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ORIGINAL ARTICLE

Roses are red, violets are blue, sophisticated brands have a Tiffany Hue: the effect of iconic brand color priming on brand personality judgments

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Abstract Iconic brand color priming is introduced as a cue to consumer perceptions of brand personality. Although previous research has examined generic color meanings (e.g., purple is exciting, gray is passive and dull, and blue is competent), we demonstrate an iconic (widely recognized and well-established) brand color associative priming process. Through three experiments, we show that the personality tied to an iconic brand color can be created by brand managers, learned by consumers, and leveraged by other brands. Study 1 provides evidence that consumers perceived the iconic *Cadbury* purple, as opposed to a generic purple color, as sincere, aligning with consumer perceptions of the brand. Study 2 shows that exposure to a brand color prime (*Apple* gray), compared to a generic gray, influences brand personality perceptions (i.e., excitement) for an unknown brand. In Study 3, a schema congruity brand color priming effect is observed, whereby brand color priming enhancement occurs only when a brand color prime is placed in a product category that is congruent. When the brand color prime is incongruent with the product category schema, the priming effect weakens. This research provides evidence that brand personality can be primed, or leveraged, through embedding iconic brand colors within brand communications.

Keywords Brand color · Priming · Brand personality · Associations · Schema congruity

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Introduction

Brand colors communicate meaning that can become central to a brand's identity (Abril et al. 2009) and are the first point of identification that distinguishes a brand from competitors (Kapferer 1995). A brand's color can act as an important non-verbal cue that can signal brand meaning and position in the marketplace (Zaichkowsky 2010). In recent years, research investigating hue (overall color category, e.g., blue, green, red) effects in branding has gained momentum, with researchers focusing on the meaning consumers derive from colored brand names and brand logos, including brand personality (i.e., the human-like characteristics that become associated with a brand: sincerity, excitement, competence, sophistication, and ruggedness; Aaker 1997) (e.g., Grohmann et al. 2013; Labrecque and Milne 2012; Sundar and Kellaris 2016). Previous research, however, focuses on the intrinsic meanings elicited from generic colors when paired with brands, such as red is exciting, brown is rugged, and white is sincere (Labrecque and Milne 2012), which is based on the theory of chromodynamics, that is, the temperature, or wavelength, of colors (Hynes 2009). For example, shorter wavelength, or cool, colors (e.g., green and blue) are calming and relaxing, and longer wavelength, or warm, colors (e.g., red and orange) elicit arousal and stimulation, such as excitement or anger (Hynes 2009; Elliot and Maier 2012).

Brand managers often align their color to leverage already established personality traits. For example, blue symbolises that *IBM* is a competent brand. In this instance, the color gives meaning to the brand. However, brand managers can give meaning to a color. This research examines the meaning brand managers give to a color, from the perspective of *learned associations* that become

linked to the brand color over time (via the pairing of color, objects, messages, and experiences) through the brand management process (Elliot and Maier 2012). Specifically, this study looks at real iconic brand colors and their marketer created meaning, beyond intrinsic hue (i.e., generic color) meaning. For example, gray, a shorter wavelength color, is intrinsically associated with calming and relaxing characteristics. However, the *Apple* brand has been able to create meaning of excitement with their iconic gray brand color. The associations tied to the *Apple* brand (i.e., excitement; imaginative, contemporary, young, cool, unique, and daring) have been carefully crafted by brand managers and communicated over time to become associated with the *Apple* brand and its other brand elements, including brand color (Pantone 429), and brand name. We argue that brand colors become iconic when they are widely recognized and well established (Merriam-Webster 2017). As such, brand managers, over time, use communications to enhance brand awareness and to establish a link between the brand color, the brand, and its associated meanings, including personality (Keller 1993).

Learned meaning association reflects the premise underlying associative network theory (Collins and Loftus 1975), whereby exposure to an iconic brand color will simultaneously activate the brand and its adjoining associations in consumer memory (including its personality; the process of spreading activation). Due to the heavy investment in crafting the association between a brand, color, and personality, brand managers often seek to legally protect their hue through a specific blend of saturation and lightness (Labrecque and Milne 2012). Colors, like sounds and smells, however, are particularly difficult to trademark, due to the complexity in demonstrating that a particular shade distinguishes a brand (Safi 2014). For example, in Australia, oil brand, *BP*, failed to trademark their specific hue of green (Pantone 355) for its service stations (Safi 2014). This was due to green being predominantly applied to service stations and other equipment used in service stations. As a result, the color green does not distinguish *BP's* goods and services from other brands in the same product category (Purcell-Hennessy 2014). Color trademarks are limited to the product category in which the iconic brand competes (Tavassoli 2001). The difficulty with which color trademarking occurs, and the limitation on product category competition, provides managers of brands an opportunity to leverage the meaning tied to iconic brand colors.

This research aims to examine three core research questions: (1) whether an iconic brand color can convey brand personality traits beyond that of generic colors (Study 1); (2) whether exposure to an iconic brand color prime can influence personality perceptions for an unknown brand (Study 2); and (3) whether color priming effects are dependent upon product category schema congruity (Study 3). We suggest that this research has implications for brand managers wanting to create a unique brand color in order to differentiate their brand from competitors. In addition, this research identifies ways by which brand managers can leverage the associations tied to an iconic brand color in order to "borrow" meaning.

Theoretical development

Color: brand personality cue

Literature supports the notion that models of semantic memory, that is, associative network theory, can be used to understand the formation and activation of color associations (e.g., Elliot et al. 2007; Labrecque and Milne 2012; Labrecque et al. 2013; Stach 2015). Consumer memory is structured as an associative network containing nodes (i.e., brand attributes including personality, benefits, and attitudes; Keller 1993) connected by means of related links that vary in strength (Martindale 1991; Anderson 1983; Collins and Loftus 1975). Retrieval of associations is dependent upon the spreading activation process, whereby a set of nodes triggers the activation of connected nodes (Anderson 1983). Spreading activation, therefore, is the simultaneous activation of the brand, the brand's color, and personality associations tied to the brand.

Although the hue (color), saturation (intensity of hue), and lightness (amount of black/white added to the hue) of colors examined in the literature are seldom reported, researchers have consistently demonstrated associations between generic colors and personality traits. For example, individuals characterize blue hues with competence, trustworthiness, security, and sincerity; red hues with imagination and excitement; and yellow hues with sincerity, excitement, and refreshment (Grohmann et al. 2013; Hynes 2009; Labrecque and Milne 2012). Labrecque and Milne (2012) suggest a spreading activation process occurs when a brand leverages the meanings associated with a generic color (i.e., chromodynamics). Exposure to a brand's visual identity (e.g., a blue hue brand logo) triggers intrinsic generic hue-related color meaning in memory (e.g., blue is competent), with this meaning contributing to the brand's personality (e.g., a brand with a blue brand logo is competent).

Due to the spreading activation process in associative network of memory, a brand name, its iconic color, and personality will, over time, become a part of the brand's associations set. Exposure to the brand name will activate the brand's personality, and exposure to the iconic brand color will also activate the brand's personality. As such, it is proposed that when a consumer is exposed to an iconic brand color, both the brand name node and brand

personality traits will be simultaneously activated. In the case of *Cadbury*, the generic purple hue is associated with excitement (Hynes 2009), which is also a personality trait highlighted by the brand through their marketing communications. However, the brand also positions itself as a sincere brand (cheerful and family friendly, e.g., through their annual Cadbury Family Day which includes their Cadbury Easter Egg Hunt); a personality trait not associated with the purple hue. As such, we propose that consumers will perceive the brand personality trait associations of excitement and sincerity tied to the brand color *Cadbury* purple (i.e., Pantone 2865C) and the brand name itself (i.e., Cadbury), as the spreading activation process links the elements of generic and learned brand color associations, and brand name, to the brand's personality traits. On the other hand, it is expected that a generic color will heighten hue-related personality traits (i.e., excitement, above sincerity). It is, therefore, hypothesized that:

Hypothesis 1 Exposure to an (a) iconic brand color and (b) iconic brand name will elicit perceptions of different brand personality traits than exposure to a generic color.

Color: associative priming

Associative priming occurs when one concept, or node, activates a second concept, or node (e.g., Postman and Keppel 1970), through spreading activation (Collins and Loftus 1975). This process occurs when a generic or an iconic brand color provides meaning to an unknown brand. In other words, when an unknown brand is paired, or primed, with a brand color, activation of an association linked to a brand color (such as the brand personality trait) spreads from the prime color node to the unknown brand through an associative network link.

Drawing on associative network theory of memory (Collins and Loftus 1975), it is proposed that when the meanings residing within the brand color (i.e., personality) are coupled with an unknown brand, those meanings, or associations regarding the brand color, transfer or become associated with the unknown brand. For example, the generic hue of gray is associated with competence (reliability, intelligence, and success; Labrecque and Milne 2012). As such, it is proposed that when consumers are primed with the generic color gray, they should associate an unknown brand with competence; as the meanings tied to the color transfer to the brand through spreading activation. However, the *Apple* brand (a brand with a gray logo) positions itself as being an exciting consumer electronics brand, a brand that is trendy, cool, and contemporary (e.g., the Mac vs. PC ads highlighted that PC's were outdated, boring, and uninteresting compared to the Apple Mac). Therefore, it is proposed that an iconic *Apple* gray color will act as a priming device, activating brand personality judgments (competent and exciting), which will be ascribed to the personality of an unknown brand. It is hypothesized that:

Hypothesis 2 Exposure to an iconic brand color prime will elicit different perceptions of the brand's personality for an unknown brand, compared to exposure to a generic color prime.

Associative color priming: product category schema congruity

According to schema congruity theory, product category schemas, or organized structures of prior knowledge about the product category stored in memory, influence evaluative judgments (Srull 1981; Fiske and Pavelchak 1986). Product category schema congruity occurs when there is consistency within the entire configuration of associations tied to the product (Mandler 1982; Meyers-Levy and Tybout 1989). Product category schema incongruity, on the other hand, is when associations with the product mismatch the corresponding product category schema, with some research identifying that it results in frustration and negative consumer evaluations (Meyers-Levy and Tybout 1989). We argue that personality is also a part of consumers' associative network of memory tied to particular product categories, forming the overall product category schema.

Drawing on associative network theory and schema congruity theory, we propose that associative color priming enhances only when the brand personality associated with the iconic brand color is congruent with the unknown brand's product category schema. In other words, if the brand personality of the color prime is aligned with the product category schema, priming will strengthen brand personality judgments. For example, the *Tiffany and Co.* brand positioning is focused on the sophistication of the brand. As such, it is suggested that as sophistication is a personality that is congruent with the perfume product category schema, the *Tiffany & Co.* blue color prime in an advertisement for an unknown brand of perfume should enhance the "sophistication" brand personality meaning association transfer. Alternatively, it is proposed that the iconic brand color priming effect will be attenuated when the brand personality of the color prime is incongruent with the unknown brand's product category schema. For example, as sophistication is incongruent with the chocolate product category schema, the brand personality trait of sophistication primed through the *Tiffany & Co.* blue color in an advertisement for an unknown brand of chocolate will

inhibit the "sophistication" brand personality associative meaning transfer. Formally, it is proposed that:

Hypothesis 3 Exposure to an iconic brand color prime will elicit different perceptions of brand personality for an unknown brand that is congruent with the product category schema, compared to exposure to a generic color prime.

Study 1

Study 1 aimed to demonstrate that iconic brand colors (as opposed to generic colors) convey the personality traits of the brand for which they are associated.

Pre-test: iconic brand color selection

A pre-test ($n = 80$) was conducted to identify iconic (i.e., widely recognizable) brand colors. Five brand colors were selected for the pre-test: *Guinness* black (Pantone 419C), *Tiffany & Co.* blue (Pantone 1837), *Cadbury* purple (Pantone 2685C), *Apple* gray (Pantone 429), and *Caterpillar* yellow (Pantone 123C). These brand colors were selected as it is expected that the personality traits associated with the brand will differ from the traits associated with the generic color hue (e.g., yellow is associated with sincerity and excitement (Labrecque and Milne 2012), while the brand *Caterpillar* is positioned as a rugged and competent brand). Pre-test participants were presented with a swatch of the five test brand colors (color swatch of 600 mm × 400 mm). Participants were shown each of the five brand colors sequentially (order randomized across participants). Participants were then asked to indicate which brand is associated with the color (open-response). Results indicate that *Tiffany & Co.* blue (≈ 78%), *Cadbury* purple (85%), and *Apple* gray (≈ 91%) can be categorized as "iconic" (recognition > 75%), with less consistent color recognition achieved for *Guinness* black (≈ 28%) and Caterpillar (5%). Thus, we selected *Cadbury* (Study 1), *Apple* (Study 2), and *Tiffany & Co.* (Study 3) for this research.

Participants and procedures

A sample of one hundred and seventy-four members of the Australian general public (96 male, 78 female) participated in an online experiment. A between-subjects design was employed, with participants randomly allocated to one of three experimental conditions: (1) brand color ($n = 58$; purple: websafe color code #330066 (rgb[to] 2016); color swatch of 600 mm × 400 mm), (2) generic color ($n = 58$; purple: websafe color code #6600CC (rgb[to] 2016); color swatch of 600 mm × 400 mm) or (3) brand name ($n = 58$; *Cadbury*; Helvetica font in black; 600 mm × 400 mm) (see Appendix 1). The sample exceeded that required for statistical power of .80, with an a priori alpha level of .05 and estimated medium effect size ($F = .25$) (that is, $n > 159$; Cohen 2013).

To create the generic color, the saturation of the brand color was altered. Specifically, as Labrecque and Milne (2012) demonstrates that lightness does not affect judgments of brand sincerity, the lightness of the *Cadbury* brand color was enhanced to 40 percent (from 20 percent) to create the generic color control. The altering of the color's lightness ensured that a consistency in hue (270°) and saturation (100 percent) was maintained.

First, participants were shown either the brand color swatch, generic color swatch, or the brand name image and asked "If this color [brand] were a person, what kind of person do you think they would be?" Participants were then presented with the 42-item brand personality scale drawn from Aaker (1997; items randomized), and asked to rate the degree to which each trait applied to the color (brand or generic) or brand on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree) (Cronbach $\alpha_{\text{sincere}} = .924$; Cronbach $\alpha_{\text{exciting}} = .899$; Cronbach $\alpha_{\text{competent}} = .902$; Cronbach $\alpha_{\text{sophisticated}} = .911$; Cronbach $\alpha_{\text{rugged}} = .917$), and simple demographic information was obtained.

Results

To ascertain brand name-color personality correspondence (i.e., whether participant evaluations on each of the personality dimensions differed across brand name, brand color, and generic color), a MANOVA model was estimated with personality traits examined simultaneously as the dependent variables. Results showed a significant difference in brand personality judgments across brand name, brand color, and generic color (*Wilks' Lambda* = .795, $p < .001$, $\eta^2 = .108$). Between-subjects effects demonstrate that significant differences were observed for the traits of excitement ($F\ (2,\ 171) = 5.88$, $p = .003$, $\eta^2 = .064$) and sincerity ($F\ (2,\ 171) = 6.72$, $p = .002$, $\eta^2 = .073$). No other significant results were found. Multiple comparisons for brand sincerity judgments showed that the brand name ($p = .002$) and brand color ($p = .026$) were deemed to be more sincere when compared to the generic color. No difference between brand color and brand name was observed ($p = .627$). Further, the generic color was perceived to possess a more exciting personality when compared to the brand color ($p = .002$; no difference between brand color and brand name was observed; $p = .283$). Hypothesis 1 is, therefore, supported. Table 1 summarizes the results obtained.

Table 1 Brand personality traits—*Cadbury*

Brand personality trait	Brand name		Brand color		Generic color		*F*	*p*
	M	SD	*M*	SD	*M*	SD		
Sophisticated	3.12	1.70	3.31	1.30	2.76	1.69	1.84	.162
Exciting	5.24	1.30	4.90	1.24	5.67	1.14	5.88	.003
Competent	4.09	1.43	4.16	1.46	4.31	1.68	.33	.721
Sincere	5.14	1.00	4.93	1.07	4.34	1.49	6.72	.002
Rugged	3.52	1.35	3.64	1.33	3.78	1.51	.494	.611

Study 2

Study 2 aimed to examine associative brand color priming. Specifically, it is argued that personality traits tied to a brand color will become associated with an unknown brand.

Pre-test: personality traits—*Apple*

To identify which personality traits are associated with the brand, *Apple,* a pre-test was undertaken ($n = 55$). Pre-test participants were asked, "If the brand Apple were a person, what kind of person do you think they would be?" Participants were then asked to rate the degree to which each of the 42 personality traits applied to the brand (Aaker 1997; items randomized; 1 = strongly disagree, 7 = strongly agree; Cronbach $\alpha_{sincere} = .921$; Cronbach $\alpha_{exciting} = .903$; Cronbach $\alpha_{competent} = .910$; Cronbach $\alpha_{sophisticated} = .909$; Cronbach $\alpha_{rugged} = .912$).

To identify the personality traits associated with *Apple*, a series of one-sample *t* tests (test value of 4, neutral point on scale) were performed. Specifically, we sought to identify the traits that participants, on average, "agreed" to apply to the *Apple* brand. Results showed that two traits were associated with *Apple*; competence ($M_{competence} = 4.98$; $SD_{competence} = 1.08$, $p < .001$) and excitement ($M_{excitement} = 5.73$; $SD_{excitement} = 1.13$, $p < .001$). Further, one trait was deemed to be not associated with *Apple* ($M_{ruggedness} = 3.42$; $SD_{ruggedness} = 1.38$, $p < .001$), with the two remaining traits being neither associated nor non-associated with the brand ($M_{sophistication} = 4.27$; $SD_{sophistication} = 1.11$, $p = .075$; $M_{sincere} = 4.25$; $SD_{sincere} = 1.31$, $p < .155$).

Participants and procedures

A sample of one hundred and twenty members of the Australian general public (61 male, 59 female) participated in an online experiment. A between-subjects design was employed, with participants randomly allocated to one of two experimental conditions: generic color ($n = 60$; gray: websafe color code #4D4D4D (rgb[to] 2016) versus brand color ($n = 60$; gray: websafe color code #999999 (rgb[to] 2016). This sample exceeded that required for statistical power of .80, with an a priori alpha level of .05 and estimated medium effect size ($d = .50$, that is, $n > 102$; Cohen 2013).

To create the generic color for Study 2, the lightness of the brand color was altered. Labrecque and Milne (2012) demonstrate that lightness (value) does not affect judgments of brand excitement. As a result, the lightness of the *Apple* brand color was reduced to 30 percent (from 60 percent) to create the generic color control, while maintaining hue (0°) and saturation (0 percent).

First, participants were informed that a new brand is entering the marketplace, ND&X. Participants were asked: "If this new brand, ND&X, were a person what kind of person do you think they would be?" The color of the screen directly behind the question was altered to display either the brand color or generic color (see Appendix 2). Consistent with Study 1, participants were then presented with the 42-item brand personality scale drawn from Aaker (1997; items randomized) and asked to rate the degree to which each trait applied to the new brand (Cronbach $\alpha_{sincere} = .904$; Cronbach $\alpha_{exciting} = .901$; Cronbach $\alpha_{competent} = .912$; Cronbach $\alpha_{sophisticated} = .923$; Cronbach $\alpha_{rugged} = .925$). Finally, simple demographic information was obtained.

Results

It was expected that exposure to a brand color would influence an individual's perception of an unknown brand's personality (i.e., ND&X is an exciting brand). To test this hypothesis, a MANOVA model was estimated with personality traits examined simultaneously as the dependent variables. Results showed a significant difference in brand personality judgments across brand color and generic color primes (*Wilks' Lambda* = .597, $p < .001$, $\eta^2 = .403$). Between-subjects effects demonstrated that significant differences were observed for the trait of excitement ($F(1, 117) = 68.75$, $p < .001$, $\eta^2 = .370$). No other significant results were found. Results showed that the unknown brand, ND&X, was deemed to be more exciting when paired with the brand color as opposed to the generic color, providing support for Hypothesis 2. Table 2 summarizes the results obtained.

Table 2 Brand personality traits—*ND&X*

Brand personality trait	Brand color		Generic color		*F*	*p*
	M	SD	*M*	SD		
Sophisticated	4.37	1.14	4.07	1.36	1.76	.187
Exciting	4.90	1.00	3.53	.80	68.75	<.001
Competent	5.00	1.38	4.65	1.51	2.25	.136
Sincere	4.32	1.17	3.97	1.00	3.21	.076
Rugged	3.44	1.01	3.58	1.43	.40	.531

Study 3

Study 3 aimed to examine the effect of product category schema congruity on consumer brand personality perceptions. It is argued that brand color priming effects will attenuate when the personality associated with the brand color prime is incongruent with the unknown brand's product category schema.

Pre-test: personality traits—*Tiffany and Co*

To identify which personality traits are associated with the brand *Tiffany & Co.*, a pre-test was undertaken ($n = 60$). Pre-test participants were asked, "If the brand Tiffany & Co. were a person, what kind of person do you think they would be?" Participants were then asked to rate the degree to which each of the 42 personality traits applied to the brand (Aaker 1997; items randomized; 1 = strongly disagree, 7 = strongly agree; Cronbach $\alpha_{sincere} = .920$; Cronbach $\alpha_{exciting} = .890$; Cronbach $\alpha_{competent} = .914$; Cronbach $\alpha_{sophisticated} = .906$; Cronbach $\alpha_{rugged} = .918$).

To identify the personality traits associated with *Tiffany & Co.*, a series of one-sample *t* tests (test value of 4, neutral point on scale) were performed. Results showed that two traits were associated with *Tiffany & Co.*; sincerity ($M_{sincerity} = 4.92$; $SD_{sincerity} = 1.17$, $p < .001$) and sophistication ($M_{sophistication} = 5.67$; $SD_{sophistication} = 1.27$, $p < .001$). Further, one trait was deemed to not be associated with *Tiffany and Co.* ($M_{ruggedness} = 3.30$; $SD_{ruggedness} = 1.37$, $p < .001$), with the two remaining traits being neither associated nor non-associated with the brand ($M_{excitement} = 4.23$; $SD_{excitement} = 1.25$, $p = .155$; $M_{competence} = 4.25$; $SD_{competence} = 1.39$, $p = .167$)

Pre-test: product category selection

A pre-test was undertaken ($n = 40$) to identify products whose product category schema was either congruent or incongruent with the target personality trait of sophistication. Employing measures adapted from Bigné et al. (2012), pre-test participants reported on three seven-point scales, the degree to which chocolate/perfume and "sophistication" are: *incongruent/congruent*, *do not go together/go together*, *illogical/logical* (chocolate Cronbach $\alpha_{congruence} = .947$; perfume Cronbach $\alpha_{congruence} = .871$). Results of a paired samples *t* test demonstrated that perfume ($M_{congruence} = 5.11$, $SD_{congruence} = 1.18$) was perceived as significantly more congruent with sophistication when compared to chocolate ($M_{congruence} = 3.64$, $SD_{congruence} = 1.03$, $p < .001$). Thus, perfume was deemed to have a congruent product category schema, while chocolate was found to have an incongruent product category schema.

Participants and procedures

A sample of two hundred and ten members of the Australian general public (108 male, 102 female) participated in an online experiment. A 2 (color prime: generic vs. iconic brand) × 2 (product category schema: congruent vs. incongruent) between-subjects design was employed, with participants randomly allocated to one of the four experimental conditions. The sample for Study 3 exceeded that required for statistical power of .80, with an a priori alpha level of .05 and estimated medium effect size ($F = .25$) (that is, $n > 158$; Cohen 2013).

To create the generic color, the saturation of the brand color was altered. Drawing from Labrecque and Milne (2012) who demonstrates that saturation does not affect judgments of brand sophistication, the saturation of the *Tiffany & Co* brand color was reduced to 25 percent to create the generic color control, while maintaining hue (180°) and lightness (60 percent).

Participants were exposed to an advertisement for a fictitious brand, *Burlay* (color and product category manipulated across conditions; see Appendix 3). Burlay was presented as either a brand of chocolate (incongruent) or perfume (congruent). Participants were then asked: "If this new brand of [perfume/chocolate], Burlay, was a person what kind of person do you think they would be?" Consistent with Study 1 and Study 2, participants were then presented with the 42-item brand personality scale drawn from Aaker (1997; items randomized), and asked to rate the degree to which each trait applied to the new brand (Cronbach $\alpha_{sincere} = .898$; Cronbach $\alpha_{exciting} = .906$; Cronbach $\alpha_{competent} = .910$; Cronbach $\alpha_{sophisticated} = .903$; Cronbach $\alpha_{rugged} = .925$). Finally, simple demographic information was obtained.

Results

It was expected that exposure to an iconic brand color would influence brand personality judgments for an unknown brand, *Burlay*, with the effect strengthening

under conditions of product category schema congruence. To test this hypothesis, a between-subjects MANOVA model was estimated, whereby personality traits were examined simultaneously as the dependent variables. Results showed a significant difference in brand personality judgments across color prime (*Wilks' Lambda* = .908, $p = .001$, $\eta^2 = .092$), product category schema (*Wilks' Lambda* = .748, $p = .001$, $\eta^2 = .252$), as well as the interaction color prime x product category schema (*Wilks' Lambda* = .930, $p = .011$, $\eta^2 = .070$). Analysis of between-subjects effects demonstrated significant main and interaction effects for the trait of sophistication. Significant results were not observed for excitement, sincerity, competence, or ruggedness ($p > .05$). Specifically, results showed that the iconic brand color prime (as opposed to generic color) enhanced sophistication judgments (F (1, 206) = 13.34, $p < .001$, $\eta^2 = .061$). Further, the trait of sophistication was more prominent when the unknown brand was positioned within the congruent product category schema (perfume), as opposed to the incongruent product category schema (chocolate; F (1, 206) = 25.37, $p < .001$, $\eta^2 = .110$). A significant interaction effect (color prime x product category schema) was also observed (F (1, 206) = 9.77, $p = .002$, $\eta^2 = .045$). Results showed that the brand color prime significantly enhanced perceptions of sophistication when the unknown brand was situated within a congruent product schema (F (1, 103) = 24.96, $p < .001$, $\eta^2 = .195$). However, the brand color prime did not affect judgments of sophistication when the brand was positioned within an incongruent product category schema (F (1, 103) = .128, $p = .721$, $\eta^2 = .001$). No other significant results were found. Table 3 summarizes the results obtained.

Table 3 Brand color and product category schema congruence—*Burlay sophistication*

	n	*M*	SD	*F*	*p*
Main effect: color prime					
Brand color	104	5.02	1.31	13.34	<.001
Generic brand	106	4.39	1.36		
Main effect: product category schema					
Congruent	105	5.14	1.32	25.37	<.001
Incongruent	105	4.28	1.28		
Two-way interaction					
Congruent product schema					
Brand color	53	5.72	1.20	9.77	.002
Generic brand	52	4.56	1.18		
Incongruent product schema					
Brand color	53	4.32	1.01		
Generic brand	52	4.23	1.52		

Discussion and conclusion

Marketers use color to signal product attributes and to distinguish brands within the marketplace (Labrecque et al. 2013). The results of this research, however, provide unique insight into the use of color in branding, specifically in recognizing the ability of an iconic brand color to: (a) convey brand personality traits, and (b) prime personality judgments for a new or unknown brand; neither of which has been previously considered in the marketing literature.

Previous research has examined how brand names and logos can utilize the intrinsic meaning associated with color to create brand personality associations (e.g., red is exciting; Labrecque and Milne 2012). While it is also known that marketers can create their own color associations through the brand management process by creating linked associations beyond those traditionally associated with a color (Keller 1993), the ability of an iconic brand color to convey personality traits that may be associated with a brand, absent of its other brand element counterparts, has not been explored. Results of this research extend the work of Labrecque and Milne (2012) and Labrecque et al. (2013) on the importance of color in marketing by demonstrating the power of created and learned brand associations elicited by color. Findings indicate that while a generic color may be intrinsically associated with a particular personality trait (e.g., purple is exciting), and will indeed create perceptions of brand personality related to those intrinsic color associations, a color with specific specifications, such as lightness that has been utilized by an iconic brand, can elicit stronger perceptions of a personality trait that has been learnedly associated with that brand (e.g., Cadbury purple is sincere). The apparent impact of these results for brand management would support theory that a single, distinctive color is effective for creating a strong brand identity (Simonson and Schmitt 1997) and aids the portrayal of specifically created brand associations surrounding brand personality.

Another practical implication for brand management arising from this research is that iconic brand colors can be embedded into marketing communications (e.g., as a background color, or specific components of an advertisement like the color of a prominent object) to leverage learned personality associations. Results of this research extend current branding theory in relation to color and personality perceptions by demonstrating that personality traits associated with an iconic color can be transferred to a new or unknown brand via color priming in branded communications. This result may provide useful insight for brand management, especially for new or relatively unknown brands. Brands trying to establish brand associations to create their brand's identity may do well to leverage the personality associations from a well-established brand by utilizing the iconic brand's color in their marketing communications.

Further, results of this research indicate that product category schema congruity will impact consumer brand personality perceptions. That is, when an iconic brand color is used as a prime for an unknown brand, a personality trait provoked by the presence of an iconic brand color will be more pronounced when the personality trait is congruent with the product category schema. This provides important advice to brand managers regarding the use of a specific color with the purpose of leveraging learned associations connected to an iconic brand. For the iconic color prime to be effective, it is important that the personality trait elicited by the iconic color is utilized in a product category that would be consistent with consumer prior knowledge structures and what they associate with that product category. For example, utilizing *Tiffany & Co.* blue as the background of a print advertisement for a new brand of make-up may be more successful in generating associations of sophistication than a new toothpaste brand, as consumers would not naturally associate the toothpaste product category as being sophisticated.

Color has always been an important marketing consideration, particularly in the design of logos and packaging. While marketers may be restricted to a traditional color vocabulary when it comes to package design to convey the attributes of the product (Alsop 1984), marketing communications do not have that constraint. Marketers should, however, pay careful attention, and be strategic with the use of color in marketing communications for several reasons. First, color plays an imperative role in the creation of a brand's identity and facilitating brand awareness (Keller 2003). Although the results of this research provide marketers with a useful tool for stimulating brand personality perceptions, caution should be applied with any use of competing brand color, so as not to confuse the identity of the brand, and draw attention to the competing brand. Second, results of this research also indicate that brand personality perceptions created by an iconic brand color can transfer easily to products within the same product category schema and therefore may transfer to extensions or new brands within other similar product categories. With previous research suggesting that brand extensions can potentially dilute brand personality (Diamantopoulos et al. 2005), it is suggested that brand managers should be careful when leveraging multiple brands in a portfolio that the brand personality traits inferred from color associations do not dilute the core brand personality.

Colors cannot legally be exclusively claimed by a company (Alsop 1984), and although companies can trademark colors, pursuing color registration is not easy. For example, the *Cadbury* purple failed to obtain trademarking based on the lack of specificity, clarity, and precision (Bowcott 2013). Where brand color copyright exists, the trademark is limited to the product category in which the iconic brand competes (Tavassoli 2001); therefore, results of this research provide brand managers (of competing brands in alternate product categories but congruent product category schema) with a means to leverage brand personality from existing brands that have established strong, unique, and favorable brand personality associations.

Limitations and directions for future research

While the results of this research have strong implications for branding theory and practice, it is not without limitations. Despite websafe colors being adopted for this research to control screen color variations and color perception differences, results of this study may be limited as variations in color may appear across screens due to the online nature of the studies. Even if a laboratory study was conducted on one computer, variations in lighting and participant's eye structure would affect color appearance (Fraser et al. 2005; Pantone 2017). The impact of this limitation, however, would be very minimal as brand managers are unable to fully control for an exact color, even in printing, with different paper stock, printing machines, and temperatures of ink affecting color production (Fraser et al. 2005).

Additionally, this research only examines the ability of a single color to portray personality traits, and prime personality traits for an unknown brand. While using a single color as the focus of brand identity is deemed to be more effective (Simonson and Schmitt 1997); many successful and iconic brands use a combination of colors (such as McDonald's red and yellow). Future research should investigate color combinations and the impact of different combinations on the elicitation of personality traits, as well as their ability to prime for new or unknown brands.

Further, while the results of this research highlight the capacity of color to signal brand personality, the marketing-related outcomes related to color priming and brand personality have not been examined. Previous research shows that brand personality influences not only consumer preference and usage (Biel 1993), and consumer experiences and uses of a brand (Aaker and Stayman 1992), but also consumer attitude and purchase intention (Batra and Homer 2004). While it is anticipated that these positive effects would be observed for color induced brand personality, future research is needed to confirm this assumption through examining the mediating role of brand personality on attitudes and purchase intention following exposure to an iconic brand color prime.

Also not considered in this research are the unintentional consequences that may arise from the use of an iconic brand color in an attempt to leverage brand personality. Firstly, while results of this research would indicate that learned personality associations created by an iconic brand are stronger than intrinsically associated color meanings, the

impact of negative associations that may be learned through the continued use of color not considered in this research has not been explored and should be considered in future research. Secondly, future investigations should also examine the impact of the presence of an iconic brand color in another well-known brand's marketing communications, to determine whether unintentional use of these colors may "muddy" the brand associations for that well-known brand, having detrimental consequences on the brand's identity.

Lastly, while the benefits of utilizing an iconic brand color to leverage learned brand personality associations are clear from the outcomes of this research, the impact of another brand implementing the iconic brand color in marketing communications, on the iconic brand, has not been explored. Future research should examine whether another brand's use of an iconic brand color would dilute the associations with the iconic brand, and therefore impact on the brand's iconicity.

Compliance with ethical standards

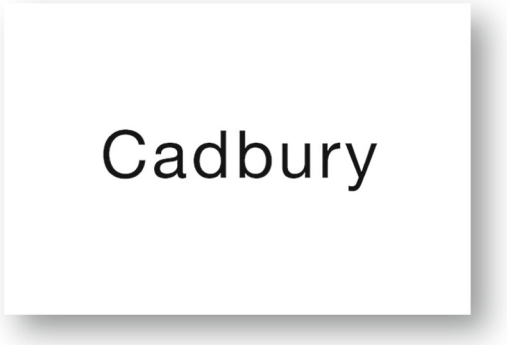
Conflict of interest All authors declare that they have no conflict of interest.

Appendix 1: study 1 stimuli

Iconic brand color condition

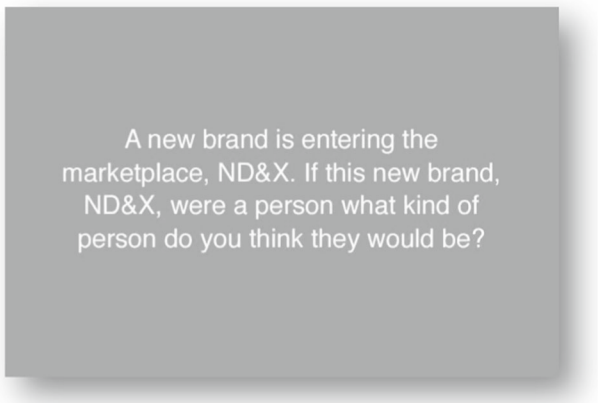
Generic color condition

Brand name condition

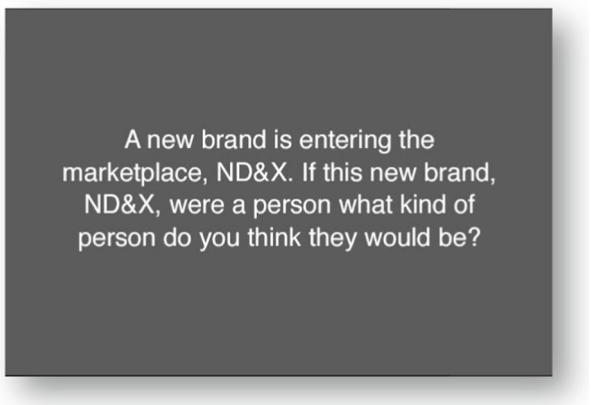


Appendix 2: study 2 stimuli

Iconic brand color prime condition



Generic color prime condition



Appendix 3: study 3 stimuli

Congruent product category schema

Iconic brand color

Generic brand color

Incongruent product category schema

Iconic brand color

Generic brand color

References

Aaker, J.A. 1997. Dimensions of brand personality. *Journal of Marketing Research* 34(3): 347–356.

Aaker, D.A., and D.M. Stayman. 1992. Implementing the concept of transformational advertising. *Psychology & Marketing* 9(3): 237.

Abril, P.S., A.M. Olazábal, and A. Cava. 2009. Marketing and the law. *Journal of the Academy of Marketing Science* 37(3): 375–380.

Alsop, R. 1984. Color grows more important in catching consumer's eyes. *Wallstreet Journal, Eastern Edition*, 29 November, 37.

Anderson, J.R. 1983. *Language, memory, and thought*. Hillsdale: Lawrence Erlbaum Associates.

Batra, R., and P.M. Homer. 2004. The situational impact of brand image beliefs. *Journal of Consumer Psychology* 14(3): 318–330.

Biel, A.L. 1993. Converting image into equity. In *Brand equity and advertising: Advertising's role in building strong brands*. Hillsdale: Psychology Press.

Bigné, E., R. Currás-Pérez, and J. Aldás-Manzano. 2012. Dual nature of cause-brand fit: Influence on corporate social responsibility consumer perception. *European Journal of Marketing* 46(3/4): 575–594.

Bowcott, O. 2013. Cadbury's attempt to trademark Dairy Milk purple blocked. *The Guardian*. 4 October, http://www.theguardian.com/business/2013/oct/04/cadbury-dairy-milk-purple-trademark-blocked.

Cohen, J. 2013. *Statistical power analysis for the behavioral sciences*. Abingdon: Routledge Academic.

Collins, A.M., and E.F. Loftus. 1975. A spreading-activation theory of semantic processing. *Psychological Review* 82(6): 407.

Diamantopoulos, A., G. Smith, and I. Grime. 2005. The impact of brand extensions on brand personality: Experimental evidence. *European Journal of Marketing* 39(1/2): 129–149.

Elliot, A.J., and M.A. Maier. 2012. Color-in-context theory. *Advances in Experimental Social Psychology* 45: 61–125.

Elliot, A.J., M.A. Maier, A.C. Moller, R. Friedman, and J. Meinhardt. 2007. Color and psychological functioning: The effect of red on performance attainment. *Journal of Experimental Psychology: General* 136(1): 154–168.

Fiske, S.T., and M.A. Pavelchak. 1986. Category-based versus piecemeal-based affective responses: Developments in schema-triggered affect. In *The handbook of motivation and cognition: Foundations of social behaviour*, ed. R.M. Sorrentino and E.T. Higgins, 167–203. New York: Guilford.

Fraser, B., C. Murphy, and F. Bunting. 2005. *Real world color management*, 2nd ed. Berkeley: Peachpit Press.

Grohmann, B., J.L. Giese, and I.D. Parkman. 2013. Using type font characteristics to communicate brand personality of new brands. *Journal of Brand Management* 20(5): 389–403.

Hynes, N. 2009. Color and meaning in corporate logos: An empirical study. *Journal of Brand Management* 16(8): 545–555.

Kapferer, J.N. 1995. Stealing brand equity: Measuring perceptual confusion between national brands and 'copycat' own-label products. *Marketing and Research Today* 23(2): 96–103.

Keller, K.L. 1993. Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing* 57(1): 1–22.

Keller, K.L. 2003. Brand synthesis: The multidimensionality of brand knowledge. *Journal of Consumer Research* 29(4): 595–600.

Labrecque, L.I., and G.R. Milne. 2012. Exciting red and competent blue: The importance of color in marketing. *Journal of the Academy of Marketing Science* 40(5): 711–727.

Labrecque, L.I., V.M. Patrick, and G.R. Milne. 2013. The marketers' prismatic palette: A review of color research and future directions. *Psychology & Marketing* 30(2): 187–202.

Mandler, G. 1982. The structure of value: Accounting for taste, in affect and cognition. In M.S. Clark and S.T. Fiske (Eds.), *The 17th Annual Carnegie Symposium*, Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 3–36

Martindale, C. 1991. *Cognitive psychology: A neural-network approach*. California: Brooks/Cole Publishing.

Merriam-Webster. 2017. Iconic meaning. Retrieved May 15, 2017, from https://www.merriam-webster.com/dictionary/iconic.

Meyers-Levy, J., and A.M. Tybout. 1989. Schema congruity as a basis for product evaluation. *Journal of Consumer Research* 16 (1): 39–54.

Pantone. 2017. How do we see color? Retrieved January 11, 2017, from https://www.pantone.com/how-do-we-see-color.

Postman, L., and G. Keppel. 1970. *Norms of word associations*. New York: Academic Press.

Purcell-Hennessy, K. 2014. BP loses colour trade mark battle. Retrieved May 15, 2017, from http://ipwhiteboard.com.au/bp-loses-colour-trade-mark-battle/.

Rgb^{to}. 2016. RGB to Websafe. Retrieved April 10, 2014, from http://rgb.to/pantone/.

Safi, M. 2014. BP loses battle to trademark the colour green in Australia. *The Guardian*. 3 July, http://www.theguardian.com/business/2014/jul/03/bp-loses-battle-to-trademark-the-colour-green-in-australia.

Simonson, A., and B.H. Schmitt. 1997. *Marketing aesthetics: The strategic management of brands, identity, and image*. Simon and Schuster.

Stach, J. 2015. A conceptual framework for the assessment for brand congruent sensory modalities. *Journal of Brand Management* 22: 673–694.

Srull, T.K. 1981. Person memory: Some tests of associative storage and retrieval models. *Journal of Experimental Psychology: Human Learning and Memory* 7: 440–463.

Sundar, A., and J.J. Kellaris. 2016. How logo colors influence shoppers' judgments of retailer ethicality: The mediating role of perceived eco-friendliness. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-015-2918-4.

Tavassoli, N.T. 2001. Color memory and evaluations for alphabetical and logographic brand names. *Journal of Experimental Psychology: Applied* 7(2): 104–111.

Zaichkowsky, J.L. 2010. Strategies for distinctive brands. *Journal of Brand Management* 17(8): 548–560.

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