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Successful Referral Behavior in Referral Reward Programs

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Successful Referral Behavior in Referral Reward Programs

Structured Abstract

Purpose: Referral reward programs (RRPs) incentivize existing customers (inductors) to refer new customers (inductees). The effectiveness of RRPs is not well understood as previous studies either focused on referral intent and/or ignored inductee responses. However, an RRP is only effective if inductors recommend and inductees respond with buying the service. The purpose of this article is to examine the drivers of existing customers' successful referral behavior.

Design/methodology/approach: This study combines a bank's customer relationship management (CRM) data which was used to identify successful inductors and non-inductors. Then, observed behavioral and customer background data from the CRM database (incl. successful referrals, deposits in Euro, number of products held, relationship duration, income, age and gender) were combined with survey data capturing attitudinal variables (i.e., perceived relationship quality, reward attractiveness, referral metaperception, opportunism, and involvement). This approach allowed for the simultaneous testing of all hypothesized drivers of successful referral behavior.

Findings: Metaperception (i.e., the process by which individuals determine the impressions other might form of them and their behavior) was the strongest and most significant driver of successful RRP participation, followed by attractiveness of the reward. That is, inductors recommended successfully when they believed that their incentivized referral did not look bad (or even looked good) and incentives were perceived as attractive. This finding is important as metaperception so far has only been examined in theoretical and experimental studies with intent as dependent variables. Second, latent class analyses (LCA) revealed that there were two segments of inductors of which one was opportunistic. Opportunism as a driver of referral

behavior has not been shown in past research using more traditional analyses, whereas LCA uncovered it as a driver for one third of all respondents.

Practical implications: The findings offer managers a better understanding of the key determinants of successful referral behavior with important RRP design implications that counter frequent practice (e.g., designing RRPs with high face value but then reducing its usefulness through terms and conditions). Furthermore, managers may consider segment-specific reward structures to improve the effectiveness of their RRPs.

Originality/value: This study is the first to examine inductor determinants of successful referral behavior and identify inductor segments.

Keywords: Referral reward program; incentives; metaperception; reward attractiveness; opportunism; customer segmentation.

Introduction

To acquire new customers in a competitive market many firms have launched various referral reward programs (RRPs) to incentivize existing customers to recommend a firm's service to their friends and family. Throughout this paper, existing customers who successfully refer a new customer in an RRP are defined as inductors, and those newly acquired customers via an RRP are referred to as inductees (c.f., Kumar *et al.*, 2010; Ramaseshan, 2017). Because existing customers are familiar with the firm's service, their testimonies tend to be more credible and effective in communicating the value of a firm's offering (Brown and Reingen, 1987; Tuk *et al.*, 2009). Also, because rewards for inductors tend to be contingent on the successful acquisitions of new customers, RRP have been considered a cost-effective way to acquire new customers (Biyalogorsky *et al.*, 2001). Consequently, RRP have become ubiquitous (Berman, 2016). A recent Google search on 'recommend-a-friend program' resulted in 37 million hits. For example, Marriott International offered up to 50,000 bonus points if a current loyalty program member referred new members who joined the program and stayed at one of Marriott's properties; 24 Hour Fitness, a popular fitness center in the United States, gave customers a \$20 coupon for every referral that resulted in a new member for the fitness center; T-Mobile's Refer-a-Friend program offered their customers a \$50 MasterCard Prepaid card for each referral that led to the opening of a new postpaid account; and Uber credited \$5 per referral for each new customer who downloaded the app and used a \$10 voucher.

While RRP are ubiquitous, their effectiveness is not well understood especially when previous studies were based on customers' intention to refer instead of their actual referral behavior, and when these studies focused on inductors and largely ignored inductees' responses. An RRP is only effective if inductors recommend and inductees respond with buying the service, which is termed 'successful referral behavior' in this article. With the aim of examining the

factors that affect existing customers' actual and successful referral behavior, this paper fills an important gap and makes the following contributions to the literature.

First, experimental empirical research on RRP is primarily based on existing customers' intention to refer as proxies of actual referral behavior. There are two issues with this approach. One, respondents routinely provide inaccurate predictions about their future behaviors (Seiders *et al.*, 2005). Consumers tend to be cognitive misers who lack the motivation and cognitive ability to accurately incorporate contingencies into the process of predicting their behaviors (Chandon *et al.*, 2005; Seiders *et al.*, 2005). For example, successful participation in an RRP typically requires inductors to familiarize themselves with the terms, conditions and the process (e.g., registration, providing information on potential inductees, and redeeming the rewards). Such process variables have been shown to be largely ignored when stating intentions, but then they tend to be significant barriers for people to actually carry out their intended behavior (Wirtz *et al.*, 2014). To overcome such shortcomings, researchers are advocating the use of actual behaviors rather than intentions (Gupta and Zeithaml, 2006). Two, an RRP is only effective if inductors recommend and inductees respond with buying the service (Verlegh *et al.*, 2013). However, past research has shown that drivers that may make it more likely that inductors refer can at the same time reduce inductee likelihood to comply (Tuk *et al.*, 2009). The present study addresses these issues and is the first that is based on the actual and successful referral behavior of existing customers.

Second, this study integrates the key potential drivers for successful referral behavior into a single study which has several important benefits. One, many potential drivers of RRP participation were examined on referral intent only (e.g., metaperception) or are important in driving organic WOM but have not yet been studied in RRP (e.g., relationship quality). Metaperception, for example, may lead the inductor to worry that the inductee will suspect an

ulterior motive and therefore is less likely to make a referral (Orsingher and Wirtz, 2018). A number of studies have shown that incentives can generate impression management concerns for potential inductors and reduce referral intent (Jin and Huang, 2014; Wirtz *et al.*, 2013), but has not yet been shown to affect actual and successful referral behaviors.

Two, there is value in examining the variables that were explored in individual studies together in a single dataset [see Keiningham *et al.* (2018) in the word-of-mouth (WOM) context]. For example, as has frequently been seen in a large-scale medical survey research, variables that individually explain a dependent variable can become insignificant when tested in combination with an array of other variables, indicating that prior observations may have just been covariations (c.f., Wirtz *et al.*, 2014).

It is one of the strong points of this study that it tests important variables together in an actual RRP context combining customer relationship management (CRM) and survey data. That is, this study is the first to supplement CRM data with survey data which allowing the mapping of customer behaviors on important attitudinal variables that explain unique variance in successful RRP participating. No other study has yet tested such a large number of potential drivers of actual referral behavior in a single study.

Third, most firms tend to offer similar RRP to all existing customers. This implies that firms either assume that all inductors are the same in terms of their motivation to participate in an RRP, or that firms' RRP simply have not become sophisticated enough to be tailored to different segment needs. Academic research has also not examined the possibility of segment-specific drivers of RRP participation. As suggested by Keiningham *et al.* (2018), it is crucial to account for customer heterogeneity and examine the attitudinal drivers of WOM beyond population-averaged effects. Therefore, this study is the first to examine actual and successful referral behavior to explore inductor segmentation using latent class analysis (LCA).

In summary, this study makes the following main contributions:

1. This study is the first to examine the drivers of actual and successful referral behavior.
2. This study examines key potential drivers together in a single study to explore which drivers explain unique variance. Furthermore, many of these variable were examined only on referral intent (e.g., metaperception) or are important in organic WOM but have not yet been studied in RRP (e.g., relationship quality).
3. Third, this study is the first to move beyond population averages and examines potential inductor segmentation using LCA.

Literature Review and Hypotheses

RRP rewards may provide strong incentives to encourage referrals, but rewards make existing customers' referrals seem less impartial due to social impression concerns and may even suggest ulterior motives (Verlegh *et al.*, 2015; Wirtz *et al.*, 2013). These trade-offs are inherent in RRP (Orsingher and Wirtz, 2018). Their benefits and ways to potentially attenuate the negative effects of incentives have resulted in three streams of research. The first stream focuses on the intended likelihood of an existing customer to refer a friend, the second stream examines the value of the inductees acquired through RRP, and a third emerging stream focuses on how inductees respond to receiving incentivized referrals (Table 1). In each of these three streams, attention is paid to a few specific determinants that can affect the intended referral behavior of existing customers, the value of inductees, or the perceptions and response of inductees.

[Insert Table 1 about here]

Determinants of Successful RRP Participation

Through a broad scan of the marketing literature, five potential key determinants of successful RRP participation were identified (see also Table 1). They are (1) customer-firm relationship quality, (2) attractiveness of the reward, (3) customer's metaperception about the

referral (i.e., inductor's impression management concerns), (4) customer's opportunism, and (5) customer involvement. By considering all five different determinants examined in the literature, this study aims to identify key determinants for predicting successful RRP participation among existing customers and exploring inductor segments. The conceptual framework for this study is shown in Figure 1.

[Insert Figure 1 about here]

Clearly, the success of an RRP depends on the awareness of the program among existing customers and potential new customers. However, the awareness of the RRP is beyond the scope of this paper. By focusing on existing customers who are aware of the RRP, this study examines the determinants of existing customers' successful RRP participation.

Next, the rationale and the expected relationships between each of the aforementioned five determinants and successful RRP participation are discussed. Although some of these relationships have already been examined in the referral intent (e.g., metaperception) or the WOM literature (e.g., satisfaction), these variables are re-examined in an actual and successful referral behavior setting to validate and extend the extant RRP literature.

Relationship Quality. Customer satisfaction has arguably received the most attention in the WOM literature (Neumann, 2015). In the organic WOM context, a meta-analysis of 162 samples confirmed a direct effect of customer satisfaction on WOM (Matos and Rossi, 2008). However, while satisfaction may seem an obvious determinant of referral behavior, it has not been tested empirically in an RRP context before. Rather, high levels of customer satisfaction have frequently been assumed to be a necessary condition for incentivized referrals to take place and experimental studies generally used high satisfaction scenarios (e.g., Orsingher and Wirtz, 2018; Wirtz *et al.*, 2013).

In addition, a meta-analysis on relationship marketing has shown that relationship quality,

a composite measure of relationship strength which also includes customer satisfaction, had a stronger impact on customer cooperation and WOM than customer satisfaction alone (Palmatier *et al.*, 2006). The authors conclude that focusing on a single variable may prove misleading. Other studies have also shown that the success of relationship marketing (of which loyalty programs and RRP are a subset) depends on the relationship quality between existing customers and the firm (Crosby *et al.*, 1990; Hennig-Thurau *et al.*, 2002). Studies consistently show that consumers who perceive high relationship quality have more positive attitudes and behaviors towards firms, including being grateful for good service and wanting a firm to be successful (i.e., reciprocity effect, Cialdini, 2009; Berger, 2014), and therefore have a stronger motivation to make (unincentivized) referrals (Palmatier *et al.*, 2009).

It seems also reasonable to believe that customers who perceived high relationship quality (e.g., are highly satisfied or even delighted) are more likely to make referrals that are also more credible and convincing, and that therefore inductees are more likely to comply. While relationship quality has been examined in the WOM literature, this study is the first to empirically test it in an RRP context. Thus, it is advanced:

H1: The higher the perceived firm-customer relationship quality, the higher is the inductor's likelihood of making a successful referral as part of an RRP.

RRP Attractiveness. The size of an incentive associated with an RRP has been identified as an important driver of intentions to participate in an RRP (Ryu and Feick, 2007; Wirtz and Chew, 2002; Wirtz *et al.*, 2013). The size of an incentive, however, does not equal perceived value or attractiveness. Rather, the extent to which customers evaluate the attractiveness of an incentive is subjective and personal, and it is the perceived attractiveness of the incentive (rather than the face value) that determines a customer's referral intentions (Orsingher and Wirtz, 2018). Thus, although the size of an incentive is assumed to generally correlate with its attractiveness,

the two constructs are theoretically independent, and it is the perceived attractiveness that is the more relevant construct in the RRP context. An incentive can be considered as compensation for the time and effort spent on recommending a service. It seems reasonable to suggest that with increasing incentive attractiveness inductees will be more motivated to exert energy into their referrals and perhaps approach more potential inductees, and thereby, increase the likelihood of a successful referral. As such, the following hypothesis is advanced:

H2: The higher the reward attractiveness, the higher is the inductor's likelihood of making a successful referral as part of an RRP.

Metaperception. A referral takes place in a social setting such as a conversation between two people. As with any social setting, individuals are constantly making judgments of one another through interpersonal evaluation (Schlenker and Leary, 1982). Goffman (1959) found that the need for social approval and fear of disapproval leads to impression management, which means that individuals adapt their behavior to get positive and avoid negative appraisals from others. Impression management involves anticipating the likely reactions of others to one's possible behaviors and adapting one's behavior accordingly (Schlenker and Pontari, 2000).

Central to the processes of impression management is the concept of metaperception (Schlenker, 1980) which refers to the process by which individuals determine the impressions others might form of them and their behavior (Laing *et al.*, 1966). People generally prefer to be seen in a socially positive light, such as appearing intelligent, helpful, and honest (Schlenker and Leary, 1982). Thus, before an individual engages in a behavior (e.g., making a referral), she is likely to engage in a metaperception process to assess how the other person will perceive that behavior. If an individual believes that the other party will perceive the behavior unfavorably, she will be less likely to engage in that behavior.

Metaperception has been shown to drive the evaluation and adaptation of behaviors in

organic WOM (c.f. Berger, 2014) and the RRP context (Orsingher and Wirtz, 2018; Wirtz *et al.*, 2013). When no incentive is involved, inductors tend to perceive themselves as other-oriented, even altruistic, and they believe that inductees view them in that way, too. Incentives as part of an RRP, however, change the nature of the recommendation and the outcome of the metaperception process. Here, the inductor may worry that the inductee will suspect a hidden or ulterior motive that drives his referral behavior (c.f., Tuk *et al.*, 2009; Verlegh *et al.*, 2013), and the inductor is, therefore, likely to formulate a negative metaperception and be less likely to make a referral. A number of studies have confirmed this process and have shown that incentives can generate impression management concerns for potential inductors (Jin and Huang, 2014; Wirtz *et al.*, 2013).

Furthermore, research in social psychology has shown that people's metaperception corresponds well to others' judgements. That is, people's impressions of how they and their behaviors are perceived by others tend to be relatively accurate (e.g., Kenny and DePaulo, 1993; Levesque, 1997). This suggests for the RRP context that once inductors feel their incentivized recommendation has a good metaperception, inductees are also likely to think well about the recommendation and are more inclined to purchase.

In summary, referral behavior is likely to be driven by the inductors' perception of how the referral will be viewed by potential inductees (i.e., their metaperception), which is negatively affected by the presence of an incentive (Wirtz *et al.*, 2013). Similarly, Jin and Huang (2014) found that monetary incentives increase a potential inductor's perceived social costs and the fear to be seen as being motivated by the incentive associated with the RRP rather than wanting to help the inductee. Research on inductees supports this fear as incentives raise perceptions of ulterior motives and negatively affect perceived sincerity (Tuk *et al.*, 2009; Verlegh *et al.*, 2013). These social costs for the inductor and unfavorable perceptions by the inductee, in turn, have a

negative effect on the likelihood of making a successful referral. Metaperception has been shown to drive referral intention in an RRP context but has not yet been shown to affect actual and successful referral behaviors. Therefore, the following hypothesis is advanced:

H3: The more positive the metaperception of the referral, the higher is the inductor's likelihood of making a successful referral as part of an RRP.

Opportunism. Opportunism can be defined as individuals seeking self-interest to benefit themselves (Ping, 1993), taking advantage of opportunities as they arise (Wirtz and McColl-Kennedy, 2010), and taking advantage of any circumstance of possible benefit (The Free Dictionary.com).

Opportunism as an attitude has not been studied in an RRP context before, but there are parallels in the coupon literature which show that opportunism and deal proneness are positively related to purchasing behaviors, and the tendency to see the deal as an end in itself (Price, Feick, and Guskey-Federouch, 1988; Schindler, 1989). Customer opportunism is generally seen in a negative light (Fisk *et al.*, 2010). However, in the context of RRP, customer opportunism can enable the firm to exploit customers' opportunistic behavior so as to acquire more new customers by offering referral rewards. It seems reasonable to suggest that opportunistic customers are more likely to want to take advantage of the rewards on offer and therefore may try harder and make recommendations to more potential inductees and thereby increase the chance of a successful referral. Consequently, the following hypothesis is advanced:

H4: The higher a customer's opportunism, the higher is the inductor's likelihood of making a successful referral as part of an RRP.

Involvement. A customer's product involvement is defined according to the personal relevance of a product to the customer (Krugman, 1967; Sundaram *et al.*, 1998; Zaichkowsky, 1985). Involvement has been shown to be an important driver of organic WOM in a large

number of empirical studies (e.g., Neumann, 2015; v. Wangenheim and Bayon, 2007), and a few studies extended these findings to the RRP context where they showed that high involvement products elicited higher intention to accept incentivized referrals (Chan *et al.*, 2014; Fan *et al.*, 2014). This logic is extended to successful recommendation behavior for the first time in this study. From the inductee perspective, it seems reasonable to suggest that involved inductors will exert more energy, speak to more potential inductors and will be more convincing, all of which increase the likelihood of a successful referral. Therefore, the following hypothesis is advanced:

H5: The higher a customer's involvement, the higher is the inductor's likelihood of making a successful referral as part of an RRP.

Inductor Segmentation. Academic marketing research generally does not examine whether theoretical relationships might differ by customer segment. While boundary conditions are explored frequently, customers may differ in how (strongly) they respond to certain variables which can provide further insights into the importance of drivers and theory development. As suggested by Keiningham *et al.*, (2018) in the WOM context, it is crucial to account for customer heterogeneity and examine the attitudinal drivers of WOM beyond population-averaged effects. In the RRP context, the possibility of segment-specific drivers of successful RRP participation has not been examined yet. With the above five potential determinants for successful RRP participation, one may wonder if all existing customers respond to these determinants in the same way so that all inductors belong to the same segment. If this is true, then a single RRP reward structure will be sufficient. However, if inductors can be segmented, then firms should consider developing segment-specific RRP reward structures. This study examines whether inductors can be segmented according to different determinants and tests the following hypothesis:

H6: Inductor's successful referral behavior as part of an RRP will differ across

segments. A multi-segment solution will have significantly higher explanatory power than a single-segment solution.

Context, Data Description, and Estimation Methodology

Study Context

This study is set in the context of retail banking for two main reasons. First, this industry is highly competitive and many banks offer RRP to acquire new customers. Second, some of the hypotheses require a richer service context (e.g., relationship quality and metaperception). Here, the complex bank-customer relationship (e.g., because of the sensitivity of financial information and partly complex advisory needs) offers a good context for the testing of the hypotheses. Furthermore, this study is based on an RRP that rewards both the inductor and the inductee with gifts, which is commonly observed in many industries. The specific RRP studied was offered by a leading European Bank (a Euro Stoxx 50 index company) which offered various financial products including current and savings accounts, mortgages, personal loans, and pension products.

CRM data provided by the bank to identify inductors (existing customers who referred inductees successfully) and non-inductors (who did not refer any inductee successfully) over a four-month period (immediately after the program launch) were used for this study. The bank provided the CRM data associated with a random sample of 1,800 inductors and 14,380 non-inductors. The CRM data provided information about the actual observed RRP participation (i.e., the actual behavior of inductors and non-inductors), whereby RRP participation was recorded as successful once an inductee opened a new account with the bank (c.f., Garnefeld *et al.*, 2013). Non-inductors included those who did not make referrals and those who made unsuccessful attempts to refer someone. The CRM data also provided inductor data including relationship duration with the bank, deposits, number of product held and personal income.

The CRM data were supplemented with survey data to measure the attitudinal variables that had been identified in the extant literature as key drivers for successful participation in RRP. Specifically, a stratified random sample of 300 inductors and 300 non-inductors was pulled from the CRM data. A professional market research firm conducted the interviews over the phone.

Non-inductors were screened to be aware of the RRP as they otherwise would not have been able to comment on the RRP attractiveness. Non-inductors who stated that they had wanted to participate but they were unable to find an inductee ($N = 10$) were excluded from the analysis. That is, the sample contains only successful inductors and those non-inductors who were aware of the RRP but were not interested in participating (see Figure 1). The final sample size is 422, consisting of 273 inductors (with successful RRP participation) and 149 non-inductors (with no participation or unsuccessful RRP participation). A sample of 422 is considered sufficiently large for the Latent Class Analysis (LCA) described later in this article (c.f., Bell and Lattin, 2000; Kamakura and Russell, 1989).

For validation purposes, the full sample of 273 inductors and 149 non-inductors was divided into a training and a holdout sample. Different partitions between training and holdout sample were applied (ranging from 50% to 90% for the training sample), and the results were robust and support the validity of the model. Here, the results for the 85% training sample are provided in order to use a training sample with a relevant size.

By using random sampling (i.e., defining the training sample size as about 85% of the total sample), a sample size of 362 (231 inductors and 131 non-inductors) for the training sample and 60 (42 inductors and 18 non-inductors) for the holdout sample were obtained. The training sample was used to estimate the parameters of the models of this study. By doing so, the predictive power of the models could be obtained by calculating hit rates associated with the

holdout sample. Throughout this paper, the training sample is used for the analysis unless otherwise indicated.

Data Description

Dependent Variable $Y = \text{Successful RRP Participation}$. For each respondent it is defined: $Y_i = 1$ if the respondent is an inductor (who is a successful RRP participant) and $Y_i = 0$ if the respondent is a non-inductor.

Independent Variables $X1, X2, X3, X4, X5$. The construct measures and their scale items are provided in Table 2.

[Insert Table 2 about here]

The measurement model was tested using a confirmatory factor analysis (CFA) as shown in Table 3. Using the Fornell and Larcker (1981) criterion, it found support for discriminant validity as the average variance extracted (AVE) square roots of factors is higher than the correlations between constructs. Also, the values for composite reliability (CR) and AVE are satisfactory. The Pearson correlation coefficients between constructs are reasonably low and the variance inflation factor (VIF) values are between 1.17 and 1.56, suggesting low levels of potential multi-collinearity. The overall the fit statistics are satisfactory, too (see Table 3). Together, these findings suggest that the data fit the measurement model well.

[Insert Table 3 about here]

In the following analyses, the means of the scale items were used as values for the independent variables ($X1, X2, \dots, X5$). The descriptive statistics of the five independent variables for the 273 inductors and 149 non-inductors (full sample) are shown in Table 4. Relative to non-inductors, inductors (1) had better relationship quality with the bank; (2) found the bank's RRP reward to be more attractive; (3) had higher metaperception (i.e., they believed their recommendations were more credible and better received); (4) were more opportunistic;

and (5) had a stronger involvement with financial services. These results are consistent with the hypotheses. Furthermore, the largest mean differences were found for RRP attractiveness and metaperception.

The data also showed demographic and CRM data differences between inductors and non-inductors. Specifically, on the average, inductors were younger, had less income, had a shorter relationship duration with the bank, but had higher deposits and more products with the bank. The significant variables were added as controls in the following models but subsequently dropped from the final models as they were insignificant and did not impact the hypothesis testing and segmentation.

[Insert Table 4 about here]

Models and Estimation Methodology

As the dependent variable Y_i is binary, logit models were developed that used maximum likelihood estimation to test the hypotheses. Specifically, the impact of customer-firm relationship quality (H1), attractiveness of the reward (H2), and the customer's referral metaperception (H3), opportunism (H4), and involvement (H5) on the probability of successful RRP participation were tested.

The modelling framework used is as follows. When faced with the RRP, each existing customer i will become a successful RRP participant (i.e., an inductor) with probability $P(Y_i = 1)$. If customer i becomes an inductor, she gets a utility $V_i + \varepsilon_i$, where ε_i and ε_i' are error terms that are independent and identically distributed with a double exponential distribution. Otherwise, she gets $U_i = 0 + \varepsilon_i$. If it is assumed that each customer i would select the option that maximizes her utility, then she will become an inductor with probability $P(Y_i = 1) = \frac{e^{V_i}}{1 + e^{V_i}}$ (this is a well-known result in discrete choice modeling; c.f., Anderson *et al.*, 1992; Ben-Akiva and Lerman, 1985). By using the five independent variables X_1, \dots, X_5 , the utility V_i can be

specified in the following models:

1. **Model 1 (Relationship quality X1 and RRP attractiveness X2).** In this model, we set $V_i = a + b_1 X_{1i} + b_2 X_{2i}$, where a is the intercept, b_1 and b_2 are the parameters associated with X_1 and X_2 , respectively.
2. **Model 2 (Model 1 plus Metaperception X3).** Here, $V_i = a + b_1 X_{1i} + b_2 X_{2i} + b_3 X_{3i}$.
3. **Model 3 (Model 2 plus Opportunism X4).** Here, $V_i = a + b_1 X_{1i} + b_2 X_{2i} + b_3 X_{3i} + b_4 X_{4i}$.
4. **Model 4 (Model 3 plus Involvement X5).** Here, $V_i = a + b_1 X_{1i} + b_2 X_{2i} + b_3 X_{3i} + b_4 X_{4i} + b_5 X_{5i}$.

To estimate the parameters associated with each of these four models, the likelihood of the training sample L (associated with 362 respondents) is first defined: $L = \prod_{i=1}^{362} P(Y_i) = \prod_{i=1}^{362} \left[\frac{e^{V_i}}{1 + e^{V_i}} \right]^{y_i} \left[1 - \frac{e^{V_i}}{1 + e^{V_i}} \right]^{1-y_i}$. Then, for each model, the value of the intercept a and parameters b 's that maximize the likelihood L are defined.

Empirical Results

Single-Segment Analysis

By using the training sample of 362 respondents (i.e., 231 inductors and 131 non-inductors) and by assuming all existing customers (inductors and non-inductors) belong to a single segment, the parameters and the associated z-ratios for all four models (Table 5) are estimated. The results show that for the single-segment analysis the inclusion of opportunism and involvement does not result in an increase of R^2 . As the parameters are stable across Models 2 through 4 and in order to examine potential differences between segments Model 4 in the proceeding analyses is used.

[Insert Table 5 about here]

The parameter estimates associated with Model 4 (see Table 5) suggest that, for an

average existing customer, RRP attractiveness and metaperception drive successful RRP participation, supporting H2 and H3. All other hypotheses (H1, H4, and H5) are rejected. It is noteworthy that the parameter values for RRP attractiveness and metaperception are significant and stable across the models, indicating robust estimates. This finding suggests that both variables capture unique variance even if a larger number of factors are accounted for in the model.

These findings suggest that RRP attractiveness has a strong and significant effect on RRP participation. Hence, if an existing customer values the RRP reward more, she is more likely to become a successful RRP participant. This result is consistent with the results found in experimental studies on referral intentions (Orsingher and Wirtz, 2018; Ryu and Feick, 2007; Wirtz *et al.*, 2013).

Furthermore, metaperception appears to be the strongest and most significant driver for successful RRP participation. When an existing customer thinks that her recommendation will be perceived better by her friends, she is more likely to become a successful RRP participant. This result validates some modelling assumptions established by Kornish and Li (2010) and Xiao *et al.*, (2011), and it is consistent with experimental studies on referral intentions (Orsingher and Wirtz, 2018; Wirtz *et al.*, 2013).

Multi-Segment Analysis

Model fit. LCA is used to explore whether there are different segments of customers associated with Models 1 through 4. To determine the optimal number of segments, the three most common fit criteria are used to assess the models. They are the Bayesian information criterion (BIC), Akaike's information criterion (AIC), and Akaike's information criterion with a per parameter penalty factor of three (AIC3) (Andrews and Currim, 2003a; 2003b).

Table 6 shows that the two-segment Models 4a and 3a performed best on AIC and AIC3,

respectively, while the one-segment Model 2 outperforms the others on BIC (Table 6). The two-classes Model 4a was selected as the final model for three reasons. First, Model 4a performed best on AIC and was a close second on AIC3. BIC shows underfitting for smaller samples (Yang and Yang, 2007) and unequal-sized classes (Nylund *et al.*, 2007). As both are the case in this study and several studies used AIC or AIC3 over BIC in similar contexts (e.g., Vroomen *et al.*, 2005; Wedel and Kamakura, 1999), AIC and AIC3 were also used as the key criteria for selecting the final model for this study. Both AIC and AIC3 suggest a two-classes solution.

[Insert Table 6 about here]

Second, Model 4a's explanatory power is more than double than that of Model 4 (i.e., the R^2 is 0.72 instead of 0.32), and neglecting customer heterogeneity results in a suboptimal model (Wieringa and Verhoef, 2007).

Third, the hit rate of Model 4a is excellent. Specifically, to examine the predictable power of the model, the holdout sample ($n = 60$) was used to calculate the hit rates by applying the model whose parameters were estimated by using the training sample. The hit rate (percentage of holdout customers correctly identified as inductors) is an excellent 93.3%. This result verifies the predictive validity of Model 4a. Together, the findings provide support for H6.

Two-segment solution. Table 7 presents the parameter estimates associated with the two-segment Model 4a. For Segment 1 ($n = 211$; 77.2% of inductors), three significant determinant factors were found in order of importance: (1) Metaperception, (2) attractiveness of the reward, and (3) opportunistic behavior. First, metaperception is the strongest and most significant driver (1.71 ; $z = 4.29$) of successful RRP participation. That is, Segment 1 cares a lot about what possible inductees might think about their recommendation. If these potential inductors have the feeling that potential inductees might think badly about their recommendation they would not participate in the RRP. Second, RRP attractiveness is the second most important significant

factor (1.00; $z = 4.23$), whereby they are more willing to participate if they see the reward as attractive. Third, opportunism is less prominent ($-.76$; $z = 2.65$). That is, Segment 1 is less opportunistic in the sense that they are less likely to participate just for the sake of receiving a reward.

[Insert Table 7 about here]

Of the estimated parameters in Segment 2 ($n = 62$; 34% of inductors) opportunism is significant (4.95; $z = 2.13$). Thus, relatively speaking, Segment 2 captures those opportunistic customers who do not care so much about the attractiveness of the RRP reward, they are eager to participate in the RRP program and take advantage of whatever the bank makes available. Metaperception was marginally significant with a value of 3.79 ($z = 1.87$; $p < .10$). It seems that these opportunistic customers are still worried about what possible inductees might think about them.

As for the single-segment solution, relationship quality (H1) and involvement (H5) are not significant in the two-class solution. These findings are discussed further in the implications section.

Ex-Post Analysis

Inductor characteristics in different segments. To examine whether there are qualitative differences between the two inductor segments, the two segments in Model 4a were compared along key variables. First, the five independent variables were contrasted. Relative to inductors in Segment 2, inductors in Segment 1 viewed the RRP reward as more attractive, perceived a much higher metaperception favorability of their recommendation and had a slightly higher involvement with financial services (see Table 8).

[Insert Table 8 about here]

Second, of the demographic variables income was significantly higher for Segment 2. In

contrast, age and gender showed no significant differences between the segments.

Finally, key variables obtained from the CRM database were compared and found that all variables measured showed significant differences between the segments. Specifically, Segment 2 had higher deposits (which is consistent with their higher average income), had more products with the bank, and had been a customer of the bank for longer than Segment 1.

Together, these findings confirm that the segmentation taps into qualitatively different segments with different attitudes, demographics and purchasing behaviors.

Conclusions and Implications

This study is the first to examine inductor determinants of successful referral behavior. A bank's CRM data were used that captured successful referral behavior which was then matched with survey data measuring key potential attitudinal drivers of successful referral behavior. Logit models were developed to estimate the impact of various determinants on the probability of successful RRP participation of an existing customer.

Implications for Theory

Referral Intent and Behavior Versus Successful Referral Behavior. This study uses a unique dataset as it combines attitudinal and actual, behavioral data and can therefore bridge a gap in the existing literature that seldom looks into the effectiveness of RRPs based on actual and successful referral behavior. This is important as Matos and Rossi's (2008) meta-analysis showed that the influence of loyalty on WOM is significantly lower for reported behaviors than for behavioral intentions. Similarly, Brown *et al.*, (2005) found that satisfaction was a much weaker predictor of WOM behavior than WOM intentions. Matos and Rossi (2008) explain these findings by the attitudinal nature of the WOM intention measure whereby it seems likely that respondents try to maintain consistency when responding to a survey. Past studies were largely based on stated intentions with hypothetical RRP scenarios (rather than real RRPs) or self-

reported data. Furthermore, an RRP is only effective if inductors recommend and inductees respond with buying the service (c.f., Chan *et al.*, 2014; Tuk *et al.*, 2009; Verlegh *et al.*, 2013). As such, it is important to verify findings based on intentions in actual and successful behavior contexts and the present study makes an important contribution to RRP research. From a managerial perspective, mere referrals (with or without the inductee buying) differ from successful referrals.

Furthermore, this study uses two sources for the independent and dependent variables which makes the data free of common method bias, response styles, simultaneity and endogeneity (MacKenzie and Podsakoff, 2012; Seiders *et al.*, 2005), and therefore offers a robust test of the hypotheses. As such, the findings provide important support for the extant literature in that it shows that the key variables of metaperception and reward attractiveness explored in intention contexts in the past are indeed linked to successful referrals. The implications are that key variables that have been shown in lab studies indeed also truly important for driving successful referrals. This is important as behavioral data are an important complement to customer intentions and self-reported behavioral data (Seiders *et al.*, 2005).

Finally, past studies examined only one or two potential drivers of referral intentions. However, it is important to explore these variables together in a single dataset to understand potential co-variation issues (Wirtz *et al.*, 2014). It is a strong point of this study that important variables were tested together in an actual RRP context to confirm the relevance of variables examined in the past. For example, all five individual variables in this study were significantly correlated (see Table 3). However, when tested together in a regression model, only two of them remained significant. Specifically, the single-segment analysis revealed that only customer's metaperception and attractiveness of the reward explain unique variance of successful RRP participation.

Metaperception and RRP Attractiveness. Overall, the most important variables that explained actual and successful participation in the RRP of the study are (1) metaperception concerns with the fear of an incentivized referral not being seen in a good light by potential inductees, and (2) attractiveness of the reward. This finding is consistent with a recent study by Orsingher and Wirtz (2018) which found that metaperception and RRP attractiveness together fully mediated the effects of incentives on referral likelihood, suggesting that both variables together fully explain the effects incentives have on referral intention. This present study extends this finding with added variables in the model and on successful referral behavior. That is, for an average existing customer, metaperception and attractiveness of the RRP are the most important factors that drive successful RRP participation.

Metaperception has not been shown to matter in RRP-related behaviors before but emerged as the by far the most important determinant of successful referral behavior in this study. That is, when an existing customer thinks that her recommendation will be more credible and better perceived by her friends, she is more likely to become a successful RRP participant. This result validates some modelling assumptions established by Kornish and Li (2010) and Xiao *et al.*, (2011), and it is consistent with experimental studies using referral intent (Wirtz *et al.*, 2013).

People's metaperception corresponds well to others' judgements (e.g., Kenny and DePaulo, 1993; Levesque, 1997). This suggests in the RRP context that once inductors feel their incentivized recommendation has a good metaperception, inductees are also likely to think well about the recommendation and respond positively.

It seems that RRPs that make customers look good and avoid making them look bad is the most important driver of successful referrals. This finding connects well with and allows the integration of a number of RRP design and contextual variables that were explored in the

literature. For example, referral rewards split between inductor and inductee rather than just incentivizing the inductor (Jin and Huang, 2014; Xiao *et al.*, 2011), referral of strong vs. weak brands (Rye and Feick, 2007), expected high satisfaction of the inductee vs. low satisfaction (Kornish and Li, 2010), and referral to strong vs. weak ties (Rye and Feick, 2007; Orsingher and Wirtz, 2018) all can be viewed from the perspective of metaperception. Specifically, RRP that share the reward between inductor and inductee, relate to strong brands, are likely to result in high inductee satisfaction, and referrals to strong ties are likely to have a more positive metaperception than their counterparts.

Second, incentive size was found to drive referral intentions (Ryu and Feick, 2007; Wirtz *et al.*, 2013). This study extended this to the attractiveness of the RRP and showed that it had a strong and significant effect on successful RRP participation. If an existing customer valued the RRP reward more, she was more likely to become a successful inductor. This finding suggests that a more attractive reward led potential inductors put in more effort and perhaps approach more potential inductees which enhanced the likelihood of a successful referral.

Relationship Quality. One surprising finding is that high levels of customer satisfaction (or relationship quality as it is operationalized in this study) do not seem necessary for participation in attractive RRP that make the inductor look good (or not look bad). Note that the customers in this study had been with the bank on the average for nine years and therefore that sample did not contain truly dissatisfied customers (see the limitations and further research section where the implications of this are discussed).

This insignificant finding for relationship quality is interesting and represents an important departure from the WOM literature where high levels of satisfaction, (Anderson, 1998; Berger, 2014; Keiningham *et al.*, 2018; Matos and Rossi, 2008; Oliver, 2010) especially when related to positive disconfirmation-of-expectations and subsequent emotions and possible delight

(Oliver, 2010, p. 406) were shown to result in disproportionately more WOM. Interestingly, satisfaction has not been tested explicitly in an RRP context before, possibly as it seemed too obvious a variable to examine; rather, high satisfaction or even delight have implicitly or explicitly been assumed to be a necessary condition for incentivized referrals to take place (e.g., Biyalogorsky *et al.*, 2000; Orsingher and Wirtz, 2018; Verlegh *et al.*, 2013; Wirtz *et al.*, 2013). While this holds true for organic WOM, the findings of this study suggest that this may not be true in the context of incentivized referrals where even customers with neutral satisfaction levels can be incentivized to make successful referrals. That is, the findings of this study on actual referral behaviors suggest RRP participation differs from organic WOM. There are two potential explanations for this finding.

First, organic WOM seems to require positive disconfirmation-of-expectations, something that exceeds expectations, a positive surprise, or a significant positive emotional experience such as delight that motivates customers to tell others about it (Biyalogorsky *et al.*, 2001; Matos and Rossi, 2008). However, incentives seem to be effective in driving referrals in the average to high relationship quality levels. That is, successful referrals were independent of whether customers perceived a neutral or highly positive relationship for making an incentivized referral which suggests that ‘average’ satisfied customers who are not dissatisfied can be enticed to participate in an RRP. This is in contrast to the satisfaction literature that holds that extremely satisfied customers engage in more WOM than moderately satisfied ones (Anderson, 1998; Berger, 2014; Oliver, 2010, p. 406).

Second, Keiningham *et al.* (2018) also did not find a positive effect of customer satisfaction on positive WOM. What they found though was that satisfaction reduced negative WOM. As their study was based on a massive and professionally collected dataset of over 15,000 respondents across 10 countries and 793 brands their findings seem robust. The authors

proffer that past research findings may potentially be caused by a publication bias in the scientific literature whereby researchers who encountered similar (i.e., insignificant) results in their studies did not publish them because of perceived error on their part, inability to explain the findings, and because the findings did not survive the peer review process. The findings of the present study add to their observation in the RRP context and suggest that positive metaperception and attractive incentives are sufficient to drive successful referrals, and increased relationship quality (vs. neutral) does not further increase the likelihood of successful referral behavior.

Segmentation. Keiningham *et al.* (2018) advanced in the WOM context that it is crucial to account for customer heterogeneity and examine the attitudinal drivers beyond population-averaged effects. This study is the first to explore inductor segmentation based on the drivers of successful referral behavior and found that there is more than one segment. Specifically, by examining the results of the LCAs, this study revealed two segments of inductors. One segment cared about metaperception and the attractiveness of the reward, and another segment was mainly opportunistic but still cared about metaperception. Opportunism had not been established as a driver of referral behavior before using more traditional analytical approaches, and it was also not significant in the single-segment model of this study. However, using LCA, opportunism was uncovered as a driver for one third of all inductors.

This finding has implications beyond the RRP context. Academic marketing research generally neglects the possibility that theoretical relationships might differ by customer segment. While boundary conditions are explored for specific variables, customers may differ in how they respond to independent variables. Such findings can provide further insights into the importance of drivers and theory development as they have the potential of uncovering deeper-seated differences between customers that drive their behaviors. It helps to address questions such as: Is

there something extant research seems to be missing? Are researchers too definite by implicitly assuming samples are homogeneous with regards to the causal relationships examined? Could theories work for some but not other subsets of the population? If so, it means, researchers have to dig deeper to truly understand the consumer psychology that is driving the observed behaviors. It may be of value to explore segmentation as part of marketing theory research further.

Incentivized Referrals vs. Organic WOM. Finally, many of the determinants in the study have been shown to be important in organic WOM but have not been studied in an RRP context before (e.g., relationship quality). The findings suggest that successful RRP participation is explained by much fewer variables than organic WOM (c.f., Berger, 2014; Keiningham *et al.*, 2018; Matos and Rossi, 2008; Neumann, 2015), possibly as the extrinsic motivation of material rewards is psychologically more parsimonious than intrinsically motivated organic WOM (c.f., Berger, 2014; Deci *et al.*, 1999). It seems that incentives move motivation from intrinsic (with its many potential motivators; e.g., Berger, 2014) to extrinsic which is much more cognitive, goal oriented and instrumental. Furthermore, this interpretation is also consistent with Decy and Ryan's (2000) self-determined motivation theory. Specifically, incentives are linked to controlled motivation that is extrinsically introjected into the inductors and potentially result in feelings of guilt, lowered self-esteem or attacks on ego (e.g., through lower metaperception and lower self-perception) rather than autonomous motivation that governs organic WOM (c.f., Gagné and Deci, 2005; Pauline *et al.*, 2014).

Together, these theories would also explain why involvement did not play a role as it is an intrinsic motivator. Incentives may have levelled low and high involvement customers' motivation to make a referral. Furthermore, incentives have been shown to invoke market-pricing norms, whereas when no incentives are involved, social norms with their far richer and

more emotional, cooperative, communal and altruistic motivations are invoked (c.f., Jin and Huang, 2014). Finally, Gneezy and Rustichini (2000) showed in their article “Pay enough or don’t pay at all” in a number of laboratory and field experiments that people who were paid a small amount exerted less effort than people who were not paid at all, and performance only improved as incentive size increased. As such, the finding that metaperception, incentive attractiveness, and opportunism are the key variables even when examined in a segmentation context seems a natural and important finding.

Managerial Implications

The overall findings suggest that managers have to manage at least two important variables: metaperception of the referral and attractiveness of the reward. This finding is important for firms that use a single non-differentiated RRP.

First, the findings provide a solid confirmation of the importance of metaperception – potential inductors want to look good and don’t want to look bad in the eyes of potential inductees. RRP have to be designed to achieve this, and past research offers suggestions on how this might be done. Potential approaches include using a shared reward structure that provides incentives to both the inductor and the inductee (e.g., Ryu and Feick, 2007), using symbolic, soft or in kind incentives (e.g., access to special features or events, perhaps as part of the firm’s loyalty program) rather than cash or vouchers (e.g., Jin and Huang, 2014; Verlegh *et al.*, 2013), selecting incentives that are highly attractive to the inductor (e.g., an invitation to an exclusive event) but have low face value (Orsingher and Wirtz, 2018), and designing RRP to target close ties (e.g., Ryu and Feick, 2007; Wirtz *et al.*, 2013).

Second, most firms offer a singular RRP to all their customers. This implies that firms either assume that all inductors are the same in terms of their motivation to participate in an RRP, or that firms’ RRP simply have not become sophisticated enough to be tailored to

different segment needs. However, this study found that there are different segments with (at least) two customer segments with strong predictive power. Segment 1 customers' RRP participation is driven by metaperception and RRP attractiveness, while Segment 2 customers' RRP participation is motivated by their opportunism and metaperception.

Because these two segments of customers' RRP participation are driven by different factors, the bank should consider developing and targeting segment-specific RRP rewards to design more cost-effective RRPs (c.f., Wirtz and Zeithaml, 2018). For example, because Segment 1 customers are not opportunistic and need an attractive reward, the bank may modify the inductor's reward that is intended to increase RRP attractiveness. On the other hand, knowing Segment 2 customers are more opportunistic and are eager to participate as long as they believe they do not create a negative impression. It is important for managers to consider different customer segments which requires them to use sophisticated and robust analytical approaches to understand the impact of attitudinal drivers (c.f., Keiningham *et al.*, 2018).

While the results are data-specific, this approach is generally applicable to RRPs. That is, firms should explore whether there are different segments in their customer base with regards to their drivers of successful RRP participation (see also the further research section on the generalizability of the findings and approach).

Future Research and Limitations

The findings of this study provide a number of avenues for future research. First, metaperception is a variable that has only been recently introduced into the RRP literature (c.f., Wirtz *et al.*, 2013), and a number of RRP design features and contextual variables have been shown to increase referral intentions. A logical next step would be to confirm that metaperception is indeed the central mediating variable that explains the impact of RRP design features on actual and successful referral behavior. For example, would the positive effects of

sharing referral rewards between inductor and inductee, offering rewards in kind rather than monetary form, and targeting strong rather than weak ties be mediated via metaperception.

Second, the finding that successful referral behavior does not differ between customers with a neutral perception of relationship quality and those who view the relationship quality as highly positive was surprising and deserves further investigation. One, the customers had been with the bank on the average for nine years and therefore the sample did not have (enough) dissatisfied customers in the sample. Furthermore, the bank in this study was a leading bank with a strong brand with potentially low perceived risk of recommending which may have reduced the importance of relationship quality for referral behavior (c.f., Jin and Huang, 2014). Nevertheless, the findings are based on a conservative test as relationship quality was used which has in WOM studies shown to be a more powerful driver of WOM intent than satisfaction (Palmatier *et al.*, 2006). The question remains, would customers with a poor relationship quality perception still recommend if rewards were attractive enough? Or, would a poor relationship quality increase metaperception concerns and therefore make customers reluctant to recommend the firm? For example, Kornish and Li (2010) suggest that a poor quality service would increase inductor impression management concerns as potential inductees might be dissatisfied with the recommendation. Future research can explore whether it is metaperception that would be the central, key variable, and any effects of relationship quality would be mediated by metaperception.

Third and related to the previous point, organic WOM and unincentivized referrals were not examined – it may well be that highly satisfied and delighted customers did make more successful referrals, but these were outside the RRP as no gifts were redeemed. Future research should study the relationship and interplay between organic and incentivized referral behavior and the roles intrinsic and extrinsic motivation play.

Fourth, the context of this study was a utilitarian service. Kornish and Li (2010) suggested that more mundane, utilitarian services, such as the banking context of this study, are highly suitable for RRP as they tend to involve lower inductor risk of inductees being dissatisfied with the recommended service, especially when combined with a strong brand (c.f., Jin and Huang, 2014) as was the case in this study. For highly sensitive services, such as Lasik eye surgery with an extreme range of outcomes from perfect vision without glasses to permanently impaired vision, the risk of making an incentivized referral seems too high (Kornish and Li, 2010) and metaperception of it can be expected to be poor. Furthermore, Berger (2014) concluded in his review that emotional content and experiences are more likely to result in organic WOM. However, a recent large-scale study showed that positive WOM did not systematically differ between more hedonic, experiential services (e.g., accommodation and food services) and more utilitarian services (e.g., pharmacies, and transportation and warehousing services; Keiningham *et al.*, 2018). Future research should explore whether the type of service in terms of riskiness and hedonic vs utilitarian services differ in an incentivized referral context.

Fifth, it is interesting to develop segment-specific reward structures especially when the segment identity of each customer is not known to the firm. This line of research may involve mechanism designs that economists have developed for improving a system with information asymmetry (i.e., when the underlying intentions of the inductors are not observable). Third, the empirical finding of multi-segment inductors with different determinant drivers can motivate others to extend the single-segment model developed by Xiao *et al.*, (2011) to the case when there are multiple segments of inductors.

Due to the fact that this study is based on the actual implementation of an RRP developed by a bank, there are several limitations that also offer further research opportunities. First, the bank's CRM database contained only successful referral dyads, had no records on unsuccessful

referrals, and it covered a specific window of time. It would be interesting to explore whether the segments have differing success rates and whether there are inductors who have a higher rate of successful referrals than others. For example, due to opportunistic behavior, Segment 2 customers may refer more inductees over time than Segment 1, or Segment 1 may be seen as more sincere and is therefore more successful than Segment 2. It would be interesting to explore such potential differences between the segments.

In conclusion, this study confirms the central role of metaperception, incentive attractiveness and opportunism in successful referral behavior. The simplicity of success determinants of incentivized referrals as part of an RRP is in stark contrast to organic, unincentivized WOM. This finding may be due to simpler extrinsic motivators overshadowing the more complex intrinsic motivators of organic WOM, which provides interesting opportunities for further investigation.

Figure 1: Framework for research on RRP effectiveness

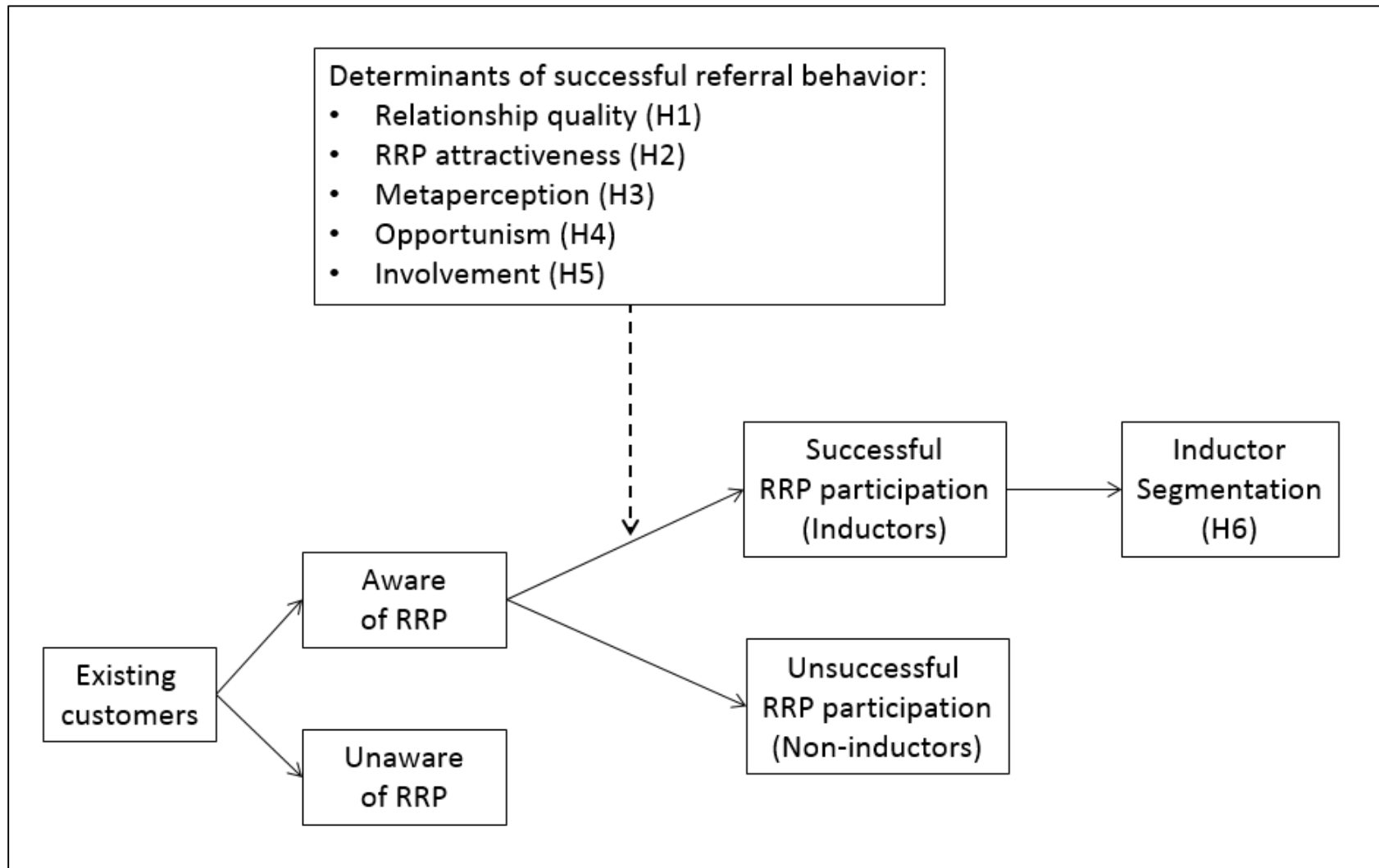


Table 1: Key literature on RRP effectiveness

Studies	Key findings	Methodology	Effectiveness variables	Determinants of RRP effectiveness			
				RRP	Inductor-firm relationship	Inductor-inductee relationship	Inductor variables
(1) Inductor's likelihood to recommend							
Biyalogorsky, Gerstner, and Libai (2001)	<ul style="list-style-type: none">• Compares RRP effectiveness vs. price reduction• When customers are easy to delight (through low a price), a low price is optimal to induce referrals• At a higher delight threshold, a reward should complement a low price as 'pay for referrals' reduces free-riding of low price customers who do not refer	<ul style="list-style-type: none">• Theoretical model	<ul style="list-style-type: none">• Likelihood to recommend	<ul style="list-style-type: none">• Reward vs low price			<ul style="list-style-type: none">• Ease of delighting a firm's customers
Ryu and Feick (2007)	<ul style="list-style-type: none">• Rewards are particularly effective for weak ties and weaker brands• Distributing the reward between inductor and inductee increases referrals in certain situations	<ul style="list-style-type: none">• Controlled experiments	<ul style="list-style-type: none">• Likelihood to recommend	<ul style="list-style-type: none">• Reward presence and size• Distribution of reward	<ul style="list-style-type: none">• Brand strength	<ul style="list-style-type: none">• Tie-strength	
Kornish and Li (2010)	<ul style="list-style-type: none">• RRP's are most profitable when using small incentives as high incentives as are less profitable compared to organic WOM and mass communications• When inductees are concerned about inductee satisfaction, incentive size can compensate for their perceived risk up to a level, after which it is better to switch to a discount for the inductee	<ul style="list-style-type: none">• Theoretical model	<ul style="list-style-type: none">• RRP profitability• Likelihood to recommend	<ul style="list-style-type: none">• Reward presence and size vs. mass communications vs. low price		<ul style="list-style-type: none">• Inductor predicted inductee satisfaction with recommended product	
Xiao, Tang, and Wirtz (2011)	<ul style="list-style-type: none">• As metaperception concerns increase, firms should reward the inductor less and the inductee more• Under certain conditions it is optimal not to provide a reward and rely only on organic WOM• Using an RRP is more effective than direct marketing when a firm's market penetration or inductor's referral effectiveness is sufficiently high	<ul style="list-style-type: none">• Theoretical model	<ul style="list-style-type: none">• Likelihood to recommend	<ul style="list-style-type: none">• Reward presence and size• Distribution of reward		<ul style="list-style-type: none">• Metaperception	

Wirtz et al. (2013)	<ul style="list-style-type: none"> • Incentives have a negative effect on metaperception • As metaperception concern increases, inductors are less likely to make referrals • Metaperception concerns are higher for weak ties 	<ul style="list-style-type: none"> • Qualitative study • Controlled experiments 	<ul style="list-style-type: none"> • Self-reported recommendation behavior • Likelihood to recommend 	<ul style="list-style-type: none"> • Reward presence and size 		<ul style="list-style-type: none"> • Metaperception • Tie-strength
Jin and Huang (2014)	<ul style="list-style-type: none"> • Inductors prefer monetary rewards over in-kind rewards, but the higher social costs associated with monetary rewards offset this benefit • Effectiveness of monetary rewards is improved for higher reward sizes, strong brands, and if the reward is distributed between inductor and inductee 	<ul style="list-style-type: none"> • Controlled experiment • Field experiments 	<ul style="list-style-type: none"> • Likelihood to recommend • Actual referral behavior 	<ul style="list-style-type: none"> • Reward size • Reward type (money vs in-kind reward) • Reward distribution 	<ul style="list-style-type: none"> • Brand strength 	<ul style="list-style-type: none"> • Social costs
Orsingher and Wirtz (2018)	<ul style="list-style-type: none"> • Metaperception and perceived attractiveness of incentive fully mediate the incentive size-referral intent relationship • Incentives can have a positive, neutral and negative net effect on referrals depending on the relative negative impact via metaperception and positive effect via perceived attractiveness • Metaperception concerns are higher for weak ties 	<ul style="list-style-type: none"> • Controlled experiments 	<ul style="list-style-type: none"> • Likelihood to recommend 	<ul style="list-style-type: none"> • Reward presence and size • Usefulness of incentive 		<ul style="list-style-type: none"> • Metaperception • Tie-strength • Perceived attractiveness of incentive

(2) Inductee value

Kumar, Petersen, and Leone (2010)	<p>Showed that drivers of customer life time value (CLV) and customer referral value (CRV) differ and have different drivers.</p>	<ul style="list-style-type: none"> • CRM data • Field experiments 	<ul style="list-style-type: none"> • Current customers' predicted referral value 	<ul style="list-style-type: none"> • Reward presence • Targeted rewards at CLV and CRV groupings 	<ul style="list-style-type: none"> • Behavioral relationship variables • Marketing spent 	<ul style="list-style-type: none"> • Customer demographics
Schmitt, Skiera, and Van den Bulte (2011)	<ul style="list-style-type: none"> • Comparison of RRP-acquired customers with customers acquired via other channels • Showed that RRP-acquired customers have a higher contribution margin and a higher retention rate 	<ul style="list-style-type: none"> • CRM data 	<ul style="list-style-type: none"> • New customer value • Customer retention rate 	<ul style="list-style-type: none"> • Reward presence 	<ul style="list-style-type: none"> • Behavioral relationship variables 	<ul style="list-style-type: none"> • Customer demographics

(3) Inductee responses to incentivized referrals

Tuk et al. (2009)	<ul style="list-style-type: none"> • Incentivized recommendations contain aspects of both equity matching (EM) and market pricing (MP) or sales relationship norms • Incentives are judged more appropriate when framed as MP than EM, and lead to higher sincerity judgement but lower compliance intentions • Incentive disclosure improved sincerity only in the full cognitive capacity condition 	<ul style="list-style-type: none"> • Controlled experiments 	<ul style="list-style-type: none"> • Perceived inductor sincerity • Inductee's compliance intention 		<ul style="list-style-type: none"> • EM vs. MP • Inductor disclosure of incentive
Verlegh et al. (2013)	<ul style="list-style-type: none"> • Rewards have a negative impact on inductee responses; the negative effect operates through ulterior motive inferences • Negative effect is stronger for weak ties; but responses become less positive also for strong ties if financial motive is disclosed • Negative effect is stronger for unsolicited vs solicited referrals • Negative effect reduces by sharing the reward between inductor and inductee, and by using symbolic rather than monetary rewards 	<ul style="list-style-type: none"> • Controlled experiments • Field survey 	<ul style="list-style-type: none"> • Inference of ulterior motive of inductor • Inductees' brand evaluation and purchase intention • Self-reported purchase behavior (survey) 	<ul style="list-style-type: none"> • Reward presence • Reward type (monetary vs symbolic) • Distribution of reward 	<ul style="list-style-type: none"> • Tie-strength • Solicited vs unsolicited referral • Inductor disclosure of incentive
(4) This study	<ul style="list-style-type: none"> • Metaperception is by far the most important determinant of successful RRP participation, followed by reward attractiveness • Importance of metaperception suggests that inductors want the recommendation not look bad because of the incentive • Two inductor segments were identified. One cared about metaperception and reward attractiveness, the other was opportunistic but still cared about metaperception 	<ul style="list-style-type: none"> • CRM data • Field survey matched to CRM data 	<ul style="list-style-type: none"> • Successful referral behavior 	<ul style="list-style-type: none"> • RRP attractiveness 	<ul style="list-style-type: none"> • Relationship quality with firm • Metaperception • Involvement • Opportunism

Notes: Studies are presented in chronological order within each stream of research.

Table 2: Measurement scales

Determinant	Item code	Statement	Supporting references
Relationship quality	RQ1	“Overall, I am very satisfied with Bank” (Customer satisfaction)	Fornell et al. 1996; Gundlach and Cannon 2010; Aurier and Goala 2010; Evanschitzky et al. 2012
	RQ2	“Bank absolutely fulfills my expectations” (Fulfilled expectations)	
	RQ3	“I think Bank is very trustworthy” (Trust)	
	RQ4	“I am glad to be customer of Bank and would not change it with another bank, even if I could” (Commitment)	
	RQ5	“Bank is my first choice in the context of banks” (First choice)	
RRP attractiveness	Attract1	“The RRP of Bank is very attractive to me”	Adapted from Suk et al. 2010; Wirtz et al. 2013
	Attract2	“The RRP of Bank has attractive rewards from my point of view”	
	Attract3	“The RRP of Bank is a good incentive to acquire new customers for DB”	
Metaperception	Meta1	“The inductee perceived the recommendation as very credible.”	Adapted from Wirtz et al. 2013
	Meta2	“The inductee highly relied on my recommendation.”	
	Meta3	“The inductee perceived my recommendation as very good.”	
	Meta4	“The inductee perceived my recommendation as very competent.”	
Opportunism	Opp1	When there is the opportunity to get an advantage from a bank, I go for it	Adapted from Ping 1993; Wirtz and McColl-Kennedy 2010
	Opp2	When there is the opportunity to get an extra from a bank, I arrange everything so I can get it.	
Involvement	Invol1	I am very interested in financial services	Adapted from Lastovicka and Gardner 1979; Guttman and Mills 1982; Alba and Hutchinson 1987; Jensen et al. 1989; Goldsmith, Freiden, and Kilsheimer 1993
	Invol2	I often and gladly talk about financial services with my friends and acquaintances.	
	Invol3	I am very competent in questions related to financial services	
	Invol4	My friends and acquaintances often ask me about my opinion regarding financial services	
	Invol5	I like to give advice to others when they are selecting financial services.	

Notes: Constructs were measured using seven-point Likert-type scales anchored in 1 = strongly disagree, and 7 = strongly agree. “Bank” was used as a placeholder in this table; in the questionnaire the actual name of the bank was stated instead. Metaperception of inductors and non-inductors was measured using identical scale items. However, the preceding question had slight different wording whereby inductors were asked about their “actual” and non-inductors about their “hypothetical” referral experience. The exact questionnaire is available upon request.

Table 3: Confirmatory factor analysis and correlations coefficients

Attitudinal factors	CR	AVE	VIF	RQ	Attract	Meta	Opp	Invol
Relationship quality (RQ)	0.90	0.64	1.34	0.80				
RRP attractiveness (Attract)	0.90	0.74	1.56	0.50	0.86			
Metaperception (Meta)	0.92	0.74	1.45	0.47	0.52	0.86		
Opportunism (Opp)	0.80	0.67	1.17	0.13	0.38	0.13	0.82	
Involvement (Invol)	0.87	0.64	1.19	0.26	0.32	0.36	0.30	0.76

Notes: Basis: Full sample (n = 422). CMIN/DF = 1.97, RMR = .097, GFI = .94, AGFI = .91. The diagonal elements in the table refer to the square root of AVE. The off-diagonal elements refer to Pearson correlation coefficients between the constructs.

Table 4: Descriptive statistics of independent variables

	Total sample (n = 422)		Inductors (n = 273)		Non-inductors (n = 149)		Group comparison
	M	SD	M	SD	M	SD	Δ M
<i>Attitudinal variables</i>							
Relationship quality	5.56	1.25	5.86	1.02	5.00	1.43	.86***
RRP attractiveness	4.75	1.71	5.33	1.40	3.67	1.70	1.66***
Metaperception	5.85	1.14	6.26	.84	5.10	1.22	1.16***
Opportunism	3.82	1.53	4.90	1.43	4.55	1.51	.34**
Involvement	4.77	1.47	4.05	1.51	3.40	1.49	.65***
<i>Socio-demographics</i>							
Age (in years)	42.97	13.91	39.6	13.4	49.2	12.7	-9.62***
Gender (1 = female)	.47	.50	.47	.50	.48	.50	-.01
Income (5-point scale)	2.80	1.33	2.67	1.32	3.06	1.33	-.38***
<i>CRM data</i>							
Relationship duration (in months)	130	130	101	113	185	143	-84***
Deposits (in Euro)	18,967	147,118	21,465	181,860	14,391	27,423	7,074
Number of products	2.73	1.63	2.9	1.7	2.5	1.5	0.40*

Notes: Basis: Full sample (n = 422). ***p < .001. **p < .01. *p < .05.

Table 5: Regression results for the single-class solution

	Model 1	Model 2	Model 3	Model 4
Number of parameters	3	4	5	6
Intercept	-3.01 (23.55)	-6.31 (46.40)	-6.17 (39.74)	-6.16 (39.58)
Relationship quality	.17 (2.32)	-.02 (.04)	-.03 (.05)	-.03 (.07)
RRP attractiveness	.59 (48.85)*	.45 (25.19)*	.46 (23.30)*	.46 (23.18)*
Metaperception		.86 (32.35)*	.86 (32.10)*	.85 (29.61)*
Opportunism			-.03 (.17)	-.04 (.23)
Involvement				.03 (.11)
R ²	.28	.39	.39	.39

Note: Basis: Training sample (n = 362). Wald values are provided in parentheses. *p < .001.

Table 6: Fit statistics associated with different models and class solutions

	Number of parameters	LL	BIC	AIC	AIC3	R ²
One Class						
Model 1 (Relationship quality and RRP attractiveness)	3	-195.6	408.8	397.2	400.2	.21
Model 2 (Model 1 plus metaperception)	4	-176.5	<u>376.5</u>	361.0	365.0	.32
Model 3 (Model 2 plus opportunism)	5	-176.5	382.4	362.9	367.9	.32
Model 4 (Model 3 plus involvement)	6	-176.4	388.3	364.8	370.8	.32
Two Classes						
Model 1a (Relationship quality and RRP attractiveness)	7	-190.1	421.5	394.3	401.3	.60
Model 2a (Model 1a plus metaperception)	9	-171.1	395.3	360.3	369.3	.58
Model 3a (Model 2a plus opportunism)	11	-165.7	396.2	353.4	<u>364.4</u>	.68
Model 4a (Model 3a plus involvement)	13	-162.8	402.3	<u>351.7</u>	364.7	.72
Three Classes						
Model 1b (Relationship quality and RRP attractiveness)	11	-187.7	440.2	397.4	408.4	.83
Model 2b (Model 1b plus metaperception)	14	-164.2	410.8	356.3	370.3	.84
Model 3b (Model 2b plus opportunism)	17	-161.9	424.0	357.8	374.8	.88
Model 4b (Model 3b plus involvement)	20	-158.7	435.2	357.3	377.3	.90

Notes: Independent variables are shown in brackets. The training sample is the basis for analysis (n = 362). Values in bold font face show the best fit indices within each segmentation, i.e. within the 1-class, 2-classes, and 3-classes estimations. Values in bold and underlined font face show the best fit indices across all class solutions.

Table 7: Latent class regression results for two-class solution

	Segment 1 (n = 211)		Segment 2 (n = 62)	
	Parameter	z-value	Parameter	z-value
Intercept	-10.13	-4.60	-27.17	-2.19
Relationship quality	-.35	-1.54	.49	.57
RRP attractiveness	1.00	4.23***	-.79	-1.09
Metaperception	1.71	4.29***	3.79	1.87 ⁺
Opportunism	-.76	-2.65**	4.95	2.13*
Involvement	.29	1.64	-2.58	-1.75
Segment R ²	.54		.84	
Total R ²			.72	

Note: Basis: Training sample (n = 362). ***p < .001. **p < .01. *p < .05. ⁺p < .10.

Table 8: Comparison of the two inductor segments

Segment descriptives	Segment 1 Inductors (n = 184)		Segment 2 Inductors (n = 89)		Group comparison
	M	SD	M	SD	Δ M
<i>Model variables</i>					
Relationship quality	6.11	1.02	5.90	0.91	.21
RRP attractiveness	5.70	1.15	4.08	1.44	1.62**
Metaperception	6.50	.57	5.46	1.10	1.04***
Opportunism	4.98	1.52	5.33	1.02	-.35
Involvement	4.17	1.54	3.63	1.35	.54*
<i>Socio-demographics</i>					
Age (in years)	38.8	13.4	41.9	13.0	-3.1
Gender (1 = female)	.49	.50	.41	.49	.08
Income (5-point scale)	2.52	1.28	3.21	1.35	-.69***
<i>CRM data</i>					
Relationship duration (in months)	87	99	143	144	-56***
Deposits (in Euro)	6,631	20,078	70,525	377,890	-63,894**
Number of products	2.5	1.4	4.2	2.0	-1.7***

Note: Basis: Full sample of inductors (n = 273). ***p < .001. **p < .01. *p < .05.

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