

Receiver responses to rewarded referrals: the motive inferences framework

Peeter W. J. Verlegh · Gangseog Ryu · Mirjam A. Tuk · Lawrence Feick

Received: 30 January 2012 / Accepted: 3 January 2013 / Published online: 29 January 2013
© Academy of Marketing Science 2013

Abstract Referral reward programs have been shown in past research to stimulate referrals and also to contribute positively to customer lifetime value and firms' profitability. In this paper we examine whether, how, and under what conditions providing a reward for a referral affects receivers' responses to the referral. Based on a multiple motives inference framework, we propose that rewards adversely affect responses because they lead receiving consumers to infer ulterior motives for the referral. Using experiments and a survey, we find support for this hypothesis and show that this effect is stronger for unsolicited and weak tie referrals. We also demonstrate that rewarding both the referral provider and receiver or providing symbolic rewards can eliminate the negative effect of rewarded referrals. The paper makes conceptual contributions to the literature on referral reward programs, word-of-mouth, and

motive inferences. The work has implications for managers considering ways to construct referral programs and design marketing activities to increase referrals.

Keywords Word of Mouth · Referral · Reward Program · Motive Inference · Tie Strength

Introduction

A small group of students is talking during a break, and their conversation flows into a discussion about smart phones. One mentions a new phone he just bought and describes its attractive features and service plan. He finishes with a strong recommendation. The students who heard the description are likely to leave with a positive impression of the phone and service provider. But what if the individual who made the recommendation added that he'll receive a reward if someone in the group buys the same phone and contract? Would the presence of the reward change the listeners' responses to the referral? Would the listeners have responded differently if one of them had solicited the referral (that is, during the conversation one of them asks whether he would recommend the phone) or if the referral were provided by a close friend or family member (rather than just a classmate)? In this paper, we address these and related questions.

Although word-of-mouth (WOM) long has been recognized as an important influence on consumers, for a variety of reasons research attention to WOM recently has surged. First, technology has allowed the emergence of new types of person-to-person interaction about products and is shifting control of message and media timing to the consumer (cf., Libai et al. 2010). Traditional advertising is sharing the stage with the increasingly available product and service recommendations of other consumers. Second, with the increasing importance of measuring customer value to the firm, marketers are considering the ways that referral potential affects estimates of a customer's value (e.g., Kumar et al. 2010; Schmitt et al. 2011). Thus, in a general sense, marketers have

P. W. J. Verlegh
Department of Communication Science, University of Amsterdam,
Kloveniersburgwal 48, Room D.110a,
1012 CX Amsterdam, The Netherlands
e-mail: pverlegh@uva.nl

G. Ryu (✉)
Korea University Business School, Korea University,
Anam-Dong, Seongbuk-Gu,
Seoul, Korea 136-701
e-mail: gryu@korea.ac.kr

M. A. Tuk
Imperial College Business School, Tanaka Building, Room 278,
Imperial College London, South Kensington Campus,
London SW7 2AZ, UK
e-mail: m.tuk@imperial.ac.uk

M. A. Tuk
INSEAD, Fontainebleau, France

L. Feick
University Center for International Studies, University of Pittsburgh,
4400 Posvar Hall,
Pittsburgh, PA 15260, USA
e-mail: feick@pitt.edu

come to realize that WOM is a powerful communication tool that can and should be managed (e.g., Keller 2007).

Referral programs, in which firms offer a reward to customers who make a (successful) recommendation, are an increasingly popular method of stimulating referrals. Using Google, a search with the term “recommend-a-friend program” yielded over 70 million hits in April 2012 (cf. Ryu and Feick 2007; Xia et al. 2011). The variety of companies offering such programs is astonishing. One can find referral programs for retail stores, financial services and products, mobile and internet services, digital goods, cosmetics, and B2B products (e.g., supply chain software), but also for horse race clubs, snoring associations, and laser eye surgery. Moreover, there is substantial variation in the ways companies implement referral programs. For example, some firms direct their reward mainly to the recommending customer, while others offer a reward for both the recommending customer and the receiver of the recommendation. In addition, although offering financial rewards or discounts seems most typical, firms also offer rewards of a different nature—such as a donation to a charity.

Academic research in marketing only recently has begun to examine rewarded referrals. Several papers have looked at reward program design and firm profitability. For example, Bialogorsky et al. (2001) were the first to identify conditions under which referral programs are more profitable than price discounts. Others have used analytical models to propose optimal designs of referral rewards in enhancing the firm’s profitability (Kornish and Li 2010; Xia et al. 2011). Schmitt et al. (2011) have shown that customers acquired through referral programs on average are 16% more valuable than those acquired through other means, and that this value is greater than the cost of the rewards used to stimulate referrals.

Other work has focused on the underlying conditions that make consumers more likely to transmit a rewarded referral and those under which consumers respond positively or negatively to such referrals. For example, both Wirtz and Chew (2002) and Ryu and Feick (2007) have shown experimentally that offering a reward increases the likelihood that consumers make referrals. Ryu and Feick (2007) also emphasized the important link to tie strength, showing that incentives were particularly important in encouraging WOM to weak social ties (e.g., casual acquaintances), and suggest that reward programs may be an effective way of stimulating consumers to spread WOM beyond their usual circle of close friends and family.

Clearly, however, for a referral program to be effective, firms need both a high likelihood of referral on the part of the WOM provider *and* a high receptivity to a referral on the part of the WOM receiver. Recently, Trusov et al. (2009) have speculated that rewarded referrals will be less effective than natural (unrewarded) WOM on recipient responses, and Tuk et al. (2009) have empirically begun to demonstrate some of

the conditions under which rewarded referrals are more likely to be negatively received. But the literature does not include a clear and systematic investigation of the existence of and the reasons for a negative impact, under what conditions the effect occurs, and how marketers can limit the negative impact of referral reward programs. Our paper focuses on the receiver of a referral in order to address these questions.

We propose a motives-based framework in which referral receivers try to understand the referral behavior of the recommender by engaging in an inference making process (Friestad and Wright 1994; Kelley 1972; Reeder 2009a). Specifically, we argue that a rewarded referral induces ambiguity in the receiver about the motives that led to the recommendation. One ambiguity resolution outcome is an inference of ulterior motives (as opposed to genuine motives) as the main driver of the recommendation, which will reduce the effectiveness of the recommendation. Based on this framework, we identify several moderating conditions that are expected to affect when and how the use of a reward leads the receiver to infer ulterior motives, thereby decreasing the referral’s effectiveness.

The remainder of this paper is structured as follows: we first review the Multiple Inference Model in combination with attribution theories and the Persuasion Knowledge Model and use this framework to develop hypotheses about the impact of rewarded and unrewarded referrals on receiver responses. We then hypothesize and test a set of moderators that are derived from this literature (see Fig. 1). We present the results from four experiments and a survey. In this set of studies we show that (1) overall, rewarded referrals yield less favorable responses than unrewarded referrals, (2) the negative response to a rewarded referral operates through ulterior motive inferences and disclosure of such motives influences the response, (3) this process is moderated by two key variables that establish boundary conditions for the effect, initiative of referral and tie

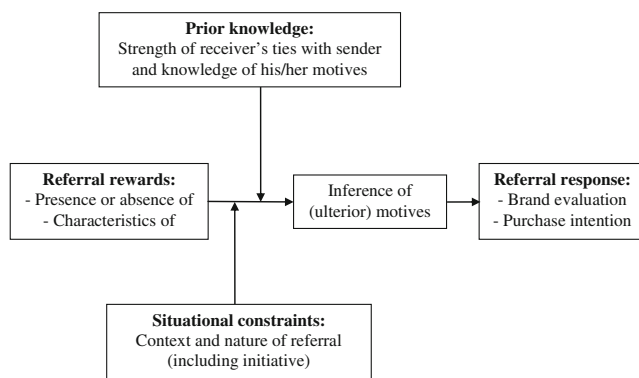


Fig. 1 The conceptual model of the determinants of receiver responses to rewarded referrals

strength between WOM participants, and (4) program design features (i.e., reward type and allocation scheme) that are under the direct control of marketing managers can mitigate negative responses. We show that these effects are quite general by generating the results in experiments and in a retrospective survey. We end with a general discussion that highlights our contributions and considers the implications of our results.

Theoretical background and development of hypotheses

We view the referral receivers' problem as sense making: trying to figure out the accuracy and usefulness of a recommendation. When a recommendation is rewarded, consumers are faced with an ambiguous situation—is the recommendation driven by genuine, product-related motives or ulterior, financial motives? The Multiple Inference Model (MIM; Reeder 2009a; Reeder et al. 2002) provides a theoretical framework that helps us understand how consumers sort through the alternative motives. The MIM proposes that individuals consider multiple motives as well as characteristics of the situation and prior knowledge in order to integrate inferences into one coherent impression (Reeder 2009a, b; Reeder et al. 2002, 2004). Hence, a single, specific behavior (providing a recommendation) can be seen as having different underlying motives (presenting oneself as an expert; helping others to obtain the product that best suits them), depending on the perceived intention of the behavior (did someone spontaneously give advice, or did the other person solicit a recommendation?) and the nature of the situation. Whenever there are inconsistencies between multiple possible motives, both prior knowledge about the actor and the characteristics of the situation are taken into account to infer the probability of the various motives as drivers of a behavior, ultimately resulting in resolution of the inconsistencies.

The MIM builds in part on attribution theories (Heider 1958; Kelley 1972), in particular, Kelley's discounting principle that focuses on the impact that plausible alternative causes have on discounting a hypothesized cause. That is, feasible person or situation attributions (e.g., an endorser in an ad did it for the money) will decrease message persuasiveness by making less credible product attributions (e.g., Sparkman 1982). Even though attribution theories and the MIM consider characteristics of the situation, the MIM is unique in the emphasis it puts on the consideration of multiple motives as causes.

The MIM also shares concepts with the Persuasion Knowledge Model (PKM; Friestad and Wright 1994, 1995). The PKM proposes that consumers possess knowledge about communicators' motives and persuasion tactics and that this knowledge helps them infer the motives underlying communicators' behavior and then guides their evaluation of the

message. If consumers suspect a hidden or ulterior motive, the persuasion attempt will yield greater recipient resistance, and the credibility and persuasiveness of the message are weakened. However, the PKM mainly focuses on understanding how knowledge of persuasion tactics and ulterior motives generally affects consumers' responses to persuasion attempts, whereas the MIM provides a more detailed account of the competition between alternative motives and offers a theoretical framework that helps explain inference making in everyday interactions as well as identify systematically influencing factors.

Rewarded versus unrewarded referral

Various categories of (mostly intrinsic) motives have been advanced as causes of natural (i.e., unrewarded) word-of-mouth (Dichter 1966; Richins 1984). Since the recommender has nothing to gain economically from the recommendation, an unrewarded recommendation is likely to be interpreted as being driven by genuine, intrinsic motives originating from product experience and/or knowledge. As a consequence, the recommender and his recommendation usually will be perceived as unbiased and objective (Bansal and Voyer 2000; Keller 2007). This fundamental aspect of natural WOM partially explains its powerful influence on consumers' evaluations.

On the other hand, with rewarded referrals, the consumer inference problem is more complicated. In this case, multiple interpretations are possible: the recommendation might be based on the recommender's positive experience with the product, but it might also be based on the reward received by the recommender, or perhaps both (cf., Tuk et al. 2009). In the MIM, the presence of a financial reward is a context effect—a situational constraint that is capable of inducing ulterior motive-driven behavior. By situational constraints, Reeder (2009a) refers to conditions that (indirectly) influence a person's actions by inspiring goal states or motives. Reeder argues that whenever behavior is to some extent intentional, the perception of the operation of differential situational constraints can result in different inferred motives. In a product referral context, the presence of a reward for the referral is as a situational constraint that can influence the inferences about motives (e.g., she made the recommendation because she was getting rewarded for doing so). Such inferences are not automatic—the individual can choose to ignore this constraint, depending on other motivating factors simultaneously considered. Consequently, in rewarded referral situations the behavior is more likely to be interpreted as driven by ulterior motives, resulting in a reduced perceived objectivity of WOM and less favorable responses. Therefore, we expect:

H1: Compared to unrewarded referrals, rewarded referrals evoke less favorable responses to the referral.

Solicited versus unsolicited referral

Of course, a number of different situational constraints may exist in a particular context, and the consumer's sense-making task involves sorting through the influence of these situational constraints to infer motives. Consider a rewarded referral in a situation in which the recommendation is sought by the receiver. Although product recommendations often originate from the sender's motivation to share an experience (Dichter 1966), and referral reward programs are designed to increase this unsolicited WOM, Brown and Reingen (1987) found that 57% of recommendations (in the context they examined) were actively sought by the receivers. In these cases, the recommendation receiver would consider the likelihood that the recommendation provider would *not* recommend the product, *given* the request for a recommendation. Furthermore, the receiver would consider the likelihood that the recommendation provider would *not* recommend the product, *given* the reward. The outcome of this deliberation is an assessment of which situational constraints end up being stronger motivators. While the financial reward adds ambiguity to the potential motives for a recommendation, a request for a recommendation is an unambiguous referral motive. As such, we expect that the solicitation of a recommendation will be perceived as a stronger situational constraint and consequently as the primary motivator. The reward for the recommendation still can be perceived as a secondary motivator driving the behavior. This reasoning is quite consistent with Kirmani and Campbell's (2004) finding that consumers who actively seek the input of others in their decision making process are less likely to infer ulterior motives on the part of the persuasion agent, because the agent's behavior appears to be driven primarily by the seeker's need for information. In summary:

H2: Rewarded referrals (vs. unrewarded) are less likely to reduce the favorability of consumer responses to a referral when it is solicited (vs. unsolicited) by the receiver.

Study 1: rewarded referrals and solicited vs. unsolicited referral

Study 1 examines whether providing rewards for referrals leads the receivers of those referrals to infer ulterior motives, resulting in less favorable responses to the referral (H1). Further, we investigate whether this effect is moderated by a situational constraint—whether or not the recommendation is solicited by the WOM receiver (H2).

Participants and design

Participants were 117 students (40% are female, mean age=20) at a large Mid-Atlantic university in the U.S. who

participated in return for course credit or a small gift. We randomly assigned participants to conditions in a 2 (Reward: Reward vs. No Reward) x 2 (Initiative: Solicited Referral vs. Unsolicited Referral) between-subjects design. We excluded six students who did not own a mobile phone since the study examined mobile phone service providers.

Stimuli and procedure

Participants responded to a scenario focusing on the recommendation of a mobile phone service provider—a category in which WOM is likely to be important because of the experiential nature of the product. Participants were asked to imagine that at a party they talked to a person named Kim whom they had just met. Next we manipulated whether the referral was solicited by the receiver or not by stating either that “you mention that you're annoyed by the high cost of using your cell phone and you ask her which provider she has” (solicited referral) or “Kim mentions that she was annoyed by the high cost of using her cell phone and that she just switched to a new provider” (unsolicited referral). In both conditions, Kim says that her new provider ReTell (fictional name) has lower prices for calls and texts. At the end of the conversation, she asks for your e-mail address to forward you an e-mail that includes the firm's low introduction rate (no reward condition). In the reward condition she adds that she will receive a \$20 gift card if she attracts a new customer.

Measures

We measured referral response by asking participants to indicate on a 7-point scale (1=not at all likely, 7=very likely) how likely they were to give Kim their e-mail address in order to participate in this campaign. As a manipulation check, we asked participants to rate the statement “Kim took the initiative in talking about cell phones” on a 7-point Likert-type item. Participants provided ratings for perceived ulterior motives on two items adapted from Campbell and Kirmani (2000): “Kim has ulterior motives,” and “Kim wants to make money” ($\alpha=.89$).

Results

Manipulation check The manipulation of initiative was successful: in the unsolicited referral condition, Kim was perceived as taking the initiative ($M=5.26$) more than in the solicited referral condition ($M=2.93$; $F(1, 107)=49.43$, $p<.001$).

Referral response ANOVA on referral responses supported H1. There was a main effect of reward (participants responded less favorably if the referral was rewarded ($F(1,$

107)=25.21, $p<.001$) and of initiative (referral responses were more favorable when the referral was solicited by the receiver ($F(1, 107)=18.36, p<.001$; see Table 1 for means)). Also, in support of H2, we found a significant interaction between reward and initiative ($F(1, 107)=5.47, p<.05$). In unsolicited referrals, consumers responded less favorably to rewarded ($M=2.00$) than to unrewarded referrals ($M=4.40$; $F(1, 107)=27.70, p<.001$). In solicited referrals, this difference was marginally significant (rewarded referral: $M=4.16$; unrewarded referral: $M=5.03$; $F(1, 107)=3.52, p<.10$).

Inference of ulterior motives We next examined whether the differences in referral responses could be explained by inferences of ulterior motives for solicited versus unsolicited referrals. An ANOVA on ulterior motives confirmed that ulterior motive inferences were stronger when the referral was rewarded ($M_{\text{reward}}=5.26$; $M_{\text{noreward}}=3.93$; $F(1, 107)=16.53, p<.001$), and when the referral was unsolicited ($M_{\text{unsolicited}}=5.03$; $M_{\text{solicited}}=4.18$; $F(1, 107)=5.36, p<.05$). The pattern of

the interaction of reward and initiative for ulterior motives was similar to that for referral responses though only marginally significant ($F(1, 107)=3.05, p<.10$). As indicated by the pattern of means in Table 1, inferences of ulterior motives were strongest when rewarded referrals were initiated by the sender, and they were considerably weaker for both unrewarded referrals initiated by the sender and for referrals initiated by the receiver (irrespective of a reward). Our theorizing predicts mediated moderation (Muller et al. 2005) in which initiative moderates the effect of rewards on the mediator (inferred ulterior motives), which in turn influences referral responses. Therefore, we analyzed our data by means of the MODMED macro, model 2 (Preacher et al. 2007). The results show that inferred ulterior motives are a significant predictor of referral responses such that referral response became less positive when the inference of ulterior motive increased ($b=-.56, t=-6.42, p<.001$). Consistent with our theorizing, further analyses revealed that when the sender took the initiative for the referral, the negative conditional indirect effect of rewards on referral response (via inference of ulterior motives) was significant ($b=-.50$, bootstrapped 95% CI: $-.83$ to $-.23$). When the receiver took the initiative, however, the effect was much smaller and not significant: the confidence interval includes 0.00 ($b=-.20$, bootstrapped 95% CI: $-.47$ to $+.07$).

Table 1 Means (standard deviations) for dependent measures in Studies 1–4

Study 1	No Reward	Reward	
Purchase intention			
Unsolicited	4.40 (2.14)	2.00 (1.05)	
Solicited	5.03 (1.50)	4.16 (2.10)	
Ulterior motives			
Unsolicited	4.02 (1.64)	5.81 (1.29)	
Solicited	3.84 (1.73)	4.56 (1.83)	
Study 2	No Reward	Reward & Non-disclosure	Reward & Disclosure
Brand evaluation			
Weak tie	2.81 (1.37)	0.40 (2.62)	1.15 (2.18)
Strong tie	3.59 (1.09)	3.48 (1.31)	2.39 (2.08)
Study 3	No Reward	Reward	
Brand evaluation			
Unsolicited	2.51 (1.57)	0.70 (2.29)	
Solicited	2.83 (1.59)	1.48 (1.90)	
Weak tie	1.98 (1.65)	0.19 (1.98)	
Strong tie	2.97 (1.46)	2.71 (1.57)	
Study 4a	No Reward	Reward Me	Reward Both
Brand evaluation			
Weak tie	2.98 (0.97)	1.99 (1.20)	2.60 (1.11)
Strong tie	3.49 (1.00)	3.31 (0.68)	3.27 (0.74)
Study 4b	No Reward	Monetary Reward	Symbolic Reward
Brand evaluation			
Weak tie	3.25 (0.98)	1.69 (1.84)	2.98 (1.24)
Strong tie	4.06 (0.62)	3.86 (0.55)	4.00 (0.77)

Discussion

Study 1 supports H1 by showing that rewards have a negative impact on responses to a referral and that this effect operates through ulterior motive inferences. Study 1 also demonstrates that the presence of additional situational constraints matters. The negative effect of rewards on ulterior motive inferences and responses to recommendations is less strong when referrals are solicited by the receiver (H2). Hence, Study 1 suggests that ulterior motives will indeed be perceived as a primary driver of rewarded recommendations. However, when there is an additional constraint that is likely to be a stronger motivator of the behavior (i.e., the advice was requested), the negative effect of the reward is reduced.

Weak vs. strong ties

Both the MIM and the PKM emphasize the role of prior knowledge about an actor or agent in the motive inference process (Friestad and Wright 1994; Gawronski 2009; Reeder 2009b). Prior knowledge guides the interpretation of ambiguous behavior, yielding an interpretation that is consistent with the existing knowledge of the individual. We’ve noted that rewarded referrals are ambiguous since either intrinsic (genuine) or extrinsic (ulterior) motives could be behind the recommendation. Thus, the receiver’s prior knowledge of the recommender is likely to influence

motive inferences. We propose that the social relationship between the two (often conceptualized as tie strength, e.g., Brown and Reingen 1987; Dale et al. 1997) will be a crucial factor in providing prior knowledge about the referral provider.

Research shows that WOM between strong ties (e.g., family members and close friends) is more likely and more persuasive than between weak ties (e.g., casual acquaintances; Brown and Reingen 1987; Gilly et al. 1998). These results occur primarily because people regularly share product experiences with strong ties as part of natural interaction and out of concern for the other's welfare (Clark 1984). In addition, the ongoing contact between strong ties will discourage a recommender from making a questionable referral since this recommendation would affect future interactions (Levin and Cross 2004). A receiver's consideration of such existing knowledge will reduce the likelihood of ulterior motive inferences as primary drivers of the recommendation. With weak ties, however, individuals lack the deep concern for the other person and the frequency of contact that characterize strong ties. In addition, less contact between weak ties means reduced opportunities to assess the trustworthiness of the other person. Less knowledge of and concern for weak ties will tend to increase the likelihood of inferences of ulterior motives leading to less favorable responses to the referral.

H3: With strong (vs. weak) ties, rewarded referrals are less likely to reduce the favorability of responses to the referral than unrewarded referrals.

This discussion suggests that the receiver of a recommendation from a strong tie will use prior knowledge in deriving more accurate inferences among possible motives. What if the provider of the referral reveals the existence of financial or ulterior motives when making a rewarded referral? There has been practitioner debate about whether recommenders should disclose the existence of a reward for a referral. Disclosure has been supported by the Word-of-Mouth Marketing Association (<http://womma.org/ethics/disclosure/>), but it raises concerns among some practitioners who fear possible detrimental effects on recommendations (e.g., Creamer 2005; Shin 2006).

Avoiding consumer deception is an obvious reason to require disclosures, but the MIM suggests that disclosure will increase ulterior motives inferences. A statement explicitly indicating that a financial reward was provided for a recommendation will eliminate some of the ambiguity in inferring motives for a recommendation. Under conditions in which both intrinsic (genuine) and extrinsic (ulterior) motives are considered as potential motivators for a behavior, disclosure of a financial motive will highlight this extrinsic motive as the more plausible cause. From our previous discussion it is clear that ulterior motives are likely to be inferred as a primary driver of a recommendation from weak ties, irrespective of whether a

financial motive is disclosed. But with strong ties we expect that disclosure will be a pivotal cue. We expect that when strong ties recommend a product without disclosing the motive, people will use their existing knowledge of the recommendation provider and be less likely to make ulterior motive inferences. However, when a strong tie discloses a financial motive, the disclosure highlights the importance of the financial incentive as a driver of the recommendation, resulting in ulterior motive inferences.

H4: With strong ties, disclosure (vs. non-disclosure) of ulterior motives is likely to reduce the favorability of responses to the rewarded referral. With weak ties, however, disclosure will have little impact on referral responses.

Study 2: the effect of tie strength and disclosure of ulterior motives

We conducted Study 2 for three reasons. First, we attempted to replicate the Study 1 finding that rewards induce more ulterior motive considerations and subsequently result in negative referral responses (H1). Second, we examined the role of tie strength as another boundary condition for the (negative) effects of rewards on referral responses (H3). Third, in order to provide additional support for our hypothesized process, we manipulated the salience of ulterior motives (i.e., we manipulated rather than measured the mediator) by having recommenders explicitly disclose (or not) that their behavior was affected by ulterior motives (H4; cf., Spencer et al. 2005).

Participants and design

Study 2 was a 3 (Reward Status: No Reward vs. Reward without Disclosure vs. Reward with Disclosure) x 2 (Tie Strength: Weak Tie vs. Strong Tie) between-subjects design. Participants were 151 undergraduate students (44% are female, mean age=23) at a major university in South Korea who were randomly assigned to conditions and participated as part of a class requirement.

Stimuli and procedure

The scenario focused on a recommendation of an English language institute. Such institutes are widespread in Korea and popular with college students. The intangible and experiential nature of such institutes is likely to make WOM important. We first manipulated tie strength by asking participants to identify (using initials) either "one of your closest friends" (strong tie), or a "casual acquaintance—someone you interact

with from time to time, but someone not close enough to count as a friend (e.g., a classmate you have recently met)” (weak tie; Frenzen and Nakamoto 1993). Participants then were asked to imagine that they were searching for a language institute to learn English and that they had engaged in a conversation with the person identified earlier who had attended a course at one such institute. This person gave a (positive) description of the experience and recommended the institute. In the no reward condition, this was the end of the description. In the reward conditions, the scenario then explained that the referrer received a shopping voucher of 30,000 Korean Won (about \$30 U.S.). In addition, in the disclosure condition the referring student stated, “I am satisfied with the institute, but I am also happy about receiving a reward for my recommendation.”

Measures

We measured participants’ response to the referral by asking them to evaluate the language institute on three 11-point semantic differential items; scores ranged from -5 to $+5$ (dislike/like, unfavorable/favorable, bad/good; $\alpha=.94$). In addition, we used the four-item measure from Frenzen and Davis (1990) as our manipulation check for tie strength ($\alpha=.91$).

Results

Manipulation check Our tie strength manipulation was successful. The mean tie strength rating was significantly higher in the strong tie ($M=0.93$) than in the weak tie ($M=0.46$) condition ($t(150)=25.83, p<.001$).

Referral response Consistent with H1 and our Study 1 results, ANOVA revealed a main effect of reward status ($F(2, 142)=7.23, p=.001$): evaluations of the institute were more favorable when the referral was not rewarded. In addition, ANOVA also revealed a main effect of tie strength ($F(1, 142)=25.30, p<.001$): evaluations of the institute were more positive when the referral was from a strong tie (see Table 1). As predicted by H3 and H4, these main effects were qualified by a significant interaction between tie strength and reward status ($F(2, 142)=3.67, p<.05$). For strong-tie referrals we found least favorable responses when there was a reward that was disclosed by the referring customer ($M=2.39$). Responses were significantly more favorable when there was an undisclosed reward ($M=3.48; F(1, 142)=4.32, p<.05$) and when the referral was unrewarded ($M=3.59; F(1, 142)=5.21, p<.05$). The difference between the latter two conditions was not significant ($F<1$). A different pattern was observed for weak-tie referrals. For weak ties, a reward resulted in statistically equal unfavorable responses in both disclosure conditions ($M_{\text{disclosure}}=1.15, M_{\text{no disclosure}}=0.40; F(1, 142)=2.07, p=.15$). In the no reward condition,

referral responses ($M=2.81$) were significantly more favorable than in the each of the reward conditions ($F(1,142)=21.88, p<.001, F(1,142)=9.88, p<.01$).

Discussion

When a referral is not rewarded, receiver responses are positive for both strong and weak ties. When a reward is present but the motive for the rewarded referral is not disclosed by the referrer, we find that a reward reduces the favorability of the response to a referral in the case of weak ties but not strong ties (H3). Note that Ryu and Feick (2007) found an increase in referral transmission likelihood due to rewards for weak ties (but not for strong ties). Ironically then, with weak ties rewards make referrals more likely to be given but less likely to be accepted.

For strong-tie referrals, we observe only a negative impact of rewards when the referring customer explicitly acknowledges that s/he is receiving a reward and thus is perceived as having ulterior motives in making the referral (H4). Otherwise, the transmitter gets the benefit of the doubt. In contrast, the impact of weak tie referrals is reduced by rewards whether or not an ulterior motive is disclosed; receivers have suspicions about the motives of weak tie referrals regardless. Our results are consistent with our theorizing in both H3 and H4 and provide strong evidence for the mediating effect of ulterior motive inferences in connecting rewards and referral responses.

Study 3: generalization of the experimental results

In Studies 1 and 2, we demonstrate the negative effects of rewarded referrals and identify the two key variables that moderate the effects. We also establish the mediating role that inferences of ulterior motives play in the process. However, since those studies were conducted in controlled experimental settings with student samples, we sought to employ a different method that would enhance the external validity and generalizability of our results. We conducted Study 3 to examine real-life responses to rewarded referrals. We used a survey in which consumers of diverse backgrounds responded to questions regarding their own experiences in receiving referrals in a variety of product and service categories. We focused on the effects of referral reward, initiative of referral, and tie strength on receivers’ responses to the referred product or service to keep the survey concise and in deference to the limits of memory.

Participants and design

After posting an announcement about the survey, we recruited a total of 164 participants from members of an

online research panel in Korea (similar to Amazon's Mechanical Turk) who had recently received a referral. Participants were rewarded with incentives (i.e., frequent flyer miles) from the panel operator in exchange for their participation. Respondents answered the survey questions online after logging in to the designated website.

Questionnaire

Respondents were asked to recall as specifically as possible their referral experience. We first asked participants to indicate the product category and brand of the recommendation. They then responded to a question about the main dependent variable, their response to the referred product or service. To capture this response, we used three 11-point semantic differential items (dislike/like, unfavorable/favorable, bad/good, +5 to -5; $\alpha=.92$).

The questions regarding our three independent variables followed. First, respondents indicated whether they had asked for a referral (i.e., solicited) or the other party made a recommendation without being asked (i.e., unsolicited). Second, we measured tie strength between the referral provider and the respondent using the same four-item measure from Frenzen and Davis (1990; $\alpha=.89$) as in Study 2. Third, respondents reported if the referral was rewarded. Then we measured respondents' involvement with and knowledge of the product category to control for potential differences. The survey ended with basic demographics: sex, age, education, occupation, and income.

Results

Respondent characteristics Of the survey respondents, 51.2% were female, and the mean age was 32.5. Most respondents had attended college or graduate school (89%) and had a full-time job (78.7%). Mean household income was the equivalent of \$42,500 U.S.

Participants reported on a wide range of products and services including insurance, financial products, mobile phone service, internet and cable service, automobiles, electronic and IT products, clothing and shoes, cosmetics, and nutritional supplements. Approximately 30% of the respondents indicated that the referral was linked to a reward, and 35% of the rewarded referrals were for services (vs. goods). About 41% of the respondents reported that they sought the recommendation. Median tie strength was .64 on a scale from 0.0 to 1.0.

Referral response The respondents were classified as either rewarded or unrewarded referral, solicited or unsolicited referral, and strong or weak tie based on responses to the questions. We ran ANCOVA on respondents' evaluation of

the referred product or service with referral reward, initiative of referral, and tie strength as independent variables, and with involvement and knowledge as covariates. The analysis yielded a significant main effect of reward ($F(1, 154)=7.36, p<.01$), initiative ($F(1, 154)=3.67, p=.057$), and tie strength ($F(1, 154)=16.45, p<.001$): responses were less favorable when the referral was rewarded (vs. unrewarded), unsolicited (vs. solicited), or made by a weak (vs. strong) tie. These effects were qualified by a significant interaction between reward and tie strength ($F(1, 154)=5.01, p<.05$), and a marginally significant interaction between reward and initiative ($F(1, 154)=3.04, p=.08$). First, and consistent with H2, rewarded referrals reduced the favorability of respondents' responses to the referral less when the referral was solicited ($M_{\text{noreward}}=2.83, M_{\text{reward}}=1.48; F(1, 154)=10.99, p<.01$) than when unsolicited ($M_{\text{noreward}}=2.51, M_{\text{reward}}=.70; F(1, 154)=36.06, p<.001$). Consistent with H3, a reward resulted in less favorable referral responses for weak ties ($M_{\text{noreward}}=1.98, M_{\text{reward}}=.19; F(1, 154)=28.15, p<.001$) but not for strong ties ($M_{\text{noreward}}=2.97, M_{\text{reward}}=2.71; F<1$).

Discussion

The survey results suggest that rewarded referrals are a common part of everyday consumer life across a broad range of products and services and across a diverse set of consumer demographics. Further, the results replicate the main results of Studies 1 and 2 using a much different approach—a survey that collected retrospective information about real consumers' actual purchases. In general, respondents showed less favorable responses to rewarded referrals than to unrewarded referrals (H1). Moreover, this negative effect was stronger when the referral was unsolicited vs. solicited (H2), and when the referral was made by a weak vs. strong tie (H3).

Plausibility of ulterior motives: scheme and type of rewards

We have argued that compared to unrewarded referrals, rewarded referrals will generate stronger inferences of ulterior motives and less favorable responses to the referral. We also showed that certain situational constraints (e.g., referral initiative) or prior knowledge of the recommender (e.g., tie strength) are likely to moderate the effects because they will facilitate inferences of other types of motives. Thus far, however, we have not considered whether characteristics of the reward will affect inferences. The answer to this question is critical for managers since it can inform decisions about the design of rewards in order to influence the likelihood of ulterior motive inferences.

We propose that reward allocation scheme and reward type will affect receivers' perceptions of the plausibility of ulterior

motives by making other motives relatively more salient. In referral reward programs, an existing customer makes a recommendation and a new customer receives the referral, but the reward for the referral can be allocated in different ways. As indicated earlier, in practice it is most typical that either the recommender (the existing customer) gets the reward (our focus in Study 1 and 2) or the reward is split between the referring and the referred customer. Ryu and Feick (2007) used the terms *Reward Me* and *Reward Both* for these two allocation schemes and found that the reward scheme affects referral likelihood. In subsequent research, Xia et al. (2011) proposed conditions under which different schemes are more profitable. Kumar et al. (2010) focused on just *Reward Both* schemes when determining the relative impact on Customer Referral Value (CRV).

Receivers can infer financial (or ulterior) motives when exposed to either *Reward Me* or *Reward Both* schemes because each involves a reward for the recommender. In contrast to a *Reward Me* scheme, however, in a *Reward Both* scheme both the sender and the receiver benefit from the interaction. This shared benefit serves as another motive that might drive the behavior and this feature should reduce the receiver's perception that the referrer is making the referral solely on the basis of potential personal gain and that the referring consumer is taking advantage of the receiver. Thus, we expect that *Reward Both* and *Reward Me* will yield different effects on consumers referral responses. Because consumers generally are less likely to infer ulterior motives for strong-tie referrals (see H3), this effect of reward scheme is more likely to operate in the case of weak-tie referrals than strong-tie referrals.

H5: Rewarded referrals using a *Reward Both* (compared to *Reward Me*) reward allocation scheme are less likely to reduce the favorability of responses to the referral. This effect is stronger when the referral is made by a weak (vs. strong) tie.

We also expect that the characteristics of the reward will influence ulterior motive inferences. The rewards most commonly used in reward programs (such as free products, rebates, discounts, and so on) represent personal financial gain for the recipient and thus are likely to be perceived as ulterior motives. In a similar vein, research in behavioral economics has shown that introducing monetary rewards into a social exchange (such as the exchange of friendly advice about a good product) changes the underlying social contract, increasing the likelihood that participants will interact in ways resembling sales or marketplace interactions (Heyman and Ariely 2004). However, firms can and do use nonmonetary rewards for referrals. Such rewards include gifts to charity or donations to a cause (hereafter symbolic rewards) and do not involve personal financial gain for the recommender. Instead, these rewards generate psychological

or social benefits. Since these rewards less explicitly link the referral to personal gain for the recommender, we expect that receivers will be less likely to infer ulterior motives than with monetary rewards and thus will be less likely to reduce the favorability of referral responses. We also expect that this effect of reward type is more likely to operate in the case of weak-tie referrals than strong-tie referrals.

H6: Rewarded referrals using *symbolic* (vs. *monetary*) rewards are less likely to reduce the favorability of responses to the referral. This effect is stronger when the referral is made by a weak (vs. strong) tie.

To examine H5 and H6, we test whether splitting the reward between sender and receiver (Study 4a) and employing symbolic rewards (Study 4b) will reduce the negative effect of a reward on weak-tie responses.

Study 4a: reward allocation scheme

Participants and design

Our participants were 261 undergraduate students (57% are male, mean age=22) from a major university in Singapore who received course credit or a small gift for participation. We randomly assigned participants to conditions of a 3 (Reward Scheme: No Reward vs. Reward Me vs. Reward Both) x 2 (Tie Strength: Weak Tie vs. Strong Tie) between-subjects design.

Stimuli and procedure

Participants were given a booklet in which we first manipulated tie strength in the same manner as in Study 2 and then presented a scenario that involved an MP3 player purchase. This product was commonly used and often discussed by our student participants. In the scenario, the WOM sender discussed their positive experiences with a player and provided a recommendation; this ended the scenario in the *No Reward* condition. For *Reward Me*, participants then read a short paragraph that described the program and reward, a shopping voucher of 50 SGD (equivalent to \$30 U.S.). In *Reward Both*, the paragraph mentioned that each person would receive a 25 SGD voucher.

Measures

Participants evaluated the MP3 player on three 11-point semantic differential items (dislike/like, unfavorable/favorable, bad/good, -5 to +5; $\alpha=.95$). As in Study 2, we used the Frenzen and Davis (1990) scale as manipulation check for tie strength. In the reward conditions, we measured participants'

perceptions of the value of referral rewards using two 9-point items (a very small amount/a very large amount, very unattractive/very attractive, $r=.86$) because a different reward amount was offered in the *Reward Me* and the *Reward Both* condition.

Results

Manipulation check As intended, tie strength was perceived as greater in the strong tie ($M=0.84$) than in the weak tie condition ($M=0.48$; $t(260)=21.82$, $p<.001$).

Referral response ANOVA replicated the main effect of tie strength ($F(1, 256)=48.94$, $p<.001$) and revealed a main effect of reward scheme ($F(2, 256)=8.02$, $p<.001$). The main effects were qualified by a significant interaction between reward scheme and tie strength as predicted by H5 ($F(2, 256)=4.32$, $p<.05$). For strong tie referrals, referral responses did not differ across reward schemes ($F<1$), while for weak ties, referral responses were lower for *Reward Me* ($M=1.99$) than for *Reward Both* ($M=2.60$; $F(1, 256)=8.54$, $p<.01$) and *No Reward* ($M=2.98$; $F(1, 256)=22.43$, $p<.001$).

Since the value of the referral reward offered in the *Reward Both* condition (25 SGD per person) is smaller than that offered in the *Reward Me* condition (50 SGD), the difference might have reduced the detrimental effect of rewarded referrals. Indeed, participants perceived the value of the reward as somewhat smaller in the *Reward Both* (5.06) than *Reward Me* (5.56) condition ($F(1, 171)=3.52$, $p=.06$). We conducted mediation analyses to test if the differences in referral responses could be attributed to differences in the perceptions of the reward value. When the reward value perception is added as a covariate, none of the conclusions reported above change; thus we conclude that reward value did not account for the effects.

Study 4b: reward type

Participants and design

Study 4b was a 3 (Reward Type: No Reward vs. Monetary Reward vs. Symbolic Reward) \times 2 (Tie Strength: Weak Tie vs. Strong Tie) between-subjects design. Participants were 120 undergraduate students at a major university in South Korea. The participants were randomly assigned to experimental conditions. Students participated as part of a class requirement and received a small gift.

Stimuli and procedure

The scenario focused on the recommendation of an English language institute and was nearly identical to that of Study 2,

except that we manipulated reward type instead of motive disclosure. In summary, the scenario took the form of a dialog between the recommender and the receiver. The recommender provided a detailed description of the institute, his/her positive experiences, and a strong recommendation. In the no reward condition, this was the end of the conversation. In the monetary reward condition, the scenario then explained that the recommender would receive a shopping voucher of 30,000 Korean Won (about \$30 U.S.). In the symbolic reward condition, the reward was a 30,000 Won donation to a charity on behalf of the referrer.

Measures

Participants evaluated the language institute using three 11-point semantic differential items (dislike/like, unfavorable/favorable, bad/good, -5 to +5; $\alpha=.95$). We used the four-item measure of tie strength from Frenzen and Davis (1990) as a manipulation check.

Results

Manipulation check Our tie strength manipulation was successful; mean ratings were significantly higher in the strong tie than in the weak tie condition ($t(119)=15.05$, $p<.001$).

Referral response We tested the impact of reward type and tie strength on referral responses using ANOVA. Results demonstrated a main effect of tie strength ($F(1, 114)=46.44$, $p<.001$) and a main effect of reward type ($F(2, 114)=7.50$, $p<.001$). Specifically, referral responses were less positive when there was a monetary reward compared to the no reward and symbolic reward conditions. As predicted in H6, this effect was qualified by a significant interaction between reward type and tie strength ($F(2, 114)=4.59$, $p<.05$). In the strong tie condition, referral responses did not differ across the three types of reward ($F<1$); however, for weak ties, we obtained significant differences. Monetary rewards led to less favorable responses ($M=1.69$) compared to both symbolic rewards ($M=2.98$; $F(1, 114)=13.62$, $p<.001$) and no rewards ($M=3.25$; $F(1, 114)=20.89$, $p<.001$), while the symbolic and no reward conditions did not differ significantly ($F<1$).

Discussion

Consistent with our previous studies, Studies 4a and 4b show that consumers respond less favorably to rewarded than unrewarded referrals when the referral is from a weak tie; however, the presence or absence of a reward makes little difference with strong-tie recommendations. Studies 4a and 4b also demonstrate managerially relevant boundary conditions for our consistent weak-tie effect: the detrimental

effects of monetary rewards for weak-tie recommendations can be eliminated if the reward scheme is structured so that the reward is shared between the consumers making and receiving the referral or if referrals are rewarded symbolically rather than monetarily. Managerially, even if the costs of various referral programs are the same, our results suggest that using a *Reward Both* scheme or a symbolic reward will result in more favorable responses from the receiver of the referral.

General discussion

Summary of findings

In a set of four experiments and a survey, we examine how receivers respond to rewarded versus unrewarded referrals. We investigate the underlying causes of these responses and examine factors that moderate the effects. Drawing on theoretical research on motive inferences, we predict and find that rewarding referrals often leads to unfavorable receiver responses as ulterior motives are perceived to drive the recommendation (H1). Based on the Multiple Inference Model, we predict the impact of a set of factors that influence receivers' motive inference process about (and thus moderate their responses to) rewarded referrals: situational constraints (referral initiative), prior knowledge (as operationalized with tie strength), and the plausibility of alternative motives (such as social motives in the case of a symbolic reward; see Fig. 1).

In Study 1, we look at the first of a number of situational constraints that can affect motive inferences. We show that when a recommendation is solicited by the receiver, it is less likely that consumers perceive ulterior motives as the main driver of the recommendation and that rewards negatively affect responses (H2).

In Study 2, we find that prior knowledge that recommendation receivers have about the referrer (i.e., tie strength) influences their inferences of motives about rewarded referrals. That is, rewarded referrals from strong ties are less likely to evoke ulterior motive inferences; thus the presence of rewards negatively affects responses to weak-tie referrals, but not strong-tie referrals (H3). However, as predicted by H4, for strong ties, referral responses become less positive when financial motives are disclosed, but for weak ties, responses are unfavorable whether or not the financial motives are disclosed. Study 2 also provides more process evidence for the hypothesized role of ulterior motive inferences by manipulating (rather than measuring) the salience of ulterior motives.

In Study 3, we replicate the experimental results on the impact of reward, initiative of reward, and tie strength using a general population survey. Participants had diverse

demographic and product use characteristics and recalled their experiences in a wide range of product and service recommendations. The survey results reinforce our experimental findings and enhance the generalizability and external validity of our findings.

Finally, both Study 4a and Study 4b focus on the design of the reward program. Results from these studies provide the most direct implications for managers by considering means to affect consumer responses to rewarded referrals. In these studies, we found a much less negative response (among weak ties) when the referral reward was divided between the provider and the receiver (H5) and when a symbolic (vs. financial) reward was offered (H6).

Contributions to the literature

Previous research has demonstrated the value of referral reward programs by analyzing their impact on sales and customer value (Kumar et al. 2010; Schmitt et al. 2011) as well as by identifying conditions under which they perform better than other promotional tools (Biyalogorsky et al. 2001; Kornish and Li 2010; Xia et al. 2011). At the level of individual consumers, Ryu and Feick (2007) have examined factors that determine the influence of reward programs on making referrals. Our research complements this work by focusing on consumers' responses to recommendations. We obtained remarkably consistent results across research contexts: a variety of products and services, participants in four countries, and experimental scenario plus retrospective survey methods. The consistency of our results across our studies supports their robustness and generalizability. On the other hand, we cannot rule out the possibility that cultural or contextual factors might have affected our results. For example, although we observed a negative effect of rewards both with Korean and U.S. participants, they might have had different perceptions of the amount of the reward or strength of ties used in these settings. Future research should provide more specific insights into the possible influences of cultural factors on receiver responses to rewarded referral.

Our research provides important insights about when and how rewarded referrals can be expected to result in favorable product responses and suggests a framework that can be used to predict rewarded referral responses in a wide variety of settings. Although previous research has speculated about the potential negative responses that might be generated by rewarding referrals (Trusov et al. 2009; Tuk et al. 2009), ours is the first systematic investigation of receivers' responses. Our results suggest that people consider different types of information about the person, his/her current and past behaviors, and the situational constraints in which the behavior occurs. Our results support a theoretical view that referral receivers infer the motive for a recommendation based on an assessment

of the relative plausibility of multiple motives and their match with previous knowledge and the current situation. This inference then influences evaluations of the product and recommender.

To our knowledge, our research is the first to examine and test implications of the MIM in a rewarded referral setting and to propose it as a key model for understanding and predicting responses in a marketing context. Our results show that the motive inference process affects not only the final evaluation of the actor (the recommender) but also the object (the product). If the receiver of the recommendation infers that a reward is necessary to induce referral behavior, then the product wasn't motivation enough, and the receiver draws corresponding inferences about the product. Thus, our extension of the MIM suggests that the motive inference process not only affects conclusions about the actor, but also about the object.

Our Study 1 findings on the initiator of referrals extend recent research by East and colleagues (2008), who found that positive word-of-mouth is more impactful if it is solicited. However, their work did not distinguish between rewarded and unrewarded referral. Moreover, the role of initiative may be interesting to explore in other settings. For example, the role of inferences of ulterior motives may differ in settings where consumers actively seek interactions with salespeople (cf., Kirmani and Campbell 2004).

Finally, our results regarding tie strength extend research on the impact of social relations in word-of-mouth to the context of rewarded referrals, and they underline the special place that strong ties have in this form of communication (cf., Brown and Reingen 1987; Frenzen and Nakamoto 1993). Moreover, the results confirm the premise that in general, receivers tend to interpret ambiguous information positively with strong ties and negatively with weak ties, filling in the gaps by assuming the best in the former case and the worst in the latter.

Contributions to practice

Our research has important implications for marketing practitioners as well. We have identified conditions within which rewarded referral adversely affects the consumer reaction to the product, and also offer multiple actionable suggestions that can help limit or overcome these unfavorable responses. In addition, our framework can help predict receivers' responses to rewarded recommendations in contexts that go beyond those tested in this research.

Our research shows that rewarded referrals tend to result in unfavorable responses when they are perceived as primarily driven by ulterior motives. Marketers can consider various options in order to reduce the likelihood of ulterior motive inferences. For example, subtle changes in the reward distribution can make an important difference, and as

we demonstrated, distributing the reward to both the provider and receiver of a recommendation will reduce ulterior motive inferences. In addition, the use of symbolic rewards will have a similar positive influence on motive inferences, though future research needs to examine the effectiveness of this type of reward on stimulating recommendations.

Unlike these two variables that have direct marketing implications, practitioners may need more creative and subtle approaches in utilizing our results regarding referral initiative and tie strength. For example, on referral initiative, firms can implement a campaign in which they encourage potential customers to seek existing customers' opinions about their products or services. This approach should not only reinforce the power of natural referrals but also reduce the negative impact of rewarded referrals. As for tie strength, it would be difficult for firms to implement a referral program that targets only strong ties, but they can position the programs such that referrals are given by strong ties or out of intrinsic motives. For example, consider naming options for the program; a "recommend-a-friend" program is more likely to frame a referral as a strong-tie interaction compared to a "member-get-member" program even if the referral actually occurs between weak ties. More generally, our theoretical framework suggests that any variable or method that can increase the plausibility of non-reward based motives and/or decrease the plausibility of reward based motives would facilitate the acceptance of a rewarded recommendation.

In our studies, customers are provided with a pre-determined referral reward scheme (e.g., *Reward Me* or *Reward Both*), but in reality, an option is to allow consumers to choose among alternative programs. For instance, allowing consumers to choose from alternatives that include rewards for the recommender as well as some that don't may increase the overall response to a referral program because consumers may prefer a different scheme depending upon whom they are interacting with. This option clearly would work in categories in which various pricing and subscription lengths are possible such as subscriptions/contracts for telephone, internet, cable/satellite TV or radio, magazines, newspapers, service and maintenance, and memberships (e.g., gyms, book clubs, professional societies). But more broadly, product and service offerings that include assortment and pricing options could be offered with referral reward options as well. Systematic research would allow an analysis of the profitability of the various alternatives.

Limitations and directions for future research

Our work comes with certain limitations and raises several interesting questions for future research. First, in addition to those we studied, there clearly are other situations in which people seek referrals. Examples include identifying an

exceptional restaurant for an important occasion or getting a referral for a physician. Such decisions are likely to be very highly involving. We expect that rewarded referrals may elicit even more negative responses under such circumstances because the importance ascribed by the recipient to the decision will yield expectations of thoughtful and unbiased recommendations.

Except for our survey (Study 3), our studies focus on referrals for brands that are new or unfamiliar to the receivers. Even in these experimental studies, we examined product categories that were very familiar to the participants. However, we did not measure category participation or satisfaction. Extensive research demonstrates how satisfaction is a critical element in marketing planning and firm profitability (Anderson and Mittal 2000; Mittal and Frennea 2010) and can be a key driver of referrals (e.g., Anderson 1998; Mittal et al. 2008). Thus an important extension of our work would be to consider satisfaction with current products/service providers as another situational constraint and then examine how responses to rewarded referrals are affected by levels of satisfaction with the current brand.

In addition, future research could examine the influence of disclosure in more detail. As we have indicated, some trade sources have advocated for the disclosure of financial rewards in all rewarded referral campaigns. Although some research (Tuk et al. 2009) suggests that the receiver impact of disclosure is less negative compared to when receivers learn about the reward program elsewhere (for example, by encountering the referral program on a website), our research suggests that the mere act of disclosure results in less favorable responses (especially for strong ties) relative to unrewarded WOM. It would be interesting to examine how disclosure interacts with the different reward schemes and reward types. Does disclosing the reward also have a negative influence on the responses toward *Reward Both* campaigns and symbolically rewarded referrals, or are these campaign characteristics sufficient to prevent ulterior motive inferences as primary motive for the recommendation? Additional research done in other typical situations would further contextualize our results.

Additional work also should be done to link our research on referral responses to other downstream variables (for example, customer satisfaction, loyalty, customer equity) that more directly affect firm profitability. Future research should explore the findings of our studies in less controlled field studies that examine purchase outcomes of referral programs and their costs. In this way, firms can begin to connect the financial analysis of these programs to calculations of customer lifetime value (e.g., Schmitt et al. 2011). Expanding on this point, it seems important to consider our results in the broader context of the various programs firms run that manage and affect customer value. For example, Bolton et al. (2000) have shown that loyalty programs

generate WOM. One implication of this work seems to be that such WOM (essentially a byproduct of other programs) makes referral programs redundant. However, Godes and Mayzlin (2008) showed that WOM programs may trigger referrals from customers who would otherwise remain silent. Thus, referral programs could be used for segments of potential customers that would not be engaged otherwise, and they may be effective if they are not perceived as blatant persuasion attempts.

Acknowledgments The authors would like to thank the four anonymous reviewers, Koen Pauwels, and the marketing faculty at Ozyegin University and Vrije University Amsterdam for their helpful comments. This research was supported by KUBS Faculty Research Grant and IBRE Award, given to the second author (G. R.). Order of authorship was determined by random draw to reflect equal contribution.

References

- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*, 1, 5–17.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3, 107–120.
- Bansal, H. S., & Voyer, P. A. (2000). Word-of-mouth processes within a service decision context. *Journal of Service Research*, 3, 166–177.
- Biyalogorsky, E., Gerstner, E., & Libai, B. (2001). Customer referral management: optimal reward programs. *Marketing Science*, 20, 82–95.
- Bolton, R. N., Kannan, P. K., & Bramlett, M. D. (2000). Implications of loyalty program membership and service experiences of customer retention and value. *Journal of the Academy of Marketing Science*, 28, 95–108.
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer Research*, 14, 350–362.
- Campbell, M. C., & Kirmani, A. (2000). Consumers' use of persuasion knowledge: the effects of accessibility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research*, 27, 69–83.
- Clark, M. S. (1984). Record keeping in two types of relationships. *Journal of Personality and Social Psychology*, 47, 549–557.
- Creamer, M. (2005). Is buzz marketing illegal? *Advertising Age*, 76, 6.
- Dale, F. D., Johnson, S. D., Wilcox, J. B., & Harrell, G. D. (1997). Influences on consumer use of word-of-mouth recommendation sources. *Journal of the Academy of Marketing Science*, 25, 283–295.
- Dichter, E. (1966). How word-of-mouth advertising works. *Harvard Business Review*, 44, 147–166.
- 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, 215–224.
- Frenzen, J. K., & Davis, H. L. (1990). Purchasing behavior in embedded markets. *Journal of Consumer Research*, 17, 1–12.
- Frenzen, J. K., & Nakamoto, K. (1993). Structure, cooperation and the flow of market information. *Journal of Consumer Research*, 20, 360–375.
- Friestad, M., & Wright, P. (1994). The persuasion knowledge model: how people cope with persuasion attempts. *Journal of Consumer Research*, 21, 1–31.
- Friestad, M., & Wright, P. (1995). Persuasion knowledge: lay people's and researchers' beliefs about the psychology of advertising. *Journal of Consumer Research*, 22, 62–74.

- Gawronski, B. (2009). The multiple inference model of social perception: two conceptual problems and some thoughts on how to resolve them. *Psychological Inquiry*, 20, 24–29.
- Gilly, M., Graham, J. L., Wolfinbarger, M., & Yale, L. (1998). A dyadic study of inter-personal information search. *Journal of the Academy of Marketing Science*, 26, 83–100.
- Godes, D., & Mayzlin, D. (2008). Firm-created word-of-mouth communication: evidence from a field test. *Marketing Science*, 28, 721–739.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley and Sons.
- Heyman, J., & Ariely, D. (2004). Effort for payment: a tale of two markets. *Psychological Science*, 15, 787–793.
- Keller, E. (2007). Unleashing the power of word of mouth: creating brand advocacy to drive growth. *Journal of Advertising Research*, 47, 448–452.
- Kelley, H. H. (1972). Attribution in social interaction. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: perceiving the causes of behavior* (pp. 79–94). Morristown: General Learning Press.
- Kirmani, A., & Campbell, M. C. (2004). Goal seeker and persuasion sentry: How consumer targets respond to interpersonal marketing persuasion. *The Journal of Consumer Research*, 31, 573–582.
- Kornish, L. J., & Li, Q. (2010). Optimal referral bonuses with asymmetric information: firm-offered and interpersonal incentives. *Marketing Science*, 29, 108–121.
- Kumar, V., Petersen, J. A., & Leone, R. P. (2010). Driving profitability by encouraging customer referrals: who, when and how. *The Journal of Marketing*, 74, 1–17.
- Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer. *Management Science*, 50, 1477–1490.
- Libai, B., Bolton, R., Bügel, M. S., deRuyter, K., Gotz, O., Risselada, H., et al. (2010). Customer-to-customer interactions: broadening the scope of word of mouth research. *Journal of Service Research*, 13, 267–282.
- Mittal, V., & Frennea, C. (2010). *Customer satisfaction: a strategic review and guidelines for managers*. Working Paper 10–701, Marketing Science Institute.
- Mittal, V., Huppertz, J. W., & Khare, A. (2008). Customer complaining: the role of tie strength and information control. *Journal of Retailing*, 84, 195–204.
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89, 852–863.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227.
- Reeder, G. D. (2009a). Mindreading: judgments about intentionality and motives in dispositional inference. *Psychological Inquiry*, 20, 1–18.
- Reeder, G. D. (2009b). Mindreading and dispositional inference: MIM revised and extended. *Psychological Inquiry*, 20, 73–83.
- Reeder, G. D., Kumar, S., Hesson-McInnis, M. S., & Trafimow, D. (2002). Inferences about the morality of an aggressor: the role of perceived motive. *Journal of Personality and Social Psychology*, 83, 789–803.
- Reeder, G. D., Vonk, R., Ronk, M. J., Ham, J., & Lawrence, M. (2004). Dispositional attribution: multiple inferences about motive-related traits. *Journal of Personality and Social Psychology*, 86, 530–544.
- Richins, M. L. (1984). Word-of-mouth communication as negative information. In T. Kinnear (Ed.), *Advances in consumer research* (pp. 697–702). UT: Association for Consumer Research.
- Ryu, G., & Feick, L. (2007). A penny for your thoughts: customer responses to referral reward programs. *The Journal of Marketing*, 71, 84–94.
- Schmitt, P., Skiera, B., & Van den Bulte, C. (2011). Referral programs and customer value. *The Journal of Marketing*, 75, 46–59.
- Shin, A. (2006). *FTC moves to unmask word-of-mouth marketing*. Washington Post, p. D01, (December 12).
- Sparkman, R. (1982). The discounting principle in the perception of advertising. In A. Mitchell (Ed.), *Advances in consumer research* (pp. 277–280). Ann Arbor: Association for Consumer Research.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: why experiments are often more effective in examining psychological process than mediational analyses. *Journal of Personality and Social Psychology*, 89, 845–851.
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site. *The Journal of Marketing*, 73, 90–102.
- Tuk, M. A., Verlegh, P. W. J., Smidts, A., & Wigboldus, D. H. J. (2009). Sales and sincerity: the role of relational framing in word-of-mouth marketing. *Journal of Consumer Psychology*, 19, 38–47.
- Wirtz, J., & Chew, P. (2002). The effects of incentives, deal proneness, satisfaction and tie strength on word-of-mouth behavior. *International Journal of Service Industry Management*, 13, 141–162.
- Xia, P., Tang, C. S., & Wirtz, J. (2011). Optimizing referral reward programs under impression management considerations. *European Journal of Operational Research*, 215, 730–739.