



Munich Personal RePEc Archive

The referral backfire effect: The identity-threatening nature of referral failure

Claus, Bart and Geyskens, Kelly and Millet, Kobe and Dewitte, Siegfried

2 August 2012

Online at <https://mpra.ub.uni-muenchen.de/57061/>
MPRA Paper No. 57061, posted 03 Jul 2014 18:19 UTC



Contents lists available at SciVerse ScienceDirect

Intern. J. of Research in Marketing

journal homepage: www.elsevier.com/locate/ijresmar

The referral backfire effect: The identity-threatening nature of referral failure

Bart Claus^{a,b,*}, Kelly Geyskens^c, Kobe Millet^d, Siegfried Dewitte^a^a K.U. Leuven, Belgium^b Iéseg School of Management, France^c University of Maastricht, The Netherlands^d VU University Amsterdam, The Netherlands

ARTICLE INFO

Article history:

First received in 2, August 2012 and was under review for 5 months

Available online xxxx

Keywords:

Word of mouth

Referral failure

Identity threat

Social influence

Self-bolstering

ABSTRACT

The present paper shows that when a person has the experience of giving advice but that advice is not acted upon, there is a reduced openness to external information. We call this the “referral backfire effect”. We argue that this referral backfire effect is due to the identity threatening nature of referral failure: the referral backfire effect is attenuated (1) when the sender perceives oneself as having low expertise in the particular domain of referral and (2) upon self-affirmation. Accordingly, implicit egotism is increased after referral failure, reflecting the need to bolster the self against threat. Because referral behavior is considered to be an important predictor of business success, we discuss the implications of our findings for both theory and practice and sketch future research opportunities.

© 2012 Elsevier B.V. All rights reserved.

1. Introduction

“Invite your friends to try Omaha Steaks and we’ll throw in a dozen free burgers. And for every two friends who try us out, we’ll send you a \$20 Reward e-Gift Card towards your next purchase of \$80 or more.”

This advertising copy shows how *Omaha Steaks*, a mail order meat company that is recognized as an innovative marketer, tried to reinforce and incentivize the natural inclination of consumers to refer others in line with their own preferences. Imagine an enthusiastic fan of *Omaha Steaks* participating in this promotion and recommending the service to her friends. Because she will receive a gift card for every two friends that follow her referral, she is able to track the extent to which her referral was successful. However, what happens to the referrer when it becomes clear that almost none of these friends have followed the recommendation? Alternatively, consider the following example: imagine your new colleague asking your advice about the best search system for scientific papers. You recommend your preferred search system. Later on, you notice that your colleague still works with a less functional system. Again, what impact does this revelation have on you when your colleague does not follow your recommendation?

In this paper, we address the question of whether *referral failure* has any consequences for subsequent behavior of the referrer. Although consumers refer others on a daily basis and are stimulated

to do so through company rewards (Ryu & Feick, 2007; Schmitt, Skiera, & Van den Bulte, 2011), we are not aware of any prior research that addresses the effect of referral failure on the referrer. However, as referral outcomes become increasingly transparent in online environments, these outcomes represent an issue of growing importance.

The existing literature indicates that consumption itself can often be considered a non-verbal form of identity-expression (Belk, Bahn, & Mayer, 1982; Reed, 2004; Richins, 1994) and that engaging in referrals makes consumption even more publicly visible (Brown, Barry, Dacin, & Gunst, 2005; Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Therefore, we propose that *referral failure* – the situation in which one’s advice is rejected – may in certain circumstances threaten consumers’ identities. Psychology provides ample evidence that identity threats motivate consumers to bolster their self-concept (Dunning, Perie, & Story, 1991; Wentura & Greve, 2005). One way to bolster the self-concept is to act in a self-determined way (Blanton & Christie, 2003; Deci & Ryan, 1985; Nail, MacDonald, & Levy, 2000). We argue that referral failure invokes a need to make self-determined choices, void of external influence. We call this reluctance to comply with external influences – as triggered by referral failure – the *referral backfire effect*. Our studies will demonstrate the effect and test the underlying process in terms of identity threat.

Whereas the proposed effect is relevant to many research domains, such as social psychology, organizational behavior, or communications research, it is useful at this point to highlight this work’s contribution to marketing literature, more specifically, in the Word of Mouth (WOM) domain. To the best of our knowledge, research on WOM behavior has focused on the existence and implications of referrals but has never empirically investigated the outcome of

* Corresponding author at: Iéseg School of Management, Socle de la Grande Arche, 1 Parvis de la Défense, F-92044 Paris La Défense Cedex, France. Tel.: +33 155 911 010; fax: +33 147 759 375.

E-mail address: b.claus@ieseg.fr (B. Claus).

referral behavior on the referrer. Studies on WOM in an offline (East, Hammond, & Lomax, 2008; Laczniak, DeCarlo, & Ramaswami, 2001) and online environment (De Bruyn & Lilien, 2008; Hennig-Thurau & Walsh, 2003) have especially focused on identifying and targeting consumers with a larger-than-average impact on the spread of information. Spreading consumer information is not reserved for an elite group of knowledgeable market mavens (Feick & Price, 1987) or influential opinion leaders (Rogers & Cartano, 1962). The ordinary consumer also engages in several conversations about brands and products every day (Keller, 2007), and her joint impact on spreading consumer information is, according to several researchers, of no lesser importance than the impacts of the aforementioned elite (Godes & Mayzlin, 2009; Smith, Coyle, Lightfoot, & Scott, 2007; Watts & Dodds, 2007). The current project opens a new dimension in WOM research by focusing on the impact of this referral behavior on the sender's subsequent behavior, rather than on the receiver's.

2. Referral failure as identity threat

Referral behavior has at least two important features that connect it to consumer identity. Referral behavior reveals information about the adviser's product preferences and opinions. Because many consumption decisions reflect a consumer's identity (Escalas & Bettman, 2005), information about these decisions will also reflect that identity. Additionally, referral behavior subjects this information with all of its potential identity implications to public scrutiny because referral behavior offers the listener the opportunity to ignore or reject the information. Indeed, self-disclosure is perceived to be risky in general (Olivero & Lunt, 2004). In accordance with this conceptual analysis, the literature suggests that one important driver behind referral behavior is the motivation to maintain and enhance a positive self-concept, e.g., to demonstrate to others that one is an intelligent shopper or to reduce anxiety stemming from a negative consumer experience (Hennig-Thurau et al., 2004; Sundaram, Mitra, & Webster, 1998). By conducting in-depth interviews, Dichter (1966) found that 24% of the 352 investigated (positive) referrals were explicitly driven by self-confirmation motives, including confirmation of one's judgment capacity or asserting status. Additionally, it is not unlikely that a substantial number of the referrals explicitly attributed to other reasons (product-, other-, or message-related reasons; Dichter, 1966), were also partially motivated by self-confirmation. Furthermore, Von Wangenheim (2005) found that switching brands might result in a negative WOM review of the initial choice to self-justify inconsistency demonstrated by the switch. Given that referral behavior is often motivated behavior, referral failure may be painful, which is a conclusion for which Dichter (1966) found some anecdotal support. Specifically, the link between consumption and the self-concept or identity suggests that referral failure may threaten the referrer's identity.

Identity threat has numerous well-established effects on behavior. For instance, it has been shown that consumers selectively focus on information that bolsters their self-beliefs when their identity is threatened (Dunning et al., 1991; Wentura & Greve, 2005), that they also choose products that support their self-concept (Gao, Wheeler, & Shiv, 2009), and, finally, that they become more motivated to firmly advocate their threatened self-beliefs (Gal & Rucker, 2010). Because referral failure implicitly questions consumers' abilities to make adequate consumer decisions, any such failure will subsequently activate the goal to restore this self-belief. Building on self-determination theory (Deci & Ryan, 1985), we argue that reducing reliance on external information during decision-making can restore this self-belief. Self-determination theory (Deci & Ryan, 1985) distinguishes between several motivational states, two of which are relevant for our argument. First, a behavior is controlled when others partially control one's intentional behavior (e.g., when someone buys a product because a salesman is pushy or because he or she

hopes it will make them blend in with a reference group). In this state, the actor is subject to external influences. In contrast, a behavior is self-determined when it reflects the self's true preferences and autonomous decisions (e.g., when someone works hard because they like the work or when a consumer chooses based on her own needs). Only in this latter case can decisions be considered unbiased reflections of the self and relevant for one's self view and, therefore, true choices (Deci & Ryan, 1987). Based on this distinction found in self-determination theory, we suggest that restoring one's self-concept can be achieved only when decisions are made autonomously and not when one's decision is (partly) the result of external influence, as is the case in controlled behavior.

We therefore expect that a goal to restore one's self-concept as a competent decision maker will lead to a decreased likelihood of complying with external influence. Indeed, existing research mentions that noncompliance is used to defend important self-views (Nail et al., 2000). People even strategically reduce compliance to signal their identity to others (Berger & Heath, 2007) or shape it for themselves (Blanton & Christie, 2003). As a result, we propose that referral failure motivates consumers to discard external influence during their decision-making. We predict that

H1. Referral failure reduces the referrer's likelihood to comply with external influence when making decisions.

The theoretical model we put forward implies that this hypothesized referral backfire effect (i.e., H1) may be explained by the identity threatening nature of referral failure. Prior research showed that identity threat leads to higher motivation to bolster the self. For example, upon perceiving an identity threat, people show a greater liking for people whose participant number resembles their birthdays (Jones, Pelham, Carvalho, & Mirenberg, 2004), take up more space when putting their signature (Rudman, Dohn, & Fairchild, 2007), and increase their liking for brands and words resembling their own name (Brendl, Chattopadhyay, Pelham, & Carvallo, 2005; Jones, Pelham, Mirenberg, & Hetts, 2002). We will measure the motivation to bolster the self via an implicit egotism measure (Buhrmester, Blanton, & Swann, 2011; Jones et al., 2002). If referral failure is threatening to the self, it should invoke the motivation to bolster the self, which leads to the following hypothesis:

H2. Referral failure increases implicit egotism.

To further investigate the proposed process driving the referral backfire effect, we turn to moderation designs. We will select two distinct factors that are believed to have an attenuating impact on identity threat: first, we focus on consumer knowledge concerning the specific product domain of the referral, and further below, we discuss the moderating role of general self-affirmation. Existing literature indicates that the level of knowledge about a topic is related to the centrality of that topic to the self (Belk, 1988; Sprott, Czellar, & Spangenberg, 2009). When applied to referrals, this relationship means that the centrality of the referral outcome to the referrer's identity correlates with the referrer's level of knowledge in this domain. Furthermore, the personal importance of a specific domain has been shown to affect the level of self-threat (Boninger, Krosnick, & Berent, 1995; Sherman & Cohen, 2006). For instance, a report describing the link between caffeine use and fibrocystic disease triggers defensive mechanisms only for heavy caffeine consumers for whom the topic is of greater importance (Lieberman & Chaiken, 1992). This result indicates that referral failure can occur without identity threat, as long as the referral was made in a domain that is not central to one's identity. We use knowledge of the domain of referral as a proxy for this centrality. Accordingly, we expect that

H3. The referral backfire effect is stronger for consumers who perceive themselves as more knowledgeable about the product domain than for consumers who do not.

Additionally, self-affirmation theory proposes that people can respond to threats by affirming alternative self-resources unrelated to the identity threat. This “self-affirmation” can be achieved when people reflect on important aspects of their life or engage in an activity that highlights important values, which causes participants to realize that their own self-worth does not depend solely on the aspect of their identity that is threatened and thereby reduces the need for self-bolstering (Sherman & Cohen, 2006).

Accordingly, manipulations of self-affirmation (Steele, 1988) have been used successfully to reduce various effects of potential identity threats in different domains (Fein & Spencer, 1997; Sherman, Nelson, & Steele, 2000; Steele & Liu, 1983). If referral failure leads to avoiding external input because it increases the need to bolster the self-concept, external support for the self should satisfy this need and thereby attenuate the referral backfire effect. Therefore, we propose that

H4. Self-affirmation will attenuate the referral backfire effect.

3. The present studies

The present studies induce referral failure by means of scenario studies or real decision contexts and measure their effects on subsequent decision-making. In particular, the studies examine the extent to which consumers incorporate external advice in their decisions. In study 1, we demonstrate the referral backfire effect, showing that the awareness that others have not followed the participant's advice reduces his or her willingness to incorporate unrelated consumer reviews in decision making. In studies 2–4, we replicate this effect via different procedures and further elaborate the role played by identity threat in the referral backfire effect. In study 2, we show that referral failure is self-threatening. In study 3, evidence is provided that this effect of referral failure is attenuated for consumers with low levels of knowledge in the domain of referral. Study 4 shows that the referral backfire effect is also attenuated when the need for self-bolstering is alleviated by an external manipulation of self-affirmation subsequent to referral failure. Thus, studies 3 and 4 illustrate important boundary conditions of the effect: the referral backfire effect only occurs when referral failure is identity-threatening. Furthermore, study 3 shows that the referral backfire effect is independent of the match between domain of the referral and domain of the subsequent product decision.

3.1. Study 1

We had two aims with this study. First, we wanted to show a relation between referral outcome and subsequent compliance with external influence (H1). After manipulating the referral outcome in a first scenario, we measured susceptibility to persuasion by a third party in a second, seemingly unrelated task. Second, we expected that referral failure influences subsequent decision making, whereas referral success does not because consumers nourish positively biased self-concepts: positive feedback regarding one's self-concept is smoothly incorporated and does not receive considerable attention (Dawson, Gilovich, & Regan, 2002; Dunning, 2007; Jain & Maheswaran, 2000). Therefore, we added a control condition in which no referral was made. We did not expect referral success to influence any dependent measure.

3.1.1. Method

One hundred fifty students at a large European university (50 males and 100 females), aged between 18 and 30, participated in this experiment in exchange for a participation fee.

3.1.1.1. Manipulation of referral outcome. In a first phase, we manipulated referral outcome by means of a scenario. The participants were asked to imagine the following:

“You are the son/daughter of the manager of a small movie theater in your town. This gives you the chance to watch all movies for free and before all the others. Your friends are aware of this and they frequently ask you which movies are worthwhile to see. After a while, you notice that your advice is often or always [seldom or never] followed; they prefer the movies you liked [you did not like].”

In the control condition, the participants received a neutral filler task of similar length.

3.1.1.2. Measurement of compliance with external influences. We adapted a procedure used in Fitzsimons and Lehmann (2004), telling participants that researchers of a food manufacturer were developing a new granola bar, and they were interested in consumer impressions. Subsequently, the participants received the descriptions of four potential granola bar formulations with two different attributes: taste and calories. Attribute values for each of the four formulations for taste (1: poor taste, 10: excellent taste) and number of calories were, respectively: A: 7.5, 125; B: 8, 365; C: 9, 220; D: 6, 150. Formulations A and C are relatively attractive, while formulations B and D are relatively less attractive (Fitzsimons & Lehmann, 2004). Next, the participants received reports from an expert magazine (e-health) that strongly recommended either granola bar A or C (counterbalanced between participants). After receiving this advice, the participants were asked to indicate which of 20 different combinations of three granola bars they would prefer when given the chance to choose three bars (e.g., “A:1, B:1, C:1, D:0”; “A:2, B:1, C:0, D:0”; “A:0, B:0, C:3, D:0”, ... Fitzsimons & Lehmann, 2004). The participants could either incorporate this external advice and choose the recommended option or ignore the external advice by selecting bars that were not recommended.

3.1.2. Results and discussion

To test whether referral outcome (success, failure, control) had an influence on a participant's compliance with external influence on his or her choice, we performed an ANOVA with choice of recommended granola bars (0–3, log-transformed) as the dependent variable and the Referral Outcome manipulation as the independent variable. The main effect of the Referral Outcome manipulation was significant ($F(2, 148) = 4.79, p < .01$). The choice of recommended granola bars was lower in the referral failure condition ($M = .28, SE = .025$) than in either the referral success ($M = .36, SE = .025$) ($t(148) = 2.14, p < .05$) or the control conditions ($M = .38, SE = .019$) ($t(148) = 3.10, p < .005$). The difference between the latter two conditions was insignificant ($t(148) = .67, ns$).

These results imply that experiencing referral failure leads to lower compliance with external influences in a subsequent choice compared to referral success or no referral experience at all. Additionally, the referral success condition did not differ from the control condition without a referral.

3.2. Study 2

In the second study, we wanted to replicate our findings with actual behavior. Moreover, we wanted to test our inference that referral failure is threatening to the self. When referral failure occurred, we expected that a need to bolster the self against this threat would arise. Consequently and in accordance with existing literature about self-threat, we predicted an increased attachment to anything that is self-relevant after referral failure. Therefore, the aim of this second study is twofold: to test whether referral failure leads to increased implicit egotism (H2) and to replicate the referral backfire effect with a different procedure as in study 1.

3.2.1. Method

One hundred sixty seven students at a large European university (84 males and 83 females), aged between 18 and 25, participated in this experiment in exchange for course credit.

The participants were told that the experiment was a test case for a larger project that investigated the viability of a communication network between two consumer labs via the Internet. The participants were further told that the research concerned the fluency of e-communication when the participants saw each other's picture. To further this cover story, the participants took a picture using a web camera. In reality, there was no interaction partner, and the alleged interaction partner's behavior was preprogrammed. For the remainder of the description of this study, we use the word "participant" to refer to the actual person participating in the experiment, and the words "interaction partner" for the fictitious, preprogrammed person in the other lab.

The actual experiment consisted of two phases. In each phase, the participants were connected to a different interaction partner. The gender of the interaction partner was counterbalanced between the phases and participant's gender to neutralize order and gender effects. In each round, the participants were asked to choose six product items (a cell phone, backpack, toothbrush, laptop, ballpoint pen and yogurt), which had to be selected from sets of three options. All 18 products were displayed as a picture. The participants were told that to structure the decision, they would be randomly assigned to either an adviser role – in which they could indicate their preference first – or a decider role – in which they had to make the final choice (for themselves, not for the interaction partner) after the adviser indicated his preference. The participants were further informed that they would be teamed up with a different interaction partner and switch roles in the second round. In reality, all participants were assigned the role of adviser in the first round, during which a manipulation of referral success took place. In the second round, the participants were all assigned to the role of decider, which allowed us to assess the referral backfire effect. In between rounds, we gave every participant the impression that the new interaction partner was not ready yet, and we asked them to complete some filler questions and a poll about which name to choose for the new computer system, which actually included the implicit egotism measure.

3.2.1.1. Manipulation of referral outcome (phase 1). In the control condition, the interaction partner followed the participant's choice in 5 out of 6 times. In the Referral Failure condition, the interaction partner followed the participant's choice in only 1 out of 6 times. The gender of the interaction partner was counterbalanced across conditions and participant's gender to neutralize gender effects.

3.2.1.2. Implicit egotism measure. Between phases, we told the participants that we still needed to decide on a name for the new software system. The participants were allowed to indicate by means of a 20-point slider between two possible names how much they preferred one option to another. Importantly, one of the two options was manipulated such that the first three letters of the name for the program were the same as those of the first name of the participant. The suffix of those three letters ("–ano") and the comparison name ("Valdano") were kept constant. Threats to the self should cause a higher preference for the name with the same first letters as the participant's own first name (Jones et al., 2002). Measuring this preference thus allows us to test whether referral outcome affects implicit egotism.

3.2.1.3. The referral backfire effect. In the second phase, the interaction partner always gave the advice to choose the least attractive product out of the three (determined from pre-testing with 46 participants). We measured referral backfire by the number of times (0–6) the participant did not follow the interaction partner's advice.

3.2.2. Results and discussion

Two effects were found for participants whose advice was not followed. First, we replicated the referral backfire effect found in study 1. Upon referral failure, the participants were less likely to follow the advice of the interaction partner ($M = 2.35$, $SE = .093$) than in the control condition ($M = 2.68$, $SE = .11$) ($t(165) = 2.28$, $p < .05$).

Second, the participants in the referral failure condition showed more implicit egotism: they preferred the name based on their own name to the control name ($M = 10.84$, $SE = .72$) at a higher rate than participants whose advice had previously been followed ($M = 8.32$, $SE = .70$) ($t(165) = 2.51$, $p < .05$). Additionally, we found these two dependent measures to be significantly correlated ($r = -.18$, $p < .05$), further cross-validating the referral backfire effect as an instance of self-bolstering. We found no effects stemming from participant's gender, interaction-partner gender, or any interaction effect between these factors and our manipulation in an ANOVA (all $F_s < 1.5$).

The findings of this study provide support for H2 that referral failure leads to an increase in implicit egotism, thereby providing empirical evidence for the idea that referral failure is threatening to the self. Moreover, we replicated the findings of study 1 by showing that referral failure leads to more self-determined behavior. In combination, these results support our inference that the referral backfire effect should be understood as an instance of self-bolstering in reaction to the identity threatening nature of referral failure. In study 3, we aim to provide further evidence for the role of identity threat in the referral backfire effect by testing whether the effect is attenuated for consumers with low knowledge levels in the domain of referral.

3.3. Study 3

In this study, we wanted to replicate and combine our previous results and aimed for two additional contributions. First, we wanted to provide process evidence by showing that the referral backfire effect is suppressed when referral failure does not provide an identity threat. In agreement with existing literature that relates knowledge levels in a domain to centrality in consumers' self-concepts (Sprout et al., 2009), we used self-perceived knowledge levels in the domain of referral (e.g., movies) as a proxy of the threatening nature of referral failure. We expected that if the sender were unknowledgeable about the domain of the referral, then referral failure would threaten the sender's identity less and therefore reduce the referral backfire effect compared to when the sender is knowledgeable in the domain of referral. This study effectively provides an important boundary condition for the referral backfire effect.

The second aim of this study is to show that the referral backfire effect is not dependent on the match between the domain of referral and the domain of the subsequent product decision, which agrees with the self-affirmation literature that predicts non-threat specific effects of identity threat. In the previous two studies, we focused on the effect of referral failure on product decisions outside of the domain (across domain compensation). However, because there is no theoretical reason to expect moderation by domain match, this third study includes data from both within and across domain DVs.

3.3.1. Method

One hundred thirty-seven students at a large European university (57 males and 80 females), aged between 18 and 29, participated in this experiment in exchange for a participation fee. For this study, restaurants and movies were used as both the domains of referral and domains within which an external influence was provided. A scenario similar to the one used in study 1 manipulated referral outcome in an initial domain (either movies or restaurants), after which popularity information for items within and outside of this initial domain was given (for both movies and restaurants). This popularity information was based on the preferences of a large group of consumers and can be considered a subtle type of social influence (Nail et al., 2000).

Therefore, we obtain two measures of compliance with external influence – one within a domain (e.g., preferences for the most popular movie after recommending movies), and one across a different domain (e.g., preferences for the most popular restaurant after recommending movies).

3.3.1.1. Manipulation of referral outcome. This study used a scenario similar to the one employed in study 1. Importantly, in addition to manipulating the referral outcome between participants, we also manipulated the domain of referral to be either restaurants or movies. This factor was manipulated between participants and counterbalanced across referral outcome conditions. First, we asked participants to think of an acquaintance and to imagine this person asking them – occasionally – for advice about restaurants [movies]. We then presented participants with a list of six restaurants [movies] and asked them to recommend one. Next, we presented the remainder of this scenario, containing the referral failure manipulation (between participants):

“One week after recommending this restaurant, you coincidentally meet your acquaintance at the doorstep of the restaurant you recommended [a different restaurant than the one you recommended]. From the small conversation that follows, it turns out that this is not a coincidence: your acquaintance had indeed chosen to follow up [not follow up] on your referral.”

We asked the participants to imagine this in a vivid way, after which they answered several filler questions meant to provide a rationale for this scenario. A similar text was used in the movie condition.

3.3.1.2. Measurement of referral backfire. In the measurement phase, the participants were provided with lists of both restaurants and movies used in the recommendation phase and were asked to rank order them according to personal preference. Crucially, prior to ranking, they were given popularity information as a source of external influence. The participants were told that one restaurant and one movie had been chosen as best by panels of visitors on relevant review websites. This approach allowed us to test their compliance with this external influence by looking at the extent to which these most popular items were ranked highly. Because the participants had made a recommendation in one of these two domains before, this resulted in two DVs, which allowed us to test the referral backfire effect both within and across domains (e.g., a participant who recommended a movie in phase one and ranks both movies and restaurants in phase two provides a within domain measure for movies and an across domain measure for restaurants). Measurement of these two DVs was counterbalanced for order between conditions. Importantly, because of the rank ordering task, a higher number indicates a weaker attitude towards an item, implying lower compliance with the external influence. Therefore, a higher number implies a stronger backfire effect.

3.3.1.3. Knowledgeability. Additionally, we asked the participants to indicate to what extent they knew about the items of each set they had been asked to rank order in the measurement phase. A single item scale, which we will further refer to as “knowledgeability,” between “not at all” (–5) and “very well” (5) was used to measure this (Bergkvist & Rossiter, 2007; Mobley, Bearden, & Teel, 1988). For analysis of knowledgeability, it is important to understand that this measure is matched with the participants' domain of referral: participants that had recommended a restaurant [movie] in the referral phase, rated their own knowledgeability about the restaurants [movies] presented.

3.3.2. Results and discussion

We investigated whether the main effect of referral failure on subsequent compliance with external influence depended on the

knowledgeability of the domain of referral (as a potential moderator of the threatening nature of referral failure) or match with the domain of referral failure (i.e., within or across domain evaluation of items). We conducted a linear mixed model with referral outcome as a between participants categorical independent variable, domain knowledgeability as a continuous independent measure, and domain match (i.e., the rank of the externally recommended item within domain and rank of the externally recommended item across domain) as within-participants dependent measures.¹ We focus on three aspects of the results: the main effect of referral outcome ($F(1,133) = 12.02, p < .005$), which replicates the referral backfire effect; the two-way interaction between knowledgeability and referral outcome ($F(1,133) = 5.08, p < .05$), which tests the attenuating role of low knowledgeability on the referral backfire effect; and the absence of the three-way interaction, ($F(1,133) = 0.38, ns.$), which shows that the referral backfire effect is insensitive to domain match.

To elaborate on the main effect of referral outcome on rank across and within domain, we conducted contrast tests. First, we found a significant effect of referral outcome on ranking across domain: after referral failure, the participants ranked the recommended item lower ($M = 3.39, SE = .19$) than after referral success ($M = 2.84, SE = .19; t(136) = -2.07, p < .05$), which replicates the referral backfire effect found in studies 1 and 2. Second, a similar significant effect occurred within a domain: after referral failure, the participants ranked the recommended item lower ($M = 2.99, SE = .18$) than after referral success ($M = 2.37, SE = .18; t(136) = -2.45, p < .05$).

To examine in more detail the two-way interaction between knowledgeability and referral outcome (see Fig. 1), we conducted spotlight analysis (Fitzsimons, 2008; Irwin & McClelland, 2001). At one standard deviation below the mean of knowledgeability, no significant difference appeared in the ranking of the externally recommended item between participants in the referral success condition and those in the referral failure condition ($M = 2.54$ and $M = 2.74$, respectively; $\beta = .10, SE = .12, t = .84, ns$). As hypothesized, low knowledgeability regarding the domain of referral attenuates the referral backfire effect. Interestingly, however, the referral backfire effect occurred at the mean level of knowledgeability ($M_{success} = 2.61, M_{failure} = 3.19, \beta = .29, SE = .084, t = 3.47, p < .001$) and at a high level (one standard deviation above the mean) of knowledgeability ($M_{success} = 2.68, M_{failure} = 3.64, \beta = .48, SE = .12, t = 4.05, p < .001$).

For sake of completeness, the mixed model also showed a positive ($r = .248$) main effect of knowledgeability ($F(1,133) = 9.69, p < .005$), i.e., knowledgeability generally leads to lower ranking of the recommended item. Additionally, and unrelated to the full model analyzed above, we found that the participants were less knowledgeable about local restaurants ($M = -1.88, SE = .25$) than about movies ($M = 1.48, SE = .23; t(136) = -10.50, p < .001$).

In previous studies, we took measures to avoid potential alternative explanations that explained the referral backfire effect in ways other than the identity threatening nature of referral failure. These measures largely consisted of separating the phase where referral failure takes place as much as possible from the phase where external information is incorporated into a decision or not. Failing to do this could lead to a game of “tit for tat”, where participants ignore advice because theirs was also ignored. This failure could also lead to an alternative explanation in terms of experimental demand. On a more conceptual level, one could also argue that experiencing referral failure induces a social norm of independence. All of these arguments make

¹ Ranks are not on an interval scale. We conducted a generalized mixed model with ordinal probit dependent variables, which led to the same conclusions: the main effect of referral outcome was significant (Wald $\chi^2(1) = 9.00, p < .005$), as was the two-way interaction between knowledgeability and referral outcome (Wald $\chi^2(1) = 4.91, p < .05$). Again, a three-way interaction was absent (Wald $\chi^2(1) = .24, ns$). We preferred parametric analysis because of its greater flexibility in testing contrasts and spotlight analyses and because the violations are typically inconsequential (Velleman & Leland, 1993).

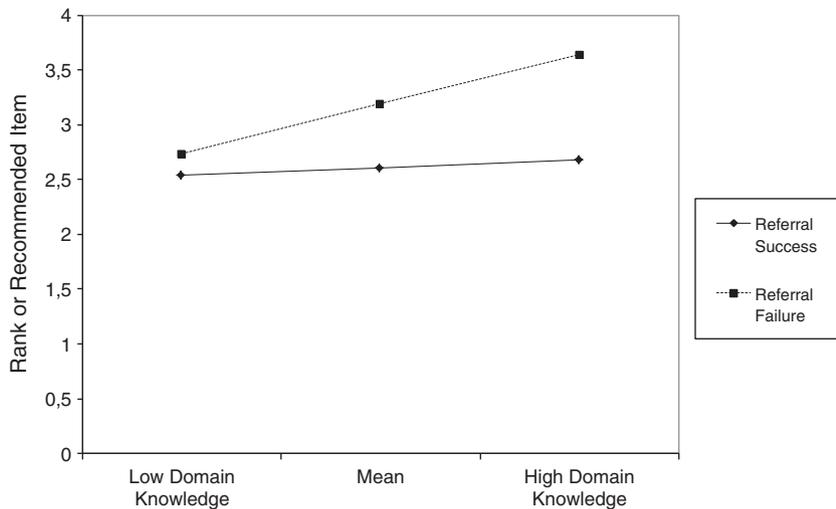


Fig. 1. Effect of referral outcome x knowledgeability on rank of recommended item.

predictions similar to the referral backfire effect. However, these arguments do not account for the moderation of this effect by knowledgeability. Thus, this study not only provides further support for our hypotheses, but also rules out these potential alternative explanations.

Furthermore, this study provides several preliminary insights into the nature of threat from referral failure. Because the effect is not observed under low knowledgeability, it is clear that referral failure does not call into question the relationship between the sender and receiver nor the sender's power to influence others. These two explanations would not be eliminated under low knowledgeability. Referral failure threatens self-image at the level of competence in decision-making in the domain of referral.

3.4. Study 4

In study 4, we aimed to provide further evidence for self-bolstering as the underlying mechanism for the referral backfire effect. This study again uses a moderation design. The current study aims to eliminate threat to self-identity after referral failure and before the subsequent decision. This study design is in contrast to study 3, which prevented the threat altogether. If the referral backfire effect relies on a need to resolve identity-threat, the effect of referral failure should be attenuated when an alternative way to bolster the ego is provided. We asked the participants to evaluate the helpfulness of reviews for a product in an online store. Based on existing literature (Deutsch & Gerard, 1955; Nail et al., 2000), we use these reviews as sources of influence. This approach is in line with the fact that consumers rely heavily on the opinion of others when making consumer decisions (Chevalier & Mayzlin, 2006). In accordance with previous results, we expected these evaluations of helpfulness to decrease after referral failure, as the participants would be more inclined to rely on their own preferences to make choices and discard external information. However, in accordance with H4, we expected this effect to disappear when self-threat comprised by referral failure had been compensated for by a self-bolstering, positive experience.

3.4.1. Method

Ninety-three participants (62 males and 31 females), aged between 19 and 28 years, participated in this experiment in exchange for a participation fee. The participants came to the lab for a one-hour session that included several studies, of which this study was first. Four participants reported extreme evaluations of the reviews and were removed as outliers based on the 3SD criterion (3%).

3.4.1.1. Manipulation of referral outcome. The participants were asked to choose their favorite out of six movie posters. In the control condition, the participants were told that the study concerned what factors people take into account when making this sort of choice and were asked to write a short justification for why they chose that particular poster. Participants in the referral failure condition were asked to write the same justification but were also told that their arguments would be shown to another participant (called the reviewing participant, which was preprogrammed). The actual participants were told that the reviewing participant would indicate the degree to which he or she considered switching their favorite poster to the favorite poster of the participant after reading the justification. For this condition, no information about the identity of the reviewing participant was revealed. After writing and submitting their justification, participants in both conditions saw the favorite poster and the argument of a third, different preprogrammed participant, who justified his choice for a randomly picked poster by means of generic arguments. For example, one such argument was that the poster represented the movie accurately. At that point, the participants were asked to indicate how likely they were to change their opinion on a 7-point scale (1: "certainly not" to 7: "certainly"). Because participants in the referral failure condition had not received feedback on their own preferences yet, this likelihood did not serve as a dependent variable but was rather a part of the procedure aimed at making the advice phase believable. We found no correlation between this switching likelihood, and subsequent measures (all $F_s < 1$). Afterwards, participants in the referral failure condition always received a response from the (preprogrammed) reviewing participant that he would be "very unlikely" (2 out of 7) to switch to the participant's choice after having read the participant's argumentation. Participants in the control condition did not receive any such feedback. Afterwards, all participants were told that this task was completed and were asked to start the next task.

3.4.1.2. Self-affirmation manipulation. After the first phase of the experiment, the participants were asked to perform a writing task that seemed to be completely unrelated but included the self-affirming manipulation. We adopted a procedure frequently used in previous research (e.g., Fein & Spencer, 1997; Sherman et al., 2000). The participants were asked to rank a list of 11 values and personal characteristics (e.g., physical attractiveness, being a good friend, financial success) in order of personal importance. In the self-affirmation condition, the participants wrote a brief essay explaining why their

top-ranked value was important to them and described a time in their lives when this value had been particularly useful. In the no-affirmation condition, the participants wrote about why and when the value they had ranked seventh in importance could be of importance to the average college student.

3.4.1.3. Measurement of referral backfire. In this study, the participants rated the helpfulness of online evaluations in a way similar to what actually takes place in such online stores as Amazon.com. The participants indicated the helpfulness of negative and positive comments made about a product that – at the time of this study – was little known among our participants (i.e., the Amazon kindle) by awarding 1 to 5 stars for each specific comment. Consumer reviews should be considered less helpful when participants are less willing to comply with external influence.

3.4.2. Results and discussion

A 2 (referral outcome) by 2 (self-affirmation) dimensional design showed that referral outcome had a significant main effect on the perceived helpfulness of consumer reviews: referral failure ($M = 3.45$, $SE = .25$) led to a lower perceived helpfulness than the control condition ($M = 4.14$, $SE = .24$; $F(1,85) = 4.03$, $p < .05$). Importantly, this effect was qualified by a significant interaction effect between referral outcome and the self-affirmation manipulation ($F(1,85) = 6.78$, $p < .05$). As depicted in Fig. 2, only participants in the no-affirmation condition rated the consumer reviews as less helpful when having encountered referral failure ($M = 2.77$, $SE = .34$) compared to the control condition ($M = 4.35$, $SE = .39$; $t(85) = 3.07$, $p < .005$). No referral backfire effect was observed in the self-affirmation condition ($M = 4.13$, $SE = .33$ in the referral failure condition vs. $M = 3.93$, $SE = .31$ in the control condition; $t(85) = -.45$, ns.). Additionally, participants in the referral failure condition rated the consumer reviews as more helpful after self-affirmation ($M = 4.13$, $SE = .33$) compared to the no-affirmation condition ($M = 2.77$, $SE = .34$; $t(85) = 2.85$, $p < .01$). In the control condition, self-affirmation had no effect on perceived helpfulness when comparing the neutral task condition ($M = 4.35$, $SE = .39$) with the self-affirmation condition ($M = 3.93$, $SE = .31$; $t(85) = .86$, ns.).

Study 4 conceptually replicated the referral backfire effect with a different procedure, thereby providing additional evidence for the process causing the effect. Moreover, study 4 supported H4; that self-affirming information attenuates the effect of referral failure on the evaluations of consumer reviews.

4. General discussion

Addressing the effect of referral outcome on the person making the referral is of growing importance because consumers engage in referral behavior on a daily basis and are even stimulated by companies to do so (Ryu & Feick, 2007; Schmitt et al., 2011). Making a referral is often driven by motivation to maintain and enhance a positive self-concept (e.g., Hennig-Thurau et al., 2004). Moreover, engaging in a referral makes consumer's choices, and therefore her identity, notably visible. This publicity is even more relevant in the online environment. Referral failure can thus bring into question not only consumer's choices but also the view of oneself as a capable choice maker. We reasoned that consumers are motivated to re-establish this self-image by making choices that are a direct reflection of one's capability as a decision maker. Based on self-determination theory, this motivation implies a relative shift from controlled to self-determined behavior (Deci & Ryan, 1985), which we predicted would make consumers less likely to comply with external sources of influence. The fact that reduced compliance can be used to bolster the self is in line with existing literature (Blanton & Christie, 2003; Nail et al., 2000). Four studies showed that referral failure indeed reduces the referrer's likelihood to comply with external influence in subsequent choices. Furthermore, based on the idea that referral failure is identity-threatening, we provided process evidence and boundary conditions for this referral backfire effect. Implicit egotism (reflecting a need to bolster the self) is increased after referral failure (study 2). Furthermore, the referral backfire effect is attenuated when the referral topic is not central to the identity of the referrer (study 3) and is eliminated when the threat is compensated by self-affirmation (study 4). In addition, the referral backfire effect is independent of the match between referral domain and the domain of the subsequent product decision (study 3). Throughout our studies, we rule out several potential alternative explanations for the referral backfire effect. Moreover, the results of study 3 allow us to make inferences concerning the nature of the threat of referral failure. Because our findings show that the referral backfire effect is attenuated in participants with low self-perceived knowledgeability in the domain of referral, we can conclude that what is under threat is not the relationship between the sender and receiver of information, nor the sender's power to influence others. Rather, referral failure threatens the idea that consumers have of themselves as competent decision makers in the domain of referral. In combination, these studies suggest that referral failure poses a threat to consumers' identity, which leads

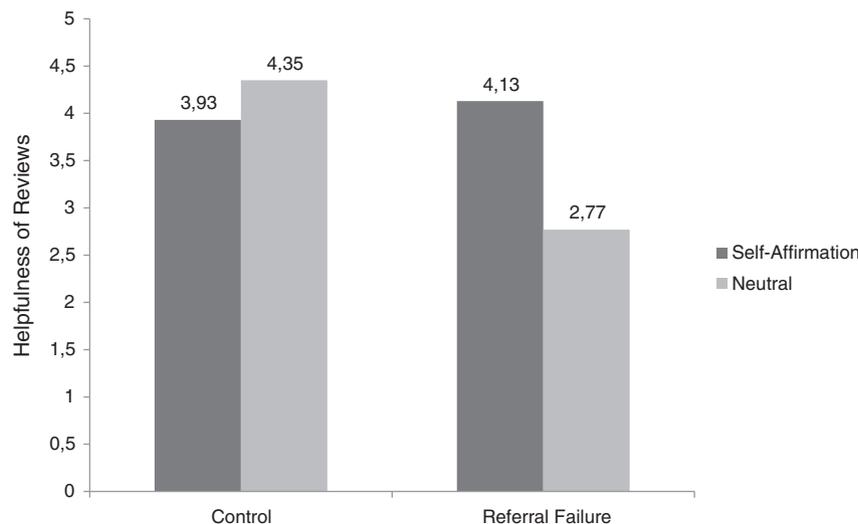


Fig. 2. Effect of referral outcome x self-affirmation on perceived helpfulness of product reviews.

them to discard external influence in an attempt to restore their self-images as competent in making consumer choices.

4.1. Theoretical and managerial implications

We believe that our findings extend previous research in several important ways. First, to the best of our knowledge, we are the first researchers to acknowledge that the outcome of giving advice to others might be consequential to the sender of advice, which is a finding that has implications in many research domains other than marketing. Although several authors have identified the motivations involved in giving advice (Dichter, 1966; Hennig-Thurau et al., 2004; Sundaram et al., 1998), no research has investigated what happens when the needs behind those motivations are not met. Whereas dominant models of information diffusion often model referral behavior (e.g., literature using the Bass diffusion model; Bass, 1969), they do not seem to assume feedback loops involving the referrers based on referral outcomes. Our results demonstrate the importance of considering the potential effects of the referral outcome on the referrer. These effects are particularly important in models of information diffusion or communication models in general. Second, we provide evidence that the outcome of a referral can be identity-threatening. Accordingly, we can expect many other behavioral effects because the existing literature indicates that self-affirmation in general can be used to cope with identity threats (Steele, 1988). For instance, it has been shown that identity threat leads to “compensatory” consumption of status goods (Sivanathan & Pettit, 2010). Therefore, senders who incur a referral failure may be subsequently more interested in offers that promise to bolster the self, such as compensatory status consumption or consumption in other unrelated domains, as long as this consumption helps protect against or compensate for the identity threat. Third, while previous consumer literature has identified reactions to identity threat in terms of *what* consumer decisions are made (Gao et al., 2009), we show that threats can also lead to reactions in *how* decisions are made. Consumers comply less with external influences on their decision processes after experiencing a referral failure.

Fourth, we arrived at our hypothesis about the nature of referral backfire based on a distinction made in the self-determination literature between controlled and self-determined behavior (Deci & Ryan, 1985). Whereas this literature explicitly states that self-determined choices do not preclude complying with external influence, as long as one fully identifies with this influence (Chirkov, Ryan, Kim, & Kaplan, 2003; Ryan, 1993), our results highlight a potential limitation to the independence of self-determination and compliance. If choice serves to establish competence in choice making and thereby restore a self-image, then external influences prohibit choices to be a valid proof of this competence. However, one could argue that behavior aimed at restoring a self-image after a threat is caused or controlled by this threat, and therefore such behavior is not actually self-determined behavior. Future research in this domain should determine whether and when self-bolstering is self-determined or controlled behavior.

We also see important managerial implications of our findings. First, the potential effects of referral failure on subsequent behavior calls into question the much-heralded efficacy of WOM (Chevalier & Mayzlin, 2006; Reichheld, 2003). Considering that consumers who make referrals are usually the company's most satisfied customers (Anderson, 1998), our results reveal the undesirable possibility that an ill-considered campaign that stimulates WOM might induce unintended behavioral changes in exactly those most valuable customers. It is difficult to predict a priori whether consumers' discarding of external influence might make them abandon the product because of referral failure or cling to the product even more vigorously. Theoretically, both reactions are possible, and further research could find circumstances under which either condition

prevails. However, customer development efforts, such as up-selling or cross-selling, are likely to be compromised in customers less willing to comply with external influences due to prior referral failure. Such attempts at persuasion might be particularly ineffective if they are not somehow framed as a support for an initial choice made by the customer. In other words, a good WOM campaign is more complicated than merely increasing the Net Promoter Score (Reichheld, 2003). To arrive at a more complete view of behavioral changes associated with stimulating word of mouth, a good WOM campaign should also consider the likelihood of referral failure and estimate its impact. We may therefore additionally recommend monitoring not only referral success in referral reward programs (Ryu & Feick, 2007; Schmitt et al., 2011) but also referral failure. This approach is potentially even more important because referral failure might – as previously mentioned – affect the company's best customers. Interestingly, our findings not only reveal potential risks in the current practice of stimulating consumer referral, but also offer methods of addressing consumers facing referral failure. More specifically, self-affirmation in an unrelated domain can compensate for identity threat caused by referral failure (study 4). Indeed, highlighting a customer's value to the company, their contribution or significance in general (e.g., by offering them rewards for loyalty) or affirming his or her lifestyle aspects relevant to the company's offer (e.g., a perfume brand promoting a luxurious lifestyle) might be exactly the type of self-affirmation such a customer needs.

A final practical observation is that stimulating referrals is often mentioned as the solution to the declining effectiveness of traditional advertising methods (Kumar, 2010; Van den Bulte & Wuys, 2009). Ironically, referral failures might contribute to that very decline because consumers facing referral failure might be impelled to make their own decisions and discard external information in the form of marketing messages.

4.2. Suggestions for future research

Our studies constitute a first step in answering the question of how referral outcome affects consumer behavior. Nevertheless, our research also evokes several questions for future enquiry. Most of those questions are based on our main contribution: referral outcome may be consequential for the referrer. However, it is essential that additional boundary conditions and both theoretical and practical implications be investigated. First, in our studies, the referrer is always aware of the failure of his/her referral. It might be an interesting avenue for future research to find out not only (a) when consumers notice referral failure but also (b) when they experience it as a failure. Second, in our studies, participants made recommendations to others that were moderately distant to them (fellow students). Research shows that recommendations travel through weak ties, where they have a bridging function, and through strong ties, where they are most influential (Brown & Reingen, 1987). Future research could focus on the moderating effect of the strength of these ties on the referral backfire effect. On the one hand, one may argue that strong ties buffer against referral failure because they are usually the result of rich and diverse relationships. Consequentially, referral failure would not necessarily lead to self-threats when the receiver and the referrer have strong ties. On the other hand, strong ties are characterized by a high degree of association, which could lead to an assumption of similarity. In that case, referral failure could violate that assumption and therefore cause even stronger effects in strong ties. Third, although our findings in study 3 already suggest that the threat invoked by referral failure is on the level of specific consumer decisions or decision making capability, future research could also provide more detailed insights into the nature of the threat of referral failure. A priori, referral failure could call into question one's personality at large, the relationship between receiver and referrer, one's

consumer choices, one's decision capability, one's capability as an advisor, or other identity aspects. Additionally, the circumstances under which a referral occurs could affect different identity aspects, leading to varying effects of referral failure. Making a referral to a close friend or an unknown audience in the internet, as an established expert or as a lay person, after lengthy research or off the top of one's head, all of these different conditions could lead to different inferences concerning the significance of referral failure for one's identity with different possible behavioral patterns.

Fourth, it remains an empirical question whether consumers are on a certain level aware of the potential negative consequences of making a referral and whether they take this risk into consideration when deciding to make a referral. If this awareness is the case, it should bias these decisions toward more "safe" instances of referrals. Referrals would subsequently become more likely for brands with a high-perceived social support or under other circumstances that minimize the risk of referral failure.

Finally, we identified in our Introduction the need for self-presentation or self-enhancement of identity as the core drivers behind referral behavior (De Angelis, Bonezzi, Peluso, Rucker, & Costabile, in press; Hennig-Thurau et al., 2004). Because our data show that the self is indeed involved in referral behavior, this notion might offer insights into the behavior of key actors in the diffusion of information. The existing literature has identified hubs (Goldenberg, Han, Lehmann, & Hong, 2009) and market mavens (Feick & Price, 1987) as important actors in information proliferation. Because hubs and market mavens share the attribute that they are active referrers, as well as avid information harvesters – and therefore very open to external influences – one might wonder how they accommodate referral failure. Does the centrality of being a hub or market maven in these consumers' self-identities and the ensuing desire to accumulate information override the threat of referral failure? Do they rely on sources of self-affirmation that are intrinsic to their role? If they do so, would these sources differ between types of key actors? Hubs, defined in terms of their social connectedness, may prefer to intensify the spreading of (other) information as a way to bolster their identity. Mavens may spread knowledge that is more technical and objective, which would be less open to opinion and therefore less discounted by referral outcomes. Further research might investigate how different key actors deal with the experience of referral failure because this knowledge might provide insight into the development of such hubs and mavens.

In conclusion, we emphasize the need for more research into the effects of referral outcome on the referrer, especially in large mass of ordinary consumers because the implications could be substantial for both consumer theory and the market place.

Acknowledgments

We would like to acknowledge the help of colleagues of the consumer behavior group at KU Leuven for comments on earlier versions of this paper. In addition, the authors would like to thank Peeter Verlegh two anonymous reviewers and the editorial team for a number of helpful suggestions and comments which have significantly improved the quality of the finished manuscript.

References

- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*, 1(1), 5–17.
- Bass, F. (1969). A new product growth model for consumer durables. *Management Science*, 15(5), 215–227.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139–168.
- Belk, R. W., Bahn, K. D., & Mayer, R. N. (1982). Developmental recognition of consumption symbolism. *Journal of Consumer Research*, 9(1), 4–17.
- Berger, J., & Heath, C. (2007). Where consumers diverge from others: Identity signaling and product domains. *Journal of Consumer Research*, 34(2), 121–134.
- Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, 44(2), 175–184.
- Blanton, H., & Christie, C. (2003). Deviance regulation: A theory of action and identity. *Review of General Psychology*, 7(2), 115–149.
- Boninger, D. S., Krosnick, J. A., & Berent, M. K. (1995). Origins of attitude importance: Self-interest, social identification, and value relevance. *Journal of Personality and Social Psychology*, 68(1), 61–80.
- Brendl, C. M., Chattopadhyay, A., Pelham, B. W., & Carvallo, M. (2005). Name letter branding: Valence transfers when product specific needs are active. *Journal of Consumer Research*, 32(3), 405–415.
- Brown, T. J., Barry, T. E., Dacin, P. A., & Gunst, R. F. (2005). Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the Academy of Marketing Science*, 33(2), 123–138.
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer Research*, 14(3), 350–362.
- Buhrmester, M. D., Blanton, H., & Swann, W. B., Jr. (2011). Implicit self-esteem: Nature, measurement, and a new way forward. *Journal of Personality and Social Psychology*, 100(2), 365–385.
- Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3), 345–354.
- Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, 84(1), 97–110.
- Dawson, E., Gilovich, T., & Regan, D. T. (2002). Motivated reasoning and performance on the Wason selection task. *Personality and Social Psychology Bulletin*, 28(10), 1379–1387.
- De Angelis, M., Bonezzi, A., Peluso, A. M., Rucker, D. D., & Costabile, M. (2011). On brag-garts and gossips: A self-enhancement account of word-of-mouth generation and transmission. *Journal of Marketing Research*, 49(4), 551–563.
- De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, 25(3), 151–163.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, 53(6), 1024–1037.
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology*, 51(3), 629–636.
- Dichter, E. (1966). How word-of-mouth advertising works. *Harvard Business Review*, 44(6), 147–157.
- Dunning, D. (2007). Self-image motives and consumer behavior: How sacrosanct self-beliefs sway preferences in the marketplace. *Journal of Consumer Psychology*, 17(4), 237–249.
- Dunning, D., Perie, M., & Story, A. L. (1991). Self-serving prototypes of social categories. *Journal of Personality and Social Psychology*, 61(6), 957–968.
- East, R., Hammond, K., & Lomax, W. (2008). Measuring the impact of positive and negative word of mouth on brand purchase probability. *International Journal of Research in Marketing*, 25(3), 215–224.
- Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, 32(3), 378–389.
- Feick, L. F., & Price, L. L. (1987). The market maven: A diffuser of marketplace information. *The Journal of Marketing*, 51(1), 83–97.
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73(1), 31–44.
- Fitzsimons, G. J. (2008). Death to dichotomizing. *Journal of Consumer Research*, 35(1), 5–8.
- Fitzsimons, G. J., & Lehmann, D. R. (2004). Reactance to recommendations: When unsolicited advice yields contrary responses. *Marketing Science*, 23(1), 82–94.
- Gal, D., & Rucker, D. D. (2010). When in doubt, shout! Paradoxical influences of doubt on proselytizing. *Psychological Science*, 21(11), 1701–1707.
- Gao, L., Wheeler, S. C., & Shiv, B. (2009). The "shaken self": Product choices as a means of restoring self-view confidence. *The Journal of Consumer Research*, 36(1), 29–38.
- Godes, D., & Mayzlin, D. (2009). Firm-created word-of-mouth communication: Evidence from a field test. *Marketing Science*, 28(4), 721–739.
- Goldenberg, J., Han, S., Lehmann, D. R., & Hong, J. W. (2009). The role of hubs in the adoption process. *Journal of Marketing*, 73(2), 1–13.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52.
- Hennig-Thurau, T., & Walsh, G. (2003). Electronic word-of-mouth: Motives for and consequences of reading customer articulations on the Internet. *International Journal of Electronic Commerce*, 8(2), 51–74.
- Irwin, J. R., & McClelland, G. H. (2001). Misleading heuristics and moderated multiple regression models. *Journal of Marketing Research*, 38(1), 100–109.
- Jain, S. P., & Maheswaran, D. (2000). Motivated reasoning: A depth-of-processing perspective. *Journal of Consumer Research*, 26(4), 358–371.
- Jones, J. T., Pelham, B. W., Carvallo, M., & Mirenberg, M. C. (2004). How do I love thee? Let me count the Js: Implicit egotism and interpersonal attraction. *Journal of Personality and Social Psychology*, 87(5), 665–683.
- Jones, J. T., Pelham, B. W., Mirenberg, M. C., & Hetts, J. J. (2002). Name letter preferences are not merely mere exposure: Implicit egotism as self-regulation. *Journal of Experimental Social Psychology*, 38(2), 170–177.
- Keller, E. (2007). Unleashing the power of word of mouth: Creating brand advocacy to drive growth. *Journal of Advertising Research*, 47(4), 448–452.

- Kumar, V. (2010). A customer lifetime value-based approach to marketing in the multichannel, multimedia retailing environment. *Journal of Interactive Marketing*, 24(2), 71–85.
- Laczniak, R. N., DeCarlo, T. E., & Ramaswami, S. N. (2001). Consumers' responses to negative word-of-mouth communication: An attribution theory perspective. *Journal of Consumer Psychology*, 11(1), 57–73.
- Liberman, A., & Chaiken, S. (1992). Defensive processing of personally relevant health messages. *Personality and Social Psychology Bulletin*, 18(6), 669–679.
- Mobley, M. F., Bearden, W. O., & Teel, J. E. (1988). An investigation of individual responses to tensile price claims. *Journal of Consumer Research*, 15(2), 273–279.
- Nail, P. R., MacDonald, G., & Levy, D. A. (2000). Proposal of a four-dimensional model of social response. *Psychological Bulletin*, 126(3), 454–470.
- Olivero, N., & Lunt, P. (2004). Privacy versus willingness to disclose in e-commerce exchanges: The effect of risk awareness on the relative role of trust and control. *Journal of Economic Psychology*, 25(2), 243–262.
- Reed, A. (2004). Activating the self-importance of consumer selves: Exploring identity salience effects on judgments. *Journal of Consumer Research*, 31(2), 286–295.
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), 46–54.
- Richins, M. L. (1994). Valuing things: The public and private meanings of possessions. *The Journal of Consumer Research*, 21(3), 504–521.
- Rogers, E. M., & Cartano, D. G. (1962). Methods of measuring opinion leadership. *Public Opinion Quarterly*, 26(3), 435–441.
- Rudman, L. A., Dohn, M. C., & Fairchild, K. (2007). Implicit self-esteem compensation: Automatic threat defense. *Journal of Personality and Social Psychology*, 93(5), 798–813.
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy, and the self in psychological development. In J. E. Jacobs (Ed.), *Nebraska symposium on motivation, 1992: Developmental perspectives on motivation* (pp. 1–56). Lincoln, NE, US: University of Nebraska Press.
- Ryu, G., & Feick, L. (2007). A penny for your thoughts: Referral reward programs and referral likelihood. *Journal of Marketing*, 71(1), 84–94.
- Schmitt, P., Skiera, B., & Van den Bulte, C. (2011). Referral programs and customer value. *Journal of Marketing*, 75(1), 46–59.
- Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-affirmation theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 38. (pp. 183–242) San Diego, CA: Academic Press.
- Sherman, D. A. K., Nelson, L. D., & Steele, C. M. (2000). Do messages about health risks threaten the self? Increasing the acceptance of threatening health messages via self-affirmation. *Personality and Social Psychology Bulletin*, 26(9), 1046–1058.
- Sivanathan, N., & Pettit, N. C. (2010). Protecting the self through consumption: Status goods as affirmational commodities. *Journal of Experimental Social Psychology*, 46(3), 564–570.
- Smith, T., Coyle, J. R., Lightfoot, E., & Scott, A. (2007). Reconsidering models of influence: The relationship between consumer social networks and word-of-mouth effectiveness. *Journal of Advertising Research*, 47(4), 387–397.
- Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing Research*, 46(1), 92–104.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. *Advances in Experimental Social Psychology*, 21, 261–302.
- Steele, C. M., & Liu, T. J. (1983). Dissonance processes as self-affirmation. *Journal of Personality and Social Psychology*, 45(1), 5–19.
- Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-mouth communications: A motivational analysis. *Advances in Consumer Research*, 25, 527–531.
- Van den Bulte, C., & Wuyts, S. (2009). Leveraging customer networks. In P. R. Kleindorfer, Y. Wind, & R. E. Gunther (Eds.), *The network challenge: Strategy, profit, and risk in an interlinked world* (pp. 243–258). Upper Saddle River, NJ: Wharton School Publishing.
- Velleman, P. F., & Leland, W. (1993). Nominal, ordinal, interval, and ratio typologies are misleading. *The American Statistician*, 47(1), 65–72.
- Von Wangenheim, F. (2005). Postswitching negative word of mouth. *Journal of Service Research*, 8(1), 67–78.
- Watts, D. J., & Dodds, P. S. (2007). Influentials, networks, and public opinion formation. *Journal of Consumer Research*, 34(4), 441–458.
- Wentura, D., & Greve, W. (2005). Assessing the structure of self-concept: Evidence for self-defensive processes by using a sentence priming task. *Self & Identity*, 4(3), 193–211.