiel and Romaniuk 2014). The presentation order can be changed by first showing respondents a brand and then asking them which, if any, of the listed attributes they associate with the brand (e.g., Swait et al. 1993). Either way, the answers are saved in binary form (Rungie et al. 2005).

4.7 Dichotomous scaling

Dichotomous scaling is characterized by having only two response categories (such as "yes" vs. "no," "agree" vs. "disagree"), which can be accompanied by a neutral response category reflecting the two categories' inapplicability (Malhotra 2010). To measure brand image, dichotomous questions can reveal whether a predefined association is associated with the target brand and, concomitantly, whether the target brand is characterized by any specific, predefined associations.

4.8 Projective techniques

Projective techniques are unstructured, indirect forms of questioning that seek to have respondents express their deepest motivations, beliefs, attitudes, or feelings regarding a topic of interest (e.g., the brand). Respondents are encouraged to "project" their own unconscious thoughts onto someone or something and "respond in ways in which they would otherwise not feel able to respond" (Boddy 2005, p. 240). According to Helkkula and Pihlström (2010), projective techniques can be divided into four different categories: (1) association tasks (e.g., brand personification), (2) completion tasks (e.g., sentence or story completion tasks), (3) construction tasks (e.g., bubble drawings/cartoon tests), and (4) expressive tasks (e.g., role-play).

4.9 Repertory grid

The repertory grid technique can be used for eliciting personal constructs (i.e., what people think about a given topic) and is based on Kelly's (1955) personal construct theory. According to this theory, people's view of objects that they interact with is made up of a collection of related similarity–difference dimensions. The repertory grid technique utilizes the so-called triads consisting of three stimuli (i.e., brands). In the first step, respondents have to name a dimension in which two of the three brands are similar to each other (i.e., similarity or emergent pole) and, at the same time, different from the third brand (i.e., contrast pole). This procedure is repeated 15–20 times to identify important image dimensions. In the second step, respondents evaluate brands on the identified image dimensions using a bipolar rating-scale. This allows researchers to assess the relevance of each image dimension and to derive the connection strength between each image dimension and the brands.

4.10 Brand concept maps

Based on the idea that consumers organize information in memory in the form of a network (see e.g., Anderson and Bower 1973), John et al. introduced brand concept maps (BCM) in 2006 for measuring brand images and underlying brand association networks. The BCM approach consists of three stages. In the elicitation stage, researchers identify a set of relevant brand associations. For this purpose, researchers can either use the results of prior market research studies or conduct a further study to elicit important associations. In the subsequent mapping stage, respondents use these previously identified brand associations to map their individual brand association networks. In the final aggregation stage, these individually designed brand maps are aggregated based on a set of standardized aggregation rules to obtain the consensus map, which depicts the whole sample's brand image and underlying brand association network. Very recently, Böger et al. (2017) introduced an improved aggregation mechanism to enhance the applicability of the BCM approach.

4.11 Constant-sum method

The constant-sum method is used in marketing research for identifying the relative (i.e., comparative) importance of attributes. Respondents' are required to allocate a fixed number of points (e.g., 100) among a set of objects (e.g., pre-defined brand associations) to express their relative preference for, or the importance of, each object (Guilford 1954; Aaker et al. 2011). If an association is completely unimportant, respondents assign zero points to it. The more important an association is to respondents, the more points they assign to it (Malhotra 2010).

4.12 Ranking

Ranking is a comparative measure where brands are ranked in relation to competitors according to their association with an attribute. For example, when a brand is ranked first, this means that the corresponding attribute is associated more with that brand than with the other brands (Driesener and Romaniuk 2006).

5 Discussion of brand image measurement techniques and practical guidance

In this section, we summarize our previous findings by discussing the benefits and drawbacks and providing a comprehensive characterization of each brand image measurement technique. We derive a roadmap for both researchers and practitioners based on these findings. Our recommendations may assist marketing researchers and brand managers in choosing brand image measurement techniques according to their specific research context.

5.1 Benefits and drawbacks of brand image measurement techniques

For the 12 techniques most used in brand image measurement since 1991, we present their important benefits and drawbacks below (see Table 2).

In the following section, we present a comprehensive characterization of the 12 techniques for measuring brand image identified within our systematic literature review. We explicitly refer to the benefits and drawbacks of each brand image measurement technique and derive specific features that allow us to compare these techniques.

5.2 Characterization of brand image measurement techniques

The brand image measurement techniques identified in our literature review can be elaborated by describing their different features: association-specific, output-specific, practical, knowledge-specific, and context-specific. Each feature is discussed in more detail below.

Table 2 Benefits and drawbacks of brand image measurement techniques

Technique	Benefits	Drawbacks
Likert scaling	Easy to construct, administer, and understand	Offers only limited information on brand image as the scales are limited to cognitive components of brand image (Hair et al. 2009)
	May provide insight into the strength of predefined sets of brand associations	Dimensions of brand associations (e.g., favorability, uniqueness) are not part of the investigation
Semantic differential scaling	Easy to construct, administer, and understand	Needs a thoroughly implemented pre-study to ensure that the scales cover important aspects of the brand image
	Suitable for measuring consumers' positive and negative feelings toward an object (Henerson et al. 1987)	
Free-association technique	Easy to construct, administer, and understand	Cannot delve deeper into nonverbal and/or implicit brand knowledge as it seeks to retrieve verbal and/or explicit brand knowledge from memory (Koll et al. 2010)
	Participants are able to voice whatever associations are the most accessible to them in their own words	Participants might be inhibited from retrieving associations stored in memory as the technique is often connected with time restrictions
	No specially trained interviewer needed	
	Less time-consuming compared with other qualitative techniques (e.g., in-depth interviews)	
Focus group	Can uncover how participants conceptualize a brand and enable participants to compare and challenge the experiences and perspectives of others regarding the respective brand (Keller 2013)	Due to time restrictions and costs (e.g., for a skilled moderator), often carried out with a small number of participants
	Within the discussion, participants can explain the meaning of their answers and provide important background knowledge	For the most part, generalizing the results of the discussion process is not possible
	Useful in research areas in which survey planning is challenging due to a lack of specific knowledge on the topic of interest (Vaughn et al. 1996; Bian and Moutinho 2009)	Possible lack of objectivity due to the role of the moderator
		Composition of people and group dynamics might influence the outcomes

Table 2 continued

Technique	Benefits	Drawbacks
In-depth interview	Question-and-answer process offers the flexibility to collect data on consumers' individual brand associations (e.g., attitudes, motivations, and opinions) (Hair et al. 2009)	Findings may lack generalizability, reliability, and the ability to distinguish small differences
	Probing questions allow interviewers to collect highly detailed data from participants	Inaccurate findings may be caused by the introduction of interviewer–participant artifacts, participant bias, or interviewer errors (Hair et al. 2009)
	Participants may reveal their inner thinking once a comfort zone has been reached in the interviewer–participant relationship (Hair et al. 2009; Aaker et al. 2011)	Success strongly depends on the quality of the interviewer
		Costs of setup and completion, extensive length of time required as well as participants' time scarcity and privacy concerns (McCracken 1988)
Free-choice technique	Easy to construct, administer, and understand	Reducing questions to the presence or absence of an association decreases analytical sensitivity and limits the analytical options (Hsieh et al. 2004; Hsieh and Lindridge 2005)
	Has been shown to discriminate better between similar brands than forced-choice scales because participants do not have to provide an answer for unfamiliar brands (Joyce 1963)	Brand image attributes measured with free-choice questions are highly unstable (Rungie et al. 2005; Dolnicar and Rossiter 2008; Dolnicar et al. 2012) and might even "contaminate" brand image studies (Dolnicar et al. 2012)
	Free-choice questions are quicker and easier to answer than forced-choice scaling, allowing the collection of more information in a shorter period while producing similar results (Barnard and Ehrenberg 1990; Driesener and Romaniuk 2006)	
Dichotomous scaling	Easy to construct, administer, and understand	Reducing questions to the presence or absence of an association decreases analytical sensitivity and limits the analytical options (Hsieh et al. 2004; Hsieh and Lindridge 2005)
	Can be recommended when participants are not knowledgeable enough to make detailed judgments or are too impatient to make fine judgments	Dichotomous questions typically do not provide any information about the strength of brand associations or existing connections between them (Hsieh et al. 2004; Hsieh and Lindridge 2005)
	A long list of dichotomous questions can be answered in a shorter time compared with the same list of continuous questions	

Table 2 continued

Technique	Benefits	Drawbacks
Projective techniques	Able to uncover participants' true opinions, attitudes, and feelings, especially when participants are otherwise unwilling or unable to expose them	Skilled and experienced researchers are required to correctly interpret the outcomes
	Less cognitively demanding for participants and not limited by individual cognitive ability in comparison with other research methods (Steinman 2009)	Comparably expensive and hard to administer (Donoghue 2000; Boddy 2005)
		Potentially low reliability of the technique (Steinman 2009)
Repertory grid	Able to determine the relationship between brand images	Time-consuming and cost-intensive
	Identifies important image dimensions without researcher bias (Boyle 2005)	Results cannot be analyzed with respect to validity and reliability criteria
Brand concept maps	Identifies brand associations, their underlying network of linkages, their strength, their favorability, and their uniqueness (Schnittka et al. 2012)	Predefined list of brand associations is used in the mapping procedure; participants might only focus on these associations and not consider additional and individually important brand associations
	Shown to be valid and reliable (John et al. 2006)	Entails large effort to conduct personal interviews
	Provides a set of (improved) standardized aggregation rules (Böger et al. 2017)	High costs (e.g., for test studios)
	Approach is more accessible in comparison with other network-generating techniques (e.g., network analysis)	Time constraints (e.g., comparatively long field times)
		Difficulties generating large sample sizes
Constant-sum method	Able to indicate both the ranking and the magnitude of relative importance assigned to each association (Hair et al. 2011)	Participants might face problems when having to assign points to more than a few categories (Aaker et al. 2011)
	Enables the researchers to distinguish between several brands without requiring too much time (Malhotra 2010)	With increased complexity, the participants' task might become too taxing and lead participants to use only a subset of the associations presented in their decision process (Iacobucci and Churchill 2010; Malhotra 2010; Aaker et al. 2011)
	Able to reduce the "halo effect" (i.e., the tendency of participants to carry over individual judgments from one association to another) (Iacobucci and Churchill 2010)	If participants do not perceive the associations presented as being completely independent, spurious correlations might also be observed (Kerlinger 1973)

Table 2 continued

Technique	Benefits	Drawbacks
Ranking	Can be used when several brands are the subject of investigation and the interest lies in the performance (regarding brand associations) of a brand relative to its competitors	Participants might be forced to rank brands by associations that are inappropriate for describing the brand from their perspective Low ranks may be a reflection of unfamiliarity rather than poor performance of the association (Driesener and Romaniuk 2006)

5.2.1 Association-specific features

Techniques for measuring brand image can be characterized according to their ability to uncover brand associations. Several techniques elicit brand associations as a starting point for measuring brand image. The free-association technique, focus groups, and the repertory grid elicit brand-specific associations directly from respondents. In contrast, in-depth interviews and projective techniques indirectly elicit consumers' (unconscious) thoughts and feelings about a brand (Zaltman 1997; Supphellen 2000). These techniques, thus, offer detailed insights into perceptions of a particular brand. Therefore, researchers can ensure that the full spectrum of brand associations can be detected. However, the absence of a predefined set of brand associations makes these techniques less suitable for comparing different brand images. Other techniques (e.g., Likert scaling, the free-choice technique, or the constant-sum method) make use of a predefined set of brand associations. When applying those techniques, respondents are usually not asked to add further associations. Moreover, techniques that rely on scales can make use of existing items from prior studies. For example, Martínez and de Chernatony (2004) used items adapted from Aaker (1996b) that can be used for a wide range of brands. Although these techniques might face problems in eliciting brand specifics, brand images can be compared more easily because they are based on the same scale.

5.2.2 Output-specific features

Techniques can be further categorized according to their outcomes. For example, the free-association technique, focus groups, in-depth interviews, and projective techniques provide qualitative (often textual) data that usually require further analysis (see e.g., Michel and Rieunier 2012). In contrast, the free-choice technique and dichotomous scaling provide binary data. As these techniques provide information only regarding the existence of a connection between a brand and an association, their informative content is limited. To derive further insights, additional analyses must be conducted. Prior research, for example, has made use of factor analysis (e.g., Loeffler 2002) or correspondence analysis (e.g., Dawes 2014) to extend the information retrieved from binary measures. The output of Likert scaling, semantic differential scaling, repertory grid, and the constant-sum

method are often interpreted as interval data because mean values and standard deviations are calculated (e.g., Hagtvedt and Patrick 2008; Allman et al. 2016). The ranking technique provides ordinal data. In contrast, the BCM approach assesses how a brand and its associations are interconnected and, therefore, results in network data.

5.2.3 Practical features

Practical features provide a deeper understanding of the cost–benefit ratio of each technique, such as the amount of time and effort required to conduct a brand image study. Different techniques, such as Likert scaling and the free-association technique, are characterized as easy to conduct and easy to administer. In contrast, some techniques (e.g., in-depth interviews and projective techniques) require extensive resources in terms of special expertise and time. That is, focus groups, in-depth interviews, and projective techniques usually require trained interviewers to moderate discussions or elicit respondents' inner thinking. Additionally, the BCM approach with its three steps—(a) elicitation, (b) mapping, and (c) aggregation—is time consuming.

5.2.4 Knowledge-specific features

Techniques for measuring brand image also differ in terms of their requirements regarding respondents' knowledge of and familiarity with the brand. When consumers are not knowledgeable enough to make detailed judgments, dichotomous scaling or the free-choice technique, which are cognitively less demanding, can be recommended (Hsieh et al. 2004). For highly familiar and knowledgeable respondents, other techniques can be applied to provide deeper insights into brand (image) perceptions.

5.2.5 Context-specific features

Finally, techniques can be distinguished according to their ability to measure brand image(s) in a competitive environment. While most techniques evaluate brands in a non-competitive environment, repertory grid and ranking evaluate the image of the brand in the context of other brands. For example, the repertory grid uses triads of brands (i.e., three brands) that respondents have to compare to build an emergent and a contrast pole.

Table 3 summarizes the characterization of brand image measurement techniques according to the discussed features.

5.3 Roadmap for researchers and practitioners

Based on the characterization of brand image measurement techniques, we are able to derive a roadmap for both researchers and practitioners who are interested in brand image measurement. This map is depicted in Fig. 7.

Table 3 Characterization of brand image measurement techniques

Feature	Brand image measurement techniques											
	Likert scaling	Semantic differential scale	Free-association technique	Focus group	In-depth interview	Free-choice technique	Dichotomous scaling	Projective techniques	Repertory grid	Brand concept maps	Constant-sum method	Ranking
Association-specific												
Elicits conscious associations			X	X	X			X	X			
Elicits unconscious associations					X			X				
Uses a predefined set of associations	X	X				X	X			X	X	X
Output-specific												
Provides qualitative data			X	X	X			X				
Provides binary data						X	X					
Provides ordinal data												X
Provides interval data	X	X							X		X	
Provides network data										X		
Practical												
Is easy to administer/conduct	X	X	X			X	X		X		X	X
Is time-consuming				X	X			X	X	X		
Needs special expertise				X	X			X				
Knowledge-specific												
Suited for knowledgeable respondents	X	X	X	X	X	X	X	X	X	X	X	X

Table 3 continued

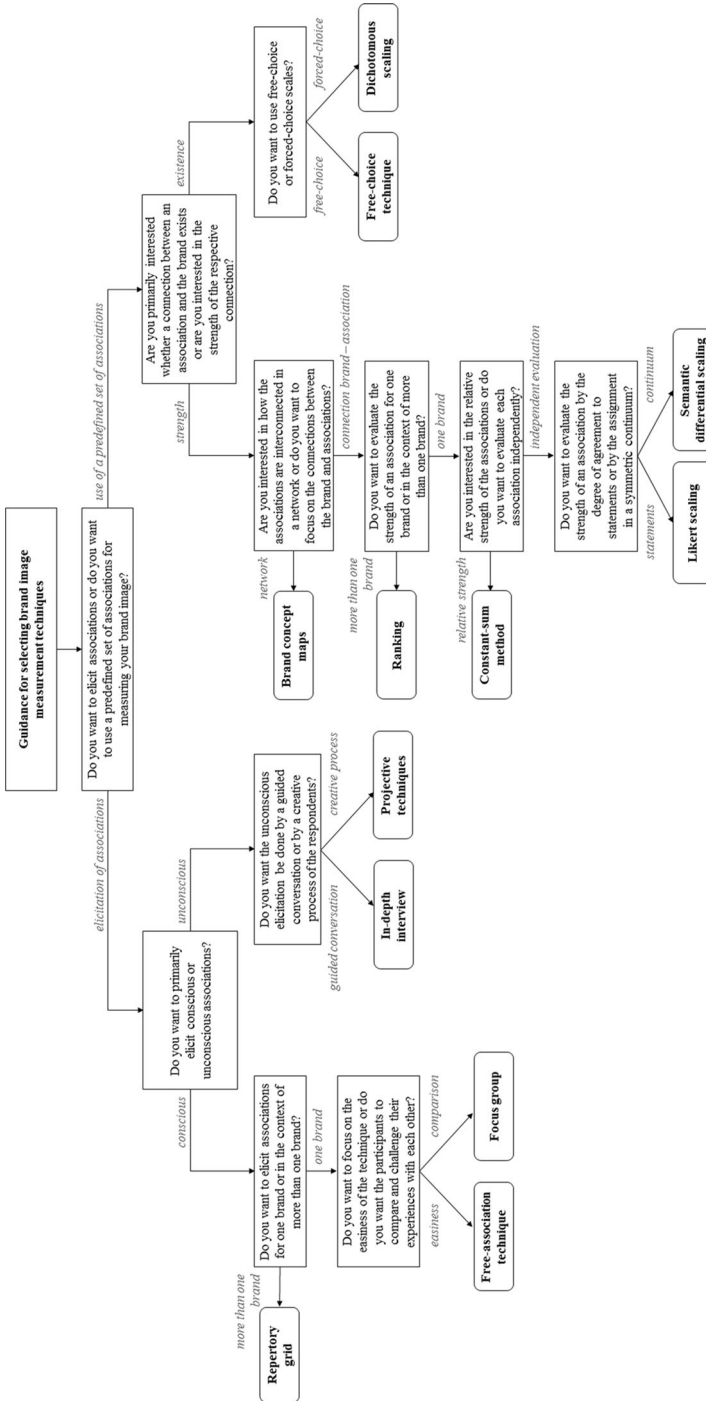| Feature	Brand image measurement techniques											
	Likert scaling	Semantic differential scale	Free-association technique	Focus group	In-depth interview	Free-choice technique	Dichotomous scaling	Projective techniques	Repertory grid	Brand concept maps	Constant-sum method	Ranking
Suited for less knowledgeable respondents						X	X					
Context-specific												
Evaluation in the context of only one brand	X	X	X	X	X	X	X	X		X	X	
Evaluation in the context of more than one brand									X	X		X

X, feature is present

Fig. 7 Roadmap for brand image measurement techniques

At the outset, a decision has to be made on the approach to brand associations: should they be elicited or should a predefined set of associations be used? If the user is interested in eliciting brand associations to measure brand image, various techniques may be applied (i.e., the free-association technique, focus groups, in-depth interviews, projective techniques, repertory grid). The use of a *repertory grid* is recommended when the user wants to identify conscious brand associations in the context of more than one brand. If the user focuses only on one brand and ease of use is the priority, then the *free-association technique* should be used. *Focus groups* may be applied if the user examines only one brand and intends participants to interact and compare their experiences with each other. In contrast, if the aim of the user is to identify unconscious associations, then either in-depth interviews or projective techniques can be used. If these unconscious associations are to be identified through a guided conversation, then *in-depth interviews* can be applied. If these unconscious associations are to be identified through respondents' creativity, *projective techniques* can be used. It is important to note that all the techniques discussed above are often applied in pre-studies to identify a list of brand associations (see e.g., Hogg et al. 2000, Bian and Moutinho 2011). In this way, these techniques are combined with other techniques in the context of measuring brand image.

If the aim of the user is to provide a predefined set of associations for measuring brand image, then the focus may be on the strength of a connection between an association and the brand or the existence of such connection(s). When focusing on the existence of a connection between the brand and an association, the user can either apply the free-choice technique or the forced-choice technique. In the *free-choice technique*, respondents select the associations they associate with a brand as opposed to explicitly marking associations that are not associated with the brand. Forced-choice techniques (i.e., *dichotomous scaling*) require respondents to explicitly decide whether an association is associated with the brand or not. When focusing on both the strength of a connection between an association and the brand and the interconnection between different associations within a network, *brand concept maps* should be applied. *Ranking* should be applied if the focus is on the relative strength of associations with a certain brand compared with other brands. If the interest of the user is in evaluating the relative strength of associations in comparison with other associations for a brand, then the *constant-sum method* should be used. Finally, if each association must be evaluated independently, Likert scaling or semantic differential scaling should be used. *Likert scaling* assesses the strength of an association through the degree of respondents' agreement to statements, while *semantic differential scaling* evaluates the strength of an association by the assignment in a symmetric continuum.

The set of recommendations presented above aims to guide researchers and brand managers in choosing a suitable brand image measurement technique for their specific research focus.

6 Opportunities for future research

The preceding discussion showed that research on the measurement of brand image is already well advanced. Nonetheless, we suggest four propositions that can guide the scope of future research in the field: (1) rethinking the conceptual background of brand image measurement techniques, (2) using new data sources for brand image measurement techniques, (3) developing new brand image measurement techniques, and finally, (4) comparing brand image measurement techniques empirically.

6.1 Rethink the conceptual background of brand image measurement techniques

Our systematic analysis revealed that the majority of articles provided no definition of brand image. While this might be because the primary goal of these articles was not to explicitly measure brand image, the findings also cast doubt on dealings with the theoretical background of brand image. Articles that did provide a definition mainly used either Keller's (1993) or Aaker's (1991, 1996a) conceptualizations of brand image. The impact of these articles on marketing theory and practice is certain, and Keller's (1993) definition of brand image might be timeless. However, different global macro changes have affected the way brands should be managed in today's world. For example, Gürhan-Canli et al. (2016) viewed fast-paced technological advances, digital (online) developments, and social as well as environmental constraints as aspects of global macro changes. Hence, works that account for these changes and rethink the conceptualization of brand image are necessary. In this regard, Gürhan-Canli et al. (2016) outlined the growing importance of innovativeness, responsiveness, and responsibility as components of brand image. These crucial components could be emphasized during the process of rethinking the conceptualization of brand image.

This research direction is in line with Yadav (2010) and MacInnis (2011), who both called for more conceptual contributions to guide academic marketing research. A conceptual rethinking of the theoretical background of brand image might provide new ideas and insights and impact the way brand image is measured.

6.2 Use and evaluate new data sources for brand image measurement techniques

The above-mentioned macro changes not only influence the way brands are managed in today's environment but also provide new opportunities for brand-related marketing research. A large number of consumers make use of different social media platforms such as Twitter, YouTube, and Facebook to express themselves and communicate with others online (Boyd and Ellison 2008; Smith et al. 2012). They are also able to engage and interact with brands online, for example, by writing comments about a brand on its Facebook page. This has become a new and rapidly growing source of data for brand image measurement, namely brand-related user-generated content (UGC). Prior empirical research has

already demonstrated that UGC is a valuable source of information as consumers express their thoughts, opinions, and feelings about products and brands online (e.g., Decker and Trusov 2010). The growth of online channels and Internet platforms now provides the opportunity to "track the hearts and minds of […] consumers" based on UGC (Swaminathan 2016, p. 37).

The most frequently applied techniques identified in this article reflect the predominance of primary data for brand image measurement, as only nine articles made use of secondary data. However, none of these articles made use of new sources of data such as UGC or microblogging. Collecting primary data from consumers can be costly and time consuming, and the corresponding results can quickly become outdated. In contrast, brand-related UGC is easily accessible and widely available in real time, allowing firms to gather information in a timely manner (Gensler et al. 2015). Hence, there is a need for brand image measurement techniques to include these new data sources. Some research has already used data from Twitter (Culotta and Cutler 2016) or the bookmarking website Delicious (Nam and Kannan 2014) to infer attribute-specific brand perception ratings.

Future research should further prove the value of UGC compared with traditional sources regarding several concerns. These concerns include, for example, potential difficulties in reaching consumers of interest. While an increasing number of consumers already provide brand-related UGC, some consumers do not provide any content online. Accordingly, future research should investigate whether the brand perceptions of consumers who post online content differ from those who do not (i.e., whether a relevant self-selection bias exists; Gensler et al. 2015). Another question concerning the value of new data sources is which types of brands are suited for UGC-based analyses. Images of brands that are popular among consumers who tend not to provide UGC are difficult to measure. Hence, future research should investigate whether appropriate UGC is available for all types of brands. This leads us to our next suggestion: that future applications of UGC for brand image measurement should focus on whether the benefits outweigh the complexity of data collection, preparation, and analysis and, finally, whether this approach can gain acceptance as a brand image measurement technique.

6.3 Develop new brand image measurement techniques

For traditional data sources, our review also reveals that measuring brand image involves at least two steps. First, brand associations must be identified. Second, respondents must evaluate these associations. Although our review shows that different brand image measurement techniques are frequently combined with each other, only the BCM approach combines both steps within one technique. Accordingly, future research might focus on providing more standardized procedures that combine these two components of eliciting and evaluating brand associations.

Future research might also consider measuring and evaluating the image of more than one brand in a competitive context. While in marketing research relative evaluations are often the standard (e.g., Olsen 2002), few studies examine the importance of normative benchmarks on brand image (e.g., Romaniuk 2013).

Therefore, researchers may use innovative forms of brand image measurement, for example, measuring the image of more than one brand in a competitive research setting. Within the techniques considered in this article, only repertory grids and ranking enable the comparison of different brands.

With respect to the new data sources mentioned above, new techniques should be developed. These techniques should be able to address at least three different challenges: first, highly dynamic data sources, such as brand-related UGC, require automatic data collection. Collecting data automatically enables researchers and practitioners to observe brand image developments in a timely manner, which is particularly useful for brand management. Second, new techniques for measuring brand image that make use of new data sources should be able to handle large amounts of data. Third, data collected from new sources should be condensed in an appropriate way. For example, these new techniques might present collected data in the form of associative networks.

Studies have already taken the first steps in this regard by converting product reviews into brand image information through a combination of text mining and (semantic) network analysis (Netzer et al. 2012; Gensler et al. 2015). We believe that these examples are only initial attempts to provide new techniques for brand image measurement.

6.4 Compare brand image measurement techniques empirically

Further research could also consider emphasizing empirical comparisons of brand image measurement techniques. Although researchers have empirically compared different techniques, they have tended to compare selected brand image measurement techniques. For example, Dolnicar et al. (2012) compared the stability of Likert scaling, dichotomous scaling, and the free-choice technique to examine the extent to which these techniques would produce the same results in repeated measurements on the individual level. Future research should build on these results and include newly developed brand image measurement techniques based on data sources such as brand-related UGC.

The techniques identified in our literature review have different association-specific and outcome-specific features (see Table 3). New brand image measurement techniques might reveal even stronger distinctiveness, and the outcomes of different techniques may vary strongly in terms of these features. While the stability of brand associations has been used as a criterion for comparing the outcomes of brand image measurement techniques, future research should also examine other criteria that might be suitable for a critical comparison (e.g., the sensitivity of image profiles).

7 Conclusion

Building, measuring, and managing brand image have become important aspects of strategic brand management, and they are increasingly emphasized in the academic literature. The purpose of this article was to contribute to the extant knowledge on

brand image by conducting a systematic review of the most frequently used brand image measurement techniques, discussing benefits and drawbacks of these techniques, providing a comprehensive categorization and roadmap for the profound use of these brand image measurement techniques, and suggesting directions for future research.

Our systematic literature review covered 224 articles that measured brand image. We identified those techniques most frequently used for brand image measurement since 1991 and discussed them in detail. To provide a synopsis of our findings, we categorized these techniques according to their association-specific, output-specific, practical, knowledge-specific, and context-specific features and derived a roadmap as a decision-support tool for both researchers and practitioners. Finally, we suggested four promising directions for future research to improve the knowledge base of this important field of brand management.

As with every study, this too has a few limitations. First, we considered only articles published in scientific journals with various ranking criteria (i.e., "$\geq$C", "$\geq$2") according to three selected journal rankings. Additional or different quality criteria could have been considered, for example, the 5-year impact factor of Thomson Reuters' SSCI. Furthermore, the additional examination of books, book excerpts, or proceedings might have yielded further insights. Second, the exclusion of 168 articles in the first step of our systematic search exhibited a certain degree of subjectivity. However, to keep this subjectivity as low as possible, we used the multiple assessor method and had a team of three researchers categorize the articles. Third, we deliberately focused on the search term "brand image" and did not include other possible search terms, such as "brand equity" or "brand associations," as we sought to identify articles explicitly addressing brand image in their research.

To conclude, we believe that this article portrays the most widely used techniques for brand image measurement in the field of marketing, offers new insights for measuring brand image, and provides impetus for future work on brand image measurement.

Appendix

See Tables 4 and 5.

Table 4 Number of articles per journal

Journal	Ranked according to our criteria by			Number of articles	
	ABDC, ABS, and VHB	ABDC and VHB	ABDC and ABS	"Brand image" is found in the abstract	Brand image is measured
Advances in Consumer Research	X			15	5
Academy of Marketing Science Review	X			0	0
Advances in International Marketing		X		0	0
Consumption Markets and Culture			X	0	0
European Journal of Marketing	X			35	13
Industrial Marketing Management	X			7	5
International Journal of Advertising	X			11	5
International Journal of Consumer Studies			X	2	0
International Journal of Market Research			X	14	11
International Journal of Nonprofit and Voluntary Sector Marketing		X		6	3
International Journal of Research in Marketing	X			6	6
International Journal of Retail and Distribution Management	X			8	4
International Marketing Review	X			12	11
International Review of Retail, Distribution and Consumer Research		X		4	2
Journal of Advertising	X			5	4
Journal of Advertising Research	X			7	5
Journal of Brand Management	X			41	18
Journal of Business and Industrial Marketing	X			0	0
Journal of Business-to-Business Marketing	X			0	0
Journal of Consumer Affairs	X			1	0
Journal of Consumer Behavior	X			6	3
Journal of Consumer Psychology	X			3	2
Journal of Consumer Research	X			1	1
Journal of Customer Behavior		X		0	0
Journal of Global Marketing		X		8	4
Journal of Interactive Marketing	X			2	2

Table 4 continued

Journal	Ranked according to our criteria by			Number of articles	
	ABDC, ABS, and VHB	ABDC and VHB	ABDC and ABS	"Brand image" is found in the abstract	Brand image is measured
Journal of International Marketing	X			6	4
Journal of Macromarketing	X			2	0
Journal of Marketing	X			7	6
Journal of Marketing Management	X			16	6
Journal of Marketing Research	X			6	3
Journal of Marketing Theory and Practice	X			4	2
Journal of Personal Selling and Sales Management	X			1	0
Journal of Product and Brand Management		X		37	29
Journal of Public Policy and Marketing	X			1	0
Journal of Relationship Marketing		X		4	2
Journal of Retailing	X			3	2
Journal of Retailing and Consumer Services	X			14	8
Journal of Revenue and Pricing Management		X		0	0
Journal of Service Research		X		1	1
Journal of Services Marketing	X			5	3
Journal of Strategic Marketing	X			3	2
Journal of the Academy of Marketing Science	X			3	2
Marketing Letters	X			5	3
Marketing Science	X			8	3
Marketing Theory	X			4	0
Psychology and Marketing	X			20	16
Qualitative Market Research: An International Journal			X	8	4
Quantitative Marketing and Economics	X			1	0
Review of Marketing Science		X		1	0
Journal of Business Research				38	24
Total	36	10	4	392	224

Table 5 Most frequently used Likert scales

References	Statements
Martínez et al. (2009)	Functional image
	The products have a high quality
	The products have better characteristics than competitors'
	The products of the competitors are usually cheaper
	Affective image
	The brand is nice
	The brand has a personality that distinguish itself from competitors' brands
	It's a brand that doesn't disappoint its customers
	Reputation
	It's one of the best brands in the sector
	The brand is very consolidated in the market
Aaker (1996b) and Martínez and de Chernatony (2004)	The brand provides good value for money
	There is a reason to buy the brand instead of others
	The brand has personality
	The brand is interesting
	I have a clear impression of the type of people who consume the brand
	This brand is different from competing brands

References

Aaker DA (1991) Managing brand equity. Free Press, New York

Aaker DA (1996a) Building strong brands. Free Press, New York

Aaker DA (1996b) Measuring brand equity across products and markets. Calif Manag Rev 38(3):102–120

Aaker JL (1997) Dimensions of brand personality. J Mark Res 34(3):347–356

Aaker DA, Kumar V, Day GS, Leone RP (2011) Marketing research. Wiley, Hoboken

*Aghekyan-Simonian M, Forsythe S, Kwon WS, Chattaraman V (2012) The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. J Retail Consum Serv 19(3):325–330

*Al-Hawari MA (2011) Do online services contribute to establishing brand equity within the retail banking context? J Relatsh Mark 10(3):145–165

*Allman HF, Fenik AP, Hewett K, Morgan FN (2016) Brand image evaluations: the interactive roles of country of manufacture, brand concept, and vertical line extension type. J Int Mark 24(2):40–60

*Almquist EL, Turvill IH, Roberts KJ (1998) Combining economic and image analysis for breakthrough brand management. J Brand Manag 5(4):272–281

*Alpert FH, Kamins MA (1995) An empirical investigation of consumer memory, attitude, and perceptions toward pioneer and follower brands. J Mark 59(4):34–44

*Alwi SFS, Kitchen PJ (2014) Projecting corporate brand image and behavioral response in business schools: cognitive or affective brand attributes? J Bus Res 67(11):2324–2335

Anderson JR (1983) The architecture of cognition. Harvard University Press, Cambridge

Anderson JR, Bower GH (1973) Human associative memory. Winston & Sons, Washington

*Andrews M, Kim D (2007) Revitalising suffering multinational brands: an empirical study. Int Mark Rev 24(3):350–371

*Anholt S (2005) Anholt nation brands index: How does the world see America? J Advert Res 45(3):296–303

*Anselmsson J, Bondesson NV, Johansson U (2014) Brand image and customers' willingness to pay a price premium for food brands. J Prod Brand Manag 23(2):90–101

*Ar AA, Kara A (2014) Emerging market consumers' country of production image, trust and quality perceptions of global brands made-in China. J Prod Brand Manag 23(7):491–502

*Arslan FM, Altuna OK (2010) The effect of brand extensions on product brand image. J Prod Brand Manag 19(3):170–179

*Ataman B, Ülengin B (2003) A note on the effect of brand image on sales. J Prod Brand Manag 12(4):237–249

*Aurier P, Séré de Lanauze G (2011) Impacts of in-store manufacturer brand expression on perceived value, relationship quality and attitudinal loyalty. Int J Retail Distrib Manag 39(11):810–834

*Balabanis G, Diamantopoulos A (2011) Gains and losses from the misperception of brand origin: the role of brand strength and country-of-origin image. J Int Mark 19(2):95–115

Barnard NR, Ehrenberg ASC (1990) Robust measures of consumer brand beliefs. J Mark Res 27(4):477–487

*Batra R, Homer PM (2004) The situational impact of brand image beliefs. J Consum Psychol 14(3):318–329

*Baumann C, Hamin H, Chong A (2015) The role of brand exposure and experience on brand recall— product durables vis-à-vis FMCG. J Retail Consum Serv 23:21–30

*Bellezza S, Keinan A (2014) Brand tourists: how non-core users enhance the brand image by eliciting pride. J Consum Res 41(2):397–416

*Beneke J, Carter S (2015) The development of a consumer value proposition of private label brands and the application thereof in a South African retail context. J Retail Consum Serv 25:22–34

*Bengtsson A, Bardhi F, Venkatraman M (2010) How global brands travel with consumers: an examination of the relationship between brand consistency and meaning across national boundaries. Int Mark Rev 27(5):519–539

*Bhardwaj V, Kumar A, Kim YK (2010) Brand analyses of U.S. global and local brands in India: the case of Levi's. J Glob Mark 23(1):80–93

*Bian X, Moutinho L (2009) An investigation of determinants of counterfeit purchase consideration. J Bus Res 62(3):368–377

*Bian X, Moutinho L (2011) The role of brand image, product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits: direct and indirect effects. Eur J Mark 45(1/ 2):191–215

*Biswas A, Sherrell DL (1993) The influence of product knowledge and brand name on internal price standards and confidence. Psychol Mark 10(1):31–45

Boddy C (2005) Projective techniques in market research: valueless subjectivity or insightful reality? A look at the evidence for the usefulness, reliability and validity of projective techniques in market research. Int J Mark Res 47(3):239–254

Böger D, Kottemann P, Meißner M, Decker R (2017) A mechanism for aggregating association network data: an application to brand concept maps. J Bus Res 79:90–106

Booth A, Sutton A, Papaioannou D (2016) Systematic approaches to a successful literature review, 2nd edn. Sage, London

Bornmann L, Daniel HD (2008) What do citation counts measure? A review of studies on citing behavior. J Doc 64(1):45–80

*Bose S, Roy SK, Tiwari AK (2016) Measuring customer-based place brand equity (CBPBE): an investment attractiveness perspective. J Strateg Mark 24(7):617–633

*Bosnjak N, Rudolph N (2008) Undesired self-image congruence in a low-involvement product context. Eur J Mark 42(5/6):702–711

Boyd DM, Ellison NB (2008) Social network sites: definition, history, and scholarship. J Comput Mediat Commun 13(1):210–230

Boyle TA (2005) Improving team performance using repertory grids. Team Perform Manag Int J 11(5/ 6):179–187

*Brandt C, de Mortanges CP, Bluemelhuber C (2011) Associative networks: a new approach to market segmentation. Int J Mark Res 53(2):187–206

*Bravo R, Montaner T, Pina JM (2012) Corporate brand image of financial institutions: a consumer approach. J Prod Brand Manag 21(4):232–244

*Brečić R, Filipovic J, Gorton M, Ognjanov G, Stojanovic Z, White J (2013) A qualitative approach to understanding brand image in an international context. Int Mark Rev 30(4):275–295

*Brodie RJ, Whittome JRM, Brush GJ (2009) Investigating the service brand: a customer value perspective. J Bus Res 62(3):345–354

*Bruhn M, Schoenmüller V, Schäfer D, Heinrich D (2012) Brand authenticity: towards a deeper understanding of its conceptualization and measurement. Adv Consum Res 40:567–575

*Burmann C, Schaefer K, Maloney P (2008) Industry image: its impact on the brand image of potential employees. J Brand Manag 15(3):157–175

*Burt S, Mavrommatis A (2006) The international transfer of store brand image. Int Rev Retail Distrib Consum Res 16(4):395–412

Calder BJ (1977) Focus groups and the nature of qualitative marketing research. J Mark Res 14(3):353–364

*Campbell C, Papania L, Parent M, Cyr D (2010) An exploratory study into brand alignment in B2B relationships. Ind Mark Manag 39(5):712–719

*Carrillat FA, Harris EG, Lafferty BA (2010) Fortuitous brand image transfer. J Advert 39(2):109–123

*Chan KKW (1996) Chinese viewers' perception of informative and emotional advertising. Int J Advert 15(2):152–165

*Chang PL, Chieng MH (2006) Building consumer-brand relationship: a cross-cultural experiential view. Psychol Mark 23(11):927–958

*Chen Z, Huang Y (2016) Cause-related marketing is not always less favorable than corporate philanthropy: the moderating role of self-construal. Int J Res Mark 33(4):868–879

*Chien PM, Cornwell TB, Pappu R (2011) Sponsorship portfolio as a brand-image creation strategy. J Bus Res 64(2):142–148

*Chiou JS, Cheng C (2003) Should a company have message boards on its web sites? J Interact Mark 17(3):50–60

*Cho E, Fiore AM, Russell DW (2015) Validation of a fashion brand image scale capturing cognitive, sensory, and affective associations: testing its role in an extended brand equity model. Psychol Mark 32(1):28–47

*Chung JE, Pysarchik DT, Hwang SJ (2009) Effects of country-of-manufacture and brand image on Korean consumers' purchase intention. J Glob Mark 22(1):21–40

*Cian L, Cervai S (2011) The Multi-Sensory Sort (MuSeS): a new projective technique to investigate and improve the brand image. Qual Mark Res Int J 14(2):138–158

*Clayton M, Heo J (2011) Effects of promotional-based advertising on brand associations. J Prod Brand Manag 20(4):309–314

*Cretu AE, Brodie RJ (2007) The influence of brand image and company reputation where manufacturers market to small firms: a customer value perspective. Ind Mark Manag 36(2):230–239

Culotta A, Cutler J (2016) Mining brand perceptions from Twitter social networks. Mark Sci 35(3):343–362

*Da Silva RV, Alwi SFS (2006) Cognitive, affective attributes and conative, behavioural responses in retail corporate branding. J Prod Brand Manag 15(5):293–304

*Da Silva RV, Alwi SFS (2008a) Online brand attributes and online corporate brand images. Eur J Mark 42(9/10):1039–1057

*Da Silva RV, Alwi SFS (2008b) The link between offline brand attributes and corporate brand image in bookstores. J Prod Brand Manag 17(3):175–186

*Da Silva RV, Alwi SFS (2008c) Online corporate brand image, satisfaction and loyalty. J Brand Manag 16(3):119–144

*Dall'Olmo Riley F, Pina JM, Bravo R (2013) Downscale extensions: consumer evaluation and feedback effects. J Bus Res 66(2):196–205

*Dall'Olmo Riley F, Hand C, Guido F (2014) Evaluating brand extensions, fit perceptions and post-extension brand image: Does size matter? J Mark Manag 30(9–10):904–923

*Danes JE, Hess JS, Story JW, York JL (2010) Brand image associations for large virtual groups. Qual Mark Res Int J 13(3):309–322

*Danes JE, Hess JS, Story JW, Vorst K (2012) On the validity of measuring brand images by rating concepts and free associations. J Brand Manag 19(4):289–302

Davies G, Chun R, Da Silva R, Roper S (2003) Corporate reputation and competitiveness. Routledge, London

*Davis DF, Golicic SL, Marquardt AJ (2008) Branding a B2B service: Does a brand differentiate a logistics service provider? Ind Mark Manag 37(2):218–226

*Dawes JG (2014) Patterns in competitive structure among retail financial services brands. Eur J Mark 48(5–6):924–941

Decker R, Trusov M (2010) Estimating aggregate consumer preferences from online product reviews. Int J Res Mark 27(4):293–307

Deese J (1965) The structure of associations in language and thought. Johns Hopkins Press, Baltimore

*Delgado-Ballester E, Navarro A, Sicilia M (2012) Revitalising brands through communication messages: the role of brand familiarity. Eur J Mark 46(1/2):31–50

*Diamantopoulos A, Schlegelmilch B, Palihawadana D (2011) The relationship between country-of-origin image and brand image as drivers of purchase intentions: a test of alternative perspectives. Int Mark Rev 28(5):508–523

Dobni D, Zinkhan GM (1990) In search of brand image: a foundation analysis. Adv Consum Res 17(1):110–119

*Dolnicar S, Gruen B (2014) Including don't know answer options in brand image surveys improves data quality. Int J Mark Res 56(1):35–49

Dolnicar S, Rossiter JR (2008) The low stability of brand-attribute associations is partly due to market research methodology. Int J Res Mark 25:104–108

*Dolnicar S, Rossiter JR, Grun B (2012) "Pick-any" measures contaminate brand image studies. Int J Mark Res 54(6):821–833

Donoghue S (2000) Projective techniques in consumer research. J Fam Ecol Consum Sci 28(1):47–53

*Dopico DC, Porral CC (2012) Sources of equity in fashion markets. J Prod Brand Manag 21(6):391–402

*Drengner J, Gaus H, Jahn S (2008) Does flow influence the brand image in event marketing? J Advert Res 48(1):138–146

*Driesener C, Romaniuk J (2006) Comparing methods of brand image measurement. Int J Mark Res 48(6):681–697

*Drinkwater P, Uncles M (2007) The impact of program brands on consumer evaluations of television and radio broadcaster brands. J Prod Brand Manag 16(3):178–186

*Dwivedi A, Merrilees B, Sweeney A (2010) Brand extension feedback effects: a holistic framework. J Brand Manag 17(5):328–341

*Eng TY, Ozdemir S, Michelson G (2016) Brand origin and country of production congruity: evidence from the UK and China. J Bus Res 69(12):5703–5710

*Esch FR, Langner T, Schmitt BH, Geus P (2006) Are brands forever? How brand knowledge and relationships affect current and future purchases. J Prod Brand Manag 15(2):98–104

*Faircloth JB (2005) Factors influencing nonprofit resource provider support decisions: applying the brand equity concept to nonprofits. J Mark Theory Pract 13(3):1–14

*Faircloth JB, Capella L, Alford B (2001) The effect of brand attitude and brand image on brand equity. J Mark Theory Pract 9(3):61–74

*Farsky M, Schnittka O, Sattler H, Höfer B, Lorth C (2016) Brand-anchored discrete choice experiment (BDCE) vs. direct attribute rating (DAR): an empirical comparison of predictive validity. Mark Lett. doi:10.1007/s11002-016-9402-4

Fink A (2010) Conducting research literature reviews: from Internet to paper, 3rd edn. Sage, Thousand Oaks

*Frank P, Watchravesringkan K (2016) Exploring antecedents and consequences of young consumers' perceived global brand equity. J Prod Brand Manag 25(2):160–169

*Frank B, Abulaiti G, Enkawa T (2012) What characterizes Chinese consumer behavior? A cross-industry analysis of the Chinese diaspora in Japan. Mark Lett 23(3):683–699

*Frank B, Abulaiti G, Torrico BH, Enkawa T (2013) How do Asia's two most important consumer markets differ? Japanese–Chinese differences in customer satisfaction and its formation. J Bus Res 66(12):2397–2404

*Frank B, Abulaiti G, Enkawa T (2014a) Regional differences in consumer preference structures within China. J Retail Consum Serv 21(3):203–209

*Frank B, Enkawa T, Schvaneveldt SJ (2014b) How do the success factors driving repurchase intent differ between male and female customers? J Acad Mark Sci 42(2):171–184

*French A, Smith G (2010) Measuring political brand equity: a consumer oriented approach. Eur J Mark 44(3/4):460–476

Gardner BB, Levy SJ (1955) The product and the brand. Harv Bus Rev 33(2):33–39

Gensler S, Völckner F, Egger M, Fischbach K, Schoder D (2015) Listen to your customers: insights into brand image using online consumer-generated product reviews. Int J Electron Commer 20(1):112–141

*Geylani T, Inman JJ, Hofstede FT (2008) Image reinforcement or impairment: the effects of co-branding on attribute uncertainty. Mark Sci 27(4):730–743

*Giesler M (2012) How doppelgänger brand images influence the market creation process: longitudinal insights from the rise of Botox cosmetic. J Mark 76(6):55–67

*Godey B, Manthiou A, Pederzoli D, Rokka J, Aiello G, Donvito R, Singh R (2016) Social media marketing efforts of luxury brands: influence on brand equity and consumer behavior. J Bus Res 69(12):5833–5840

*Golden LL, Sirdesai M (1992) Chernoff faces: a useful technique for comparative image analysis and representation. Adv Consum Res 19:123–127

*Gómez-Suárez M, Quinones M, Yagúe MJ (2016) Store brand evaluative process in an international context. Int J Retail Distrib Manag 44(7):754–770

*Graeff TR (1996) Image congruence effects on product evaluations: the role of self-monitoring and public/private consumption. Psychol Mark 13(5):481–498

*Graeff TR (1997) Consumption situations and the effects of brand image on consumers' brand evaluations. Psychol Mark 14(1):49–69

*Grant IC, Hassan LM, Hastings GB, MacKintosh AM, Eadie D (2008) The influence of branding on adolescent smoking behaviour: exploring the mediating role of image and attitudes. Int J Nonprofit Volunt Sect Mark 13(3):275–284

*Gregory JR (2001) The bottom-line impact of corporate brand investment: an analytical perspective on the drivers of ROI of corporate brand communications. J Brand Manag 8(6):405–415

*Grimes A, Doole I (1998) Exploring the relationships between colour and international branding: a cross cultural comparison of the UK and Taiwan. J Mark Manag 14(7):799–816

*Grohs R (2016) Drivers of brand image improvement in sports-event sponsorship. Int J Advert 35(3):391–419

*Gross P, Wiedmann KP (2015) The vigor of a disregarded ally in sponsorship: brand image transfer effects arising from a cosponsor. Psychol Mark 32(11):1079–1096

Guilford JP (1954) Psychometric methods. McGraw-Hill, New York

Gürhan-Canli Z, Hayran C, Sarial-Abi G (2016) Customer-based brand equity in a technologically fast-paced, connected, and constrained environment. AMS Rev 6(1):23–32

*Guzmán F, Paswan AK (2009) Cultural brands from emerging markets: brand image across host and home countries. J Int Mark 17(3):71–85

*Guzmán F, Sierra V (2009) A political candidate's brand image scale: are political candidates brands? J Brand Manag 17(3):207–216

*Gwinner KP, Eaton J (1999) Building brand image through event sponsorship: the role of image transfer. J Advert 28(4):47–56

*Hagtvedt H, Patrick VM (2008) Art and the brand: the role of visual art in enhancing brand extendibility. J Consum Psychol 18(3):212–221

Hair JF, Bush RP, Ortinau DJ (2009) Marketing research. In a digital information environment, 4th edn. McGraw-Hill Irwin, Boston

Hair JF, Celsi MW, Money AH, Samouel P (2011) Essentials of business research methods. Sharpe, Armonk

*Hamzaoui-Essoussi L, Merunka D (2007) Consumers' product evaluations in emerging markets: does country of design, country of manufacture, or brand image matter? Int Mark Rev 24(4):409–425

*Hamzaoui-Essoussi L, Merunka D, Bartikowski B (2011) Brand origin and country of manufacture influences on brand equity and the moderating role of brand typicality. J Bus Res 64(9):973–977

*Hankinson G (2004) Repertory grid analysis: an application to the measurement of destination images. Int J Nonprofit Volunt Sect Mark 9(2):145–152

*Hankinson G (2005) Destination brand images: a business tourism perspective. J Serv Mark 19(1):24–31

Harzing AW (2010) The publish or perish book. Tarma Software Research, Melbourne

*Heath TB, DelVecchio D, McCarthy MS (2011) The asymmetric effects of extending brands to lower and higher quality. J Mark 75(4):3–19

Helkkula A, Pihlström M (2010) Narratives and metaphors in service development. Qual Mark Res Int J 13(4):354–371

Henerson ME, Morris LL, Fitz-Gibbon CT (1987) How to measure attitudes. Sage, Newbury Park

*Heslop LA, Nadeau J, O'Reilly N (2010) China and the Olympics: views of insiders and outsiders. Int Mark Rev 27(4):404–432

*Hieke S (2010) Effects of counterfeits on the image of luxury brands: an empirical study from the customer perspective. J Brand Manag 18(2):159–172

*Hofstede A, van Hoof J, Walenberg N, de Jong M (2007) Projective techniques for brand image research: two personification-based methods explored. Qual Mark Res Int J 10(3):300–308

*Hogg MK, Cox AJ, Keeling K (2000) The impact of self-monitoring on image congruence and product/brand evaluation. Eur J Mark 34(5/6):641–666

*Homer PM (2008) Perceived quality and image: when all is not "rosy". J Bus Res 61(7):715–722

*Hong JW, Zinkhan GM (1995) Self-concept and advertising effectiveness: the influence of congruency, conspicuousness, and response mode. Psychol Mark 12(1):53–76

*Hosany S, Ekinci Y, Uysal M (2006) Destination image and destination personality: an application of branding theories to tourism places. J Bus Res 59(5):638–641

*Hou J, Du L, Tian Z (2009) The effects of nonprofit brand equity on individual giving intention: mediating by the self-concept of individual donor. Int J Nonprofit Volunt Sect Mark 14(3):215–228

*Hsieh MH (2002) Identifying brand image dimensionality and measuring the degree of brand globalization: a cross-national study. J Int Mark 10(2):46–66

*Hsieh MH, Lindridge A (2005) Universal appeals with local specifications. J Prod Brand Manag 14(1):14–27

*Hsieh MH, Pan SL, Setiono R (2004) Product-, corporate-, and country-image dimensions and purchase behavior: a multicountry analysis. J Acad Mark Sci 32(3):251–269

*Hu J, Liu X, Wang S, Yang Z (2012) The role of brand image congruity in Chinese consumers' brand preference. J Prod Brand Manag 21(1):26–33

Iacobucci D, Churchill GA (2010) Marketing research: methodological foundations, 10th edn. Cengage Learning, Andover

*Iversen NM, Hem LE (2011) Reciprocal transfer effects for brand extensions of global or local origin: evidence from Norway. Int Mark Rev 28(4):365–410

*Jo MS, Nakamoto K, Nelson JE (2003) The shielding effects of brand image against lower quality countries-of-origin in global manufacturing. J Bus Res 56(8):637–645

*John DR, Loken B, Kim K, Monga AB (2006) Brand concept maps: a methodology for identifying brand association networks. J Mark Res 43(4):549–562

*Johnson LW, Soutar GN, Sweeney JC (2000) Moderators of the brand image/perceived product quality relationship. J Brand Manag 7(6):425–432

Joyce T (1963) Techniques of brand image measurement. New developments in research. Market Research Society, London

*Juntunen M, Juntunen J, Juga J (2011) Corporate brand equity and loyalty in B2B markets: a study among logistics service purchasers. J Brand Manag 18(4–5):300–310

Keller KL (1993) Conceptualizing, measuring, and managing customer-based brand equity. J Mark 57(1):1–22

Keller KL (2003) Strategic brand management: building, measuring and managing brand equity. Prentice Hall, Upper Saddle River

Keller KL (2013) Strategic brand management: building, measuring, and managing brand equity. Pearson, Harlow

Keller KL (2016) Reflections on customer-based brand equity: perspectives, progress, and priorities. AMS Rev 6(1):1–16

Kelly GA (1955) The psychology of personal constructs. Norton, New York

Kerlinger FN (1973) Foundations of behavioral research. Holt, Rinehart, and Winston, New York

*Kim SJ, Choi YK, Kim KH, Liu H (2015) Country of origin and brand image influences on perceptions of online game quality. J Consum Behav 14(6):389–397

*Kirmani A, Sood S, Bridges S (1999) The ownership effect in consumer responses to brand line stretches. J Mark 63(1):88–100

*Knox S, Freeman C (2006) Measuring and managing employer brand image in the service industry. J Mark Manag 22(7–8):695–715

Koll O, von Wallpach S, Kreuzer M (2010) Multi-method research on consumer-brand associations: comparing free associations, storytelling, and collage. Psychol Mark 27(6):584–602

*Koubaa Y, Methamem RB, Fort F (2015) Multidimensional structures of brand and country images, and their effects on product evaluation. Int J Mark Res 57(1):95–123

*Kremer F, Viot C (2012) How store brands build retailer brand image. Int J Retail Distrib Manag 40(7):528–542

*Kull AJ, Heath TB (2016) You decide, we donate: strengthening consumer-brand relationships through digitally co-created social responsibility. Int J Res Mark 33(1):78–91

*Kwon WS, Lennon SJ (2009a) What induces online loyalty? Online versus offline brand images. J Bus Res 62(5):557–563

*Kwon WS, Lennon SJ (2009b) Reciprocal effects between multichannel retailers' offline and online brand images. J Retail 85(3):376–389

*Landwehr JR, McGill AL, Herrmann A (2011) It's got the look: the effect of friendly and aggressive "facial" expressions on product liking and sales. J Mark 75(3):132–145

*Lange F, Dahlén M (2003) Let's be strange: brand familiarity and ad-brand incongruency. J Prod Brand Manag 12(7):449–460

*Lau KC, Phau I (2007) Extending symbolic brands using their personality: examining antecedents and implications towards brand image fit and brand dilution. Psychol Mark 24(5):421–443

*Lee D, Ganesh G (1999) Effects of partitioned country image in the context of brand image and familiarity: a categorization theory perspective. Int Mark Rev 16(1):18–40

*Lee MY, Knight D, Kim YK (2008) Brand analysis of a US global brand in comparison with domestic brands in Mexico, Korea, and Japan. J Prod Brand Manag 17(3):163–173

*Lee HM, Lee CC, Wu CC (2011) Brand image strategy affects brand equity after M&A. Eur J Mark 45(7/8):1091–1110

Legard R, Keegan J, Ward K (2003) In-depth interviews. In: Ritchie J, Lewis J (eds) Qualitative research practice: a guide for social science students and researchers. Sage, London, pp 138–169

Likert R (1932) A technique for the measurement of attitudes. Arch Psychol 22(140):5–55

*Lin Z, He X (2015) The images of foreign versus domestic retailer brands in China: a model of corporate brand image and store image. J Brand Manag 22(3):211–227

*Liu X, Hu J (2012) Adolescent evaluations of brand extensions: the influence of reference group. Psychol Mark 29(2):98–105

*Liu H, Kim KH, Choi YK, Kim SJ, Peng S (2015) Sports sponsorship effects on customer equity: an Asian market application. Int J Advert 34(2):307–325

*Loeffler M (2002) A multinational examination of the "(non-) domestic product" effect. Int Mark Rev 19(5):482–497

*Loussaïef L, Cacho-Elizondo S, Pettersen IB, Tobiassen AE (2014) Do CSR actions in retailing really matter for young consumers? A study in France and Norway. J Retail Consum Serv 21(1):9–16

*Low GS, Lichtenstein DR (1993) Technical research note: the effect of double deals on consumer attitudes. J Retail 69(4):453–465

*Lu J, Xu Y (2015) Chinese young consumers' brand loyalty toward sportswear products: a perspective of self-congruity. J Prod Brand Manag 24(4):365–375

MacInnis D (2011) A framework for conceptual contributions in marketing. J Mark 75(4):136–154

*Mak AKY (2011) An identity-centered approach to place branding: case of industry partners' evaluation of Iowa's destination image. J Brand Manag 18(6):438–449

*Mäläskä M, Saraniemi S, Tähtinen J (2011) Network actors' participation in B2B SME branding. Ind Mark Manag 40(7):1144–1151

Malhotra NK (2010) Marketing research: an applied orientation. Prentice Hall, Upper Saddle River

Martin GS, Brown TJ (1990) In search of brand equity: the conceptualization and measurement of the brand impression construct. In: Childers ML (ed) Marketing theory and applications, 2nd edn. American Marketing Association, Chicago, pp 431–438

Martínez E, de Chernatony L (2004) The effect of brand extension strategies upon brand image. J Consum Mark 21(1):39–50

*Martínez E, Pina JM (2003) The negative impact of brand extensions on parent brand image. J Prod Brand Manag 12(7):432–447

*Martínez E, Pina JM (2010) Consumer responses to brand extensions: a comprehensive model. Eur J Mark 44(7/8):1182–1204

*Martínez Salinas E, Pina Pérez JM (2009) Modeling the brand extensions' influence on brand image. J Bus Res 62(1):50–59

*Martinez E, Polo Y, de Chernatony L (2008) Effect of brand extension strategies on brand image: a comparative study of the UK and Spanish markets. Int Mark Rev 25(1):107–136

*Martínez E, Montaner T, Pina JM (2009) Brand extension feedback: the role of advertising. J Bus Res 62(3):305–312

*Matthiesen I, Phau I (2005) The "HUGO BOSS" connection: achieving global brand consistency across countries. J Brand Manag 12(5):325–337

McCracken G (1988) The long interview. Sage, Newbury Park

Meho LI, Yang K (2007) Impact of data sources on citation counts and rankings of LIS faculty: Web of Science vs. Scopus and Google Scholar. J Am Soc Inf Sci 58(13):2105–2125

*Mehta A (1999) Using self-concept to assess advertising effectiveness. J Advert Res 39(1):81–88

*Michaelidou N, Micevski M, Cadogan JW (2015a) An evaluation of nonprofit brand image: towards a better conceptualization and measurement. J Bus Res 68(8):1657–1665

*Michaelidou N, Micevski M, Siamagka NT (2015b) Consumers' intention to donate to two children's charity brands: a comparison of Barnardo's and BBC Children in Need. J Prod Brand Manag 24(2):134–145

*Michaelis M, Woisetschlaeger DM, Hartleb V (2008) An empirical comparison of ambushing and sponsorship effects: the case of 2006 FIFA World Cup Germany. Adv Consum Res 35:527–532

*Michel G, Donthu N (2014) Why negative brand extension evaluations do not always negatively affect the brand: the role of central and peripheral brand associations. J Bus Rev 67(12):2611–2618

*Michel G, Rieunier S (2012) Nonprofit brand image and typicality influences on charitable giving. J Bus Res 65(5):701–706

*Miller S, Berry L (1998) Brand salience versus brand image: two theories of advertising effectiveness. J Advert Res 38(5):77–83

*Montaner T, Pina JM (2009) Extending the brand: controllable drivers of feedback effects. J Prod Brand Manag 18(6):394–402

*Moon BJ, Lee LW, Hoon OhC (2015) The impact of CSR on consumer–corporate connection and brand loyalty: a cross cultural investigation. Int Mark Rev 32(5):518–538

Morrin M (1999) The impact of brand extensions on parent brand memory structures and retrieval processes. J Mark Res 36(4):517–525

*Müller SS, Fries AJ, Gedenk K (2014) How much to give? The effect of donation size on tactical and strategic success in cause-related marketing. Int J Res Mark 31(2):178–190

*Nagar K (2015) Modeling the effects of green advertising on brand image: investigating the moderating effects of product involvement using structural equation. J Glob Mark 28(3–5):152–170

Nair LB, Gibbert M (2016) What makes a "good" title and (how) does it matter for citations? A review and general model of article title attributes in management science. Scientometrics 107(3):1331–1359

Nam H, Kannan PK (2014) The informational value of social tagging networks. J Mark 78(4):21–40

*Neijens P, Smit E, Moorman M (2009) Taking up an event brand image transfer during the FIFA World Cup. Int J Mark Res 51(5):579–590

*Nenycz-Thiel M, Romaniuk J (2014) The real difference between consumers' perceptions of private labels and national brands. J Consum Behav 13(4):262–268

Netzer O, Feldman R, Goldenberg J, Fresko M (2012) Mine your own business: market-structure surveillance through text mining. Mark Sci 31(3):521–543

*Newman AJ, Patel D (2004) The marketing directions of two fashion retailers. Eur J Mark 38(7):770–788

*Nguyen B, Yu X, Melewar TC, Hemsley-Brown J (2016) Brand ambidexterity and commitment in higher education: an exploratory study. J Bus Res 69(8):3105–3111

*Nyadzayo MW, Khajehzadeh S (2016) The antecedents of customer loyalty: a moderated mediation model of customer relationship management quality and brand image. J Retail Consum Serv 30:262–269

*Nyadzayo MW, Matanda MJ, Ewing MT (2015) The impact of franchisor support, brand commitment, brand citizenship behavior, and franchisee experience on franchisee-perceived brand image. J Bus Res 68(9):1886–1893

*O'Cass A, Lim K (2002) Toward understanding the young consumer's brand associations and ethnocentrism in the lion's port. Psychol Mark 19(9):759–774

Olsen SO (2002) Comparative evaluation and the relationship between quality, satisfaction, and repurchase loyalty. J Acad Mark Sci 30(3):240–249

Osgood CE, Suci GJ, Tannenbaum PH (1957) The measurement of meaning. University of Illinois Press, Urbana

*Park HJ, Rabolt NJ (2009) Cultural value, consumption value, and global brand image: a cross-national study. Psychol Mark 26(8):714–734

Park CW, Jaworski BJ, Maclnnis DJ (1986) Strategic brand concept-image management. J Mark 50(4):135–145

*Pauwels Delassus V, Descotes RM (2012) Brand name substitution and brand equity transfer. J Prod Brand Manag 21(2):117–124

*Persson N (2010) An exploratory investigation of the elements of B2B brand image and its relationship to price premium. Ind Mark Manag 39(8):1269–1276

*Pettijohn LS, Mellott DW, Pettijohn CE (1992) The relationship between retailer image and brand image. Psychol Mark 9(4):311–327

*Pham MT, Johar GV (2001) Market prominence biases in sponsor identification: processes and consequentiality. Psychol Mark 18(2):123–142

*Pich C, Dean D (2015) Qualitative projective techniques in political brand image research from the perspective of young adults. Qual Mark Res Int J 18(1):115–143

*Pich C, Armannsdottir G, Dean D (2015) The elicitation capabilities of qualitative projective techniques in political brand image research. Int J Mark Res 57(3):357–393

*Pina JM, Iversen NM, Martinez E (2010) Feedback effects of brand extensions on the brand image of global brands: a comparison between Spain and Norway. J Mark Manag 26(9–10):943–965

*Pina JM, Dall'Olmo Riley F, Lomax W (2013) Generalizing spillover effects of goods and service brand extensions: a meta-analysis approach. J Bus Res 66(9):1411–1418

*Porter SS, Claycomb C (1997) The influence of brand recognition on retail store image. J Prod Brand Manag 6(6):373–386

*Power J, Whelan S, Davies G (2008) The attractiveness and connectedness of ruthless brands: the role of trust. Eur J Mark 42(5/6):586–601

Quental N, Lourenço JM (2012) References, authors, journals and scientific disciplines underlying the sustainable development literature: a citation analysis. Scientometrics 90(2):361–381

*Randle M, Leisch F, Dolnicar S (2013) Competition or collaboration? The effect of non-profit brand image on volunteer recruitment strategy. J Brand Manag 20(8):689–703

*Rhee J, Johnson KKP (2012) Predicting adolescents' apparel brand preferences. J Prod Brand Manag 21(4):255–263

*Rindell A, Edvardsson B, Strandvik T (2010) Mapping the "roots" of the consumer's image-in-use of companies. J Prod Brand Manag 19(6):423–430

*Rindell A, Korkman O, Gummerus J (2011) The role of brand images in consumer practices: uncovering embedded brand strength. J Prod Brand Manag 20(6):440–445

*Rintoul D, Hajibaba H, Dolnicar S (2016) Comparing association grids and "pick any" lists for measuring brand attributes. Int J Mark Res 58(6):779–792

Romaniuk J (2013) Modeling mental market share. J Bus Res 66(2):188–195

*Romaniuk J, Sharp B (2000) Using known patterns in image data to determine brand positioning. Int J Mark Res 42(2):219–229

*Romaniuk J, Bogomolova S, Dall'Olmo Riley F (2012) Brand image and brand usage: Is a forty-year-old empirical generalization still useful? J Advert Res 52(2):243–250

*Romeo JB (1991) The effect of negative information on the evaluations of brand extensions and the family brand. Adv Consum Res 18:399–405

*Roper S, Davies G (2010) Business to business branding: external and internal satisfiers and the role of training quality. Eur J Mark 44(5):567–589

*Roth MS (1992) Depth versus breadth strategies for global brand image management. J Advert 21(2):25–35

*Roth MS (1995a) The effects of culture and socioeconomics on the performance of global brand image strategies. J Mark Res 32(2):163–174

*Roth MS (1995b) Effects of global market conditions on brand image customization and brand performance. J Advert 24(4):55–74

*Roy D, Banerjee S (2014) Identification and measurement of brand identity and image gap: a quantitative approach. J Prod Brand Manag 23(3):207–218

Rungie C, Laurent G, Dall'Olmo Riley F, Morrison DG, Roy T (2005) Measuring and modeling the (limited) reliability of free choice attitude questions. Int J Res Mark 22(3):309–318

*Sääksjärvi M, Samiee S (2011) Relationship among brand identity, brand image and brand preference: differences between cyber and extension retail brands over time. J Interact Mark 25(3):169–176

Sageder M, Mitter C, Feldbauer-Durstmüller B (2016) Image and reputation of family firms: a systematic literature review of the state of research. Rev Manag Sci. doi:10.1007/s11846-016-0216-x

*Schmitt BH, Shultz CJ (1995) Situational effects on brand preferences for image products. Psychol Mark 12(5):433–445

*Schnittka O, Sattler H, Zenker S (2012) Advanced brand concept maps: a new approach for evaluating the favorability of brand association networks. Int J Res Mark 29(3):265–273

*Shankar V, Azar P, Fuller M (2008) Practice prize paper-BRAN EQT: a multicategory brand equity model and its application at Allstate. Mark Sci 27(4):567–584

*Sharma P (2012) Offshore outsourcing of customer services—boon or bane? J Serv Mark 26(5):352–363

*Sharma P, Abhinav RM, Dhawan A (2009) Exploring customer reactions to offshore call centers: toward a comprehensive conceptual framework. J Serv Mark 23(5):289–299

*Sheng S, Pan Y (2009) Bundling as a new product introduction strategy: the role of brand image and bundle features. J Retail Consum Serv 16(5):367–375

*Sierra JJ, Robert S, Heiser RS, Williams JD, Taute HA (2010) Consumer racial profiling in retail environments: a longitudinal analysis of the impact on brand image. J Brand Manag 18(1):79–95

*Simões I, Agante L (2014) The impact of event sponsorship on Portuguese children's brand image and purchase intentions: the moderator effects of product involvement and brand familiarity. Int J Advert 33(3):533–555

*Smith KT, Smith M, Wang K (2010) Does brand management of corporate reputation translate into higher market value? J Strateg Mark 18(3):201–220

Smith AN, Fischer E, Yongjian C (2012) How does brand-related user-generated content differ across YouTube, Facebook, and Twitter? J Interact Mark 26(2):102–113

*Sonnier G, Ainslie A (2011) Estimating the value of brand-image associations: the role of general and specific brand image. J Mark Res 48(3):518–530

Steinman RB (2009) Projective techniques in consumer research. Int Bull Bus Admin 5(1):37–45

*Stocchi L, Driesener C, Nenycz-Thiel M (2015) Brand image and brand loyalty: do they show the same deviations from a common underlying pattern? J Consum Behav 14(5):317–323

*Stocchi L, Wright M, Driesener C (2016) Why familiar brands are sometimes harder to remember. Eur J Mark 50(3/4):621–637

*Subramony M, Holtom BC (2012) The long-term influence of service employee attrition on customer outcomes and profits. J Serv Res 15(4):460–472

Supphellen M (2000) Understanding core brand equity: guidelines for in-depth elicitation of brand associations. Int J Mark Res 42(3):319–338

*Swait J, Erdem T, Louviere J, Dubelaar C (1993) The equalization price: a measure of consumer-perceived brand equity. Int J Res Mark 10(1):23–44

Swaminathan V (2016) Branding in the digital era: new directions for research on customer-based brand equity. AMS Rev 6(1):33–38

*Swimberghe KR, Wooldridge BR, Ambort-Clark KA, Rutherford J (2014) The influence of religious commitment on consumer perceptions of closed-on-Sunday policies: an exploratory study of Chick-fil-A in the southern United States. Int Rev Retail Distrib Consum Res 24(1):14–29

*Teichert TA, Schöntag K (2010) Exploring consumer knowledge structures using associative network analysis. Psychol Mark 27(4):369–397

*Thomas RJ (2015) Out with the old and in with the new: a study of new kit sponsorship and brand associations in the Barclays Premier League. J Prod Brand Manag 24(4):229–250

*Thompson CJ, Rindfleisch A, Arsel Z (2006) Emotional branding and the strategic value of the doppelgänger brand image. J Mark 70(1):50–63

Tranfield D, Denyer D, Smart P (2003) Towards a methodology for developing evidence-informed management knowledge by means of systematic review. Br J Manag 14:207–222

*Tsiotsou RH, Alexandris K, Cornwell TB (2014) Using evaluative conditioning to explain corporate co-branding in the context of sport sponsorship. Int J Advert 33(2):295–326

*Vahie A, Paswan A (2006) Private label brand image: its relationship with store image and national brand. Int J Retail Distrib Manag 34(1):67–83

*Van der Lans R, Van den Bergh B, Dieleman E (2014) Partner selection in brand alliances: an empirical investigation of the drivers of brand fit. Mark Sci 33(4):551–565

*Van Reijmersdal EA, Neijens PC, Smit EG (2007) Effects of television brand placement on brand image. Psychol Mark 24(5):403–419

Vaughn S, Schumm JS, Sinagub J (1996) Focus group interviews in psychology and education. Sage, Thousand Oaks

*Vieceli J, Shaw RN (2010) Brand salience for fast-moving consumer goods: an empirically based model. J Mark Manag 26(13–14):1218–1237

*Villarejo-Ramos AF, Sánchez-Franco MJ (2005) The impact of marketing communication and price promotion on brand equity. J Brand Manag 12(6):431–443

*Völckner F, Sattler H, Kaufmann G (2008) Image feedback effects of brand extensions: evidence from a longitudinal field study. Mark Lett 19(2):109–123

*Voorveld HAM, Gvan Noort G, Duijn M (2013) Building brands with interactivity: the role of prior brand usage in the relation between perceived website interactivity and brand responses. J Brand Manag 20(7):608–621

*Vukasovič T (2009) Searching for competitive advantage with the aid of the brand potential index. J Prod Brand Manag 18(3):165–175

*Wang X, Yang Z (2010) The effect of brand credibility on consumers' brand purchase intention in emerging economies: the moderating role of brand awareness and brand image. J Glob Mark 23(3):177–187

*Watson A, Lecki NK, Lebcir M (2015) Does size matter? An exploration of the role of body size on brand image perceptions. J Prod Brand Manag 24(3):252–261

Weiss AM, Anderson E, MacInnis DJ (1999) Reputation management as a motivation for sales structure decisions. J Mark 63(4):74–89

Wildgaard L, Schneider JW, Larsen B (2014) A review of the characteristics of 108 author-level bibliometric indicators. Scientometrics 101(1):125–158

*Winchester MK, Romaniuk J (2003) Evaluative and descriptive response patterns to negative image attributes. Int J Mark Res 45(1):21–33

*Winchester M, Romaniuk J (2008) Negative brand beliefs and brand usage. Int J Mark Res 50(3):355–374

*Woisetschläger DM (2007) Team-sponsorship in the formula one—does it affect brand perception? An empirical assessment in the German car market. Adv Consum Res 34:616–622

*Woisetschläger DM, Michaelis M (2012) Sponsorship congruence and brand image. Eur J Mark 46(3/4):509–522

*Woisetschläger DM, Hartleb V, Blut M (2008) How to make brand communities work: antecedents and consequences of consumer participation. J Relatsh Mark 7(3):237–255

*Worm S, Srivastava RK (2014) Impact of component supplier branding on profitability. Int J Res Mark 31(4):409–423

*Wu CW (2015) Foreign tourists' intentions in visiting leisure farms. J Bus Res 68(4):757–761

Yadav MS (2010) The decline of conceptual articles and implications for knowledge development. J Mark 74(1):1–19

*Yagci MI, Biswas A, Dutta S (2009) Effects of comparative advertising format on consumer responses: the moderating effects of brand image and attribute relevance. J Bus Res 62(8):768–773

*Yoganathan D, Jebarajakirthy C, Thaichon P (2015) The influence of relationship marketing orientation on brand equity in banks. J Retail Consum Serv 26:14–21

*Yuan R, Liu MJ, Luo J, Yen DA (2016) Reciprocal transfer of brand identity and image associations arising from higher education brand extensions. J Bus Res 69(8):3069–3075

Zaltman G (1997) Rethinking market research: putting people back in. J Mark Res 34(4):424–437

*Zenker S, Beckmann SC (2013) Measuring brand image effects of flagship projects for place brands: the case of Hamburg. J Brand Manag 20(8):642–654