



# When giving money does not work: The differential effects of monetary versus in-kind rewards in referral reward programs

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## ABSTRACT

Customer referral reward programs have recently gained popularity as beneficial customer acquisition tools. This research aims to explore the impact of reward type, specifically with regard to the differential effects of monetary versus in-kind rewards, on referral success. We find that although consumers prefer monetary rewards to in-kind rewards because of the greater economic value of monetary rewards, the higher social costs associated with money offset this benefit and even render money an inferior incentive when the recommendation is not well justified. Through four experiments, we demonstrate that monetary rewards (vs. in-kind rewards) lead to less referral generation and acceptance, especially when the recommended brands are weak (Studies 1 and 4), and that perceived social costs mediate the interactive effect of reward type and brand strength (Studies 1 and 3). Moreover, by increasing the economic benefit or decreasing the social costs associated with monetary rewards, we restore the effectiveness of monetary rewards as incentives. Compared with in-kind rewards, monetary rewards perform equally well when the reward is sufficiently large (Study 2), and they perform even better when both the recommender and the receiver are rewarded (Study 3). This research extends the literature on the psychological consequences of money and provides novel insights into the customer referral process.

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## 1. Introduction

The long-term profitability and prospects of a firm depend on whether it is capable of acquiring the “right” customers and maximizing customer lifetime value (Kumar, Petersen, & Lenoë, 2010). Traditionally, word of mouth (WOM), which is recognized as an important customer acquisition tool, has attracted interest among practitioners and researchers (e.g., Godes & Mayzlin, 2009; Iyengar, Van den Bulte, & Valente, 2011). Numerous academic studies corroborate the effectiveness of WOM for gaining new customers (Godes et al., 2005; Wangenheim & Bayón, 2007).

Pioneering firms have recently introduced referral reward programs (RRPs), which purposefully incentivize existing customers to make recommendations through WOM. Unlike organic WOM, WOM generated by RRP is deliberately stimulated and actively monitored by firms (Schmitt, Skiera, & Van den Bulte, 2011). Generally regarded as an attractive customer acquisition tool, rewarded referral practices are widespread, appearing in industries ranging from financial services (i.e., ABNARMO Bank) to the automobile (i.e., BMW) and electronic device industries (i.e., Canon). A recent empirical study (Schmitt et al., 2011) confirms the benefits of the use of RRP in marketing practices by demonstrating that the value of referred customers is

16% higher than that of non-referred customers with a similar profile.

Given the advantages of this stimulated WOM, a natural extension of existing research involves investigating how to design RRP that are both effective and efficient. Although a few studies have taken steps in this direction (Kim, Shi, & Srinivasan, 2001; Kornish & Li, 2010; Ryu & Feick, 2007), to our knowledge, no study empirically examines how the effectiveness of RRP may vary as a function of reward type, such that certain reward types may be more effective in encouraging referrals than others. However, firms vary substantially in terms of their chosen reward type (i.e., cash, coupons, gifts, free products). The present study addresses this managerial issue and specifically contrasts the efficacy of monetary rewards with the efficacy of in-kind rewards of equivalent value in driving referrals for either strong or weak brands.

Conventional wisdom suggests that monetary rewards, because of their higher economic benefits, should be equally or more effective in motivating customer referrals than other types of rewards, as prior research (i.e., Bijalogorsky, Gerstner, & Libai, 2001; Ryu & Feick, 2007) on RRP has unanimously assumed. However, we question this assumption and propose that the disadvantage of monetary rewards, namely the higher social costs associated with monetary rewards, may offset this monetary benefit and may even render monetary rewards as inferior incentives. Drawing on theories that investigate the psychological consequences of money as an incentive, we argue that monetary (vs. in-kind) rewards invoke market exchange norms rather than social relationship norms (Heyman & Ariely, 2004). Thus, monetary rewards increase consumers' perceived social costs by casting doubt on

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**Table 1**  
Prior studies on referral reward programs and the incremental contributions of the current research.

Criteria	Wirtz et al. (2013)	Schmitt et al. (2011)	Kumar et al. (2010)	Kornish and Li (2010)	Ryu and Feick (2007)	Shi and Wojnicki (2007)	The current research
Nature of research Key objectives	Empirical Understand how an incentivized recommendation affects recommendation behavior through meta-perception	Empirical Determine whether referred customers are more valuable than customers acquired through other channels.	Empirical Optimum customer targeting for referral marketing campaigns	Analytical Optimum design of bonus programs and pricing schemes when accounting for customer concerns with regard to recipient outcomes.	Empirical Determine the effectiveness of extrinsic motivations (rewards) in affecting customer referral behavior	Empirical Investigate the impact of various motivational tactics—tangible or intangible and selfish or altruistic—on the referral rates of different demographic segments.	Empirical Examine the impact of reward type on referral likelihood for either strong or weak brands.
Key findings	Referrals are driven by the givers' perception of how they will be viewed by the receivers (meta-perception), which is negatively affected by the presence of an incentive and positively affected by the tie strength between the giver and the receiver.	Referred customers have higher retention rates, higher contribution margins and greater overall value.	Several behavioral drivers of referral value that can help to target customers for referral marketing campaigns have been identified	If the price is not a greater lever, the greater the concern for others' outcomes is, the higher the bonus should be.	It is effective to offer incentives, especially for weaker brands and among individuals with weaker ties. However, the reward size does not make a difference.	Referral rates are higher when tangible rewards are conferred. However, among segments with higher educational levels, when intangible or benefits are emphasized, more altruistic tactics are more effective.	Monetary rewards underperform in-kind rewards in motivating consumer behavior by increasing consumers' perceived social costs. This effect is especially pronounced for weaker brands.
Methodology/ approach	Qualitative interviews and two experiments	Tracking 10,000 customers of a leading German Bank for 3 years	A series of field experiments with a financial firm and a driver-based field experiment with a retailing firm.	Analytical modeling	4 laboratory experiments	A unique dataset matching a large-scale survey with an online field experiment	3 laboratory experiments and 1 field study

the altruistic nature of a referral. Moreover, monetary (vs. in-kind) rewards exacerbate this situation when the recommendation is difficult to justify. Hard money deters people from ill-justified or unethical actions because it leaves little room to interpret such behavior in a manner that neither threatens their self-concept nor amplifies the perceived social costs of appearing greedy to others (Mazar, Amir, & Ariely, 2008). In summary, the relative effectiveness of monetary and in-kind rewards depends on how the advantage of monetary rewards (with regard to economic benefits) compares with their disadvantage in terms of social costs.

We conducted four studies to examine the impact of reward type in RRP. Study 1 tests our main hypothesis that the underperformance of monetary rewards relative to in-kind rewards is more pronounced when the recommendation is ill justified (i.e., for weak brands) and examines the role of perceived social costs as a mediator. Study 2 confirms the results obtained in Study 1 in a field setting and identifies reward size as a boundary condition. Study 3 further tests the proposed underlying mechanism by directly manipulating the recommenders' perceived social costs. In Study 4, we adopt the perspective of referred customers and analyze how reward type influences their referral receptivity. Next, we review the related literature and report our empirical studies.

## 2. Theoretical background

### 2.1. Costs and benefits of transmitting WOM

Prior literature identifies several psychological and social benefits of and motivations for WOM. For example, market mavens actively engage in WOM transmission because they feel obligated to make good use of their professional expertise (Feick & Price, 1987) or because they find helping others to be intrinsically satisfying (Sundaram, Mitra, & Webster, 1998). Consumers also provide WOM to justify their purchase decisions and reduce post-purchase dissonance (Gatignon & Robertson, 1986). Furthermore, WOM can be a means of achieving social status (Gatignon & Robertson, 1986).

Naturally, providing WOM also entails costs. The most obvious costs of providing WOM relate to the time and effort spent in communicating. Moreover, engagement in WOM transmission may incur opportunity costs (Sundaram et al., 1998). In addition, people with certain personal traits, such as those with a high need for uniqueness, may find the generation of positive WOM particularly costly (Cheema & Kaikati, 2010). Because of the interactive nature of a WOM communication, researchers have identified various types of social costs related to WOM, including the acquisition of social obligations and the risk of providing inappropriate advice (Gatignon & Robertson, 1986). These social costs relate to how the image of the information transmitter changes in the information receiver's opinion and how the relationship between the transmitter and receiver may be affected as a consequence of this WOM exchange (Wirtz, Orsingher, Chew, & Tambyah, 2013).

RRPs increase the complexity of WOM transmission by introducing rewards into an otherwise voluntary exchange. Unlike "organic" WOM, RRP incentivize customer referrals with extrinsic rewards, generating a form of "stimulated WOM" that is extrinsically motivated and actively controlled. In the current research, we argue that the benefits that firms offer to stimulate WOM may increase consumers' perceived costs of a referral depending on the type of reward that is provided. In the following sections, we review the literature on RRP design and discuss the relative benefits and costs associated with monetary (vs. in-kind) incentives in motivating referral behavior and discuss how a cost-benefit comparison determines the relative effectiveness of the two types of rewards.

### 2.2. Relative benefits and costs of monetary versus in-kind rewards in RRP

Given the profitability of RRP (Kumar et al., 2010; Schmitt et al., 2011), research has focused on the design of effective RRP (see Table 1). For example, Kornish and Li (2010) demonstrate that

referral bonuses should increase with the level of concern that customers feel for the referred individuals. Wirtz and Chew (2002) demonstrate that the likelihood of making a purchase recommendation increases with the amount of monetary incentives, whereas Ryu and Feick (2007) contend that incentive size does not matter and that rewards are particularly effective in increasing the likelihood of referral for weaker brands and among those with whom the recommender has weaker ties. In this stream of research, most studies are concerned with reward size and are conducted with cash or cash coupons under the latent assumption that the reward type does not matter (Ryu & Feick, 2007; Schmitt et al., 2011). However, numerous studies find that monetary rewards and in-kind rewards have differential impacts on people's behaviors in various contexts (Dur, 2009; Dur, Non, & Roelfsema, 2010; DeVoe & Iyengar, 2010). Therefore, it is theoretically and practically important to determine whether monetary or in-kind rewards lead to a higher likelihood of referral.

According to the Classic Economic Theory, because of its additional role as a medium of exchange, money offers greater economic benefits than resources that only have value in use. However, recent research reveals that money performs more poorly than in-kind rewards in motivating, for example, blood donations (Lacetera & Macis, 2010), workplace productivity (Dur et al., 2010), and the egalitarian distribution of resources (DeVoe & Iyengar, 2010). Heyman and Ariely (2004) propose that the use of monetary rewards invokes market-pricing norms, according to which the amount of compensation directly determines the level of effort. By contrast, when money is not involved in the compensation scheme, a social norm is invoked, according to which effort is shaped by altruism. In other words, monetary rewards prime people for business transactions rather than social relationships such that they demonstrate less cooperative, communal, and altruistic behavior (Vohs, Mead, & Goode, 2006). Social relationships, such as those between the recommenders and receivers, often suffer and seldom recover as a consequence of the introduction of money (Burgoyne & Routh, 1991).

Money (at least in small amounts) may be an inferior motivator, but it has been demonstrated to be a surprisingly good deterrent against unethical behavior. Mazar et al. (2008) find that people are more likely to engage in dishonest behavior when the gains are in the form of non-monetary goods rather than hard cash. To maintain a positive self-concept, people are inclined to rationalize their unethical actions in a self-serving manner. According to the principles of self-presentation, people behave in certain ways to construct and maintain a good public image. Relative to money, non-monetary rewards offer people more room to interpret their behavior in terms that are compatible with a positive self-image, thereby making the moral implications of "unethical" behavior (i.e., such as "being greedy", "bent on nothing but money", or "betraying friends for money") less salient and accessible and hence decreasing the perceived social costs resulting from the diminished self-image and damaged personal relationship.

In summary, relative to in-kind rewards, monetary rewards entail greater social costs in an RRP context. Moreover, monetary rewards are at an even greater disadvantage in terms of perceived social costs when the referring behavior is difficult to justify. To determine the superior reward type, it is necessary to compare the advantage of monetary (vs. in-kind) rewards in terms of economic benefits with their disadvantage with respect to perceived social costs. The greater the benefits (costs) are, the more likely monetary (in-kind) rewards are to be better incentives. In the next section, we discuss brand strength as a means of exacerbating the disadvantage of monetary rewards with regard to perceived social costs.

### 2.3. Brand strength and perceived social costs in RRP

Implicit in our theorizing is that what referred individuals may infer from a recommendation is of concern to customers when they contemplate participating in an RRP as recommenders. They make this decision

while considering how likely they are to be trusted or distrusted or to be consulted for future advice (Wirtz et al., 2013). These considerations largely determine the level of perceived social costs. As a result, it is critical for the performance outcome of a recommended product to be at least reasonable.

Brand strength implies the possibility that a product will satisfy consumers to some extent. It is conceptualized as (Bénabou & Tirole, 2003) the extent to which the product offerings are perceived by consumers as high quality and (Bénabou & Tirole, 2006) the extent to which consumers are aware of the brand (Ryu & Feick, 2007). Strong (vs. weak) brands, which offer high-quality products and enjoy greater brand awareness and more established brand associations, are consequently associated with a lower perceived risk in terms of performance (Smith & Park, 1992). Thus, recommending a strong brand to others involves a smaller risk than recommending a weak brand. Customers can effortlessly rationalize their recommendation for strong brands by attributing their behavior to the likely superior performance of the brand, experiencing little social costs associated with untrustworthy advice. Although tainting a social relationship with money may lead to ambiguity regarding the motives behind the referrals and may make the self-interest aspect of such a recommendation salient (as the exchange market mechanism suggests), recommending a strong brand involves a lesser degree of "dishonesty" and "unethicality". As a result, a strong brand provides psychological cover for a money-driven referral so that the negative impressions (i.e., being greedy or betraying friends for money) associated with receiving monetary rewards are not reinforced in a rationalization process. In this case, we expect the disadvantage of money with respect to perceived social costs to be less pronounced.

By contrast, customers who are incentivized to refer weaker brands have little choice but to attribute their behavior to extrinsic incentives, rendering this an action with questionable motives. Thus, the recommendation of a weak brand that is likely to deliver unsatisfactory performance in exchange for money is a signal to the referred individuals and others of unflattering attributes, indicating that the recommender is "cheap" or likely to "betray friends for money". Such behavior is detrimental not only to the self-image of an individual but also to his or her relationships with the referred individuals because people who benefit at the expense of others are socially criticized for being greedy and immoral. Moreover, monetary rewards provide consumers with less leeway to rationalize their behavior in terms that are compatible with a friendly social relationship (e.g., it is nothing but a small gift; I do not even need this freebie; this is what friends do). In other words, consumers' perceived social costs of appearing immoral to referred individuals increase considerably in this case.

In summary, we expect the perceived social costs associated with monetary rewards to be greater when the recommended brand is weak than when it is strong. We propose the following hypotheses:

**H1.** Compared with in-kind rewards, monetary rewards of equal value (a) increase recommenders' perceived social costs and (b) decrease recommenders' willingness to make referrals to a greater extent for weak brands than for strong brands.

**H2.** Recommenders' perceived social costs mediate the interactive effect of brand strength and reward type on referral likelihood.

### 3. Study 1: effects of reward type on referral likelihood

In this study, we tested Hypotheses H1 and H2 by simulating a scenario in which a hotel brand operated a customer referral program. We expected the relative underperformance of monetary rewards relative to in-kind rewards to be less pronounced for weak brands than for strong ones. To capture the underlying process, we also examined the participants' perceptions regarding social costs and their attitudes toward the RRP.

### 3.1. Method

A total of 157 MBA students (78 females) at Fudan University in China participated in this study for partial course credit. This study employed a 2 (reward type: *monetary vs. in-kind*)  $\times$  2 (brand strength: *strong vs. weak*) between-subject design. The participants were familiar with staying at budget hotels and generating WOM regarding this experience. In all, 91.1% of the participants indicated more than three instances of staying at a hotel in the preceding year.

Upon arrival, the participants were randomly assigned to one of the four conditions and were asked to imagine recommending to another individual a budget hotel in which they had just stayed. We first manipulated brand strength by asking the participants to read materials providing basic information on a hotel brand and the experience of an overnight stay at that hotel. We generated this material using real customer reviews and considering the key attributes that affect customer satisfaction, including room cleanliness, hotel traffic, internet speed, service quality, and noise level. The experience with the stronger (vs. weaker) hotel brand was described more favorably on all dimensions. We concluded the reading material with a summary of customer ratings for several dimensions of hotel quality. The overall score for the stronger hotel brand was considerably higher than the score for the weaker hotel brand (see web Appendix A). Pictures of the hotels' locations, exteriors, lobbies, and rooms corresponding to the two levels of brand strength were also provided to reinforce the authenticity of the simulation. As a manipulation check, the participants rated the strength of the hotel brand on a seven-point scale ("1" = *weak brand*, "7" = *strong brand*).

After reading the material, the participants were informed that the hotel was conducting a customer referral program in which customers would be offered either RMB 50 (roughly USD 8) in cash (monetary reward condition) or RMB 50 worth of vouchers that could be redeemed for two movie tickets (in-kind reward condition) as a show of gratitude. After learning about the hotel's reward program, the participants indicated their referral likelihood on a 100-point rating scale ("0" = *will not recommend with certainty* and "100" = *will recommend with certainty*).

Next, on a five-item scale, modified from Ryu and Feick (2007), the participants reported the perceived social costs associated with the recommendations (see Table 2). The participants then indicated their attitudes toward the customer referral program on a seven-point scale ("1" = *dislike very much*, "7" = *like very much*). Finally, we assessed the participants' attribution of the motives for the hotel referral program using one item for a negative motive ("*The hotel is making profits by taking advantage of customers' social connections*") and another for a positive motive ("*The hotel is helping people share good things with others*"). Both items were measured on seven-point scales ("1" = *strongly disagree*, "7" = *strongly agree*).

As a manipulation check, we asked the participants who were exposed to the monetary reward condition to write the number of movie vouchers that they could purchase with RMB 50, and we asked the participants who were exposed to the in-kind reward condition to estimate the price of the two movie vouchers. At the end of the experiment, the participants were asked to choose between RMB 50 in cash and RMB 50 worth of movie vouchers on the basis of their preference.

### 3.2. Results and discussion

The participants rated the stronger hotel brand significantly higher ( $M = 5.44$ ) than the weaker brand ( $M = 4.00$ ,  $t(155) = 12.33$ ,  $p < .01$ ) regarding brand strength. In addition, the participants who were exposed to the in-kind reward condition indicated that the average price of two movie vouchers was RMB 50.6, which did not differ significantly from RMB 50 ( $t(81) = 0.02$ , *ns*). The participants who were exposed to the monetary reward condition estimated that, on average, RMB 50

**Table 2**

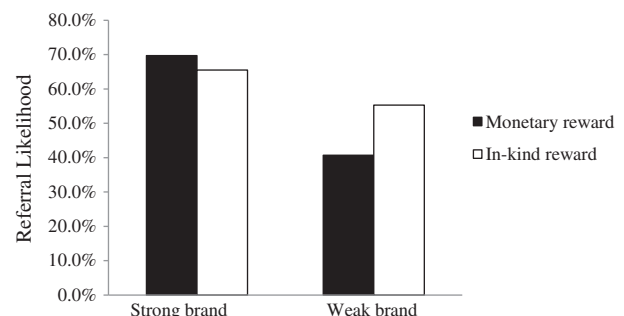
Scales used in Studies 1, 3 & 4.

Items of perceived social cost used in Studies 1 & 3 (1 = strongly disagree, 7 = strongly agree)
The referred individual will think that you are betraying him/her for your own benefit.
You will become more estranged from the referred individual after the recommendation.
The referred individual will think that you are helping him/her (reverse coded).
The referred individual will feel uncomfortable.
The referred individual will think that he/she is being taken advantage of by you.
Items of likelihood of accepting the recommendation used in Study 4
Will you refuse or accept the recommendation? (1 = refuse with certainty, 7 = accept with certainty)
How likely are you to accept this recommendation? (1 = not at all, 7 = very likely)
How likely are you to refuse this recommendation? (1 = not at all, 7 = very likely, reverse coded)
Items of attitudes toward the referral programs used in Study 4
Do you like this program? (1 = dislike very much, 7 = like very much)
Do you think this is a good or bad program? (1 = very bad, 7 = very good)
To what extent do you think the program is acceptable? (1 = very unacceptable, 7 = very acceptable)
Items of motive attribution used in Study 4 (1 = strongly disagree, 7 = strongly agree)
He/she made such a recommendation for his/her own benefit.
He/she made such a recommendation because he/she wanted to help me (reverse coded).
He/she made such a recommendation because he/she wanted to take advantage of me.

could buy 2.06 movie vouchers, which did not differ significantly from the predetermined units ( $t(74) = 1.65$ , *ns*). The results suggest that the participants deemed the two forms of rewards to be equal in value.

Consistent with economic theory, the participants preferred a monetary reward to an in-kind reward of equal value when they were free to choose between them. A total of 71.9% of the participants chose monetary rewards (73.3% of the participants who were exposed to the monetary reward condition and 70.6% of the participants who were exposed to the in-kind reward condition,  $\chi^2(1) = 0.08$ , *ns*).

Measurements of perceived social costs showed acceptable reliability ( $\alpha = .89$ ) and were thus combined to form a composite index for further analysis. An ANOVA on the referral likelihood showed a main effect of brand strength ( $F(1,153) = 21.38$ ,  $p < .01$ ) and, more important, a brand strength  $\times$  reward type interaction ( $F(1,153) = 4.92$ ,  $p < .05$ ). Specifically, for the weak brand, the participants who were exposed to the cash reward condition reported a significantly lower referral likelihood ( $M = 40.7$ ) than those who were exposed to the in-kind reward condition ( $M = 55.3$ ) ( $t(76) = 2.32$ ,  $p < .05$ ), whereas for the strong brand, there was no difference in the referral likelihood between the cash reward condition ( $M = 69.7$ ) and the in-kind reward condition ( $M = 65.5$ ,  $t(77) = 0.74$ , *ns*) (see Fig. 1).



**Fig. 1.** Referral likelihood as a function of reward type and brand strength (Study 1).

An ANOVA on the perceived social costs of recommendation also yielded a significant main effect of brand strength ( $F(1,153) = 16.16$ ,  $p < .01$ ) and a brand strength  $\times$  reward type interaction ( $F(1,153) = 4.18$ ,  $p < .05$ ). The pattern of the results was statistically identical to that obtained for referral likelihood (see Table 3).

To test whether the interactive effects between reward type and brand strength were mediated by perceived social costs, we performed a mediated moderation analysis using the bootstrapping procedure described in Zhao, Lynch, and Chen (2010) and Preacher, Rucker, and Hayes (2007, Model 8, 5,000 bootstrap samples). The results indicated that perceived social costs were predicted by the brand strength  $\times$  reward type interaction in the mediator model ( $B = -0.92$ ,  $t = 2.08$ ,  $p < .05$ ). In the dependent variable model, perceived social costs predicted referral likelihood ( $B = -10.20$ ,  $z = -7.69$ ,  $p < .001$ ), whereas the brand strength  $\times$  reward type interaction was no longer significant ( $B = 9.42$ ,  $z = 1.25$ , *ns*). Furthermore, the indirect effect of the brand strength  $\times$  reward type interaction through perceived social costs was significant (95%,  $B = -9.39$ ,  $CI = -20.17$  to  $-0.50$ ), indicating successful mediation through this path.

In addition, we examined the differences in the participants' inferences regarding the firms' motives for launching RRP. We first formed an indicator of motive attribution by subtracting the positive motive rating from the negative motive rating. As shown in Table 3, an ANOVA on this indicator (the larger the indicator is, the more negative the motive attribution is) yielded a main effect of brand strength ( $F(1,153) = 26.04$ ,  $p < .01$ ) and a main effect of reward type ( $F(1,153) = 11.71$ ,  $p < .01$ ), which were qualified by the reward type  $\times$  brand strength interaction ( $F(1,153) = 4.23$ ,  $p < .05$ ). This interaction effect is consistent with our hypothesis that consumers are more likely to deem firms' motives to be negative when the monetary (vs. in-kind) rewards are offered for weak brands than when the monetary (vs. in-kind) rewards are offered for strong brands. Finally, an ANOVA on attitudes toward the RRP yielded results parallel to previous findings: a main effect of brand strength ( $F(1,153) = 4.87$ ,  $p < .05$ ) was again found, which was qualified by the interaction of brand strength and reward type ( $F(1,153) = 4.56$ ,  $p < .05$ ) (see Table 3).

As expected, money was preferred to an in-kind reward of equal value by the majority of the participants (more than 70%). However, money may not be an effective incentive in the context of an RRP. Our results demonstrate that strong brands do not benefit from monetary rewards and that weak brands actually suffer from the demotivating effect of monetary rewards. In direct support of our hypotheses, an investigation into the underlying mechanism demonstrated that consumers perceived the social costs to be greater when they were asked to recommend a weak brand compared with a strong brand because the absence of brand strength complicated the recommendation justification process. Furthermore, when coupled with a weak brand, monetary rewards increased the perceived social costs further by not only invoking a market exchange norm but also overburdening the recommenders with concerns about a damaged self-concept. Both of these factors contributed to increasing the perceived social costs associated with monetary rewards, which could not be offset by the economic benefits of monetary

rewards, therefore discouraging the participants from engaging in the referral program.

Although Study 1 provides preliminary support for our hypotheses, a major limitation of Study 1 is that it was conducted in a hypothetical context. Additional empirical evidence was needed to determine whether our findings would hold in reality. The next study was conducted in a field setting and further tested our hypotheses with the use of real money.

#### 4. Study 2: a field study using a real referral reward program

Study 2 attempted to replicate the results obtained in Study 1 and extended the analysis in two ways. First, we aimed to test whether people who received real money in a real RRP would behave similarly to those in the hypothetical situation. In addition, we manipulated the other half of the cost–benefit dyad, the reward size, to attempt to eliminate the original effect. We expected that when the size of the reward increased, the benefits associated with the greater flexibility of monetary rewards afforded by the larger reward would increase sufficiently to offset the involved social costs. Consequently, monetary rewards were expected to be equally or more effective than in-kind rewards in stimulating recommendations regardless of the strength of the brand.

##### 4.1. Method

A total of 418 adult customers (232 females, 186 males) of a local hair salon in China (brand name YQ) participated in this study. This study used a 2 (reward type: *money* vs. *in-kind*)  $\times$  2 (reward size: *small* vs. *large*)  $\times$  2 (brand strength: *strong* vs. *weak*) mixed design, with reward size and type manipulated as between-subjects factors and perceived brand strength measured as individual differences. We conducted the field study during two weeks, from January 1 to January 14, 2013.

Following each service encounter, customers were invited to participate in a short survey, which, according to the cover story, was administered to gauge and improve the provided service quality. Among the filler questions (e.g., how satisfied are you with the service delivery time?), the item of interest assessed customers' perceptions of the brand strength of this hair salon by asking them to indicate, "how strong is the YQ brand, in your opinion?" ("1" = *extremely weak*, "7" = *extremely strong*  $M = 4.16$ ,  $SD = 1.87$ ). To clarify the meaning of a strong (weak) brand, in addition to this item, we noted that strong (weak) brands offer relatively higher-quality (lower-quality) products/services and are more (less) well known in the industry.

After completing the survey, the customers were informed that the hair salon was running a reward referral program. Specifically, the customers were informed that to expand their customer base, the hair salon invited them to refer others who might be interested in purchasing their first paid annual membership card for the salon. Each customer was randomly assigned to one of the four versions of the program. We manipulated the reward size by offering either RMB 6 (roughly USD

**Table 3**  
Results of Study 1.

	Weak brand		Strong brand	
	Monetary reward	In-kind reward	Monetary reward	In-kind reward
Referring likelihood	40.7 <sub>a</sub>	55.3 <sub>b</sub>	69.7 <sub>a</sub>	65.5 <sub>a</sub>
Perceived social cost	4.19 <sub>a</sub>	3.44 <sub>b</sub>	2.82 <sub>a</sub>	3.00 <sub>a</sub>
Motive attribution	3.44 <sub>a</sub>	1.81 <sub>b</sub>	1.31 <sub>a</sub>	0.90 <sub>a</sub>
Attitude toward program	3.19 <sub>a</sub>	3.79 <sub>b</sub>	4.05 <sub>a</sub>	3.80 <sub>a</sub>

Note: within the weak brand and strong brand conditions, means in the same row with different subscripts are significantly different at  $p < .05$ . The means of motive attribution = negative motive rating – positive motive rating.

1) or RMB 60 (roughly USD 10) worth of rewards for generating a referral. To manipulate the reward type, customers in the monetary reward condition were informed that they would be offered cash (i.e., RMB 6 or 60) if they made the recommendation, whereas customers in the in-kind reward condition were offered a bottle of hair shampoo of equal value (i.e., a small bottle of shampoo worth RMB 6 or a large bottle of shampoo worth RMB 60) for their referral.

After familiarizing themselves with the reward schemes, the customers indicated whether they would consent to making a recommendation. Those who agreed to generate referrals were asked to write down the names and contact information of the referred individuals and to sign their own name on the “recommendation letter”. To ensure the involvement of the program participants, they were also required to send a text message to the contacts that they had provided. Finally, the customers who participated in the program were given their promised rewards before leaving.

#### 4.2. Results and discussion

We coded the customers who made a recommendation as 1 and those who did not as 0. We then submitted this binary variable to a logistic regression model in which we included reward type, reward size, and perceived brand strength, as well as all of their interaction terms, as predictors. The analysis yielded a main effect of reward size ( $B = 4.33$ ,  $\chi^2(1, 418) = 11.97$ ,  $p < .01$ ), a main effect of brand strength ( $B = 0.99$ ,  $\chi^2(1, 418) = 70.48$ ,  $p < .01$ ), a reward size  $\times$  reward type interaction ( $B = 6.09$ ,  $\chi^2(1, 418) = 5.91$ ,  $p < .05$ ), a reward size  $\times$  brand strength interaction ( $B = -0.63$ ,  $\chi^2(1, 418) = 7.17$ ,  $p < .01$ ) and, more important, a three-way interaction ( $B = -1.08$ ,  $\chi^2(1, 418) = 5.28$ ,  $p < .05$ ) (see Fig. 2).

To better understand the three-way interaction, we followed spotlight analysis procedures (Irwin & McClelland, 2001; Spiller, Fitzsimons, Lynch, & McClelland, 2013) to explore the impact of reward type on customer referral behavior depending on the perceived brand strength of the hair salon and the size of the reward. When the reward was small, the analysis showed a main effect of perceived brand strength ( $B = 1.30$ ,  $\chi^2(1, 210) = 38.47$ ,  $p < .01$ ) and a reward type  $\times$  perceived brand strength interaction ( $B = 0.90$ ,  $\chi^2(1, 210) = 4.58$ ,  $p < .05$ ), replicating the results of Study 1. Further spotlight analyses demonstrated that the customers who perceived the brand to be weak (1 SD below the mean) were less likely to make a recommendation when a monetary reward was offered ( $M = 7.5\%$ ) than when an in-kind reward was offered ( $M = 20.8\%$ ,  $p = .05$ ). However, for customers who perceived the brand to be strong (1 SD above the mean), there was no significant difference in the referral rates between the monetary ( $M = 40.4\%$ ) and in-kind reward ( $M = 36.5\%$ ,  $ns$ ) conditions.

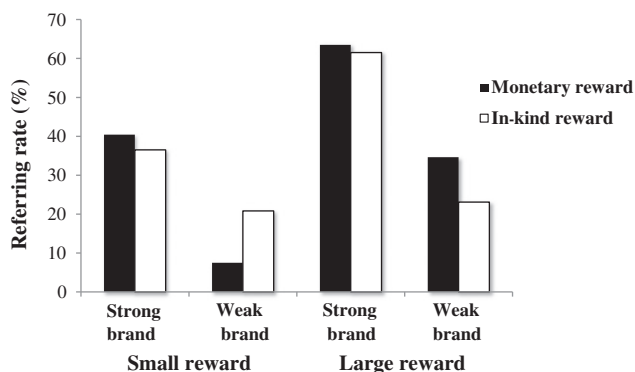


Fig. 2. The referring rate as a function of brand strength, reward type and reward size (Study 2).

However, when the reward was large, there was only a main effect of perceived brand strength ( $B = 0.67$ ,  $\chi^2(1, 208) = 40.21$ ,  $p < .01$ ). Regardless of the reward type, customers who perceived the brand to be strong were significantly more likely to make a recommendation ( $M = 62.5\%$ ) than those who perceived the brand to be weak ( $M = 28.8\%$ ). Although monetary rewards resulted in a higher referral rate (49.0%) than in-kind rewards (42.3%), the difference did not reach significance ( $B = -1.36$ ,  $\chi^2(1, 208) = 1.80$ ,  $ns$ ).

Consistent with our predictions, when the reward was small, monetary rewards underperformed for the weak brand but not for the strong brand. However, the demotivating effect of monetary rewards in stimulating referrals for the weak brand disappeared when the reward was large. In this case, monetary rewards appeared to be equally effective (if not better) incentives than non-monetary rewards. According to our cost–benefit perspective, when the size of the reward becomes sufficiently large, the relative advantage of monetary rewards in terms of economic benefit ultimately outweighs their disadvantage in terms of perceived social costs, resulting in greater net benefits.

Although we did not observe a significantly higher referral rate with monetary rewards in Study 2, we can make a conservative suggestion that as the reward size continues to increase, monetary rewards may ultimately outperform in-kind rewards. In the next study, we investigated whether rewarding both the referring and referred customers (while keeping the reward size constant) alleviates the referring consumers' perceived social costs and consequently mitigates the discouraging effect of monetary rewards.

#### 5. Study 3: alleviating social costs by rewarding both the referring and referred customers

We designed Study 3 to achieve two objectives: First, we examined the robustness of our results in a controlled experiment by using behavioral measures and operationalizing brand strength solely with respect to brand awareness. Second, we investigated whether we could restore money as a superior incentive by decreasing the inherently high social costs associated with monetary rewards. Prior research has demonstrated that people are more likely to cheat when the benefit of doing so is split with another person, even an anonymous stranger, because of the mitigated perception of immorality (Willemuth, 2011). Therefore, by rewarding either only the recommenders or both the recommenders and the corresponding referred individuals, we expected the same results as those observed in Study 1 for participants in the “reward me” condition, whereas for those in the “reward both” condition, monetary rewards should be equally or more effective than in-kind rewards regardless of the strength of the brand.

##### 5.1. Method

A total of 379 MBA students (206 females) at Fudan University in China participated in this study. This study employed a 2 (reward type: *money vs. in-kind*)  $\times$  2 (brand strength: *strong vs. weak*)  $\times$  2 (reward recipients: *me vs. both*) between-subjects design.

Upon arrival, the participants were told that this study was conducted in cooperation with a real online wine store that wanted to better understand customers' preferences for wine. They were told that their task was to complete a survey regarding their wine preferences. The participants were presented with detailed background information on this online wine store. Instead of varying the quality level as in Study 1, we manipulated brand strength by varying the level of brand awareness. Specifically, we described this online wine store either as a well-known and large-scale brand (strong brand) or as a small and less well-known brand (weak brand) in the industry. Varying only the brand awareness aspect of brand strength allowed us to further examine whether the perceived social costs and referral behavior could be changed when we manipulated only one aspect of the brand strength.

**Table 4**  
Results of Study 3.

	Benefit to the recommender only		Benefit to both recommender and referred customer	
	Monetary reward	In-kind reward	Monetary reward	In-kind reward
Referring rate (%)				
Weak brand	12.8 <sub>a</sub>	31.9 <sub>b</sub>	59.6 <sub>a</sub>	39.1 <sub>a</sub>
Strong brand	47.9 <sub>a</sub>	43.8 <sub>a</sub>	68.8 <sub>a</sub>	60.4 <sub>a</sub>
Perceived social cost				
Weak brand	4.45 <sub>a</sub>	3.44 <sub>b</sub>	3.38 <sub>a</sub>	3.96 <sub>a</sub>
Strong brand	3.10 <sub>a</sub>	3.25 <sub>a</sub>	2.73 <sub>a</sub>	2.75 <sub>a</sub>
Attitude toward program				
Weak brand	3.23 <sub>a</sub>	4.30 <sub>b</sub>	4.55 <sub>a</sub>	4.54 <sub>a</sub>
Strong brand	4.69 <sub>a</sub>	4.79 <sub>a</sub>	4.98 <sub>a</sub>	5.29 <sub>a</sub>

Note: within the benefit to recommender only and benefit to both recommender and referred customer conditions, means in the same row with different subscripts are significantly different at  $p < .05$ .

After reading the background information, the participants were asked to complete the previously mentioned survey. Among the questions related to wine preference, we measured the perceived brand strength as a manipulation check. At the end of the survey, the participants were informed that to expand its customer base, this store was operating a RRP and invited them to recommend the store to others who might be interested in registering as new members of the store. The participants were further informed that they would be offered either RMB 30 (roughly USD 5) in cash (monetary reward condition) or a wine glass worth RMB 30 (roughly USD 5) (in-kind reward condition) as a show of gratitude (see web Appendix B). The rewards would be mailed to those who chose to make recommendations after the referred individuals' registrations were confirmed.

For the manipulation of the reward recipients, the participants in the "reward both" condition were informed that their referred individuals would receive a large discount on their first purchase from the wine store, whereas no such information was provided to the participants in the "reward me" condition.

After reading all of the program-related information, the participants were asked to indicate whether they would like to make a recommendation (1 = yes, 0 = no). We then asked those who indicated "yes" to provide the names and contact information of the recommendation receivers. Using this information, we automatically generated an electronic "invitation letter" for the participants to confirm. After the final confirmation of the invitation letter, the participants entered their name (signed) and clicked the "send" button to complete the recommendation. Those who indicated "no" skipped the recommendation stage.

Finally, the participants completed items measuring perceived social costs (see Table 2) and attitudes toward the program and were then debriefed and dismissed.

## 5.2. Results and discussion

The perceived brand strength of the strong brand ( $M = 4.71$ ) was significantly higher than that of the weak brand ( $M = 3.14$ ,  $F(1,371) = 99.44$ ,  $p < .01$ ), suggesting that the manipulation of brand strength was valid.

We coded the participants who made referrals as 1 and those who did not as 0 and submitted this binary variable to a logistic regression model. We included the reward type, brand strength, and reward recipient as well as all of their interaction terms as predictors. The analysis yielded main effects of brand strength ( $B = 0.90$ ,  $\chi^2(1, 379) = 15.88$ ,  $p < .01$ ) and reward recipient ( $B = 1.04$ ,  $\chi^2(1, 379) = 21.20$ ,  $p < .01$ ), a reward type  $\times$  reward recipient interaction ( $B = 1.10$ ,  $\chi^2(1, 379) = 5.85$ ,  $p < .01$ ), and, more important, a brand strength  $\times$  reward type  $\times$  reward recipient three-way interaction ( $B = -1.80$ ,  $\chi^2(1, 379) = 3.93$ ,  $p < .05$ ).

To decompose the three-way interaction, we further conducted separate logistic regressions within each reward recipient condition. When the referral reward program only benefited the recommenders, we replicated what we observed in Study 1. There was a main effect of brand strength ( $B = 1.17$ ,  $\chi^2(1, 190) = 12.03$ ,  $p < .01$ ) and a brand strength  $\times$  reward type interaction ( $B = 1.33$ ,  $\chi^2(1, 190) = 3.88$ ,  $p < .05$ ), suggesting that for the weak brand, participants who were offered monetary rewards were less likely to make recommendations (12.8%) than those who were offered in-kind rewards (31.9%),  $\chi^2(1, 94) = 4.97$ ,  $p < .05$ . By contrast, for the strong brand, there was no difference in the referral rates between the monetary condition (47.9%) and the in-kind reward condition (43.8%),  $\chi^2(1, 96) = 0.17$ , *ns*.

However, among the participants in the "reward both" condition, we identified only two significant main effects and no interaction effect ( $B = -0.46$ ,  $\chi^2(1, 189) = 0.59$ , *ns*). The participants were less likely to make recommendations for the weak brand (49.5%) than for the strong brand (64.6%),  $B = 0.63$ ,  $\chi^2(1, 189) = 4.40$ ,  $p < .05$ . The participants who were provided with in-kind rewards were less likely to generate referrals (50.0%) than those who were provided with monetary rewards (64.2%),  $B = 0.60$ ,  $\chi^2(1, 189) = 3.93$ ,  $p < .05$  (see Table 4).<sup>1</sup>

An ANOVA on perceived social costs yielded a significant main effect of brand strength ( $F(1,371) = 23.12$ ,  $p < .01$ ), a main effect of reward recipient ( $F(1,371) = 4.09$ ,  $p < .05$ ), a reward type  $\times$  reward recipient interaction ( $F(1,371) = 4.20$ ,  $p < .01$ ), and, more important, a three-way interaction ( $F(1,371) = 5.77$ ,  $p < .05$ ). Similarly, an ANOVA on attitudes toward the program yielded results with a statistically identical pattern. Specifically, a significant main effect of brand strength ( $F(1,371) = 24.87$ ,  $p < .01$ ), a main effect of reward recipient ( $F(1,371) = 14.18$ ,  $p < .01$ ), a main effect of reward type ( $F(1,371) = 5.52$ ,  $p < .05$ ), and a three-way interaction ( $F(1,371) = 4.20$ ,  $p < .05$ ) were found, indicating the disappearance of the demotivating effects of money on attitudes toward the program when both the recommender and the receiver were rewarded (see Table 4).

We further tested the mediating role of perceived social costs using a bootstrapping procedure (5000 bootstrap samples). In the mediator model, perceived social costs were predicted by the brand strength  $\times$  reward type  $\times$  reward recipient three-way interaction ( $B = 1.70$ ,  $t = 2.37$ ,  $p < .05$ ). In the dependent-variable model, perceived social costs predicted referral likelihood ( $B = -0.28$ ,

<sup>1</sup> For the weak brand, although the participants who were provided with in-kind rewards were directionally less likely to generate referrals (39.1%) than those who were provided with monetary rewards (59.6%), the difference did not reach significance,  $\chi^2(1, 93) = 3.88$ ,  $p > .06$ .

**Table 5**  
Results of Study 4.

	Weak brand		Strong brand	
	Monetary reward	In-kind reward	Monetary reward	In-kind reward
Likelihood of acceptance	4.20 <sub>a</sub>	5.00 <sub>b</sub>	5.62 <sub>a</sub>	5.33 <sub>a</sub>
Motive attribution	4.23 <sub>a</sub>	5.52 <sub>b</sub>	5.78 <sub>a</sub>	5.83 <sub>a</sub>
Attitude toward program	4.54 <sub>a</sub>	5.45	5.38 <sub>a</sub>	5.33 <sub>a</sub>

Note: within the weak brand and strong brand conditions, means in the same row with different subscripts are significantly different at  $p < .05$ . For motive attribution, the smaller the means, the more negative the motive attribution.

$z = -4.06$ ,  $p < .001$ ), whereas the brand strength  $\times$  reward type  $\times$  reward recipient three-way interaction was non-significant ( $B = -1.46$ ,  $z = -1.57$ , *ns*). Furthermore, the indirect effect through perceived social costs was significant (95%,  $B = -0.47$ ,  $CI = -1.05$  to  $-0.09$ ), indicating successful mediation through this path.

One way to make monetary rewards become better incentives is to increase the associated economic benefits (i.e., reward size), as we did in Study 2. Alternatively, rewarding both the referring customers and their referred friends makes even “recommending a weak brand for benefits” a well-justified action and thus decreases the higher social costs related to monetary rewards. To the extent that the benefits are split between an individual and others, the recommending behavior changes from a purely self-interested action to a somewhat altruistic one. Thus, the relative disadvantage of monetary rewards with regard to the higher associated social costs diminishes and is offset by the monetary benefits involved, making monetary rewards more effective in driving recommendations. We also demonstrated that manipulating only one aspect of brand strength is sufficient to alter consumers' perceived social costs and, consequently, their referring behavior.

## 6. Study 4: effects of reward type on referred customers' acceptance likelihood

Whereas Studies 1–3 shed light on how monetary rewards may be discouraging from the recommender's perspective, one limitation of the previous studies is that the other half of the recommender–receiver dyad remains unexplored. Specifically, a rewarded referral program involves an indirect interaction between the recommender and the receiver. Although recommenders are tremendously important because of their role as initiators, receivers of a recommendation ultimately decide whether to accept the recommendation. Therefore, it is important to further examine whether the reward type systematically affects receivers' receptivity toward a recommendation and whether the perceived social costs are rooted in the receiver's perspective.

In other words, concerns about being criticized for “betraying friends for money” and “benefiting at the expense of others”, which make customers hesitant to engage in a rewarded referral program, may be reconfirmed with the referred customers (Wirtz et al., 2013). We suggest that recipients are more likely to attribute recommenders' referral behavior to negative motives if monetary rather than in-kind rewards are offered to recommenders. This is particularly true when the referral program is associated with a weak brand, which, in turn, diminishes the receivers' intentions to accept such a recommendation. We formalize our prediction in the following hypotheses and test these hypotheses in Study 4.

**H3.** Assuming that referred customers are aware of the type of reward provided to recommenders, monetary rewards perform more poorly than in-kind rewards with regard to recommendation receptivity to a greater extent for weak brands than for strong brands.

**H4.** Referred customers' motive attributions with regard to the referral program mediate the interactive effect of the reward type and brand strength on recommendation receptivity.

### 6.1. Method

A total of 128 MBA students (61 females) from Fudan University in China participated in the experiment in exchange for a lottery gift. The experiment utilized a 2 (reward type: *monetary reward* vs. *in-kind reward*)  $\times$  2 (brand strength: *strong* vs. *weak*) between-subjects design.

The participants were required to read a scenario in which their friends had recommended an online wine store to them. As in Study 3, we manipulated brand strength by varying another aspect of this construct, brand awareness. Specifically, we described the strong brand as a well-known, large-scale online wine store and the weak brand as a smaller, lesser-known one. After reading the background information on the wine store, the participants were asked to indicate the perceived brand strength on a seven-point scale (“1” = *very weak brand*, “7” = *very strong brand*).

The participants were then asked to imagine receiving a phone call from a salesperson at the wine store. The salesperson told participants that a friend of theirs had recommended that they join the store club and that their friend would be rewarded if they agreed to join the club. The participants who were exposed to the monetary reward condition were told that their friends would receive RMB 30 (roughly USD 5) in cash as a reward. The participants who were exposed to the in-kind reward condition were informed that their friends would receive a nice wine glass worth RMB 30 (roughly USD 5) as a reward (see web Appendix C). Finally, the participants reported on their likelihood of accepting the recommendation, their attitudes toward the referral program, and their motive attribution (see Table 2).

### 6.2. Results and discussion

The perceived brand strength of the strong brand ( $M = 5.47$ ) was significantly higher than that of the weak brand ( $M = 4.44$ ,  $F(1,124) = 84.14$ ,  $p < .01$ ), suggesting that the manipulation of brand strength was valid.

The multiple-item measures of the likelihood of acceptance ( $\alpha = .92$ ), attitudes toward the referral program ( $\alpha = .91$ ), and motive attribution ( $\alpha = .87$ ) all showed high reliability and were thus combined for further analysis. Consistent with our hypotheses, an ANOVA on the likelihood of acceptance yielded a significant main effect of brand strength ( $F(1,124) = 26.41$ ,  $p < .01$ ), which was qualified by the reward type  $\times$  brand strength interaction ( $F(1,124) = 10.18$ ,  $p < .01$ ). These results indicate that for the weak brand, in-kind rewards led to a higher mean value of acceptance likelihood ( $M = 5.00$ ) than cash rewards ( $M = 4.20$ ,  $t(64) = 3.11$ ,  $p < .01$ ), whereas for the strong brand, there was no significant difference in acceptance likelihood between in-kind rewards ( $M = 5.33$ ) and cash rewards ( $M = 5.62$ ,  $t(60) = 1.31$ , *ns*) (see Table 5).



An ANOVA on motive attribution showed main effects of both brand strength ( $F(1,124) = 36.18, p < .01$ ) and reward type ( $F(1,124) = 18.57, p < .01$ ) as well as a reward type  $\times$  brand strength interaction ( $F(1,124) = 15.16, p < .01$ ). For the weak brand, the inferred motives were significantly more negative for the cash reward condition ( $M = 4.23$ ) than for the in-kind reward condition ( $M = 5.52, t(64) = 5.49, p < .01$ ). Conversely, for the strong brand, there was no significant difference in motive attribution between the in-kind reward ( $M = 5.83$ ) and the cash reward ( $M = 5.78, t(60) = 0.26, ns$ ) conditions. Additionally, as shown in Table 5, an ANOVA on attitudes toward the referral program also yielded main effects of both brand strength ( $F(1,124) = 5.69, p < .05$ ) and reward type ( $F(1,90) = 8.40, p < .01$ ), which were qualified by an interaction between brand strength and reward type ( $F(1,124) = 10.09, p < .01$ ), replicating the pattern of results for motive attribution.

We further tested the mediating role of consumers' motive attribution on referral acceptance using a bootstrapping procedure (5000 bootstrap samples). The results indicated that motive attribution was predicted by the brand strength  $\times$  reward type interaction in the mediator model ( $B = -1.24, t = -3.97, p < .001$ ). In the dependent-variable model, motive attribution predicted acceptance likelihood ( $B = 0.36, z = 3.84, p < .001$ ), whereas the brand strength  $\times$  reward type interaction was no longer significant ( $B = -0.64, z = -1.87, ns$ ). Furthermore, the indirect effect of the brand strength  $\times$  reward type interaction through motive attribution was significant (95%,  $B = -0.45, CI = -0.86$  to  $-0.17$ ), indicating successful mediation through this path.

Study 4 confirmed our proposition that from the recommendation recipients' perspective, the reward type affects referred customers' attitudes and behavior in the same way that it affects referring customers' attitudes and behavior. These results provide additional support for the underlying process. A high level of perceived social costs reflects recommenders' concerns that their behavior may be attributed to selfish motives and that their behavior may therefore negatively affect their relationship with the referred individuals. As we expected, their concerns are well founded: monetary rewards lead to more negative motive attributions, particularly when the recommended brand is weak.

## 7. General discussion

Referral reward programs are key CRM tools because of their dual benefits of attracting new customers and retaining existing ones (Ryu & Feick, 2007). Therefore, it is critical to understand the psychological and behavioral drivers of customer referrals in facilitating the managerial optimization of targeted marketing campaigns and the subsequent maximization of customer referral value (Kumar et al., 2010). Previous studies have examined certain aspects of the design of referral programs (Kim et al., 2001; Ryu & Feick, 2007). However, little research has explored the role of reward type in optimizing the efficiency of referral programs, particularly with regard to how different types of rewards affect customers' likelihood of referral and acceptance. The present study contributes to the literature by filling this theoretical and practical gap.

We used four studies to examine the differential effects of monetary versus in-kind rewards in driving referral success. In Study 1, customers who were asked to generate referrals in exchange for monetary (vs. in-kind) rewards were less likely to do so for a weak brand than for a strong brand. Furthermore, customers' perceived social costs mediated the interactive effect of reward type and brand strength on referral likelihood. In Study 2, we replicated our findings in a field setting and demonstrated that a sufficiently large reward could increase the relative benefits of monetary (vs. in-kind) rewards such that the higher social costs associated with monetary rewards could be completely offset, thereby eliminating the effects of reward type on referral likelihood. In Study 3, we found that rewarding both the giver and the receiver of the recommendation considerably decreased the perceived social costs associated with monetary rewards, making monetary rewards more effective incentives than in-kind rewards. In Study 4, we explored

the other half of the referral dyad by demonstrating that referred customers who learned that a monetary reward was offered to recommenders were less likely to accept the recommendation for a weak brand than for a strong brand.

This study makes several contributions to the literature on WOM and the psychological consequences of monetary incentives. First, and at the most basic level, we extend the theory on the demotivating effect of money to a new context in which people are incentivized to accomplish a task that affects their friends and acquaintances. Although the underperformance of monetary rewards as an incentive has been tested in a variety of contexts, previous studies have focused on incentivizing people to perform actions that have consequences for only themselves or a psychologically distant group of people (i.e., blood donations) (Goette & Stutzer, 2008; Heyman & Ariely, 2004; Lacetera & Macis, 2010). However, we demonstrate that the detrimental effect of money also exists in the context of social interactions (i.e., referral reward programs). We further identify the psychological mechanism of how monetary rewards undermine referral intentions when the need to send positive signals about oneself is involved. In a broader sense, this research also advances theories on incentives in labor economics (Bénabou & Tirole, 2003; Bénabou & Tirole, 2006; Dur et al., 2010) as well as theories on the psychological consequences of money (Heyman & Ariely, 2004; Vohs et al., 2006).

This study elucidates the motivations behind WOM and provides novel insights into the customer referral process. Prior research has focused on the intrinsic motivations behind WOM, such as satisfaction, trust, emotional reaction, and arousal (Berger & Milkman, 2012; Verlegh & Moldovan, 2008; Wangenheim & Bayón, 2007). More recent research has focused on certain product characteristics that are conducive to the spread of WOM, such as the originality, usefulness, accessibility, and public visibility of a product (Berger & Shwartz, 2011; Moldovan, Goldenberg, & Chattopadhyay, 2011), as well as the role of social networks in facilitating information and product diffusion (Stephen, Dover, & Goldenberg, 2010). Recent work has examined how controversy affects conversation (Chen & Berger, 2013) and how the channels through which consumers communicate affect what they talk about (Berger & Iyengar, 2013). However, RRP represent an active firm strategy through a reward system that strengthens the extrinsic motivations behind WOM. In this study, we explored how intrinsic motivation (brand strength) and extrinsic incentives (rewards) interactively influence the likelihood that customers will make referrals. Our findings suggest that the impact of reward type on incentivized referrals hinges on the intensity of the intrinsic motivation (i.e., sharing a quality product). Specifically, when there is a sufficient intrinsic motivation to make a referral (i.e., when the behavior is well justified), the type of extrinsic motivator exerts much less influence on the incentive efficiency because the intrinsic motivation dominates. However, if there is a lack of an intrinsic motivation, then the extrinsic motivation dominates, and in such a case, the type of reward affects the referral success.

Our research provides a note of caution to managers that money may be unexpectedly demotivating as an incentive in an RRP context. Although a sufficiently large reward has the potential to eliminate or even reverse the demotivating effects of monetary rewards relative to in-kind rewards, as shown in Study 2, offering rewards of considerable value is inefficient for most firms. This finding possibility highlights the importance of managers' awareness that although money appears to be desired by everyone, there is a potential downside to offering money as an incentive in RRP. People may simply choose to opt out of programs that reward customers with money because the social costs associated with monetary rewards outweigh their economic benefits. It is important to note that if a firm is a new player in the initial stages of developing its brand capital, offering a monetary reward in an RRP not only undermines the efficiency of the program but also generates negative impressions regarding the firm's motives.

In-kind rewards also have a cost advantage over monetary rewards. A reward worth one dollar to a consumer may have different cost

implications for the offering firm depending on the reward type. For example, cash is more costly for a firm than a product of the same value. As a result, in-kind rewards are more suitable for the purpose of RRP. Nevertheless, as long as an extrinsic reward is provided, customers experience more or less distress caused by perceived social costs. Therefore, firms should take measures to alleviate such feelings of guilt. As demonstrated in Study 3, rewarding both the recommenders and the recipients of recommendations is one way to alleviate such feelings. Keeping the details of the rewards that recommenders receive confidential may also be a plausible solution. Alternatively, building up brand strength, such as by improving the quality of products and services, and nurturing brand awareness and a good public image may also reduce the perceived social costs associated with monetary rewards.

Despite the implications of our findings, we realize that the present research has certain limitations that may provide fruitful opportunities for future research. First, we concentrated on the effect of monetary and non-monetary rewards on perceived social costs and referral likelihood without considering the features of the consumer–firm relationship and the nature of the recommender–receiver dyad. For example, we expect consumers to respond differently to incentives depending on whether they make recommendations to close friends or casual acquaintances or whether they recommend a firm (product) to which they are loyal or a firm (product) with which they are unfamiliar. Therefore, we believe that it would be fruitful to incorporate these contextual factors into future research.

Regarding the reward type, we limited our attention to cash rewards and one type of in-kind reward, material goods. In reality, firms also offer other types of in-kind rewards, such as redeemable points, free products/services, and membership upgrades. Therefore, a deeper examination of the impacts of various types of in-kind rewards on referral success could constitute an interesting avenue for future research.

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## Appendix A. Supplementary experiment material

Supplementary experiment material to this article can be found online at <http://dx.doi.org/10.1016/j.ijresmar.2013.08.005>.

## References

- Bénabou, R., & Tirole, J. (2003). Intrinsic and extrinsic motivation. *Review of Economic Studies*, 70(244), 489–520.
- Bénabou, R., & Tirole, J. (2006). Incentives and pro-social behavior. *American Economic Review*, 96(5), 1652–1678.
- Berger, J., & Iyengar, R. (2013). Communication channels and word of mouth: How the medium shapes the message? *Journal of Consumer Research*, 40(3), 567–579.
- Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, 49(2), 192–205.
- Berger, J., & Shwartz, E. M. (2011). What drives immediate and ongoing word of mouth? *Journal of Marketing Research*, 48(5), 869–880.
- Biyalogorsky, E., Gerstner, E., & Libai, B. (2001). Customer referral management: Optimal reward programs. *Marketing Science*, 20(1), 82–95.
- Burgoyne, C. B., & Routh, D. A. (1991). Constraints on the use of money as a gift at Christmas: The role of status and intimacy. *Journal of Economic Psychology*, 12(1), 47–69.

- Cheema, A., & Kaikati, A.M. (2010). The effect of need for uniqueness on word of mouth. *Journal of Marketing Research*, 47(3), 553–563.
- Chen, Z., & Berger, J. (2013). When, why and how controversy causes conversation? *Journal of Consumer Research*, 40(3), 580–593.
- DeVoe, S. E., & Iyengar, S. S. (2010). Medium of exchange matters: What's fair for goods is unfair for money. *Psychological Science*, 21(2), 159–162.
- Dur, R. (2009). Gift exchange in the workplace: Money or attention? *Journal of the European Economic Association*, 7(2–3), 550–560.
- Dur, R., Non, A., & Roelfsema, H. (2010). Reciprocity and incentive pay in the workplace. *Journal of Economic Psychology*, 31(4), 676–686.
- Feick, L. F., & Price, L. L. (1987). The market maven: A diffuser of marketplace information. *The Journal of Marketing*, 83–97.
- Gatignon, H., & Robertson, T. S. (1986). An exchange theory model of interpersonal communication. In Richard J. Lutz (Ed.), *Advances in consumer research*, Vol. 13. (pp. 534–538) Provo, UT: Association for Consumer Research.
- Godes, D., & Mayzlin, D. (2009). Firm-created word-of-mouth communication: Evidence from a field test. *Marketing Science*, 28(4), 721–739.
- Godes, D., Mayzlin, D., Chen, Y., Das, S., Dellarocas, C., Pfeifferer, B., et al. (2005). The firm's management of social interactions. *Marketing Letters*, 16(3–4), 412–428.
- Goette, L., & Stutzer, A. (2008). Blood donation and incentives: Evidence from a field experiment. *IZA working paper 3580*.
- Heyman, J., & Ariely, D. (2004). Effort for payment: A tale of two markets. *Psychological Science*, 15, 787–793.
- Irwin, J. R., & McClelland, G. H. (2001). Misleading heuristics for moderated multiple regression models. *Journal of Marketing Research*, 38(1), 100–109.
- Iyengar, R., Van den Bulte, C., & Valente, T. W. (2011). Opinion leadership and social contagion in new product diffusion. *Marketing Science*, 30(2), 195–212.
- Kim, B., Shi, M., & Srinivasan, K. (2001). Reward programs and tacit collusion. *Marketing Science*, 20(2), 99–120.
- Kornish, L. J., & Li, Q. (2010). Optimal referral bonuses with asymmetric information: Firm-offered and interpersonal incentives. *Marketing Science*, 29(1), 108–121.
- Kumar, V., Petersen, J. A., & Lenoe, R. P. (2010). Driving profitability by encouraging customer referrals: Who, when, and how. *Journal of Marketing*, 74(5), 1–17.
- Lacetera, N., & Macis, M. (2010). Do all material incentives for pro-social activities backfire? The response to cash and non-cash incentives for blood donations. *Journal of Economic Psychology*, 31(4), 738–748.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633–644.
- Moldovan, S., Goldenberg, J., & Chattopadhyay, A. (2011). The different roles of product originality and usefulness in generating word of mouth. *International Journal of Research in Marketing*, 28(2), 109–119.
- Preacher, K. J., Rucker, D.D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227.
- 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, 6–59.
- Shi, Mengze, & Wojnicki, Andrea, C. (2007). *Money Talks: Field Experiment Evidence Regarding Online Referral Propensities*. Available at SSRN: <http://ssrn.com/abstract=958290>.
- Smith, D. C., & Park, C. W. (1992). The effects of brand extensions on market share and advertising efficiency. *Journal of Marketing Research*, 29(3), 296–313.
- Spiller, S. A., Fitzsimons, G. J., Lynch, J. G., & McClelland, G. H. (2013). Spotlights, floodlights, and the magic number zero: Simple effects tests in moderated regression. *Journal of Marketing Research*, 50(2), 277–288.
- Stephen, A., Dover, Y., & Goldenberg, J. (2010). A comparison of the effects of transmitter activity and connectivity on the diffusion of information over online social networks. *Working paper*.
- Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-mouth communications: A motivational analysis. *Advances in Consumer Research*, 25(1), 527–531.
- Verlegh, P. W. J., & Moldovan, S. (2008). What drives word of mouth: A multi-disciplinary perspective. *Advances in Consumer Research*, 35, 49–51.
- Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science*, 314, 1154–1156.
- Wangenheim, F. V., & Bayón, T. (2007). The chain from customer satisfaction via word-of-mouth referrals to new customer acquisition. *Journal of the Academy of Marketing Science*, 35, 233–249.
- Wiltermuth, S. S. (2011). Cheating more when the spoils are split. *Organizational Behavior and Human Decision Processes*, 115(2), 157–168.
- 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(2), 141–162.
- Wirtz, J., Orsingher, C., Chew, P., & Tambyah, S. K. (2013). The role of metaperception on the effectiveness of referral reward programs. *Journal of Service Research*, 16(1), 82–98.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.