



## UvA-DARE (Digital Academic Repository)

### Why Nonprofits Are Easier to Endorse on Social Media: The Roles of Warmth and Brand Symbolism

Bernritter, S.F.; Verlegh, P.W.J.; Smit, E.G.

**DOI**

[10.1016/j.intmar.2015.10.002](https://doi.org/10.1016/j.intmar.2015.10.002)

**Publication date**

2016

**Document Version**

Final published version

**Published in**

Journal of Interactive Marketing

**License**

CC BY-NC-ND

[Link to publication](#)

**Citation for published version (APA):**

Bernritter, S. F., Verlegh, P. W. J., & Smit, E. G. (2016). Why Nonprofits Are Easier to Endorse on Social Media: The Roles of Warmth and Brand Symbolism. *Journal of Interactive Marketing*, 33, 27-42. <https://doi.org/10.1016/j.intmar.2015.10.002>

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

*UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)*



# Why Nonprofits Are Easier to Endorse on Social Media: The Roles of Warmth and Brand Symbolism

Stefan F. Bernritter<sup>a,\*</sup> & Peeter W.J. Verlegh<sup>b</sup> & Edith G. Smit<sup>a</sup>

<sup>a</sup> Amsterdam School of Communication Research (ASCoR), University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV Amsterdam, The Netherlands

<sup>b</sup> Department of Marketing, Vrije Universiteit Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands

Available online 3 February 2016

## Abstract

Brands often seek endorsements by consumers on social media (e.g., likes on Facebook). But is this marketing strategy feasible for all brands? To answer this question, this research investigates in seven studies the processes that underlie consumers' intention to endorse brands on social media. We suggest that consumers aim to signal their identity by endorsing brands online. Based on the Brands as Intentional Agents Framework and related research in (social) cognition and consumer behavior, we argue that consumers on social media primarily want to emphasize their warmth rather than their competence. Experimental studies 1, 2, and 3 distinguish between nonprofit and for-profit brands and show that brand warmth (and not competence) mediates the effect of brand type (nonprofit vs. for-profit) on consumers' intentions to endorse brands and branded content on social media. Experiment 4 demonstrates that this process is moderated by brand symbolism (moderated mediation). A high level of brand symbolism increases the positive effect of warmth on consumers' intention to endorse brands online, but only for for-profit brands. The fifth experiment shows that these effects are conditional upon the public vs. private distinction in consumer behavior: consumers prefer to publicly affiliate with nonprofit (vs. for-profit) brands but with regard to private affiliations, there is no difference between both types of brands. In experiment 6, the causal role of warmth (vs. competence) is further examined. Finally, we demonstrate that perceptions of brands' warmth and not competence reduce the efforts that brands need to make to achieve consumers' endorsements on their real brand pages on Facebook.

© 2016 Direct Marketing Educational Foundation, Inc., dba Marketing EDGE. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

**Keywords:** Online brand endorsements; Social media; Consumer behavior; Self-identity; Warmth and competence; Brand symbolism

## Introduction

On social media, such as Facebook, consumers often “like” or share brands and brand-related information. In doing so, consumers endorse these brands as their likes and shares on social media are visible to their peers. In order to benefit from consumers' tendency to endorse brands online, marketers are increasingly trying to engage consumers in attempts to “spread the word” about their brand (Van Doorn et al. 2010). They assume that using other consumers as a source of persuasive communication is one way to overcome consumer resistance

toward commercial messages (Kaikati and Kaikati 2004). Consumers are less likely to perceive that other consumers' brand-related activities have persuasive intent, which makes them more persuasive than brand information from marketers (Bickart and Schindler 2001; Brown, Broderick, and Lee 2007; Willemsen et al. 2011). Especially the connection of consumers through a variety of social media (e.g., social networking sites, virtual communities, blogs) has fueled this development by enabling a wider and easier dissemination of public endorsements (e.g., Chu and Kim 2011; Godes et al. 2005; Libai et al. 2010). Thus many brands use social media marketing strategies that entail endorsements by their consumers. But are consumers' online brand endorsements a feasible marketing strategy for all brands, or do brands differ with regard to their inherent potential to acquire online endorsements from their consumers?

\* Corresponding author.

E-mail addresses: [S.F.Bernritter@uva.nl](mailto:S.F.Bernritter@uva.nl) (S.F. Bernritter), [P.Verlegh@vu.nl](mailto:P.Verlegh@vu.nl) (P.W.J. Verlegh), [E.G.Smit@uva.nl](mailto:E.G.Smit@uva.nl) (E.G. Smit).

To answer this question, we focus on brand-related drivers of consumers' tendency to endorse brands on social media. A considerable body of research is dedicated to the examination of drivers of user behavior on social media. This research has for example examined the uses and gratifications of social media use (Calder, Malthouse, and Schaedel 2009; Muntinga, Moorman, and Smit 2011), the design features of postings (De Vries, Gensler, and Leeflang 2012), impression management (e.g., Bazarova and Choi 2014; Hancock and Dunham 2001; Wilcox and Stephen 2013), and community aspects (Bagozzi and Dholakia 2006; Morandin, Bagozzi, and Bergami 2013). Interestingly, only a few studies focus on the brand related aspects in this context. In this paper, we identify essential brand related drivers of consumers' online brand endorsements. We do this from the perspective that consumers' brand relationships are in many ways similar to interpersonal relationships (Fournier 1998; Labrecque 2014).

Consumers have a tendency to anthropomorphize brands and perceive them as somehow human-like entities that have their own motivations and intentions (Aggarwal and McGill 2007; Epley et al. 2008; Epley, Waytz, and Cacioppo 2007). This notion is also reflected in Kervyn, Fiske, and Malone's (2012) *Brands as Intentional Agents Framework* (BIAF), which states that consumers' perceptions of brands map onto two different dimensions: warmth and competence. These same two dimensions have been found to underlie people's perception of other people (Fiske et al. 2002). In our studies, we take the perspective of this framework and suggest that this brand perception is a key factor in consumers' decision-making process to endorse brands on social media. In particular, we show that warmth, and not competence, of a brand is the main driving factor in consumers' decision to endorse brands online (e.g., like them on Facebook; cf., Stokburger-Sauer, Ratneshwar, and Sen 2012). Building on the work of Aaker, Vohs, and Mogilner (2010), we show that this results in an advantage for nonprofit brands over for-profit brands, because the former are perceived as more warm (but not necessarily less competent). We extend this framework by establishing a significant impact of brand symbolism in this context. This finding emphasizes that identity signaling plays an important role in consumers' decision to like brands on Facebook.

In sum, the present research has four key contributions: First, we extend the knowledge about brand-related social media use and show which features drive consumers' intentions to endorse brands online. In doing so, we are able to answer the question to what extent brands differ with regard to their inherent potential to evoke consumers' online endorsements. This allows us to assess the feasibility of consumers' brand endorsements as a marketing strategy for different (kinds of) brands.

Second, we empirically examine the identity and brand-related drivers of consumers' decision to like and thereby endorse brands on Facebook. Although some previous work (Hollenbeck and Kaikati 2012; Wallace et al. 2014) has provided a first investigation of these drivers, our paper is the first to examine these drivers in an experimental context, and shed light on the underlying psychological processes. The study of brands as a means to signal consumers' identities in

social media acknowledges the recent call for more research on the role of identity and identity signaling in consumer research (Reed et al. 2012).

Third, we extend the BIAF in two important ways. Our research shows that, of the two key components of this framework, warmth is the one that is fundamental to consumers' brand endorsements, just like it is primary in people's judgments of other people (Fiske, Cuddy, and Glick 2007; Ybarra, Chan, and Park 2001). In addition, we show that the role of brand warmth in this process is moderated by brand symbolism. Brand symbolism can enhance the effects of warmth on consumers' intention to endorse brands on social media, especially for for-profit brands.

Fourth, we extend the work of Aaker, Vohs, and Mogilner (2010) regarding differences between nonprofit and for-profit brands, by showing that the higher level of perceived warmth of nonprofits' lowers the threshold for endorsing them on social media. In other words, consumer online endorsements are easier to obtain for nonprofit brands than for-profit brands.

The remainder of this paper is organized as follows. First, we provide the fundamental building blocks of our conceptual framework. Next, we describe six studies that test our predictions. In studies 1 and 2, we demonstrate that warmth mediates the effects of different types of brands (nonprofit vs. for-profit) on consumers' intention to endorse brands on Facebook. In study 3, we show that nonprofits' superiority in evoking consumers' online endorsements is not limited to likes of their brand pages, but is also reflected in consumers' intention to interact with branded content. We replicate the findings of the first three studies in study 4 and combine the effects of warmth with those of brand symbolism to show a process of conditional moderated mediation. In study 5, we show that these mechanisms operate when consumers publicly engage with brands on Facebook but not when they privately engage with them. This provides further support for the idea that endorsements of brands on social media serve goals related to identity signaling. In study 6, we investigate the causal effects of warmth and competence. Finally, study 7 relates consumers' perception of brands' warmth and competence to the ease of these brands to achieve endorsements by consumers and shows that warmth decreases brands' effort to acquire online brand endorsements.

## Conceptual Framework

We define consumers' online brand endorsements as online behavior that affiliates consumers with brands in ways that are public, positive, and perceived by others. Thus, liking a brand on Facebook, sharing branded content, creating consumer generated advertising (Campbell et al. 2011; Muñiz and Schau 2007; Muntinga, Moorman, and Smit 2011), or visibly connecting oneself to branded online content (Ahn and Bailenson 2011) are all examples of consumers' online brand endorsements, as they are public, positive, and perceived by others. Conversely, private forms of brand engagement, such as visiting a website or online community, or subscribing to a newsletter should not be regarded as examples of consumers' online brand endorsement as they don't meet all of these three criteria.

In the present paper, we operationalize consumers' online brand endorsements as likes of brand pages (studies 1, 2, 4, 6, and 7), liking, sharing, or positing brand information (study 5), and liking branded content (study 3) on Facebook. On Facebook, users' likes are visible in different ways. First, all likes can be found on a user's personal Facebook page (i.e., the timeline). Second, based on an algorithm, Facebook selects some of their users' likes to appear on the newsfeed of their Facebook friends. Third, the desktop version of the Facebook page includes the so-called "Ticker." The Ticker is located in the upper right corner of the Facebook desktop interface and shows information of a user's network's activity in real time. If the privacy settings of the other users allow it, a Facebook user is able to see every activity of these peers within the ticker. These activities entail — among others — comments, photos, friendships, app-activity, and likes. Fourth, many brand pages show pictures of Facebook users (with an algorithm giving preference to showing friends) who "like" their page (Naylor, Lamberton, and West 2012). Consumers' likes on Facebook are thus visible to their Facebook friends and can even be broadcasted to them.

### *Identity Signaling*

A long history of research in marketing and consumer behavior suggests that consumers use brands not only for the quality of their products and services but also because products and brands can be used to construct and express desired identities (Belk 1988; Belk 2013; Escalas and Bettman 2005; Kleine, Kleine, and Kernan 1993). In a recent qualitative study, Hollenbeck and Kaikati (2012) extended this literature to the social media domain and demonstrated that consumers deliberately use brands on Facebook to manage and create their self-identities (see also Belk 2013). They suggested that consumers realize that online linkages with brands on social network sites can be a more powerful means of identity signaling than offline brand identifiers. Their finding was confirmed in a recent survey, which showed that self-expression was one of the key motivations for "liking" a brand on Facebook. In fact, "self-expressives" were the largest of four segments identified by the authors (Wallace et al. 2014). It is important to recognize that identities are dynamic, malleable and highly sensitive to situational cues (Aaker 1999; Oyserman 2009). While a certain identity can be triggered in one situation, this can change in a different situation. Liking brands on Facebook gives consumers a means to adapt to this shift in salient identities: "liking" a brand is done within a second, and the same goes for "unliking" it. Consumers can thus manage their identities in real time and adapt them, if necessary, to changed situations.

### *Warmth & Competence*

In line with the idea that people's relationships with brands are similar to their relationships with people (e.g., Fournier 1998), the recently introduced BIAF (Kervyn, Fiske, and Malone 2012) suggests that much of consumers' relationships with brands can be explained by the same main dimensions as their perceptions of people: warmth and competence, two universal dimensions of social cognition, which are able to explain both interpersonal and intergroup relationships (Becker

and Asbrock 2012; Cuddy, Glick, and Beninger 2011). The BIAF is a framework for describing and examining brand perception that has been supported and discussed in a variety of studies in marketing and consumer behavior (Aaker, Garbinsky, and Vohs 2012; Bennett and Hill 2012; Kervyn et al. 2014; Rauschnabel and Ahuvia 2014).

A further study of the literature uncovers several lines of support for the notion that the effects of warmth and competence on consumers' intention to endorse brands on social media might differ. First, people's perceptions of the warmth of others are considered to be more important in affective and behavioral responses (Fiske, Cuddy, and Glick 2007), and perceptions of warmth are almost always of great interest to others and universally positively evaluated (Cuddy, Fiske, and Glick 2008; Fiske et al. 2002). They are also primary to other influences. Before judging the competence of others, consumers judge their warmth (Ybarra, Chan, and Park 2001). Second, broader global concepts, such as warmth, are more likely to be cued than narrow and specific ones, such as competence (Oyserman 2009). It is thus more likely that warmth is an appropriate, congruent and important signal of identity than is the case for competence. Third, endorsing a nonprofit brand communicates warmth and dedication to others (Aaker, Vohs, and Mogilner 2010; Fiske, Cuddy, and Glick 2007). Consumers who endorse nonprofit brands signal that they care about others and are wealthy enough to do so, which provides them with social status (cf., Miller 2000). In line with this, research on purchase of pro-environmental products demonstrated that people are more likely to buy these products if others are able to observe them (Griskevicius, Tybur, and Van den Bergh 2010), presumably because of the status benefits that these products provide. In private surroundings, however, the effects changed direction, and people chose conventional products more often.

First evidence that the dimensions of warmth and competence also map onto consumers' identification with brands was provided by Stokburger-Sauer, Ratneshwar, and Sen (2012). Their survey study among a panel of German household consumers demonstrated that consumers' perception of brand warmth is positively correlated with consumer-brand identification. In this context they also demonstrated that consumer-brand identification had a positive effect on brand loyalty and advocacy. They suggest that consumers are more likely to identify with brands that they perceive to be highly warm, due to the inherently affective nature of consumers' identity construction and maintenance.

This notion finds support in literature that investigates the human-like characteristics of brands as, for instance, brand anthropomorphism. Brand anthropomorphism refers to consumers' tendency to attribute human-like features such as intentions, emotions, motivations, and mind to brands (Aggarwal and McGill 2007; Epley, Waytz, and Cacioppo 2007). This attribution of human-like features to brands is generally positively associated with enhancement of consumers' positive product evaluations (Delbaere, McQuarrie, and Phillips 2011; Epley et al. 2008) and an increase in brand love (Rauschnabel and Ahuvia 2014). Brand anthropomorphism, however, can also have negative consequences. In case of product wrongdoings, for instance, Puzakova, Kwak, and Rocereto (2013) demonstrated that

anthropomorphization of brands can negatively affect consumers' brand attitude.

Consumers thus perceive and treat brands somehow human-like (Aggarwal and McGill 2007; Epley, Waytz, and Cacioppo 2007; Epley et al. 2008). From this perspective, endorsing a brand online by means of clicking a like-button of a brand page could be perceived as a similar task as “friending” another person — although the “friend” in this case cannot refuse this request. Building on the above, it seems plausible that people would be more likely to introduce a person to their circle of friends, when that person is warm and lovable (cf., Sherman, Lansford, and Volling 2006). As the construct of warmth is related to positive and collaborative intentions (Fiske et al. 2002), we furthermore suggest that consumers are more likely to support a brand that has these characteristics. We therefore suggest that warmth is one of the main drivers of consumers' online endorsements, whereas competence should play a minor role in consumers' intention to endorse brands on social media, such as Facebook. This notion is supported by the idea that Facebook is considered a social network site that primarily focuses on personal self-promotion rather than on professional self-promotion (Van Dijck 2013) and therefore that warmth (being nice) might be more important than competence (being good at something).

The above-discussed distinctions between warmth and competence are likely to have important bearings on consumers' intentions to endorse nonprofit versus for-profit brands. Earlier research by Aaker, Vohs, and Mogilner (2010) had shown that nonprofit brands elicit different types of associations than for-profit brands. Whereas perceptions of for-profit brands primarily map onto the competence dimension, perceptions of nonprofit brands generally map onto the warmth dimension. Taken together, these studies suggest that for consumers who seek to express their (desired) identity, liking nonprofit brands would be an easy and most effective way to make a favorable (first) impression. For any or all of these reasons, the social benefits of liking nonprofit brands will almost always be higher than the social benefits of liking for-profit brands. We therefore hypothesize the following:

**H1.** Consumers will be more likely to endorse nonprofit brands than for-profit brands on social media.

**H2a.** Perceptions of (a) warmth and (b) competence of a brand will have a positive effect on consumers' intention to endorse the brand on social media, but the effect of warmth is stronger than that of competence.

**H2b.** The perceived warmth of a brand will mediate the effect of type of the brand (nonprofit vs. for-profit) on consumers' intention to endorse a brand on social media.

### *Brand Symbolism*

Importantly, the literature on identity signaling suggests that not all brands are equally suited to serve as identity signals. Escalas and Bettman (2005) demonstrated that brands differ in symbolism (i.e., a brand's ability “...to communicate something about the person who is using it;” Escalas and Bettman 2005, p. 380). This difference is essential in the construction of self-identity

via the usage of brands. They found that the effects of brand associations on self-brand connections were considerably stronger when a brand was highly symbolic, that is, when people perceived a brand to communicate something about the person who uses it. Similarly, White and Dahl (2006) showed that consumers tend to avoid products and brands that associate them with dissociative reference groups (cf., Berger and Heath 2007). The dissociative reference groups most strongly had a negative effect on self-brand connections, consumer evaluations and product choices. These negative effects were stronger for brands that were perceived to be relatively more symbolic (White and Dahl 2007).

Moreover, an emerging body of research indicates that people use brands to emphasize certain aspects of their identity and downplay other aspects (e.g., Aaker 1999). In a qualitative study, Hollenbeck and Kaikati (2012) recently applied this framework in an online setting and demonstrated that Facebook users use brands as subtle cues to express themselves. Based on this, one might assume that consumers who strive to express their identity by endorsing brands would not endorse a brand if it were, in their opinion, not symbolizing their identity. More specifically, we suggest that brand symbolism can enforce the effects of warmth on consumers' intention to endorse. Thus, if consumers want to signal their warmth to others by means of endorsing brands, they would choose brands, which have the symbolic value to communicate this warmth to others. In other words, we predict an interaction between perceived warmth and brand symbolism on consumers' intention to endorse brands on social media. In particular, we formulate the following hypothesis:

**H3.** The effect of warmth on consumers' intention to endorse brands on social media will be stronger for highly symbolic brands than for brands with low symbolic value.

These hypotheses are summarized in Fig. 1.

### **Overview of Studies**

To test our hypotheses, we conducted six experiments and examined one set of secondary data. In studies 1, 2, and 3, we demonstrated the mediating role of warmth on the effects of different types of brands (nonprofit vs. for-profit) on consumers' intention to endorse brands on Facebook and their interaction with branded social media content. In studies 4 and 5, we investigated the added value of brand symbolism in this context and showed that the symbolism of a brand moderates the effects of warmth on consumers' intention to endorse for-profit brands, but not nonprofit brands. We replicated the findings of the first three studies in study 4 and combined the effects of warmth with those of symbolism to demonstrate the robustness of our proposed model that shows the mentioned moderated mediation. In study 5, we manipulated brand symbolism and support the findings of study 4 by showing that brand symbolism has only an effect on consumers' intention to endorse for-profit brands and not nonprofit brands. Moreover, in study 5, we provide further support for the role of identity signaling in the described processes, when we show that the effects of warmth occur for online endorsements, but not for non-public online engagement with brands. In study 6, we manipulated warmth and competence

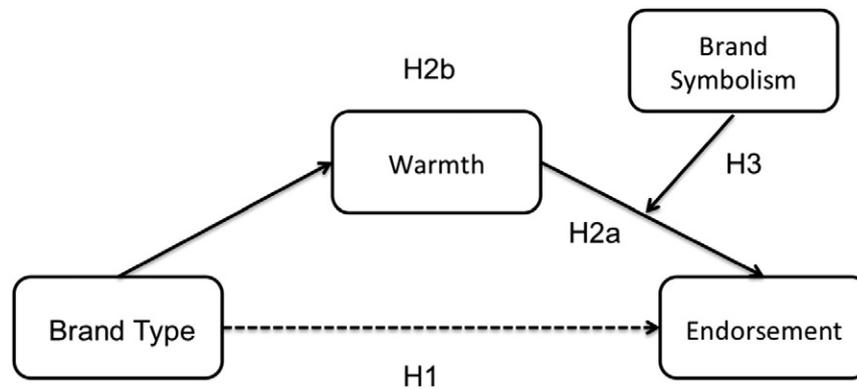


Fig. 1. Proposed moderated mediation model.

to rule out causality concerns. To examine the validity of our findings, we used real brands (studies 1, 3, 4, 5, and 7), fictitious ones (study 2), and unfamiliar brands (study 6). Four of the present studies were conducted using student samples. To increase the generalizability of our findings, we conducted studies 4 and 6 with general consumer samples and tested findings with secondary data on actual Facebook likes in study 7.

## Study 1: Warmth and Real Brands

### Method

#### Participants & Procedure

One hundred forty-five students of a Dutch university ( $M_{\text{age}} = 21.8$ ; 78.1% female) participated and were given financial compensation or partial course credit. Only Facebook users were allowed to participate. The participants were randomly assigned to one of the two conditions of a single-factor between-subjects experimental design with two levels (nonprofit vs. for-profit).

At the beginning of the online experiment, participants first answered demographic questions. Next, they were told that the subsequent task of the experiment would be to evaluate some brands with regard to several characteristics. The experiment consisted of four blocks per condition (i.e., one block per brand). Each block started with the logo of the respective brand and was followed by the instruction: “In this part of the experiment, we will ask you some questions about brand X.” Participants then answered questions about their perception of the brand’s warmth and competence and subsequently indicated their intention to like the brand on Facebook. The four blocks per condition were presented in random order.

#### Measurements

**Warmth & Competence.** Participants’ perceptions of the brands’ warmth and competence were measured by multi-item scales, measured on 7-point Likert scales, as used by (Aaker, Vohs, and Mogilner 2010; see also, Judd et al. 2005). The scale for warmth contained three items: warmth, kindness and generosity (Cronbach’s  $\alpha > .91$  for all brands). Competence was measured by another set of three items: competence,

effectiveness, and efficiency (Cronbach’s  $\alpha > .89$  for all brands; see Appendix A for an overview of all items).

**Intention to Endorse.** We used four nonprofit and four for-profit brands in this experiment. The for-profit brands used in this experiment were: *Rabobank*, *Albert Heijn* (large Dutch supermarket chain), *Calvé*, and *Philips*. We chose these brands to cover four important product domains: finances, groceries, food and technology. *World Wide Fund for Nature (WWF)*, *KiKa* (a local charity supporting children with cancer), the *Dutch Heart Foundation*, and the *Dutch Animal Protection* served as nonprofit brands. These nonprofit brands were chosen to cover the domains of nature, children, health and animals. The brands were chosen based on a list of the 100 strongest brands in The Netherlands (BrandAsset Consult 2013) and the top ten charities in The Netherlands (Hendrik Beerda Brand Consultancy 2013).<sup>1</sup> Instead of limiting our results by only focusing on one brand per analysis, and being susceptible to effects of individual brand characteristics, we were aiming for a measurement of consumers’ overall online brand endorsements. Therefore, we calculated the average of consumers’ scores on their intention to like the different brands within one condition as dependent variable in the subsequent analyses. Cronbach’s  $\alpha$  for this measure was high (nonprofits = .81; for-profits = .85). Participants indicated on a 101-point slider scale (0 to 100%) their intention to like each of their condition’s brands on Facebook.

### Results

Supporting Hypothesis 1, consumers had a stronger intention to like the pages of the nonprofit brands ( $M = 34.35$ ;  $SD = 22.40$ ) than those of the for-profit brands ( $M = 22.32$ ;  $SD = 20.83$ ),  $t(1, 144) = 3.36$ ,  $p = .001$ . In line with earlier research (Aaker, Vohs, and Mogilner 2010), nonprofit brands were perceived to be warmer ( $M = 5.17$ ;  $SD = 0.97$ ) than for-profit brands ( $M = 4.34$ ;  $SD = 1.02$ ),  $t(1, 144) = 5.03$ ,  $p < .001$ .

#### Mediation Analysis

We performed 5,000 bootstrap resamples using Hayes’ (2013) SPSS macro PROCESS to test the indirect paths (i.e.,

<sup>1</sup> Note: all real brands used in this paper are chosen based on these rankings.

the paths from brand type to intention to like via warmth and competence). Brand type had a positive effect on perceived warmth ( $B = 0.42$ , 95% BCBCI [0.25, 0.58]), meaning that nonprofits were perceived to be warmer than for-profits, and perceived warmth increased the intention to like a brand on Facebook ( $B = 6.32$ , 95% BCBCI [0.23, 12.42]; **Hypothesis 2a**). Brand type had no effect on perceived competence ( $B = 0.91$ , 95% BCBCI [-0.06, 0.25]), and competence did not affect consumers' intention to like a brand on Facebook ( $B = 4.09$ , 95% BCBCI [-2.54, 10.72]). The direct effect of brand type on intention to like was not significant ( $B = 3.02$ , 95% BCBCI [-0.78, 6.81]). The effect of brand type on intention to like was thus, as suggested in **Hypothesis 2b**, fully mediated by brand warmth (indirect effect:  $B = 2.63$ , 95% BCBCI [0.57, 5.58]).

### Discussion

**Hypotheses 1, 2a and 2b** are supported by the results of study 1. Nonprofit brands are perceived to be warmer than for-profit brands, and the warmth of a brand has a positive effect on consumers' intention to like a brand on Facebook. The effect of brand type on the intention to like is fully mediated by warmth of the brand. Interestingly, and contrary to earlier research (Aaker, Vohs, and Mogilner 2010), consumers did not perceive for-profit brands as more competent than nonprofit brands. We will return to this point in our general discussion. Moreover, the results indicated that the competence of a brand does not play a significant role in consumers' intention to like brands on Facebook.

One might argue that the use of existing brands might introduce confounds due to consumers' prior experience with and attitudes toward these brands. Therefore, in study 2, we replicate the first experiment using fictitious brands.

### Study 2: Warmth and Fictitious Brands

#### Method

##### Participants & Procedure

One hundred forty-seven students of a Dutch university ( $M_{\text{age}} = 21.5$ ; 83% female) who did not participate in any of the other studies participated for financial compensation or partial course credit and were randomly assigned to one of the two conditions of the single-factor between-subjects design with two levels (nonprofit vs. for-profit). We used a fictitious brand that was described, dependent on the condition, as either a for-profit brand or a nonprofit brand. We used a fictitious bike manufacturer that was described as identical in both conditions, except the for-profit brand's bikes were sold at the local market, whereas the nonprofit organization manufactured bikes that were donated to third-world schools. The rest of the procedure was identical to that of experiment 1.

#### Results

In line with **Hypothesis 1**, intention to like the brand on Facebook was higher for the nonprofit ( $M = 23.42$ ;  $SD = 23.17$ ) than for the for-profit brand ( $M = 13.52$ ;  $SD = 16.78$ ),  $t(1,$

145) = 2.98,  $p = .003$ . Supporting **Hypothesis 2a**, the nonprofit was also perceived as warmer ( $M = 5.16$ ;  $SD = 1.22$ ) than the for-profit ( $M = 4.16$ ;  $SD = 0.96$ ),  $t(1, 145) = 5.54$ ,  $p < .001$ .

#### Mediation Analysis

In a mediation analysis that uses Hayes' (2013) PROCESS SPSS macro with a number of 5,000 bootstrap resamples, we tested the indirect paths (i.e., the paths from brand type to intention to like via warmth and competence). Brand type had a positive effect on warmth ( $B = 0.50$ , 95% BCBCI [0.32, 0.68]), and warmth, as suggested in **Hypothesis 2a**, increased the intention to like a brand on Facebook ( $B = 4.35$ , 95% BCBCI [0.74, 7.97]). Again, brand type had no effect on perceived competence ( $B = 0.76$ , 95% BCBCI [-0.09, 0.25]) and did not affect consumers' intention to like brands on Facebook ( $B = 1.99$ , 95% BCBCI [-1.79, 5.77]). The direct effect of brand type on intention to like was not significant ( $B = 2.62$ , 95% BCBCI [-0.93, 6.18]), which demonstrates the full mediation of the effect of brand type on intention to like by warmth of the brand (indirect effect:  $B = 2.17$ , 95% BCBCI [0.46, 4.60]; **Hypothesis 2b**).

### Discussion

The results of study 2 replicate the findings of study 1 and, supporting **Hypotheses 2a and 2b**, again demonstrate that warmth is a key component in consumers' decision to like brands on Facebook, which fully mediates the effect of brand type. These findings demonstrate again that perceptions of competence do not affect consumers' intention to endorse brands on social media. While endorsing a brand by liking its brand page normally is a onetime act, actively endorsing the brand can of course continue by interacting with the branded content of the endorsed brand on social media. Consumers can, for instance, like or share posts of brands on social media. From a practical point of view, it is important to investigate whether maintaining active online endorsements by consumers can be achieved in the same way as the first unique online endorsement of the brand. In study 3, we therefore explore whether the mechanisms we showed in the first two studies are also at play in consumers' visible interactions with branded social media content. We did this by exposing consumers to a post on Facebook and manipulating the sender (i.e., nonprofit vs. for-profit brands).

### Study 3: Branded Social Media Content

#### Method

##### Participants & Procedure

Sixty-seven students of a Dutch university ( $M_{\text{age}} = 23.6$ ; 74.6% female) participated for financial compensation or partial course credit. They were randomly assigned to one of the two conditions of the single factor between subjects design with two levels (nonprofit vs. for-profit). We designed two versions of a common posting of a brand on Facebook, which stated: "BRAND wishes you a warm spring". Below this text a picture of a little girl that was running through a field of flowers was shown. The sender of this posting was either a nonprofit brand (i.e., *KiKa*, see study

1), or a for-profit brand (*Rabobank*). Participants were first exposed to this posting and were afterwards asked how warm and competent they perceived the brand to be and how likely they were to like this posting on Facebook. The used scales were the same as in the previous studies.

### Results

To test whether our findings do also apply for consumers' endorsement of branded online content, we conducted the same mediation analysis as in the first two studies using Hayes' (2013) PROCESS macro for SPSS with a number of 5,000 bootstrap resamples. This analysis tested the indirect paths from brand type to intention to endorse the branded social media content via warmth and competence. Replicating our earlier results, this analysis revealed an indirect positive effect of brand type on consumers' intention to like the branded Facebook post via warmth (indirect effect = 6.63, 95% BCBCI [0.67, 16.84]; **Hypothesis 2b**). Again, there was no effect of competence (indirect effect = 0.13, 95% BCBCI [-5.77, 6.76]). The direct effect of brand type was not significant ( $B = 8.13$ , 95% BCBCI [-4.14, 20.39]).

### Discussion

This experiment demonstrates that the patterns that we found in the first two studies are not only applicable to consumers' initial act of endorsing a brand online, but that the same rules apply for active, continuing interaction with branded content on social media. Warmth is thus not only a strong predictor of onetime endorsement, but also for ongoing endorsement by interacting with branded content. Also in this case, perceived competence played no role in consumers' decision to interact with the branded social media content. After demonstrating the extended range of our framework, in study 4 we are coming back to our initial dependent variable and are exploring the role that brand symbolism is playing in the context of consumers' online brand endorsements.

## Study 4: Warmth and Brand Symbolism

### Method

#### Participants & Procedure

A general sample of the Dutch consumer population was obtained from a commercial market research agency ( $N = 290$ ;  $M_{\text{age}} = 43.9$ ; 50% female). Respondents participated for financial compensation. Participants were screened for age, gender, and level of education to ensure that the sample accurately reflected the Dutch adult population. The procedure was identical to that of experiments 1 and 2: participants were randomly assigned to one of the conditions of a single-factor between-subjects design with two levels (nonprofit vs. for-profit).

This time, however, both warmth and symbolism were measured. The extent to which brands were symbolic was measured with two items on 7-point Likert scales (cf., Escalas and Bettman 2005): "how much does this brand symbolize what kind of person uses it?" (not at all symbolic/highly symbolic); and "to what extent does this brand communicate something specific

about the person who uses it?" (does not communicate a lot/communicates a lot). These two items were averaged for further analyses (Cronbach's  $\alpha > .70$  for all brands). We used the following 22 brands in the present experiment (11 for-profit and 11 nonprofit): *Coca Cola*, *Conimex*, *Microsoft*, *Nivea*, *Hansaplast*, *Apple*, *Unox*, *Philips*, *Douwe Egberts* (coffee), *Rabobank*, and *Albert Heijn* (for-profit brands), and *Doctors without Borders*, *The Dutch Cancer Foundation*, *WWF*, *The Dutch Heart Foundation*, *KiKa*, *The Red Cross*, *CliniClowns*, *Ronald McDonald Children Fund*, *UNICEF*, *The Dutch Animal Protection*, and *Stichting De Opkikker* (a foundation to brighten up the life of chronically diseased children).

### Results

An ANOVA on intention to like with warmth, competence, brand symbolism, brand type, and their interactions as independent variables revealed a significant main effect of brand type,  $F(1, 284) = 9.36$ ,  $p = .002$ , the intention to like nonprofit brands was higher ( $M = 49.59$ ;  $SD = 28.58$ ) than the intention to like for-profit brands ( $M = 45.64$ ;  $SD = 24.85$ ). Moreover, it revealed a warmth  $\times$  brand symbolism interaction  $F(1, 284) = 5.23$ ,  $p = .023$ , a brand type  $\times$  brand symbolism interaction  $F(1, 284) = 10.55$ ,  $p = .001$ , and a brand type  $\times$  brand symbolism  $\times$  warmth three-way interaction  $F(1, 284) = 8.17$ ,  $p = .005$ . We also controlled for consumers' brand attitude, which had no significant effect on their intention to endorse  $F(1, 284) = 3.03$ ,  $p > .05$ .

#### Moderated Mediation Analysis

To test our hypothesis, we conducted a moderated mediation analysis using Hayes' (2013) PROCESS SPSS macro with of 5,000 bootstrap resamples. Brand type had a positive effect on warmth ( $B = 0.14$ , 95% BCBCI [0.14, 0.26]). Moreover, warmth increased consumers' intention to like brands on Facebook ( $B = 8.76$ , 95% BCBCI [0.64, 16.87]). The direct path from brand type to the intention to like was not significant ( $B = -1.14$ , 95% BCBCI [-3.71, 1.44]), which demonstrates a full mediation by warmth (**Hypothesis 2b**). Again, competence was not affected by brand type ( $B = 0.36$ , 95% BCBCI [-0.08, 1.59]) and did not have an effect on consumers' intention to like brands on Facebook ( $B = -1.07$ , 95% BCBCI [-9.26, 7.12]). Demonstrating the moderating role of brand symbolism on the effect of warmth on consumers' intention to endorse, we found a warmth  $\times$  brand symbolism interaction effect ( $B = 12.88$ , 95% BCBCI [0.78, 24.98]). In line with **Hypothesis 3**, warmth had a smaller effect on the intention to endorse for low symbolic brands (indirect effect = -0.75, boot SE = 0.49, 95% BCBCI [0.13, 2.11]) and greater effect for brands, which are high in symbolic value (indirect effect = 0.86, boot SE = 0.74, 95% BCBCI [0.20, 3.10]). To get more insight into the workings and limits of brand symbolism for nonprofit and for-profit brands, we took a closer look at the warmth  $\times$  brand symbolism interaction and tested its simple effects for both nonprofit and for-profit brands. The warmth  $\times$  brand symbolism interaction was not significant for nonprofit brands ( $B = 1.64$ , 95% BCBCI [-1.09, 4.37]), but reached statistical significance for for-profit brands

( $B = 3.25$ , 95% BCBCI [0.09, 6.40]). The effect of warmth on consumers' intention to endorse for-profit brands was smaller if the brands were perceived to be low in symbolic value ( $-1SD$  from the mean; conditional effect = 9.20, boot SE = 2.41, 95% BCBCI [4.43, 13.97]), compared to brands that were perceived to be highly symbolic ( $+1SD$  from the mean; conditional effect = 14.40, boot SE = 2.49, 95% BCBCI [9.46, 19.35]). **Hypothesis 3** is thus partly supported.

### Discussion

The present results replicate findings of the first three studies and expand them by showing a conditional moderated mediation effect, whereby the effect of brand type on intention to endorse for-profit brands is mediated by warmth, and this mediation is in turn moderated by brand symbolism. Supporting the notion that a brand should be capable to signal one's identity to evoke consumers' endorsements, we show that the basic effect of warmth on consumers' intention to endorse for-profit brands increases when a brand is highly symbolic and decreases if it is low in symbolic value. An explanation for the finding that brand symbolism moderates the effect of warmth on consumers' intention to endorse for-profit brands but not to endorse nonprofit brands might be that the perspective of warmth as a universal positive virtue might be too influential on consumers' perception of nonprofit brands. As warmth and brand symbolism have been measured and not manipulated in the previous studies, we are not able to show exactly how they affect the effect of brand type on consumers' intention to endorse. To address this potential shortcoming, in study 5, we manipulated warmth and symbolism, which enabled us to achieve a deeper understanding of the interplay between them. In particular, we manipulated brand symbolism by exposing people to different groups of brands (high vs. low symbolic value) and used brand type (nonprofit vs. for-profit) as a proxy for the brand warmth manipulation. The latter is based on the consistent observation from the previous studies that nonprofit brands are perceived to be warmer than for-profit brands. In line with the findings from study 4, we expected that a high level of brand symbolism would positively affect consumers' public online affiliations on social media with for-profit brands but not with nonprofit brands. Our model assumes that consumers care about the warmth and competence of brands because their affiliations with these brands are visible to others. Therefore, in study 5, we also tested whether the nature of the affiliation with a brand (i.e., public vs. private) affected intention to endorse.

## Study 5: Visibility and Brand Symbolism

### Method

#### Pretest

Before the experiment, we conducted a pre-test on brand symbolism for ten for-profit brands and ten nonprofit brands. These brands were chosen based on a list of the 100 strongest brands in The Netherlands (BrandAsset Consult 2013) and the top ten charities in The Netherlands (Hendrik Beerda Brand

Consultancy 2013). In order to ascertain comparability of the brands, we excluded brands that do not produce physical products (e.g., YouTube) from the analyses, as well as brands that produce addictive substances such as alcohol or tobacco. 40 participants rated the extent to which the 20 brands were symbolic on the brand symbolism scale (Escalas and Bettman 2005), which we also used in study 4.

Based on the results of this pre-test, we chose the two most symbolic and the two least symbolic for-profit/nonprofit brands to serve as the high/low symbolism manipulation in the actual experiment: *Apple* and *Nivea* (high symbolic for-profit brands), *Philips* and *Hansaplast* (low symbolic for-profit brands), *World Wildlife Fund (WWF)* and *KiKa* (a local fund supporting children with cancer; high symbolic nonprofit brands), and *Ronald McDonald Children Fund* and *The Red Cross* (low symbolic nonprofit brands). T-tests revealed that the high symbolic for-profit brands ( $M = 3.39$ ;  $SD = 0.79$ ) differed significantly in symbolism from the low symbolic for-profit brands ( $M = 2.03$ ;  $SD = 0.73$ ),  $t(39) = 11.98$ ,  $p < .001$ . The same pattern was found for high symbolic ( $M = 3.58$ ;  $SD = 0.82$ ) versus low symbolic nonprofit brands ( $M = 2.97$ ;  $SD = 0.78$ ),  $t(39) = 5.66$ ,  $p < .001$ .

### Participants and Design

Dutch student participants ( $N = 209$ ;  $M_{age} = 20.9$ ; 80.9% female) took part in exchange for course credits or financial compensation and were randomly assigned to one of the two conditions of the 2 (brand type: for-profit brands vs. nonprofit brands; between-subjects)  $\times$  2 (nature of the affiliation: public vs. private; within-subjects)  $\times$  2 (symbolism: high vs. low; within-subjects) mixed experimental design. The dependent variable was how likely participants were to affiliate themselves with a brand.

### Measures and Procedure

At the beginning of the online experiment, participants were asked for some demographic data. Next, they were randomly exposed to the four brands assigned to their experimental condition and had to answer some questions about these brands. Brands were presented in random order. Depending on the condition that the participants were assigned to, they had to answer questions about either for-profit brands or nonprofit brands. First, they were asked to indicate on 7-point Likert scales how likely they were to engage with a for-profit brand/nonprofit brand in different ways. For each brand, participants answered six questions: three items that represented public engagement with the brand and three that represented private forms of engagement with these brands. Participants answered these questions for all four brands within their experimental condition. These questions were inspired by Muntinga, Moorman, and Smit (2011) COBRA (consumers' online brand-related activities) typology, in which different behavior types are mapped onto a continuum of level of brand-related activeness, ranging from consuming (private) to contributing and creating (public). The first three items were questions about public online engagement with brands on Facebook and covered "liking," "sharing" and "appearance of a brand on your own timeline" (see Appendix A). The scores on these items represent the concept of public

engagement with brands and were aggregated (mean scores) for further analyses. We chose to include other ways of public online brand endorsements on Facebook to demonstrate that the found patterns are not restricted to likes on Facebook. The next three items aimed to measure consumers' private online engagement with brands and consisted of three questions about how likely people were to subscribe to a newsletter, to request an information package, and to visit the website of the brand.

### Results

A repeated measures mixed ANOVA showed that consumers overall had higher intentions to endorse nonprofit brands ( $M = 5.32$ ;  $SE = 0.20$ ) than for-profit brands ( $M = 4.19$ ;  $SE = 0.20$ ),  $F(1, 200) = 16.70$ ,  $p < .001$ ,  $\eta_p^2 = .077$ . Moreover, this analysis revealed a significant main effect of brand symbolism, which demonstrates that online engagement with high symbolic value brands ( $M = 5.40$ ;  $SD = 2.32$ ) was higher than with low symbolic value brands ( $M = 4.11$ ;  $SD = 2.26$ ),  $F(1, 200) = 115.40$ ,  $p < .001$ ,  $\eta_p^2 = .366$ . Supporting hypothesis 4, this effect was moderated by the type of the brand,  $F(1, 200) = 57.53$ ,  $p < .001$ ,  $\eta_p^2 = .223$ . Symbolism affected only consumers' intention to endorse a for-profit brand and not their intention to endorse a nonprofit brand (Fig. 2). For-profit brands were more likely to be endorsed when they were of high-symbolic ( $M = 5.23$ ;  $SD = 2.20$ ) rather than low-symbolic value ( $M = 3.10$ ;  $SD = 1.20$ ),  $t(102) = 11.17$ ,  $p < .001$ . In line with our findings from study 4, nonprofit brands, which were considered highly symbolic, were not more likely to be endorsed ( $M = 5.50$ ;  $SD = 2.43$ ) than low symbolic nonprofit brands ( $M = 5.11$ ;  $SD = 2.59$ ),  $t(105) = 2.55$ ,  $p > .01$ .

In addition, the same analysis revealed a significant interaction between the type of the brand and the public (vs. private) nature of the engagement,  $F(1, 200) = 23.17$ ,  $p < .001$ ,  $\eta_p^2 = .104$  (Fig. 3). Post hoc contrasts showed that participants' intention to engage with brands in public were higher for nonprofit brands ( $M = 5.70$ ;  $SD = 2.72$ ) than for for-profit brands ( $M = 3.98$ ;  $SD = 1.53$ ),  $F(1, 200) = 30.30$ ,  $p < .001$ ,  $\eta_p^2 = .132$ . With regard to private engagement with brands, however, there was no difference between participants' intention to endorse nonprofit ( $M = 4.96$ ;  $SD = 2.40$ ) and for-profit brands ( $M = 4.40$ ;  $SD = 1.76$ ),  $F(1, 200) = 3.69$ ,  $p = .056$ ,  $\eta_p^2 = .018$ . The three-way interaction between brand type, brand symbolism and the nature of the affiliation was not significant  $F(1, 200) = 2.31$ ,  $p = .13$ ,  $\eta_p^2 = .011$ .

### Discussion

The results of study 5 provide further support for the findings of study 4: Higher levels of brand symbolism enhanced consumers' intention to publicly engage with for-profit brands but not nonprofit brands. Moreover, we demonstrated that whether engagement with a brand is public or private, depending on the type of the brand, affects how likely consumers are to publicly affiliate themselves with a brand. These findings provide further support for earlier findings that demonstrated that consumers tend to show socially more desirable (purchase)

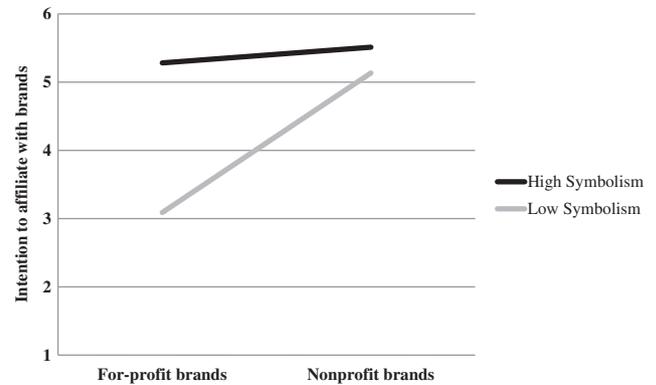


Fig. 2. Intention to affiliate with a brand as a function of the type of the brand and level of symbolism.

behavior in public, whereas the tendency to behave in this manner decreases when people expect that their behavior is not observable (cf., Griskevicius, Tybur, and Van den Bergh 2010).

Our finding that brand symbolism does not affect consumers' intention to publicly affiliate themselves with nonprofit brands might indicate that because nonprofit brands are generally perceived as warm and are universally evaluated as positive (Cuddy, Fiske, and Glick 2008; Fiske et al. 2002), it might be enough for consumers to publicly affiliate with them. Finally, by underlining and testing the public vs. private distinction in consumers' endorsements, we showed that liking and engaging with brands on Facebook goes beyond purely informational motivations.

Until now, we did not directly manipulate warmth and competence. In our next study, we address this shortcoming and aim to investigate the causal roles of warmth and competence by means of manipulating them.

### Study 6: The Causal Roles of Warmth and Competence

#### Method

#### Participants and Design

We recruited 454 U.S. citizens via Amazon's Mechanical Turk (MTurk). Fifty-four participants were excluded from the

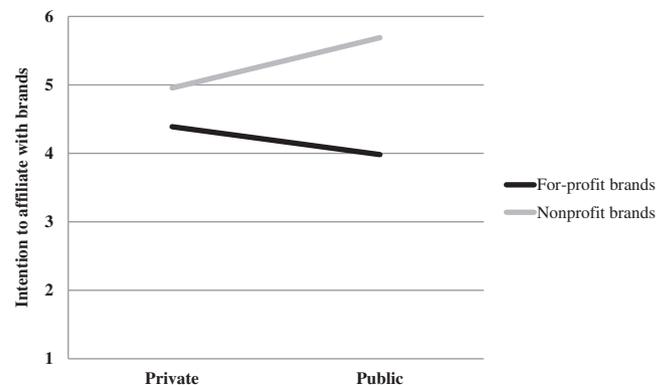


Fig. 3. Intention to affiliate with a brand as function of the type of the brand and being public with the affiliation.

analyses since they were not Facebook users. Another 52 participants had to be excluded from the analyses because they did not pass an attention check, which was designed to assess whether participants would read the instructions. The remaining 348 participants (49.4% female;  $M_{\text{age}} = 34.4$ ,  $SD_{\text{age}} = 10.27$ ) were randomly assigned to one of the four conditions of a 2 (warmth: high vs. low)  $\times$  2 (competence: high vs. low) between subjects design with intention to endorse as dependent variable.

#### Measures and Procedure

At the beginning of the experiment, participants were told that they had the task to rate a new bike brand that would be introduced in the U.S. soon. We used the small Dutch bike brand Cortina, which does not operate in markets outside of The Netherlands, Belgium, and Germany, in order to make sure that our respondents would not be familiar with the brand and would not have preexisting attitudes toward this brand. As a first step, participants were asked to read a brief description of the brand. The first part of this description was the same across all experimental conditions and was part of the official mission statement of the brand. The second part contained the actual manipulations of warmth and competence. In order to manipulate these two constructs, the description continued with a review-based summary of other consumers' opinions about the brand. This summary exactly reflected the items of the warmth and competence scales, which we used in all prior studies (cf., Aaker, Vohs, and Mogilner 2010). In the high warmth, low competence condition, for instance, the description said: "In their reviews about Cortina, customers in general describe Cortina to be warm, friendly, and generous. But they also indicate that there is room for improvement in the domains of efficiency, competence, and effectiveness." After reading this description, participants were asked to indicate their intention to endorse the brand by means of liking it on Facebook by the same 101-point slider as in previous studies.

#### Results

A regression analysis with warmth, competence and their interaction as predictors revealed a main effect of warmth  $t(344) = 2.33$ ,  $\beta = 0.124$ ,  $p = .020$ . Warmth had thus a positive effect on consumers' intention to like the brand on Facebook. The main effect of competence ( $t(344) = 1.92$ ,  $\beta = 0.102$ ,  $p > .05$ ) and the interaction between warmth and competence ( $t(344) = 1.02$ ,  $\beta = 0.054$ ,  $p > .05$ ) did not reach significance.

#### Discussion

The results demonstrate the causal role of warmth in consumers' intention to endorse brands on social media. Again, a high degree of warmth increased consumers' likelihood to endorse the brand, whereas the brand's competence had no significant effect. It is noticeable that the robustness of this pattern is not affected by the fact that we used a bike brand — a brand type that one might rather associate with competence.

In the next study we aim to underscore the robustness and external validity of our finding that it is warmth and not

competence of a brand that drives consumers' online brand endorsements. We did this by means of using secondary survey data with scores on warmth and competence for 20 brands, complemented by our data from study 4 with another 20 brands, to predict the financial effort that brands need to make to get endorsed on their real Facebook pages.

### Study 7: Brands' Ease to Acquire Real Endorsements

#### Method

##### Participants

We combined data from two independent samples in this study, in order to get an as broad as possible sample of brands for our analyses. The first sample was our general consumer sample from study 4. The second was a representative sample of the U.S. population. This sample consisted of 1,000 U.S. adults ( $M_{\text{age}} = 45.9$ ; 51.2% female), which completed the online survey questionnaire via an online consumer panel (Toluna). Participants were screened for age, region, gender, race and socio-economic status to ensure that the total sample accurately reflected the U.S. adult population.

##### Measurements

Details on sample 1 can be found in the [Method](#) section of study 4 in this paper. In sample 2, we used two-item five point Likert scales ("does not describe at all," "describes extremely well") to assess the statements "is a warm brand" (warmth) and "is a competent brand," to measure consumers' perception of warmth and competence (cf., Bennett and Hill 2012). Moreover, we assessed the amount of likes of the brands in this sample by checking their Facebook pages. Finally, we acquired the revenue of the U.S. brands from Forbes.com and those of the European brands by means of their most recent official annual reports.

##### Procedure

Contrary to our previous studies, the units of analysis in this study are not participants but brands. For both samples, we calculated the mean scores of consumers' perception of warmth and competence for each brand. Sample 1 delivered these scores for 20 brands and sample 2 for 20 brands (for an overview of all brands, see [Appendix C](#)). We used these scores to predict how much effort it will cost for brands to get endorsed by their consumers. Sample 2 used a one-item five-point scale (Bennett and Hill 2012), which assessed warmth and competence and slightly differed from our three-item seven-point scales from sample 1 (see [Appendix A](#)). As the scales that we used in study 4 included the same items, for the sake of comparability, we just used these items and not the other two of the scales. The items of both samples are thus identical. Moreover, to correct for the difference in scale length, we calculated warmth and competence scores based on the percental score on the respective scales (i.e., for the seven-point scale: "warmth or competence score" \* 100/7; for the five-point scale: "warmth or competence score" \* 100/5). All these mean scores were aggregated into a new data file, which was complemented with the dependent variable. As the topic of this paper is the ease of receiving likes we used the amount of likes on

the actual Facebook pages of the brands divided by their revenue as dependent variable. Since the amount of likes and the revenue of the brands were not normally distributed, we log-transformed our dependent variable.<sup>2</sup>

By means of this calculation, we are able to control for the interference of the fact that for-profit brands in general do have a considerable higher (advertising) budget than nonprofit brands. Moreover, this approach allows us to calculate the “costs” of endorsements for the endorsed brands and provides thus a vivid estimation of brands’ effort to get endorsed by their consumers. In this way, we can answer our central question, for which types of brands consumers’ online brand endorsements are a feasible marketing strategy.

We had to exclude two brands from our analyses. First, we excluded Hansaplast because it has only a Singapore version of its Facebook page with just a few likes. Second, we identified Conimex as an extreme outlier, which differed more than 3SD from the mean and consequently excluded it from the analyses. In total, we thus had 39 brands<sup>3</sup> in our sample (Appendix B).

## Results

We regressed brand type, the warmth and competence scores of the brands and their interactions on the log-transformed likes/revenue scores. This analysis revealed significant main effects of brand type  $t(32) = 2.55$ ,  $\beta = 3.82$ ,  $p = .015$ , and warmth  $t(32) = 2.58$ ,  $\beta = 4.45$ ,  $p = .016$ . Thus nonprofit brands need to make less effort to get endorsed by consumers and the warmer a brand is perceived to be, the less effort it costs the brand to receive endorsements by consumers. In line with our earlier findings, perceived competence had no effect,  $t(32) = 0.99$ ,  $\beta = 0.97$ ,  $p = .328$ . We also found an unexpected warmth  $\times$  competence interaction effect,  $t(32) = -2.66$ ,  $\beta = -4.42$ ,  $p = .012$ , which suggests that the effect of warmth is stronger for brands that score low on competence compared to those that are perceived to be highly competent (Fig. 4).

## Discussion

These results demonstrate that it is easier for nonprofit brands to achieve online endorsements by consumers. Additionally, an increase of perceived warmth makes it easier for both types of brands to get endorsed by their consumers. Again, perceived competence of a brand played no role in this context. These findings support the notion that a brand’s potential to signal consumers’ warmth predicts the ease to achieve consumers’ online endorsements.

<sup>2</sup> Note: We log transformed the dependent variable due to the skewed distribution of the data with a huge variation (i.e., a large proportion of observations between 10,000 and 1,000,000 with outliers up to more than 93,000,000 (Coca Cola)).

<sup>3</sup> Note: Coca Cola was represented in both samples but was of course only one time included in the analyses. It makes no significant difference which of the values for Coca Cola is included in the analyses.

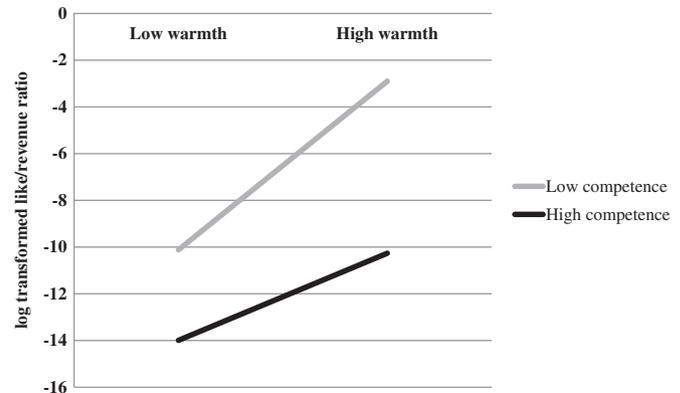


Fig. 4. Like/revenue ratio (log transformed) as a function of warmth and competence (in this figure, Low/High categories are  $-/+1$ SD respectively).

## General Discussion

The present studies examine three factors that affect consumers’ decisions to endorse brands on social media and investigate for which brands consumers’ online brand endorsements are a feasible marketing strategy. We demonstrate that warmth positively affects consumers’ intention to endorse brands on social media and that warmth fully mediates the effect of brand type (i.e., nonprofit vs. for-profit) on consumers’ intention to endorse brands and branded content on social media. This mediation is conditionally moderated by brand symbolism, which indicates that the effect of warmth is stronger for highly symbolic brands than for those low in symbolic value, but only for for-profit brands. Moreover, we show that the differences between endorsements of nonprofit and for-profit brands are conditional upon the public vs. private distinction in consumer behavior: consumers are more likely to publicly affiliate with nonprofit brands compared to for-profit brands. When it comes to private affiliations, however, there were no differences between consumers’ intention to affiliate with both types of brands. Finally, we demonstrate that brand warmth also reduces the effort for brands to get endorsed by consumers. In all of these cases, brands’ competence did not play a role.

The current literature lacks knowledge about individuals’ motives behind and the boundaries of public online affiliations with brands. With the present research, we aim to fill this gap and show some of the brand related drivers of consumers’ social media use. We demonstrate that warmth is primary and superior not only in social judgments (Ybarra, Chan, and Park 2001), but also in the expression of online brand identifiers. Moreover, we show that it is the only one of the two components (i.e., warmth) of the BIAF (Kervyn, Fiske, and Malone 2012) that drives consumers’ online brand endorsements and their interactions with branded social media content. Earlier work based on correlational data suggested that warmth is a driver of consumers’ brand identification (Stokburger-Sauer, Ratneshwar, and Sen 2012). With the present studies, we support this notion and provide the first experimental evidence for this. By comparing consumers’ online brand endorsements of both nonprofit and for-profit brands, we are able to build upon the findings of Aaker, Vohs, and Mogilner (2010). We show that it is the warmth of

nonprofit brands that leads to an increased likelihood of consumers endorsing them on social media, whereas the supposed advantage in competence of for-profit brands (Aaker, Vohs, and Mogilner 2010) plays a negligible role in this context.

#### *Limitations, Extensions and Directions for Future Research*

As with any study, the present research has some limitations. First, we investigated only online affiliations with brands and thus only online forms of consumer endorsement. It is not certain, therefore, whether our findings are generalizable to offline forms of consumers' affiliations with brands. We considered research on online consumer endorsement to be a promising first step to put forward the concept of consumer endorsement. It may be argued that, in an online domain, people are more likely to engage in identity signaling because this is relatively easy and effortless compared with most offline endorsements. We therefore propose the question about the antecedents and consequences of consumers' endorsements in general for future research.

Another possible point of concern is that we did not find differences between nonprofit and for-profit brands on the competence domain. This is contrary to earlier research (Aaker, Vohs, and Mogilner 2010), which found that for-profit brands were perceived as being more competent than nonprofit brands. A possible explanation is that our experiments were conducted in Western Europe whereas the studies of Aaker, Vohs, and Mogilner (2010) were conducted in the United States. Perhaps, U.S. consumers are more focused on competence than those in our samples. The finding that — in our samples — for-profits and nonprofits did not significantly differ in perceived competence cannot of course explain the lack of an effect of competence on consumers' intention to endorse brands on social media. It does not, therefore, affect our confidence in the robustness of the finding that consumers' online brand endorsements are primarily driven by perceptions of warmth rather than competence.

In our Introduction section, we argued that consumers' endorsements may be a powerful means to overcome the shortcomings of marketers' traditional direct persuasion attempts because consumers would not expect persuasive intents of other consumers (e.g., Bickart and Schindler 2001; Brown, Broderick, and Lee 2007). Although, for example, research on online consumer reviews supports this notion by demonstrating that consumers experience laypersons as more trustworthy (and thus more persuading) than self-proclaimed experts (Willemsen, Neijens, and Bronner 2012), nothing is currently known about the impact of consumers' endorsements on others. The effects of consumers' endorsements, however, do not conditionally need to be positive. From an observer's point of view, recent research suggests that conspicuous use of brands leads to negative brand impression among observers with a weak connection to the brand (Ferraro, Kirmani, and Matherly 2013). This effect is weaker for consumers whose link between their own identity and the brand is strong because they have the tendency to counter-argue and discount negative information about the brand (Swaminathan, Page,

and Gürhan-Canli 2007). From the perspective of the endorser herself, it is also questionable whether endorsements eventually lead to positive outcomes for the brand. Research has demonstrated that self-expressive behaviors, such as online brand endorsements, have the tendency to weaken subsequent brand preferences (Chernev, Hamilton, and Gal 2011). Other recent research showed that observable endorsements of a cause (i.e., joining a Facebook group) lead to a decreased subsequent support of that cause compared with a situation in which the joined Facebook group was not visible to others (Kristofferson, White, and Peloza 2014). Therefore, future research should examine whether consumers' endorsements indeed have a positive effect on others, as desired by marketers.

Research has shown that consumers do not have just one identity but possess multiple selves (Arnould and Thompson 2005; Leary and Allen 2011) that they express tailored to their target audience (Hollenbeck and Kaikati 2012). On Facebook, consumers are connected to multiple audiences (Hollenbeck and Kaikati 2012), which might also facilitate consumers' tendencies to express different identities. Contrary to the term "Facebook friends," a large portion of consumers' contacts on Facebook might be described as acquaintances or weak ties rather than close friends (Ellison, Steinfield, and Lampe 2007; Trusov, Bodapati, and Bucklin 2010). The notion of Facebook as an "extended social network" where a considerable amount of ties does not know the consumer that well (Boyd and Ellison 2007), suggests that consumers, based on their target audience, express different identities to a greater extent than they would do when only exposed to their real-life social circle, without having to be afraid of possible negative consequences. It would be interesting to investigate whether and how consumers adapt their online brand identifiers to changes in context. Thus, do they try to show different parts of their identities by means of online brand endorsements in different situations?

The effects of consumers' perceptions about for-profit brands and nonprofit brands, which managed to land in the "golden quadrant" of competence and warmth — meaning that they score high on both dimensions — on consumers' intention to endorse brands on social media might be an interesting field of research (cf., Aaker, Garbinsky, and Vohs 2012). It would be worthwhile to dig deeper into the role of competence and the interplay between competence and warmth and to what extent these two influence each other. We propose these questions for future research to shed more light on the underlying mechanisms of consumers' online brand endorsements.

#### *Managerial Implications*

The present paper demonstrates that the perceived warmth of a brand is a central driver of consumers' intention to endorse brands on social media. For this reason, nonprofit brands may find acquiring social media endorsements from consumers particularly easy, as they are in general perceived to be highly warm. But also for-profit brands, which score high on warmth,

can take advantage of this, as the positive effect of warmth is not restricted to nonprofit brands. For-profit brands can even enhance the positive effect of warmth if they are highly symbolic for their consumers. Brands can not only enhance consumers' online brand endorsements by means of being warm, they can also bolster consumers' interaction with branded content on social media through an increase in warmth. This positive effect of perceived warmth does also affect the ease of a brand to acquire consumers' online brand endorsements: The warmer a brand is perceived to be, the easier endorsements on social media are to achieve for this brand.

Additionally, we showed that it might be even easier for nonprofit brands to motivate people to engage in public endorsement behavior than into private affiliations with the brand. Nonprofit brands might thus considerably benefit from each marketing strategy that gives consumers the opportunity to publicly affiliate with them rather than just affiliate with them in private. For for-profit brands, it might be somewhat more difficult (or expensive) to motivate consumers to publicly endorse them online. As public endorsements of for-profit brands are dependent on the extent to which consumers perceive a brand to be warm and symbolize the people who are affiliated with it, consumers' online brand endorsements might be a viable marketing strategy only for for-profit brands, which are perceived to be high in symbolic value. Therefore, marketers should evaluate their brand's symbolic value before deciding whether consumer endorsements are a feasible strategy.

However, there might also be ways to make online brand endorsements worthwhile for for-profit brands that are not very warm or symbolic. For for-profit brands with a low symbolic value, marketers might consider increasing the for-profit brand's symbolic value before facilitating consumers' endorsements. Increasing a brand's symbolic value might, for instance, be working by positioning the brand in line with in-group characteristics of the target group (cf., Berger and Heath 2007; Escalas and Bettman 2005).

Another possibility might be to strengthen consumers' perception of warmth of the brand, for example by means of corporate social responsibility programs (Aguinis and Glavas 2012) or cause-related marketing strategies (Robinson, Irmak, and Jayachandran 2012). For-profits' warmth might also be increased by means of emphasizing the feeling of warmth in advertisements (Aaker, Stayman, and Hagerty 1986; Pelsmacker and Geuens 1999). For-profit brands could also benefit from nonprofits' warmth by linking their social media profiles to those of nonprofit brands in various ways. They might, for instance, share the posts of nonprofit brands, donate money to a cause for every new like of their brand, or actively promote certain nonprofits via their social media channels.

Summarizing, we can conclude that for warm brands, and especially nonprofit brands, consumers' online brand endorsements are a more feasible marketing strategy than for brands that score low on warmth. Warm brands benefit from consumers' tendency to signal their warmth to others, which makes it easier and cheaper for these brands to acquire consumers'

endorsements. For nonprofit brands, this positive effect of warmth is unconditional, whereas for for-profit brands a high degree of brand symbolism should also be given in order to achieve consumers' online brand endorsements.

## Acknowledgments

The authors thank Edward C. Malthouse for his helpful comments on earlier versions of this paper, Chris Malone at Fidelum Partners for providing one of the datasets of study 7, and the Editor Charles Hofacker and two anonymous reviewers for their very valuable advice.

## Appendix A

Table A1  
Measurements (translated from Dutch).

Warmth & competence	
Studies 1–4 (Aaker, Vohs, and Mogilner 2010; Judd et al. 2005)	I find that (Brand) is... <i>Warmth</i> ...warm. ...generous. ...friendly. <i>Competence</i> ...competent. ...efficient. ...effective. (1 to 7: Totally disagree–Totally agree)
Study 6 (Bennett and Hill 2012)	How well do the following statements describe (Brand)? <i>Warmth</i> (Brand) is a warm brand. <i>Competence</i> (Brand) is a competent brand. (1 to 5: Does not describe at all–Describes extremely well)
<i>Brand Symbolism</i> (Escalas and Bettman 2005)	How strong does (Brand) symbolize a person who is using it? (1 to 5: Does not symbolize at all–Symbolizes a lot) To what extent does (brand) tell something specific about the person who is using it? (1 to 5: Tells nothing–Tells a lot)
<i>Intention to endorse</i> (studies 1, 2, 4, & 6)	How great is the chance that you would like (brand) on Facebook? (0 to 100% slider)
<i>Intention to endorse</i> (study 3)	How great is the chance that you would like this post on Facebook? (0 to 100% slider)
<i>Intention to endorse</i> (study 5)	<i>Private engagement with brands</i> I would like to visit the website of (brand). If I could subscribe to a newsletter of (brand), I would do that. If I could order an information-package about (brand) online, I would do that. <i>Public engagement with brands</i> I would like to like (brand) on Facebook. I would like to share (brand) on Facebook. I would appreciate it, if content from (brand) would appear on my timeline on Facebook (1 to 7: Totally disagree–Totally agree)

## Appendix B

Table B1  
Used brands, revenue, and amount of Facebook likes, study 7.

Brand	Revenue	# of likes (Mar. 2015)
Albert Heijn	\$10,393.62 M	284.54 K
Apple	\$173,760.00 M	26,534.69 K
Boys & Girls Clubs of America	\$1,690.00 M	146.84 K
BP	\$379,200.00 M	163.01 K
Campbell	\$8,260.00 M	245.69 K
Cartier	\$6,500.00 M	3,446.04 K
citibank	\$94,060.00 M	1,073.59 K
CliniClowns	\$15.45 M	44.70 K
CocaCola	\$46,250.00 M	93,221.70 K
Dierenbescherming	\$45.00 M	74.16 K
Disabled American Veterans	\$125.00 M	3.15 K
Doctors Without Borders	\$191.00 M	836.41 K
Douwe Egberts	\$3,172.79 M	349.55 K
Dutch Heart Foundation	\$48.14 M	26.86 K
ExxonMobil	\$393,970.00 M	41.54 K
Ford	\$146,920.00 M	3,016.66 K
Gucci	\$4,700.00 M	15,293.31 K
Habitat for Humanity	\$1,670.00 M	374.92 K
Hershey's	\$7,150.00 M	6,769.93 K
Humane Society	\$155.00 M	436.86 K
Johnson & Johnson	\$71,260.00 M	663.00 K
KiKa (Children Cancer Free)	\$21.55 M	24.62 K
KWF	\$162.05 M	51.49 K
Marlboro	\$23,200.00 M	461.15 K
Mercedes Benz	\$98,000.00 M	17,970.65 K
Microsoft	\$83,260.00 M	6,281.56 K
Nivea	\$8,150.00 M	16,202.67 K
Philips	\$30,970.00 M	6,048.20 K
Rabobank	\$32,521.34 M	193.32 K
Red Cross	\$3,500.00 M	2,260.10 K
Rolex	\$4,700.00 M	4,107.37 K
Rolls Royce	\$24,250.00 M	3,755.53 K
Ronald McDonald Kinderfonds	\$139.48 M	718.06 K
Salvation Army	\$4,320.00 M	220.53 K
Stichting de Opkikker	\$2.76 M	15.52 K

## References

- Aaker, David A., Douglas M. Stayman, and Michael R. Hagerty (1986), "Warmth in Advertising: Measurement, Impact, and Sequence Effects," *Journal of Consumer Research*, 12, 4, 365–81, <http://dx.doi.org/10.2307/254299>.
- Aaker, Jennifer L. (1999), "The Malleable Self: The Role of Self-expression in Persuasion," *Journal of Marketing Research*, 36, 1, 45–57.
- , Kathleen D. Vohs, and Cassie Mogilner (2010), "Nonprofits Are Seen as Warm and For-profits as Competent: Firm Stereotypes Matter," *Journal of Consumer Research*, 37, 2, 224–37, <http://dx.doi.org/10.1086/651566>.
- , Emily N. Garbinsky, and Kathleen D. Vohs (2012), "Cultivating Admiration in Brands: Warmth, Competence, and Landing in the 'Golden Quadrant'," *Journal of Consumer Psychology*, 22, 2, 191–4, <http://dx.doi.org/10.1016/j.jcps.2011.11.012>.
- Aggarwal, Pankaj and Ann L. McGill (2007), "Is That Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products," *Journal of Consumer Research*, 34, 4, 468–79, <http://dx.doi.org/10.1086/518544>.
- Aguinis, Herman and Ante Glavas (2012), "What We Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda," *Journal of Management*, 38, 4, 932–68, <http://dx.doi.org/10.1177/0149206311436079>.
- Ahn, Sun Joo and Jeremy N. Bailenson (2011), "Self-endorsing Versus Other-endorsing in Virtual Environments," *Journal of Advertising*, 40, 2, 93–106, <http://dx.doi.org/10.2753/JOA0091-3367400207>.
- Arnould, Eric J. and Craig J. Thompson (2005), "Consumer Culture Theory (CCT): Twenty Years of Research," *Journal of Consumer Research*, 31, 4, 868–82, <http://dx.doi.org/10.1086/426626>.
- Bagozzi, Richard P. and Utpal M. Dholakia (2006), "Antecedents and Purchase Consequences of Customer Participation in Small Group Brand Communities," *International Journal of Research in Marketing*, 23, 1, 45–61, <http://dx.doi.org/10.1016/j.ijresmar.2006.01.005>.
- Bazarova, Natalya N. and Yoon Hyung Choi (2014), "Self-disclosure in Social Media: Extending the Functional Approach to Disclosure Motivations and Characteristics on Social Network Sites," *Journal of Communication*, 64, 4, 635–57, <http://dx.doi.org/10.1111/jcom.12106>.
- Becker, Julia C. and Frank Asbrock (2012), "What Triggers Helping Versus Harming of Ambivalent Groups? Effects of the Relative Salience of Warmth Versus Competence," *Journal of Experimental Social Psychology*, 48, 1, 19–27, <http://dx.doi.org/10.1016/j.jesp.2011.06.015>.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15, 2, 139–68.
- (2013), "Extended Self in a Digital World," *Journal of Consumer Research*, 40, 3, 477–500, <http://dx.doi.org/10.1086/671052>.
- Bennett, Aronté Marie and Ronald Paul Hill (2012), "The Universality of Warmth and Competence: A Response to Brands as Intentional Agents," *Journal of Consumer Psychology*, 22, 2, 199–204, <http://dx.doi.org/10.1016/j.jcps.2011.10.005>.
- Berger, Jonah and Chip Heath (2007), "Where Consumers Diverge from Others: Identity Signaling and Product Domains," *Journal of Consumer Research*, 34, 2, 121–34, <http://dx.doi.org/10.1086/519142>.
- Bickart, Barbara and Robert M. Schindler (2001), "Internet Forums as Influential Sources of Consumer Information," *Journal of Interactive Marketing*, 15, 3, 31–40, <http://dx.doi.org/10.1002/dir.1014>.
- boyd, Danah M. and Nicole B. Ellison (2007), "Social Network Sites: Definition, History, and Scholarship," *Journal of Computer-Mediated Communication*, 13, 1, 210–30, <http://dx.doi.org/10.1111/j.1083-6101.2007.00393.x>.
- BrandAsset Consult (2013), "Dutch Strongest Brands," <http://www.brandingthebrands.com/The-Brand-Rankings.aspx?rankingID=151&nav=category>.
- Brown, Jo, Amanda J. Broderick, and Nick Lee (2007), "Word of Mouth Communication within Online Communities: Conceptualizing the Online Social Network," *Journal of Interactive Marketing*, 21, 3, 2–20, <http://dx.doi.org/10.1002/dir.20082>.
- Calder, Bobby J., Edward C. Malthouse, and Ute Schaedel (2009), "An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness," *Journal of Interactive Marketing*, 23, 4, 321–31, <http://dx.doi.org/10.1016/j.intmar.2009.07.002>.
- Campbell, Colin, Leyland F. Pitt, Michael Parent, and Pierre R. Berthon (2011), "Understanding Consumer Conversations Around Ads in a Web 2.0 World," *Journal of Advertising*, 40, 1, 87–102.
- Chernev, Alexander, Ryan Hamilton, and David Gal (2011), "Competing for Consumer Identity: Limits to Self-expression and the Perils of Lifestyle Branding," *Journal of Marketing*, 75, 3, 66–82, <http://dx.doi.org/10.1509/jmkg.75.3.66>.
- Chu, Shu Chuan and Yoo Jung Kim (2011), "Determinants of Consumer Engagement in Electronic Word-of-Mouth (eWOM) in Social Networking Sites," *International Journal of Advertising*, 30, 1, 47, <http://dx.doi.org/10.2501/IJA-30-1-047-075>.
- Cuddy, Amy J.C., Susan T. Fiske, and Peter Glick (2008), "Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map," *Advances in Experimental Social Psychology*, 40, 7, 61–150, [http://dx.doi.org/10.1016/S0065-2601\(07\)00002-0](http://dx.doi.org/10.1016/S0065-2601(07)00002-0).
- , Peter Glick, and Anna Beninger (2011), "The Dynamics of Warmth and Competence Judgments, and Their Outcomes in Organizations," *Research in Organizational Behavior*, 31, 73–98, <http://dx.doi.org/10.1016/j.riob.2011.10.004> (January).

- De Vries, Lisette, Sonja Gensler, and Peter S.H. Leeftang (2012), "Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing," *Journal of Interactive Marketing*, 26, 2, 83–91, <http://dx.doi.org/10.1016/j.intmar.2012.01.003>.
- Delbaere, Marjorie, Edward F. McQuarrie, and Barbara J. Phillips (2011), "Personification in Advertising: Using a Visual Metaphor to Trigger Anthropomorphism," *Journal of Advertising*, 40, 1, 121–30, <http://dx.doi.org/10.2753/JOA0091-3367400108>.
- Ellison, Nicole B., Charles Steinfield, and Cliff Lampe (2007), "The Benefits of Facebook 'Friends': Social Capital and College Students' Use of Online Social Network Sites," *Journal of Computer-Mediated Communication*, 12, 4, 1143–68, <http://dx.doi.org/10.1111/j.1083-6101.2007.00367.x>.
- Epley, Nicholas, Adam Waytz, and John T. Cacioppo (2007), "On Seeing Human: A Three-factor Theory of Anthropomorphism," *Psychological Review*, 114, 4, 864–86, <http://dx.doi.org/10.1037/0033-295X.114.4.864>.
- , ———, Scott Akalis, and John T. Cacioppo (2008), "When We Need A Human: Motivational Determinants of Anthropomorphism," *Social Cognition*, 26, 2, 143–55, <http://dx.doi.org/10.1521/soco.2008.26.2.143>.
- Escalas, Jennifer Edson and James R. Bettman (2005), "Self-construal, Reference Groups, and Brand Meaning," *Journal of Consumer Research*, 32, 3, 378–89, <http://dx.doi.org/10.1086/497549>.
- Ferraro, Rosellina, Amna Kirmani, and Ted Matherly (2013), "Look at Me! Look at Me! Conspicuous Brand Usage, Self-brand Connection, and Dilution," *Journal of Marketing Research*, 50, 4, 477–88.
- Fiske, Susan T., Amy J.C. Cuddy, Peter Glick, and Jun Xu (2002), "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow From Perceived Status and Competition," *Journal of Personality and Social Psychology*, 82, 6, 878–902, <http://dx.doi.org/10.1037//0022-3514.82.6.878>.
- , ———, and ——— (2007), "Universal Dimensions of Social Cognition: Warmth and Competence," *Trends in Cognitive Sciences*, 11, 2, 77–83, <http://dx.doi.org/10.1016/j.tics.2006.11.005>.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24, 4, 343–53, <http://dx.doi.org/10.1086/209515>.
- Godes, David, Dina Mayzlin, Yubo Chen, Sanjiv Das, Chrysanthos Dellarocas, Bruce Pfeiffer, Barak Libai, Subrata Sen, Mengze Shi, and Peeter W.J. Verlegh (2005), "The Firm's Management of Social Interactions," *Marketing Letters*, 16, 3–4, 415–28, <http://dx.doi.org/10.1007/s11002-005-5902-4>.
- Griskevicius, Vlasdas, Joshua M. Tybur, and Bram Van den Bergh (2010), "Going Green to Be Seen: Status, Reputation, and Conspicuous Conservation," *Journal of Personality and Social Psychology*, 98, 3, 392–404, <http://dx.doi.org/10.1037/a0017346>.
- Hancock, Jeffrey T. and Philip J. Dunham (2001), "Impression Formation in Computer-mediated Communication Revisited: An Analysis of the Breadth and Intensity of Impressions," *Communication Research*, 28, 3, 325–47, <http://dx.doi.org/10.1177/009365001028003004>.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*. New York, NY: Guilford Press (doi:978-1-60918-230-4).
- Hendrik Beerda Brand Consultancy (2013), "KWF Kankerbestrijding Is Het Sterkste Goede Doel van 2012," <http://www.hendrikbeerda.nl/brandalchemy-model/goede-doelen>.
- Hollenbeck, Candice R. and Andrew M. Kaikati (2012), "Consumers' Use of Brands to Reflect Their Actual and Ideal Selves on Facebook," *International Journal of Research in Marketing*, 29, 4, 395–405, <http://dx.doi.org/10.1016/j.ijresmar.2012.06.002>.
- Judd, Charles M., Laurie James-Hawkins, Vincent Yzerbyt, and Yoshihisa Kashima (2005), "Fundamental Dimensions of Social Judgment: Understanding the Relations Between Judgments of Competence and Warmth," *Journal of Personality and Social Psychology*, 89, 6, 899–913, <http://dx.doi.org/10.1037/0022-3514.89.6.899>.
- Kaikati, Andrew M. and Jack G. Kaikati (2004), "Stealth Marketing: How to Reach Consumers Surreptitiously," *California Management Review*, 46, 4, 6–22.
- Kervyn, Nicolas, Susan T. Fiske, and Chris Malone (2012), "Brands as Intentional Agents Framework: How Perceived Intentions and Ability Can Map Brand Perception," *Journal of Consumer Psychology*, 22, 2, 166–76, <http://dx.doi.org/10.1016/j.jcps.2011.09.006>.
- , Emily Chan, Chris Malone, Adam Korpusik, and Oscar Ybarra (2014), "Not All Disasters Are Equal in the Public's Eye: The Negativity Effect on Warmth in Brand Perception," *Social Cognition*, 32, 3, 256–75, <http://dx.doi.org/10.1521/soco.2014.32.3.256> (Guilford).
- Kleine, Robert E., Susan Schultz Kleine, and Jerome B. Kernan (1993), "Mundane Consumption and the Self: A Social Identity Perspective," *Journal of Consumer Psychology*, 2, 3, 209–35, [http://dx.doi.org/10.1016/S1057-7408\(08\)80015-0](http://dx.doi.org/10.1016/S1057-7408(08)80015-0).
- Kristofferson, Kirk, Katherine White, and John Peloza (2014), "The Nature of Slacktivism: How the Social Observability of an Initial Act of Token Support Affects Subsequent Prosocial Action," *Journal of Consumer Research*, 40, 6, 1149–66, <http://dx.doi.org/10.1086/674137>.
- Labrecque, Lauren I. (2014), "Fostering Consumer–Brand Relationships in Social Media Environments: The Role of Parasocial Interaction," *Journal of Interactive Marketing*, 28, 2, 134–48, <http://dx.doi.org/10.1016/j.intmar.2013.12.003>.
- Leary, Mark R. and Ashley Batts Allen (2011), "Self-presentational Persona: Simultaneous Management of Multiple Impressions," *Journal of Personality and Social Psychology*, 101, 5, 1033–49, <http://dx.doi.org/10.1037/a0023884>.
- Libai, Barak, Ruth Bolton, Mamix S. Bügel, Ko de Ruyter, Oliver Götz, Hans Risselada, and Andrew T. Stephen (2010), "Customer to Customer Interactions: Broadening the Scope of Word of Mouth Research," *Journal of Service Research*, 13, 3, 267–82, <http://dx.doi.org/10.1177/1094670510375600>.
- Miller, Geoffrey F. (2000), *The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature*. New York: Doubleday & Co.
- Morandini, Gabriele, Richard P. Bagozzi, and Massimo Bergami (2013), "Brand Community Membership and the Construction of Meaning," *Scandinavian Journal of Management*, 29, 2, 173–83, <http://dx.doi.org/10.1016/j.scaman.2013.03.003>.
- Muñiz Jr., Albert M. and Hope Jensen Schau (2007), "Vigilante Marketing and Consumer-created Communications," *Journal of Advertising*, 36, 3, 35–50, <http://dx.doi.org/10.2753/JOA0091-3367360303>.
- Muntinga, Daniel G., Marjolein Moorman, and Edith G. Smit (2011), "Introducing COBRAs: Exploring Motivations for Brand-related Social Media Use," *International Journal of Advertising*, 30, 1, 13–46, <http://dx.doi.org/10.2501/IJA-30-1-013-046>.
- Naylor, Rebecca Walker, Cait Poyner Lamberton, and Patricia M. West (2012), "Beyond the 'Like' Button: The Impact of Mere Virtual Presence on Brand Evaluations and Purchase Intentions in Social Media Settings," *Journal of Marketing*, 76, 6, 105–20, <http://dx.doi.org/10.1509/jm.11.0105>.
- Oyserman, Daphna (2009), "Identity-based Motivation: Implications for Action-readiness, Procedural-readiness, and Consumer Behavior," *Journal of Consumer Psychology*, 19, 3, 250–60, <http://dx.doi.org/10.1016/j.jcps.2009.05.008>.
- Pelsmacker, Patrick De and Maggie Geuens (1999), "The Advertising Effectiveness of Different Levels of Intensity of Humour and Warmth and the Moderating Role of Top of Mind Awareness and Degree of Product Use," *Journal of Marketing Communications*, 5, 3, 113–29, <http://dx.doi.org/10.1080/135272699345626>.
- Puzakova, Marina, Hyokjin Kwak, and Joseph F. Rocereto (2013), "When Humanizing Brands Goes Wrong: The Detrimental Effect of Brand Anthropomorphization Amid Product Wrongdoings," *Journal of Marketing*, 77, 3, 81–100, <http://dx.doi.org/10.1509/jm.11.0510>.
- Rauschnabel, Philipp A. and Aaron C. Ahuvia (2014), "You're So Lovable: Anthropomorphism and Brand Love," *Journal of Brand Management*, 21, 5, 372–95, <http://dx.doi.org/10.1057/bm.2014.14>.
- Reed, Americus, Mark R. Forehand, Stefano Puntoni, and Luk Warlop (2012), "Identity-based Consumer Behavior," *International Journal of Research in Marketing*, 29, 4, 310–21, <http://dx.doi.org/10.1016/j.ijresmar.2012.08.002>.
- Robinson, Stefanie Rosen, Caglar Irmak, and Satish Jayachandran (2012), "Choice of Cause in Cause-related Marketing," *Journal of Marketing*, 76, 4, 126–39, <http://dx.doi.org/10.1509/jm.09.0589> (American Marketing Association).
- Sherman, Aurora M., Jennifer E. Lansford, and Brenda L. Volling (2006), "Sibling Relationships and Best Friendships in Young Adulthood: Warmth, Conflict, and Well-being," *Personal Relationships*, 13, 2, 151–65, <http://dx.doi.org/10.1111/j.1475-6811.2006.00110.x>.

- Stokburger-Sauer, Nicola, S. Ratneshwar, and Sankar Sen (2012), "Drivers of Consumer-brand Identification," *International Journal of Research in Marketing*, 29, 4, 406–18, <http://dx.doi.org/10.1016/j.ijresmar.2012.06.001>.
- Swaminathan, Vanitha, Karen L. Page, and Zeynep Gürhan-Canli (2007), "'My' Brand or 'Our' Brand: The Effects of Brand Relationship Dimensions and Self-construal on Brand Evaluations," *Journal of Consumer Research*, 34, 2, 248–59, <http://dx.doi.org/10.1086/518539>.
- Trusov, Michael, Anand V. Bodapati, and Randolph E. Bucklin (2010), "Determining Influential Users in Internet Social Networks," *Journal of Marketing Research*, 47, 4, 643–58, <http://dx.doi.org/10.1509/jmkr.47.4.643>.
- Van Dijck, José (2013), "'You Have One Identity': Performing the Self on Facebook and LinkedIn," *Media, Culture & Society*, 35, 2, 199–215, <http://dx.doi.org/10.1177/0163443712468605>.
- Van Doorn, Jenny, Katherine N. Lemon, Vikas Mittal, Stephan Nass, Doreën Pick, Peter Pimer, and Peter C. Verhoef (2010), "Customer Engagement Behavior: Theoretical Foundations and Research Directions," *Journal of Service Research*, 13, 3, 253–66, <http://dx.doi.org/10.1177/1094670510375599>.
- Wallace, Elaine, Isabel Buil, Leslie de Chernatony, and Michael Hogan (2014), "Who 'Likes' You...and Why? A Typology of Facebook Fans: From 'Fan'-atics and Self-expressives to Utilitarians and Authentics," *Journal of Advertising Research*, 54, 1, 92–109, <http://dx.doi.org/10.2501/JAR-54-1-092-109>.
- White, Katherine and Darren W. Dahl (2006), "To Be or Not Be? The Influence of Dissociative Reference Groups on Consumer Preferences," *Journal of Consumer Psychology*, 16, 4, 404–14, [http://dx.doi.org/10.1207/s15327663jcp1604\\_11](http://dx.doi.org/10.1207/s15327663jcp1604_11).
- and ——— (2007), "Are All Out-groups Created Equal? Consumer Identity and Dissociative Influence," *Journal of Consumer Research*, 34, 4, 525–36, <http://dx.doi.org/10.1086/520077>.
- Wilcox, Keith and Andrew T. Stephen (2013), "Are Close Friends the Enemy? Online Social Networks, Self-esteem, and Self-control," *Journal of Consumer Research*, 40, 1, 90–103, <http://dx.doi.org/10.1086/668794>.
- Willemsen, Lotte M., Peter C. Neijens, Fred Bronner, and Jan A. de Ridder (2011), "'Highly Recommended!' The Content Characteristics and Perceived Usefulness of Online Consumer Reviews," *Journal of Computer-Mediated Communication*, 17, 1, 19–38, <http://dx.doi.org/10.1111/j.1083-6101.2011.01551.x>.
- , ———, and ——— (2012), "The Ironic Effect of Source Identification on the Perceived Credibility of Online Product Reviewers," *Journal of Computer-Mediated Communication*, 18, 1, 16–31, <http://dx.doi.org/10.1111/j.1083-6101.2012.01598.x>.
- Ybarra, Oscar, Emily Chan, and Denise Park (2001), "Young and Old Adults' Concerns About Morality and Competence," *Motivation and Emotion*, 25, 2, 85–100, <http://dx.doi.org/10.1023/A:1010633908298>.