

Customer relationship investment and relationship strength: evidence from insurance industry in China

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Abstract

Purpose – This study aims to elucidate how different relationship investment efforts by a service firm affect its customers' perceived relationship investment; to determine how perceived relationship investment influences various dimensions of relationship strength; and to explore the moderating effects of customer innovativeness and complaint propensity on the relationship between the perceived relationship investment and relationship strength.

Design/methodology/approach – To minimize common method variance, data were collected from pairs of life insurance agents in China and their clients using self-report questionnaires. Hypotheses were tested using structural equation modeling.

Findings – The results indicate that customers value financial effort most followed by social effort and structural effort. Perceived relationship investment influences the affective strength most strongly, followed by cognitive strength and conative strength. Customer innovativeness and complaint propensity both moderate the effectiveness of perceived relationship investment in influencing two of the three dimensions of relationship strength.

Originality/value – This study is among the first to specify how service employees can guide consumer perceptions of relationship investment by applying three types of relationship investment effort. The impact of perceived relationship investment on different dimensions of relationship strength was assessed to demonstrate how service providers can benefit from investing in building consumer relationships. The moderating impact of consumer innovativeness and of complaint propensity was quantified. The research findings have important implications for managing different relationship investment as well as recruiting and training service employees.

Keywords Customer relationships, Consumer innovativeness, Complaint propensity, Relationship investment, Relationship strength

Paper type Research paper

Introduction

Exchanges in many service contexts involve long-term commitments and a continual stream of interaction between buyers and sellers (Lovelock, 1983). It is well documented that strong customer relationships enhance purchase intention and sales effectiveness in services industries (Parasuraman *et al.*, 1985; Crosby and Stephens, 1987; Crosby *et al.*, 1990; Barry *et al.*, 2008; Dawes, 2009; Grégoire *et al.*, 2009; De Canniere *et al.*, 2010; Wang and Groth, 2014). Relationship investments have been shown to generate strong customer relationships (De Wulf *et al.*, 2001; 2003; Yoon *et al.*, 2008). As Yoon *et al.* (2008) pointed out that the best point of their models is to use a global construct, relationship quality to assess the strength of relationship between buyer and sellers".

They claimed that relationship quality (a combination of trust, commitment and satisfaction) was the best assessment. However, relationship quality as a construct has its intrinsic weaknesses. First, relationship quality has no clear definition itself. When Crosby *et al.* (1990) introduced it into the literature of relationship marketing, relationship quality was viewed as an undefined higher-order construct. And it has been used so far as an overall assessment of the strength of a relationship without specific definition (De Wulf *et al.*, 2001; Liang *et al.*, 2008; Palmatier, 2008). Second, without clear definition, it is difficult to talk about construct validity (Carnap, 1950); therefore, different researchers may include different dimensions for relationship quality. For example, Crosby *et al.* (1990) and Liang *et al.* (2008) consider relationship satisfaction and trust to be the dimensions of relationship quality; De Wulf *et al.* (2001) and Yoon *et al.* (2008) add relationship commitment besides satisfaction and trust, while Palmatier (2008) includes commitment, trust, reciprocity norms and exchange efficiency as the indicators of

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relationship quality. Scholars normally treated relationship strength as practically synonymous with relationship quality to describe the extent, degree or magnitude of a relationship between two parties in a commercial setting (Bove and Johnson, 2001; Aaker et al., 2004; Grégoire et al., 2009; De Canniere et al., 2010; Moore et al., 2012; Wang and Groth, 2014), while relationship strength has clear definition and valid measurement scale (Shi et al., 2009). Another weakness of the existing studies of customer relationship investments is the common method bias caused by the fact that all the variables are measured from the same source in terms of customer's self-report (De Wulf et al., 2001; Liang et al., 2008; Yoon et al., 2008). Although previous studies have investigated the impact of consumer characteristics on relationship marketing effectiveness (Beatty et al., 1996; Bendapudi and Berry, 1997), there is little research on moderation of consumer characteristics in studies of customer relationship investments.

To summarize the above discussion, we can find the following research gaps: first, using relationship quality to determine the outcomes of relationship investments is not appropriate. We need another construct which has clear definition and valid measurement scale to replace relationship quality. Second, existing studies of customer relationship investments have the common method bias (De Wulf et al., 2001; Liang et al., 2008; Yoon et al., 2008). Another approach which can minimize the common method variance is needed. Third, it is lack of research on moderation of consumer characteristics in studies of customer relationship investments.

With the aforementioned existing gaps, our objectives are threefold. First, we want to use relationship strength as outcome variable instead of relationship quality to determine whether relationship investments have differential impacts on different dimensions of relationship strength. Second, we want to provide empirical evidence for the impact of relationship investment efforts on perceived relationship investment and ultimately on relationship strength with much less common method variance through dyadic data, one from the service employee and the other from the customer. Third, we want to analyze whether the effect of perceived relationship investment on relationship strength is contingent on consumer characteristics.

Conceptual framework and hypotheses

Several studies have investigated the effects of service employees' attributes and relationship-building efforts on aspects of the service provider–customer relationship such as service domain expertise; similarity and appearance (Chen et al., 2008); relationship value; salesperson likeability and relational selling behavior (Shi et al., 2009); service provider perceived expertise (Spake and Megehee, 2010); and loyalty bonds including utilitarian bonds, affective bonds, symbolic bonds and obligatory bonds with consumers (Moore et al., 2012) as well as relationship investments, which have received more and more consideration in relationship marketing (Yoon et al., 2008). It was De Wulf and his colleagues who first attempted to test the utility of various relationship marketing strategies in a retailing context (De Wulf et al., 2001), and their results have received the most attention on this topic. De Wulf's group proposed a model representing how relationship marketing tactics affect seller–buyer relationships. They

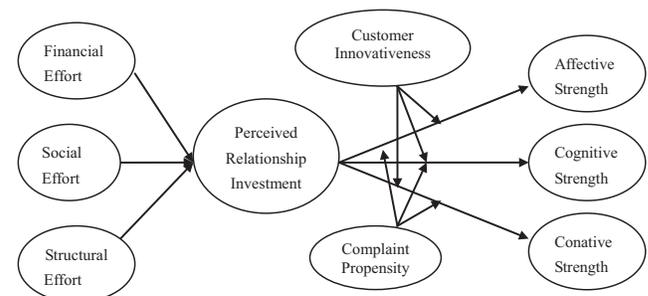
concluded that direct mail appeals, favorable treatment, interpersonal communication and tangible rewards all promoted consumers' perceptions of relationship investment and ultimately promoted relationship quality and consumer loyalty.

In fact, De Wulf et al. (2001)' model is supported by previous study. For instance, tangible rewards such as obtaining discounts or money-saving schemes was proposed as the main reason for consumers to engage in long-term relationships and strong relationship quality (Berry, 1995; Peterson, 1995). In addition, direct mail (Dwyer et al., 1987; Morgan and Hunt, 1994), preferential treatment (Gwinner et al., 1998) and social benefits such as personal recognition and friendship (Gwinner et al., 1998; Liang et al., 2008) are also regarded as impact factors in relationship marketing effectiveness.

In a subsequent study, De Wulf and his colleagues extended their initial model, adding product efforts and service quality as antecedents. They suggested that all such efforts except the product efforts are positively related with customers' perceptions of relationship investment (De Wulf et al., 2003). The theoretical framework shown in Figure 1 is in line with the logic behind De Wulf's et al. (2001, 2003) models and other related studies (Dwyer et al., 1987; Morgan and Hunt, 1994; Berry, 1995; Peterson, 1995; Gwinner et al., 1998; Liang et al., 2008). In this study, the factors proposed by above articles are integrated into three kinds of relationship investments. Financial effort refers to the tangible benefits offered by service providers; thus, financial effort is regard as one of the antecedents of perceived relationship investment in this model. Direct mail, interpersonal communication and other social benefits are summarized into social effort. Preferential treatment was included in structural effort, which is also brought into the conceptual model.

In the framework, perceived relationship investment is the bridge between these three relationship investment efforts discussed above and the dimensions of relationship strength. This correlation proposed is not only based on the literature discussed above but also based on the social exchange theory. Social exchange theory is probably the most popular theory used to explain social interaction (Homans, 1961; Blau, 1964). According to this theory, social behavior can be explained in terms of rewards, where rewards are goods or services, tangible or intangible, that satisfy a person's needs or goals. A stable social relationship requires that each individual make some investments that constitute commitments to the other party. This can explain why perceived relationship investment has effect on relationship strength.

Figure 1 Conceptual framework



Although our model is based on the past studies, we chose relationship strength as consequent variable instead of relationship quality. Relationship strength is a multidimensional construct consisting affective strength, cognitive strength and conative strength (Shi *et al.*, 2009). Compared with relationship quality, each dimension of relationship strength has different effects on sales effectiveness and relationship profitability (Shi *et al.*, 2009). Thus, relationship strength can provide rich information to marketing researchers and practitioners.

In addition, customer innovativeness and complaint propensity are included as moderators between perceived relationship investment and the dimensions of relationship strength.

Relationship investment effort and perceived relationship investment

Financial effort

In this study, perceived relationship investment is defined as a consumer's perception of the extent to which a service provider devotes resources, efforts and attention aimed at maintaining or enhancing relationships with regular customers who do not have outside value and cannot be recovered if these relationships are terminated (De Wulf *et al.*, 2001). And financial effort refers to the extent to which a service provider offers tangible benefits such as pricing or gift incentives to its customers in return for their loyalty to the relationship. Service providers regard this as one suitable method of expressing friendship or concern to their customers, building perceived investment (Chiu *et al.*, 2005; Liang *et al.*, 2008). In addition, some researchers believe that the beneficiaries should be more and more grateful if the benefactors endeavor to do them favors. They reason that the norm of reciprocity should create a greater obligation to reciprocate if the benefactor provides more benefits (Gouldner, 1960; McCullough *et al.*, 2001). Therefore:

H1a. Financial effort has a positive effect on perceived relationship investment.

Social effort

In this study, social effort refers to the service provider's interacting with his customers in a warm and personal way. Such interactions include having dinner together, entertainment and providing personalized information. Such social bonding programs are believed to have a strong impact on relationships (Evans and Richard, 1994; Gwinner *et al.*, 1998; Liang *et al.*, 2008), and are regarded as an effective strategy for service providers to show their friendship and their consideration for their customers' needs, which may lead to customer satisfaction and loyalty (Deighton, 1996; Watson *et al.*, 1998). As a result:

H1b. Social effort has a positive effect on perceived relationship investment.

Structural effort

In this study, structural effort refers to special treatment for customers. A service provider can provide additional information about the industry and product as well as offer customization so as to attract customers (Hsieh *et al.*, 2005). According to Peterson (1995) and Liang *et al.* (2008), special

designs or distinctive treatment will make a customer feel important. Therefore, customers' perceptions of relationship investment may be influenced by their experiences with structural effort. Accordingly:

H1c. Structural effort has a positive effect on perceived relationship investment.

Perceived relationship investment and relationship strength

Relationship strength has been proposed as the most appropriate construct to describe the extent, degree or magnitude of a relationship between two parties in a commercial setting (Bove and Johnson, 2001; Hausman, 2001; Aaker *et al.*, 2004; Shi *et al.*, 2009). It is defined as "the extent to which the partners are bound in a customer relationship and reflects the ability of the relationship to resist both internal and external challenges" (Shi *et al.*, 2009).

According to Shi *et al.* (2009), relationship strength has three dimensions, namely, affective strength, cognitive strength and conative strength. They defined affective strength as the emotional attachment of the relating parties to the ongoing relationship; cognitive strength as the partners' belief that the ongoing relationship is worth maintaining from an economic perspective; and conative strength as the partners' propensity to continue the relationship (Shi *et al.*, 2009). In accordance to the logic behind the association between customer perceived relationship investment and relationship quality in De Wulf *et al.* (2001, 2003) and other related studies (Dwyer *et al.*, 1987; Morgan and Hunt, 1994; Berry, 1995; Peterson, 1995; Gwinner *et al.*, 1998; Liang *et al.*, 2008), we propose the following hypotheses:

H2a. Perceived relationship investment has a positive effect on affective strength.

H2b. Perceived relationship investment has a positive effect on cognitive strength.

H2c. Perceived relationship investment has a positive effect on conative strength.

Moderating effects of relationship strength

In fact, many consumers simply seek timely service with a minimum of hassles, so they view service providers' relationship investments as unnecessary or even undesirable (Bendapudi and Berry, 1997; Christy *et al.*, 1996; Day, 2000). Accordingly, this study also investigated whether or not perceived relationship investment depends on a customer's innovativeness and his or her propensity to complain.

Customer innovativeness

Innovativeness was defined as the degree to which a customer is receptive to new ideas, goods or services (Midgley and Dowling, 1978). As well documented, consumer personality affects customer behaviors. The propensities of customers to accept new ideas, goods and services can play an important role in decision-making and buying progress (Hirschman, 1980). For example, some researchers defined consumer innovativeness as a predisposition to buy new and different products (Steenkamp *et al.*, 1999), a preference for new and different experiences (Hirschman, 1980; Venkatraman and Price, 1990) and a tendency to change (Hurt *et al.*, 1977).

More specifically, customer loyalty is known to be influenced by their acceptance of such new ideas, goods and services (Hirschman, 1980), and more recent research has found that if a customer's innovativeness is high, his propensity to try new service providers will also be high, implying little attachment to the his current relationship (Shi et al., 2009). Therefore, this study expects the effects of perceived relationship investment to be weakened in the case of high levels of customer innovativeness:

H3a. Customer innovativeness weakens the impact of perceived relationship investment on affective strength.

H3b. Customer innovativeness weakens the impact of perceived relationship investment on cognitive strength.

H3c. Customer innovativeness weakens the impact of perceived relationship investment on conative strength.

Complaint propensity

Complaint propensity describes a customer's an enduring tendency to complain when dissatisfied about a purchase. Harris and Mowen (2001) found complaint propensity was positively associated with complaint intentions. Numerous studies have linked dissatisfaction and complaint intention to supplier switches (Day and Landon, 1977; Patrick, 1979). If a customer's complaint intentions are high, his attachment to any ongoing relationship with the service provider is likely to be low and he may even intend to end the relationship (Shi et al., 2009). Therefore, this study hypothesized that:

H4a. Customer complaint propensity weakens the impact of perceived relationship investment on affective strength.

H4b. Customer complaint propensity weakens the impact of perceived relationship investment on cognitive strength.

H4c. Customer complaint propensity weakens the impact of perceived relationship investment on conative strength.

Methodology

Research context

We chose the agent–client relationship in the life insurance industry in China as the research context for the empirical testing, following the example in the study by Crosby et al. (1990). The agent–client relationship in life insurance industry is a typical context for research on the customer relationships in personal service industries where the personal relationships between the service employees and the customers play an important role in the service (Liechty and Churchill, 1979; Crosby et al., 1990; Maas and Graf, 2008; Shi et al., 2009). It has indicated that effective relationship marketing would be most critical if the services have the following characteristics (Zeithaml, 1988; Lovelock, 1983; Ghingold and Maier, 1986):

- the services is complex, customized and delivered over a continuous stream of transactions;
- many buyers are relatively unsophisticated about the service; and

- the environment is dynamic and uncertain in ways that affect future needs and offerings.

And the life insurance services have all the above-mentioned three characteristics (Crosby et al., 1990).

Moreover, the background of this study might provide much clearer insight because the life insurance industry in China fulfills all of the situations in which the relationship marketing can play more important role. Except the same characteristics with the general life insurance, life insurance is quite new in China and the market is full of dynamic ambiguities. Because many new domestic insurance companies and multinational insurance companies have been getting into the market and many new types of policies have recently been introduced. The agent thus plays a more important role than a service employee in a more stable environment.

Measurements

Measures for all of the constructs were borrowed from studies published previously but adapted to fit the context of life insurance in China. All of the constructs except the demographic characteristics were measured using survey responses quantified with a five-point Likert scale. The final measures are shown in the Appendix 1. All of the measures showed good reliability (Cronbach's alpha ranging from 0.72 to 0.86).

To measure relationship marketing efforts, nine items were adapted from the work of Palamtier's group (Palamtier et al., 2006). They included three items related to financial effort, three to social effort and three to structural effort. This measurement was widely used in many researches in this field.

Customers' perceived relationship investment was measured using questions adapted from those used by De Wulf et al. (2001). In fact, besides the study by De Wulf et al. (2001), a variety of measures for perceived relationship investment can be found in the literature (Agustin and Singh, 2005). However, for the purpose of this study, we need an overall measures rather than a multidimensional construct. Thus, we chose customers' perceived relationship investment which was measured via a three-item, five-point Likert type scale, recommended by De Wulf et al., (2001).

Very few measures of relationship strength can be found in the field of marketing. Relationship strength was operationalized as a three-dimensional construct, including affective, cognitive and conative strength, as suggested by Shi et al. (2009). We chose this measurement, as the measurement scale has acceptable levels of reliability, unidimensionality, convergent validity, discriminant validity and nomological validity (Shi et al., 2009).

Three items adapted from Midgley and Dowling (1978) were used to measure customer innovativeness. This measurement was published in the top journal in marketing field – *Journal of consumer research* and was cited by many researchers (Goldsmith and Hofacker, 1991).

A scale adapted from Harrison-Walker (2001) were used to measure complaint propensity, because their studies were examined in service selling context as well.

Sample and data collection

To minimize common method variance, data were collected from both agents and their clients, although it was difficult to do so. A sample of 150 agents was generated from among the agents of a major Chinese life insurance company using a random number generator. There are three reasons for studying a main insurance company. The first is that there is no sampling frame of all Chinese insurance companies available. The second is that there are less than ten main insurance companies in China, and each of them provides similar policies. The third is that the company chosen is China's largest insurer.

The questionnaire used had an agent version and a client version in Chinese, which were translated from English version using the standard translation and back-translation procedure (Brislin, 1980). Both questionnaires contained same items, but presented from different perspectives. They were first distributed to the agents. Each agent was then asked to select three clients and fill in one copy of the agent questionnaire describing his or her relationship with each of the clients. We perceived that favorable biases and halo effects might occur if we only survey high-level relationship strength clients. To reduce possible bias, the agents were instructed to select one client with a relationship perceived by the agent as very strong, one very weak and the third in the middle. We did not define what was meant by very strong, very weak or neutral. We left the task to the agents. The agents then distributed the client questionnaires to those three clients and asked them to reply and to seal the completed questionnaire in an envelope provided for later pick up. An agent was assigned as the coordinator who collected all the completed questionnaires from the agents. This sample design is in accordance with that used by Shi et al., 2009.

Initially, 450 agent questionnaires and 450 client questionnaires were distributed. After the uncompleted and unmatched questionnaires had been deleted, a total of 354 sets of agent–client questionnaires remained and constituted the study's sample. The response rate was thus 78.7 per cent. The respondents' key characteristics are summarized in Table I.

Results

All of the scales demonstrated satisfactory levels of reliability (Cronbach's alpha ranging from 0.72 to 0.86). A confirmatory factor analysis of the full measurement model showed that all of the indicators significantly loaded on their corresponding latent constructs ($p < 0.01$). The proposed model was then tested with the aid of the LISREL software package using the two-step model-building approach described by Anderson and Gerbing (1988). To reduce common method biases, the structural equation modeling used paired samples composed of exogenous variable data from the agent sample and other data from the client sample.

Table II shows the correlation matrix for the variables analyzed. The goodness-of-fit indices of the test fell within an acceptable range ($\chi^2 = 279.80$, $df = 141$; $\chi^2/df = 1.98$; GFI = 0.91; NNFI = 0.90; CFI = 0.89; RMSR = 0.043; RMSEA = 0.052), suggesting that the model fitted the data reasonably well (Hu and Bentler, 1999). The results are

Table I Key characteristics of the respondents

Measures	Agent		Client	
	Frequency	(%)	Frequency	(%)
Gender				
Male	43	36.4	147	41.5
Female	75	63.6	207	58.5
Age				
20-29	88	74.6	84	23.7
30-39	22	18.6	77	21.8
40-49	6	5.1	90	25.4
50-59	2	1.7	72	20.3
60+	0	0.0	31	8.8
Education				
High school	13	11.0	164	46.3
Associate	80	67.8	135	38.1
Bachelor	24	20.3	49	13.8
Postgraduate	1	0.8	6	1.7
Household income (RMB/month)				
<3000	18	15.3	21	5.9
3,000-5,999	26	22.0	69	19.5
6,000-9,999	35	29.7	83	23.4
10,000-14,999	16	13.6	86	24.3
15,000-20,000	14	11.9	59	16.7
>20,000	9	7.63	36	10.2

presented in Table III. As indicated by the t -value in the Table III, the results support all the main effect hypotheses.

Moderated regressions were evaluated to test whether the interaction terms were related to relationship strength. As shown in Table IV, of the six hypothesized interactions, four received support. Specifically:

- the perceived relationship investment \times innovativeness ($\beta = -0.19$, $p < 0.05$) interaction had the hypothesized negative relationship with affective strength;
- the perceived relationship investment \times innovativeness ($\beta = -0.17$, $p < 0.05$) and the perceived relationship investment \times complaint propensity ($\beta = -0.13$, $p < 0.05$) interactions both significantly predicted conative strength; and
- the perceived relationship investment \times complaint propensity ($\beta = -0.13$, $p < 0.05$) interaction significantly predicted cognitive strength.

These findings support $H3a$, $H3b$, $H4b$ and $H4c$. There was no significant relationship between the perceived relationship investment \times complaint propensity interaction and affective strength, nor between the perceived relationship investment \times innovativeness interaction and conative strength. $H3c$ and $H4a$ are thus rejected.

Discussion

Theoretical contributions

We believe that our research makes a significant contribution to relationship marketing theory in four different ways. First, with data from both the agent and the client, we empirically demonstrate the sequential effects of relationship marketing in

Table II Correlation matrix of variables

	M	SD	FIN	SOC	STR	PRI	AFF	COG	CON
FIN	3.67	0.76	1.00						
SOC	3.21	0.84	0.65*	1.00					
STR	4.12	0.71	0.42*	0.37*	1.00				
PRI	4.04	0.69	0.40*	0.23*	0.46*	1.00			
AFF	3.68	0.66	0.36*	0.35*	0.49*	0.38*	1.00		
COG	2.79	0.56	0.28*	0.17*	0.17*	0.32*	0.40*	1.00	
CON	2.51	0.59	0.22*	0.22*	0.33*	0.37*	0.43*	0.28*	1.00

Notes: * $p < 0.05$; FIN (Financial investment); SOC (Social investment); STR (Structural investment); PRI (Perceived relationship investment); AFF (Affective strength); COG (Cognitive strength); CON (Conative strength)

Table III Structural path estimates and hypotheses tests

Path	Hypothesis	Estimates	t-value	Results
Financial effort → Perceived relationship investment	H1a	0.28***	4.13	Supported
social effort → Perceived relationship investment	H1b	0.24**	3.75	Supported
structural effort → Perceived relationship investment	H1c	0.13*	1.49	Supported
perceived relationship investment → Affective strength	H2a	0.37***	6.30	Supported
perceived relationship investment → Cognitive strength	H2b	0.26**	4.15	Supported
perceived relationship investment → Conative strength	H2c	0.12*	1.56	Supported

Notes: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table IV Moderating influences

Variable	Affective strength		Cognitive strength		Conative strength	
	β	Adjusted R^2	β	Adjusted R^2	β	Adjusted R^2
Perceived relationship investment (X)	0.65***	0.47	0.36**	0.37	0.59**	0.41
Innovativeness (Z1)	-0.14*	0.49	-0.27*	0.45	-0.10	0.32
(X) × (Z1)	-0.19*	0.53	-0.17*	0.47	-0.09	0.34
Complaint propensity (Z2)	-0.03	0.47	-0.18*	0.39	-0.16*	0.44
(X) × (Z2)	-0.05	0.50	-0.13*	0.29	-0.13*	0.45

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

a personal service industry with much less common method bias. Prior studies of this kind used one questionnaire to measure all constructs included, so the strength of the relationships among these constructs may be inflated (De Wulf *et al.*, 2001; Liang *et al.*, 2008; Yoon *et al.*, 2008). With much more confidence by using two questionnaires to eliminate the common method bias, the results show the link between service employees' relationship investment effort, customer-perceived relationship investment and customer relationship strength in the empirical investigation.

Second, our model contributes to the existing literature by specifying how service employees can guide consumer perceptions of relationship investment by applying three relationship investment efforts. Prior studies have rarely investigated the role of such efforts in shaping consumer relationships. Although there are many ways for service providers to engage in customer relationships, three specific relationship investment efforts are the most successful: financial, social and structural efforts. Through the intervening effects of perceived relationship investment, all three relationship investment efforts enhance relationship strength. The results show that customers value financial effort most ($\beta = 0.28$, $p < 0.05$), followed by social effort

($\beta = 0.24$, $p < 0.05$) and structural effort ($\beta = 0.13$, $p < 0.05$). The contributions to the relationship marketing literature relate to the multidimensional nature of relationship investment effort. This study suggests that a relationship investment effort is a higher-order construct containing three dimensions: financial effort, social effort and structural effort. In other words, an effective relationship investment tactics has to combine reasonable financial reward, social networking with customer and suitable product adjustment for the customer. In a word, the results strongly support a three-dimensional conceptualization of relationship investment effort in professional service marketing.

Third, our study demonstrates how service providers benefit from investing in consumer relationships by assessing the impact of perceived relationship investment on different dimensions of relationship strength. Although this study is based on a study in 2001, as discussed above, relationship quality has been used as an overall assessment of the strength of a relationship without specific definition (De Wulf *et al.*, 2001; Liang *et al.*, 2008; Palmatier, 2008). Compared with relationship quality, relationship strength has clear definition and valid scale to measure relationship marketing effectiveness. Using relationship strength instead of

relationship quality is more accurate to test the influence of perceived relationship investment. The results show that relationship investment influences affective strength most ($\beta = 0.37, p < 0.05$), followed by cognitive strength ($\beta = 0.26, p < 0.05$) and conative strength ($\beta = 0.21, p < 0.05$). The results demonstrated that same level of perceived relationship investment affects specific dimensions of relationship strength in different levels. This provides more evidence that using relationship strength as our consequence can bring about more information to help us understanding this field.

Fourth, this study is an attempt to provide insights into the role of contingency factors in determining relationship strength by emphasizing the moderating impact of a newly introduced construct, consumer innovativeness and complaint propensity. The results show that both customer innovativeness and complaint propensity act as moderators of the effectiveness of perceived relationship investment on two of the three dimensions of relationship strength. The effectiveness of relationship marketing investments can apparently be affected by customer characteristics, which has been assumed in prior research (Ganesan, 1994) but never previously demonstrated.

Managerial implications

Customer relationships in the insurance industry are highly complex, involving high levels of trust and even friendship (Crosby et al., 1990; Coulter and Ligas, 2004). The findings of this study can be applied in the similar service industries where the personal relationships between the service employees and the customers play an important role in the service, such as legal consulting services, psychological counseling services, financial consulting services, medical services and beauty services.

The comprehensive model proposed by this study would give service providers in personal service industries a clearer picture of what relationship efforts most strongly affect perceived relationship investment and eventually strengthen the relationships between service employees and customers. The findings show specific associations between different relationship investments and perceived relationship investment and the dimensions of relationship strength. This should provide valuable insights and suggestions on how to retain customers in personal service industries. Service providers might profitably apply the measurement instrument used in this study to manage the mix of their different kinds of relationship efforts.

The results show that customers value financial effort the most, followed by social effort and structural effort. In other words, three kinds of relationship investment efforts were found to play different roles in affecting perceived relationship investment. Compared with social effort and structural effort, financial effort plays more important role, which suggested that service providers must provide ongoing tangible incentives such as discount and free product to their customers. But as we know, tangible incentives are more easily copied. Customers value financial effort the most, which might be a big challenge to service providers, as once the financial effort was copied by competitors, the customers' relationship strength to service providers will be weakened.

Structural efforts offer a customer value-added benefits that are difficult or expensive for businesses to provide and cannot easily be duplicated by competitors. So, social and structural efforts should be given much attention. Personalization and customization are important aspects in the provision of social benefits. For instance, service employees can provide customers treatment which appears to be preferential, including calling them by name and initiating personal contact. Structural bonding tactics can include providing customized designs, procedures and services according to the customer's requirements. These results shine new lights on the findings in previous studies, such as of De wulf et al. (2001). According to De wulf et al. (2001), preferential treatment revealed an insignificant relationship with perceived relationship investment, De wulf et al. (2001) suggested that the efforts directed at customers should be made delicately to avoid putting customers in an uncomfortable position. However, in the personal relationships between the service employees and the customers such as insurance services and legal consulting services, providing structural effort will not bring into uncomfortable position discussed above under one-to-one service situation. Our results make a significantly different perspective from existing findings in this field.

Another key research goal of this study was to evaluate the effect of perceived relationship investment. In this study, the multidimensional construct of relationship strength (affective strength, cognitive strength and conative strength) is selected as consequence of perceived relationship investment. Unsurprisingly, our results concluded that perceived relationship investment has positive effect on each dimension of relationship strength. The results showed that relationship investment influenced affective strength most, followed by cognitive strength and conative strength. A consumer may have strong conative strength toward one service provider, but he might not have strong affective strength and cognitive strength toward the same service provider. Affective strength, cognitive strength and conative strength have different effects on sales effectiveness and relationship profitability (Shi et al., 2009). Thus, using three-dimension construct relationship strength can provide rich information about the impact of perceived relationship investment on the performance of relationship marketing. Service firms might thus improve customers' perceptions of relationship investment by using these results in the recruitment, training and evaluation of their service employees. Insight into the impact of relationship investment on relational outcomes can be the one factor used in the recruitment of service employees. Assessment of relational skills may be considered an integral part in the hiring process, as an employee that builds up, maintains and strengthens relationships with customers is of great value to the organization. Relationship management abilities should be a major factor in the selection criteria and be at least as important as uct knowledge.

Management should also carefully assess the need for ongoing training in relationship management. The measurement instrument in this study could assist them in designing training initiatives. By administering the measuring tool to the service team, managers should be able to identify training needs, both for the team as whole as well as for individual employees. More important, effective relationship

investment tactics should be taught to service employees throughout their career rather than only during the initial training period.

In terms of performance measurement, a service employee should be compensated for their ability to maintain long-term relationships with customers. For example, in China's insurance industry, most companies pay their agents only for the first few years of the policies. After a certain period of time, the agents are no longer compensated, even if their clients continue to settle the premiums every year. This tends to discourage the agents from maintain long-term relationships with their existing clients, so they spend little time on it. Performance evaluation would better be based at least in part on agents' abilities to develop long-term relationships with their clients. This is at least as important as new contacts, the average amount of premium per client and the number of referrals.

But no matter how much effort a service employee makes to reinforce relationship strength, the effects will, it seems, be influenced by the consumers' innovativeness and complaint propensity. Accordingly, service employees should pay attention not only to investing in consumer relationships but equally to seeking out consumers who are willing to accept to such investments – those, for example, who are not very innovative and show little propensity to complain. The consumer with high innovativeness and complaint propensity will not easily engage in long and strong relationship with the service providers; thus, it is risky to make relationship investment efforts on these consumers of this type.

Limitations and further research

Although it is a typical context for research on customer relationships in personal service industry (Crosby *et al.*, 1990; Shi *et al.*, 2009), China's insurance industry is, of course, a rather special context compared with other personal service industries such as legal consulting services, psychological counseling services, financial consulting services, medical services and beauty services. Life insurance is still a new idea in China and the market environment is dynamic and uncertain, with many new firms joining the industry. The study's findings must be generalized only with caution.

All constructs were measured by perceptual scales. Although perceptual data are commonly used in marketing studies (Crosby *et al.*, 1990; Morgan and Hunt, 1994), it should still be acknowledged that such a perceptual approach has its limitation. Ideally objective measures should be utilized to match the perceptual measures, especially those that are related to behavioral activities (e.g. repurchase and WOM).

We let the agents chose the client respondents according to their describing his or her relationship with each of the client. Standard definitions for what was strong relationship, weak or the middle ones are not provided to the agents. We did not test if clients chosen by the agent are strong, moderate and weak to see if the responses indicate the clients belong to those categories. It may cause sampling errors.

It seems strange that no significant relationship could be demonstrated between the interaction of investment and innovativeness and conative strength. The reason may be that insurance is not viewed as a high-tech service where innovativeness is not very important. The model developed

here might fruitfully be tested with other service categories. Indeed, studying other contingency factors might be an interesting research direction.

The study's cross-sectional design of course limits the interpretation of the findings. A longitudinal approach to the study is clearly needed. Calls for longitudinal research are often made and rarely met, but such a research approach appears crucial for the study of relationship investment because the customer relationship evolves over time, the longer a relationship exists, the stronger is the relative impact of relationship marketing tactics on perceived relationship investment (De Wulf *et al.*, 2001). Longitudinal data are likely to provide richer information on how relationship investment affects the dimensions of relationship strength. Moreover, a qualitative study might provide deeper insight into the constructs used in this study and the findings. These are all incentives for future research.

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Further reading

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Appendix 1. Measures

Constructs

- Financial effort (reported by agent) [Palmatier et al. \(2006\)](#):
 - You often provide free product and services to the client.
 - You frequently offer special pricing or discounts to the client.
 - You offer special financial benefits and incentives to your client.
- Social effort (Reported by agent) [Palmatier et al. \(2006\)](#):
 - You often provide special treatment or status for your client.
 - You provide special reports or information to your client.
 - You often provide meals, entertainment, or gifts to your client.
- Structural effort (reported by agent) [Palmatier et al. \(2006\)](#):
 - You often offer special value-added benefits to your client.
 - You have instituted special designs for your client.
 - Your often adjust the procedures and product according to your client's requirements.
- Perceived relationship investment (reported by client) [De Wulf et al. \(2001\)](#):
 - You feel the agent makes efforts to keep a good relationship with you.
 - The agent makes various efforts to improve his ties with you.
 - The agent cares about keeping a good relationship with you.
 - You believe the agent really puts some effort into maintaining a relationship with you.
 - You believe the agent cares about satisfying your needs.
- Affective strength (reported by client) [Shi et al. \(2009\)](#):
 - I have a good personal friendship with the agent.
 - I enjoy interacting with the agent.
 - I defend this agent when others criticize him.
 - I care about the agent's long-term success.
 - We have a very close relationship.
- Cognitive strength (reported by client) [Shi et al. \(2009\)](#):
 - From the economic perspective, maintaining the relationship with the agent deserves my maximum effort.
 - Regardless of my feelings, I need to continue the relationship.

- The continuation of a relationship with the agent is very important to me.
 - It would cost me little to change agents. (R)
- 7 Conative strength (reported by client) Shi *et al.* (2009):
- I am continuously looking for alternatives to replace my current agent. (R) If I meet a better agent, I will certainly leave the current one.
 - I want to change the agent right away. (R)
 - I am patient with my agent if he makes a mistake.
- 8 Customer innovativeness (reported by client) Midgley and Dowling (1978):
- I am the kind of person who would try any new thing once.
 - I am very interesting in trying new/different products.
 - A new idea or experience is something I would be eager to find out about.
- 9 Complaint propensity (reported by client) Harrison-Walker (2001):
- I have no trouble getting off the phone when called by a person selling something I don't want.
 - If a salesperson comes to my door selling something I don't want, I have trouble saying no. (R)
 - If a defective product is inexpensive, I usually keep it rather than make a fuss or complain.

Notes: R indicates that the item was reverse coded.

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