Integrative Institutional Theory, Expectation Theory and Self-Determination Theory in Cross-level Perspective

Kuo-Hsun Liao *, Sheau-Hwa Chen †, Nien-Tai Tsai ‡

Abstract

Mimetic isomorphic theory explains the process through which organizations in the same environment imitate each other’s actions to become more similar to each other. This research makes a potential contribution that institutional theory can help to understand the success of marketing practices. Based on the concept of mimetic motives, Expectation Theory and Self-Determination Theory, the moderation effect of insurance companies’ mimetic motives to customers’ perceived performance and SDT can be investigated.

Data are obtained from 289 customers and 30 team managers of insurance companies in Taiwan. A two-level hierarchical linear modeling (HLM) is adopted to examine the relationships between team managers and customers, appropriately adjusted for a nested structure. The empirical results of this study indicate that the moderation effect of mimetic motives on SDT to loyalty is significant and positive, suggesting that institutional processes are also an important factor in consumers’ behavior. This study has provided insights into marketing practices that self-determined motivation dominates the mediating mechanism between satisfaction and loyalty.

Keywords: Mimetic isomorphic, Expectation theory, Self-determination theory, Hierarchical linear modeling, Perceived performance.

1 Introduction

There is a gap between the customer’s expectation and the firm. Customers expect to obtain good products and service, while firms hope to meet customers’ needs, provide competitive products and service in pursuit of growing and sustainable development. Marketing research usually explore expectations and motivations from the customers’ perspective, rarely at the same time to integrate the impact of manufacturers on customers. For example, Gaps Model of service quality [41] [42] [67], indicates that customer assessments of service quality originates from a comparison of service expectation with actual performance [68]. Customer expectation has got the most
complete treatment in the literature of customer satisfaction and dissatisfaction (CS/D) as well as service quality [68]. Lin, Tsai and Chiu [26] integrate Self-Determination Theory (SDT) and ECT together for exploring loyalty.

These are typical examples of marketing practice from the customer view. On the other hand, marketing researchers seldom examine cross-disciplines and level situations. For example, institutional theory is rarely applied to the field of marketing [17] [21] [22] [44] [20]. Hillebrand et al. [20] recommend that using institutional theory can successfully understand the variation in effectiveness of marketing practices in firms. Hillebrand et al. [20] uses institutional theory and focuses on how motivation for adopting customer relationship management (CRM) influences CRM effectiveness, in terms of actually performing CRM activities as well as generating customer insights.

With this prominent foundation, marketing researchers can conduct follow-up studies on customers’ cross-level issue. This study suggests that using institutional theory can make a contribution to understand customer expectations and motivations in cross-level environments. More specifically, inquiry aims at disentangling the factors between organizations and customers of institutional environment is by its very nature multi-level insofar as organizations are matched with customers according to CRM implement (i.e., customers are nested under organizations’ purview). The objective of this study is to empirically test a cross-level moderating influence of mimetic motives on a model specifying the causal relationship between the degree to which firms have CRM systems in place, the degree to which customers expectation processes, and self-determination of customers. Although institution theory has been commonly applied to analyze firms’ perceptions of mimetic isomorphic, it is still insufficient and needs to be improved concerning its application understanding customers’ perceptions toward other customer service. Therefore, what makes this study differ from the previous works is that it transfers the application of institution theory from particularly mimetic motives to a customer service in general.

2 Literature Review

2.1 Institutional Theory

In Institutional Theory, it declares that institutions are stable social structures of actions and outcomes that are socially acceptable in a society [32] [55]. Formal institutions (or rational perspective) comprise three qualities—laws, regulations and supporting apparatuses—which function as monitoring and enforcing. Weber[60] Formal institutions (or rational perspective) comprise three qualities—laws, regulations and supporting apparatuses—which function as monitoring and enforcing.

Compared to formal institutions, informal institutions (or institutional perspective) comprise the qualities of society’s norms, values, and beliefs [32]. The management of organizations is influenced by the social context in which firms operate [29]. In this situation, firms may follow similar structures and practices in an industry [20]. DiMaggio and Powell’s study [16] indicates that the theory of institutional isomorphism may make a contribution to explaining the growing phenomenon of homogeneity in organizations and why elites often get their way; meanwhile, let us understand the commonplace in organizational life such as the irrationality, the frustration of power, and the lack of innovation. The institutional perspective is also a beneficial method for organizations to note the social pressure within the society and a strong predictor of adoption and
isomorphism across firms [20]. As a result, mimetic behavior with the institutional perspective is also considered to be rational [10].

In DiMaggio and Powell’s study [16], there are three mechanisms which affect organizations to make their decisions become more similar to each other in their environments. First, coercive isomorphism is caused by the formal and informal pressure of organizations. Second, mimetic isomorphism is caused by environmental uncertainty, which results from several factors, including that organizations endeavor to face an intricate problem or the competition of fierce market. Third, normative isomorphism is caused by professionalism. The type of mimetic isomorphism is shown by empirical studies in the various realms of organizations. Empirical studies show the operation of mimetic isomorphism in a variety of organizational domains.

According to Li and Lee’ study [25], it indicates that organizations intensely feel hesitant to make a decision because of the keen competition in the marketplace or technological innovations. As a result, imitation is an easy and efficient approach that organizations can cope with uncertainty. The mimetic isomorphism is a phenomenon under pressure that can explain the homogeneity of insurance industry that influences customer expectation in terms of environmental uncertainty; thus, the theory of institutional isomorphism is a useful framework for this study.

2.2 Expectation Confirmation Theory

Expectation gives a description of customers’ prediction of what service will happen and customers’ belief in the capability of the service provider [9]. ECT indicates consumers’ expectancy in advance of receiving real performance of a product or service [34] [37]. Expectation works as the importance comparison standard. By comparing their expectation and perceived performance, consumers form their satisfaction. They feel positive confirmation and satisfaction when perceived performance is higher than the expectation; conversely, consumers feel negative confirmation and dissatisfaction when perceived performance is lower than the expectation [34] [53] [69].

Expectancy confirmation theory indicates that there are three factors which will influence on consumers’ satisfaction. These three factors are costumers’ perceptions of performance, customers’ expectation of that performance, and specific comparisons of perceived performance with their expectation [34] [38]. Satisfaction of ECT is originally proposed by Locke [27] as a pleasurable or positive emotional state resulting from the appraisal of one’s job [5], and such meaning may be extended as the summary psychological state resulted when the emotion surrounding a disconfirmed expectation is coupled with customers’ prior feelings [35] about their experience on a service provided by the business organization.

To sum up, ECT has long been a dominant marketing paradigm for studying customer satisfaction across many products and service, as a single measure asking consumers whether performance equals, exceeds, or falls short of their expectations.

2.3 Self Determination Theory

Self–Determination Theory (SDT) is a theory of human motivation that aims to explain a set of the self-behavior toward psychological mechanisms [50] [15]. The principle of this theory is on the basis of people’s intrinsic organizational tendency toward personal growth, self-integration,
and the resolution of psychological inconsistence; therefore, SDT is also called a theory of personality development and self-motivated behavior change [48][50]. Following are three intrinsic psychological needs—the need for autonomy, competence, and psychological relatedness to the social environment—to influence the continuing psychological growth of human beings so as to influence their integrity and well-being [15].

The first one is the need for autonomy which refers to the desire to behave based on one’s own will [18][62]. The second basic need in the three intrinsic psychological needs is competence which means to feel independent instead of being controlled or compelled to participate in action [11][12]. The third one is the need for relatedness, including the need for experience social relationship with others [4][45]. These three needs of Self-Determination theory are somewhat different from the general theory of motivation.

SDT is an integrated theory, it includes four key theories: (1) Cognition Evaluation Theory (CET): CET mainly investigates the effects of situational factors on people's intrinsic motivation, (2) Organismic Integration Theory (OIT): Motivations deciding human behavior are different on a qualitative scale from lack of motivation, namely ‘amotivation’ through extrinsic motivation (EM) to intrinsic motivation (IM), (3) Causality Orientation Theory (COT): The general causality orientations scale (GCOS) presented by Ryan and Deci [49] is used to measure the differences between the original motivation and cognitive feelings, and (4) Basic Need Theory SDT emphasizes the Basic Needs Theory is different from the general theory of motivation needs [13][14].

In the OIT, Extrinsic motivation is propelled by external control, requests or requirements like rewards and punishments. IM is a state that causes free engagement in an activity out of interest or for inherent satisfaction [14]. IM is always connected with the satisfaction of three basic psychological needs: the need for autonomy, competence, and relatedness. SDT suggests all behaviors can be seen as lying along a continuum of relative autonomy, showing how much the person fully agrees and is resolute in what he/she is doing [28]. The types of motivation and regulation are external regulation, introjected regulation, identified regulation and intrinsic motivation.

The introjected regulation is more about autonomy. For instance, customers feel that they use a service because they “have to” (implying a negative emotional tone, tension, and an inner conflict), not because they “want to.” Identified regulation means genuinely understanding of the importance of a rule made by others [7]. Intrinsic motivation is behavior that is interesting and exciting. For example, people engaged in parachuting aim to learn a new skill, and enjoy excitement and a sense of accomplishment. Peers, parents and organizational institution are environmental factors that can be influential in the type and strength of a person’s motivation or the internalization process [46][63]. This study will focus on the moderation effect of organizational institution on customers’ self-determination motivation.

3 Method

3.1 Conceptual Model

The theoretical model proposed in this research, as shown in Fig. 1, integrates the mimetic isomorphic of institutional theory in organizational-level and the expectation confirmation theory (ECT) combine self-determination theory (SDT) in an individual-level. First, this
study proposes that mimetic motives of adopting customer relationship management (CRM) will negatively moderate the relationship between customers’ perceived performance and confirmation, as well as self-determination motivation and loyalty.

Next, the conceptual model proposes that customer expectations, confirmation, satisfaction of ECT and the intrinsic motivation of SDT affect customer loyalty. Andreassen and Lindestad [2] suggest an indirect impact between satisfaction and loyalty. Lin, Tsai and Chiu [26] argue that SDT can fill up the indirect influence between satisfaction and loyalty, because intrinsic motivation requires satisfying the need for autonomy and competence, and strong benefits of satisfying the need for relatedness.

### 3.2 Hypotheses Development

**Hypothesis development of expectation, confirmation, perceived performance and satisfaction:** Expectation is the anticipation of the future, and the emphasis of it can cover from general beliefs to particular product features [38]. Satisfaction is closely associated with expectation, and it can be explained as perceived service results of a specific consumption experience and makes assessing response [64]. In the ECT model, expectation is generally predicted to have a negative influence on confirmation, as higher expectation are more likely to be negatively confirmed (i.e., perceived performance is worse than expected). Also, both expectation and confirmation are predicted to lead to a higher level of satisfaction. In ECT, it is vital that the direct effect of expectation on satisfaction after a service results in customer satisfaction or preference because the expectation shows personal beliefs about the levels [39].

Expectation works as the importance comparison standard. By comparing their expectation and perceived performance, consumers form their satisfaction. They feel positive confirmation and satisfaction when perceived performance is higher than the expectation; conversely, consumers feel negative confirmation and dissatisfaction when perceived performance is lower than the expectation [34] [53] [69]. As a result, before customers display their attitude, inclination, or behavior toward a service, expectation is regarded as a chief element in the consumption process [26]. In accordance with prior research, this study proposes these hypotheses:

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*Figure 1: Conceptual model*
H1: Individual-level customers’ expectation is positively related to satisfaction, controlling for organization-level variance.

H2: Individual-level customers’ expectation is negatively related to expectation confirmation, controlling for organization-level variance.

H3: Individual-level perceived performance is positively related to expectation confirmation, controlling for organization-level variance.

H4: Individual-level expectation confirmation is positively related to satisfaction, controlling for organization-level variance.

Hypothesis development of satisfaction, self-determination motivation and loyalty:

Based on the Organismic Integration Theory (OIT) of SDT, motivations that determine human behavior vary on a qualitative scale from lack of motivation (namely, ‘amotivation’) through extrinsic motivation to intrinsic motivation (IM). IM comprises four distinct types of motivation. The first type is external regulation, which means that heteronomous and more controlled end of this continuum. It is behavior that is motivated by external regulations, such as the rewards and punishments that others might control. The introjected regulation is more autonomous, which means that a person is motivated not by external controls, but by internalized, self-esteem related contingencies. Identification regulation refers to sincere understanding of the significance of a rule made by others [7]. Integrated regulation is the most autonomous form of extrinsic motivation, and it connects rules to norms and values.

IM is a state that is caused by interest or inner satisfaction and results in free engagement in an activity [14]. The satisfaction of the need for relatedness refers to the customer satisfaction between firms’ service and customer relationship need. Considering the individual to be an intentional organism, SDT holds that individuals are motivated to obtain differing objectives during service provided [54]. Thus, customer satisfaction is an important factor that affects the self-determined motivation. To sum up, satisfaction is anticipated being a crucial mediator between service that supports perception (or expectation confirmation) and self-determined motivation (or four motivational regulations) [54] [26]. Yoon and Uysal [66] think it is important that both motivation and satisfaction are crucial ideas to fully understand loyalty. Therefore, this study proposes the following hypotheses:

H5: Individual-level satisfaction is positively related to self-determination motivations, controlling for organization-level variance.

Based on Organismic Integration Theory of SDT, Ryan and Deci [51] suggest that the innate psychological needs play a key role. That is, the innate psychological needs decide whether to accept the external norms or relatedness, and further strengthen or weaken their motivation and behavior. Therefore, it is important to investigate how motivation drives loyalty [66]. One of the results of predicting positive motivational is customer loyalty [33]. It is also found by Ntoumanis [33] that positive behavioral intentions based on satisfaction and self-determined motivation are able to make actual decisions physically active.

In accordance with these studies, it is expected that self-determined motivation would positively predict customer loyalty, since customers feel the pleasure of service (intrinsic regulation), recognize the value of service (identified regulation), do not want to offend people (introjected regulation) and subject to the business rules (external regulation, such as
warranty conditions). Hence, the following hypotheses are suggested:

**H6: Individual-level self-determination motivation is positively related to loyalty, controlling for organization-level variance.**

*Hypothesis development of mimetic motives and confirmation:* The viewpoint of institution that conceptualizes firms as performing in a social context, regards social pressures in the environment of firms as great indicators for adoption and isomorphism throughout firms [20]. Institutional theorists have suggested that, as to the use of a practice, social pressure probably have bad performance consequences [3] [61] because mimetic pressure may cause ostensibly adoption [24]. Such adopters don’t fully understand the “internalization” of the practice, so they are not sure of its value or they have no understanding of the demands and requirements of the practice [20], which makes customers’ perceived performance and satisfaction reduce. Based on IBM’s online survey of large enterprises in North America in 2003, they find that a key factor in the failure of CRM. 79% of the businesses fail because they do not do well on the “differentiation”, rather than the tool itself because the tool itself only accounts for 2% of the factors. In this study, customers’ perceived performance is defined as customer awareness effectiveness of CRM implement of firms. An indirect relationship between perceived performance and satisfaction has been verified in experimental tests [5]. When customers compare their expectation and perceived performance, they have to confirm the firms’ actual performance.

Little research has investigated the relationship between firms and customers affected by institutional. Institutional imitative behavior often occurs “when organizational technologies are poorly understood [or] when goals are ambiguous” [16]. Hillebrand et al., [20] proves that mimetic motives have a negative influence on the effectiveness of this marketing practice. This study advocates HLM analysis to better fit the mimetic motives–perceived performance nested structure and try to investigate the moderating of mimetic motives as well as the impact of cross-level interactions on perceived performance in the perspectives of marketing practices. Thus, the hypotheses are derived as follows.

**H7: Organization-level mimetic motives negatively moderate the relationship between individual customers’ perceived performance and confirmation.**

*Hypotheses development of mimetic motives and self-determination motivation:* Vallebrand [57] proposes a model of motivation including a number of social factors (e.g., autonomy-supportive or controlling teaching styles). The satisfaction of the fundamental human needs for competence, autonomy, and relatedness can impact on the various types of motivation. Deci and Ryan [13] argue that social contextual factors including the extent of supporting the autonomy (informational) and controlling. The self-determined forms of motivation can be social factors promoted when these needs are satisfied. The social context where firms perform affects the behavior in and of organizations [29]. Thus, organizational institutions can be considered as one of the social factors that promote the self-determination motivation.

Under social pressure, these firms may probably have bad performance consequences and cause ostensibly adoption [24]. Such adopters do not fully understand the “internalization” of the practice, which makes customers’ self-determination motivation and loyalty reduce. As it is previously mentioned that the firm will be benefited positively though more weakly
with a high mimetic motives CRM system than when the mimetic motives are deficient; high mimetic motives will cause less effective system use [20] and thus reduce the customers’ perceived motivation and behavioral outcomes. The hypotheses are therefore developed as the following.

**H8: Organization-level mimetic motives negatively moderate the relationship between individual self-determination motivations and loyalty.**

### 3.3 Sample, Measures and Analyses

**Sample:** This study investigates the relationship between insurance industry’s mimetic motives and customers’ ECT and SDT. Due to the openness of financial market in Taiwan, foreign insurance companies have swept into Taiwan’s market, and make the insurance market more competitive and uncertainty. The survey of organizational level is on senior marketing, sales managers or superintendent of sales of insurance corporations in Taiwan. Questionnaires are distributed to those senior marketing, sales managers, or superintendents of 30 insurance teams.

The survey of individual level focuses on the selected insurance teams’ customers. Surveying these customers facilitates to improve external validity, because they have experienced the insurance company’s customer service. This study surveys at least 10 respondents for each insurance team in order to meet the requirements of HLM.

The subjects of the study include the work teams and customers from Insurance Company A in Taiwan. The survey period is from April 10th to May 28th, 2016; forty-nine business days in total. There are 30 organizational-level questionnaires and 300 customer-level questionnaires distributed, 30 organizational-level questionnaires and 290 individual-level questionnaires returned. Deducing invalid questionnaires, there are 289 valid questionnaires. The valid response rate of organization-level is 100%, and individual-level is 96.33%.

The control variables of organizational-level include years of team operation, number of teams, average monthly turnover, and positions. Over half (50.5%) of the team have operated between 1 to 5 years, and most teams are sized between 1 to 5 people. Demographic variables of the individual-level sample include gender, age, marital status, educational level, occupation, and average monthly income. Over half (51.2%) are female. Respondents aged 20 to 29 accounts for 37.4%, and aged 30 to 39 for 34.6%. Over half (51.9%) are married. Respondents with a college or university degree are 65.4%; most (47.1%) working in the service industry; most average monthly income 20,000 to 30,000 (41.9%).

**Measures:** In the organizational level, mimetic motives with three items is drawn and modified by Abrahamson [1], Westphal et al. [61] and Hillebrand et al. [20]. The three items express explicitly the degree to which respondents thought the origins of mimetic pressure affect their firms’ decision about CRM adoption.

In the individual level, satisfaction with three items and confirmation with four items are inspired by Lin, Tsai and Chiu, [26] and Bhattacherjee [5], as well as service expectation with four items and perceived service performance with four items are inspired by Lin, Tsai and Chiu [26] and Spreng et al. [53]. The self-determined motivation with three items for each dimension is inspired by Ryan, Connell [47] and Standage et al. [53]. Loyalty with five items is inspired by Lin, Tsai and Chiu, [26] and Zeithaml et al. [68].

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All constructs are measured by using five-point scales using “strongly disagree” and
“strongly agree” as the anchors, the organizational-level-questionnaire including 3 items and
the customers-questionnaire including 22 items.

**Analyses:** Descriptive statistics illustrates the structure of research sample and the dis-
tribution of variables, about the individual-level and organizational-level samples. The in-
dividual-level includes gender, age, marital status, educational level, occupation, the average
monthly income and so on. The organizational-level includes the numbers of teams, the time
of the founding, the position of the managers, the revenue of the group and et cetera as the
average, frequency distribution, and percentage to explain the distribution.

Results of the reliability analysis indicate the Cronbach’s α of all dimensions fall between
0.85 to 0.92 (Expectation=0.91, Perceived performance=0.89, Confirmation=0.85, Satisfac-
tion=0.89, Self-determination motives=0.9, Loyalty=0.85, Mimetic motives=0.92), greater
than 0.7, which means good reliability and high internal consistency.

This research uses Harman’s One-Factor Test to detect the common method variances of
each question of the scales. The exploratory factor analysis is adopted to exact all variables
into main factors. Four factors are extracted. The first factor’s explanatory power is 33.202%
(compared to criteria: under 50%); the total variances are 76.143%. It shows that the sample
data does not have a serious problem of common method variance.

Pearson’s correlation coefficients analyze whether multicollinearity problems exist be-
tween each pair of variables. When the correlation coefficient between two variables is
higher than 0.8, collinearity might be present. As shown in Table 1, none of correlation co-
efficients is higher than 0.8, so it excludes collinearity concerns.

<table>
<thead>
<tr>
<th>Table 1: Pearson's correlation coefficients</th>
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<tbody>
<tr>
<td><strong>Expectation</strong></td>
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<tr>
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</tr>
<tr>
<td>Expectation</td>
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<tr>
<td>Perceived</td>
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<tr>
<td>performance</td>
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<tr>
<td>Confirmation</td>
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<tr>
<td>Satisfaction</td>
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<tr>
<td>Self-determination motives</td>
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<tr>
<td>Loyalty</td>
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<tr>
<td>Mimetic motives</td>
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</table>

*p < 0.01, *p < 0.05

To assess the validity of the constructs and discriminant validity, a confirmatory factor
analysis (CFA) will be conducted by SEM. This research is going to use AMOS to build
structural equation modeling, to detect the significance of path coefficient and certify the
hypotheses in this research. Absolute fit measures mainly test the degree that overall model
can predict covariance or correlation matrix. The chi-square value is 1108.09, yet the
chi-squared value divided by the degree of freedom is 3.986. RMR, .046, is in the range of
standard value .050. The incremental fit measure is the fit degree compared the theoretic
model and null model. AGFI=0.677, NFI=0.829, RFI=0.801, IFI=0.866, TLI=0.843,
CFI=0.865, all close to the standard value 0.900. The parsimonious fit measure is to adjust
the fit measure. It compares the models with different estimated coefficients amounts and determine the best fit. PNFI=0.709, PCFI=0.740, PGFI=0.590, all conforming to the standard value 0.500, the model has good parsimonious fit.

The analysis result of convergent validity of the loadings of every measured question like expectation, perceived performance, confirmation, satisfaction, self-determination motives, loyalty, and mimetic motives are all greater than the standard value 0.500. The CR values of every dimension are greater than the standard value 0.700, and AVE is greater than the standard value 0.500. The fit index: GFI=0.734, NFI=0.829, CFI=0.865, which are less than the standard value but in the acceptable range. RMR is 0.046, in the range of standard value 0.050, and fits the acceptable range. Reducing from this research, it is deduced that every dimension and every question have good convergent validity.

Discriminant validity is to test whether there is discrimination between the questions. The correlation coefficient between every dimension like satisfaction, self-determination motives, loyalty, and mimetic motives are all less than the square root of AVE of relative dimensions. As the result, discriminant validity exists among dimensions (Table 2).

### Table 2: Discriminant validity of dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Mean</th>
<th>SD</th>
<th>Expectation</th>
<th>Perceived performance</th>
<th>Confirmation</th>
<th>Satisfaction</th>
<th>Self-determination motives</th>
<th>Loyalty</th>
<th>Mimetic motives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation</td>
<td>4.50</td>
<td>0.62</td>
<td>0.861</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived performance</td>
<td>3.93</td>
<td>0.69</td>
<td>0.394**</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirmation</td>
<td>3.55</td>
<td>0.62</td>
<td>0.256**</td>
<td>0.641**</td>
<td>0.781</td>
<td></td>
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</tr>
<tr>
<td>Satisfaction</td>
<td>3.58</td>
<td>0.69</td>
<td>0.184**</td>
<td>0.474**</td>
<td>0.610**</td>
<td>0.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-determination motives</td>
<td>3.28</td>
<td>0.70</td>
<td>0.310**</td>
<td>0.354**</td>
<td>0.493**</td>
<td>0.451**</td>
<td>0.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>3.59</td>
<td>0.77</td>
<td>0.368**</td>
<td>0.434**</td>
<td>0.492**</td>
<td>0.565**</td>
<td>0.492**</td>
<td>0.777</td>
<td></td>
</tr>
<tr>
<td>Mimetic motives</td>
<td>1.35</td>
<td>0.68</td>
<td>-0.240**</td>
<td>-0.235**</td>
<td>-0.176**</td>
<td>-0.147**</td>
<td>-0.099</td>
<td>-0.122*</td>
<td>0.913</td>
</tr>
</tbody>
</table>

1. **p < 0.01**
2. The gray bottom is the square root of AVE

**Hypothesis Verification of SEM:** There are totally eight hypotheses in this research. The Hypotheses 3, 6, 7, and 8 are analyzed through HLM. Hypotheses 1 to 6 are analyzed by SEM, controlling for the organizational-level variance. Hypothesis 1 (customers’ expectation is positively related to satisfaction) and Hypothesis 2 (customers’ expectation is negatively related to expectation confirmation) are both not supported. Hypothesis 3 (perceived performance is positively related to expectation confirmation) is supported (standardized coefficient 0.627***, p < .001). Hypothesis 4 (customers’ expectation confirmation is positively related to satisfaction) is supported (standardized coefficient 0.746***, p < .001). Hypothesis 5 (customers’ satisfaction is positively related to self-determination motivations) is supported (standardized coefficient 0.555***, p < .001). Hypothesis 6 (customers’ self-determination motivations is positively related to loyalty) is supported (standardized coefficient 0.403***, p < .001).

**Hypothesis test of HLM:** This study adopts the hierarchical linear modeling method and tests the model. There are four steps to test the model. First, this study runs a null model that has a predictors at level 1 (the individual level) to partition any variance into within- and between-groups components. A significant chi-square for the confirmation is obtained ($\tau_{00} = .064, p < .001$)(Table 3), so is for loyalty ($\tau_{00} = .099, p < .001$)(Table 4). In addition, using
information estimated in the null model, an intraclass correlation coefficient (ICC[1]) and reliability of the mean (ICC[2]) are computed, representing the percentage of the total between-group variance in the dependent variable [6]. The ICC[1] of confirmation is .165, indicating 16.5% of the variance in confirmation resides between groups, and 83.5% of the variance resides within groups. The ICC[1] of loyalty is .169, indicating 16.9% of the variance in confirmation resides between groups, and 83.1% of the variance resides within groups. The result of ICC[1] marginally satisfies the critical value, .138 [23]. Meanwhile, the ICC[2] value of confirmation and loyalty is satisfactory at .856 and .859, which surpasses the minimum .7 requirement [52].

Table 3 Hierarchical linear modeling results for mimetic motives, perceived performance and expectation confirmation

<table>
<thead>
<tr>
<th>Model</th>
<th>Null model</th>
<th>Random-coefficient regression model</th>
<th>Intercepts-as-outcomes model</th>
<th>Slopes-as-outcomes model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Expectation confirmation</td>
<td>Expectation confirmation</td>
<td>Expectation confirmation</td>
<td>Expectation confirmation</td>
</tr>
<tr>
<td>Intercept</td>
<td>3.548***</td>
<td>3.553***</td>
<td>3.553***</td>
<td>3.553***</td>
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<tr>
<td>Independent variable</td>
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<tr>
<td>Level 1</td>
<td></td>
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<tr>
<td>Perceived performance</td>
<td>0.540***</td>
<td>0.540***</td>
<td>0.540***</td>
<td>0.540***</td>
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<tr>
<td>Level 2</td>
<td></td>
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<tr>
<td>Mimetic motives</td>
<td>-0.616</td>
<td>-0.015</td>
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<tr>
<td>Interaction</td>
<td></td>
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</tr>
<tr>
<td>Perceived performance * Mimetic motives</td>
<td>0.035</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² within-groups</td>
<td>0.895</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² between-groups</td>
<td>0.975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>τ_{00}</td>
<td>0.064***</td>
<td>0.068*</td>
<td>0.068*</td>
<td>0.068*</td>
</tr>
<tr>
<td>τ_{10}</td>
<td>0.624</td>
<td>0.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>σ²</td>
<td>0.323</td>
<td>0.209</td>
<td>0.209</td>
<td>0.209</td>
</tr>
<tr>
<td>Deviance</td>
<td>528.861</td>
<td>384.142</td>
<td>384.051</td>
<td>333.359</td>
</tr>
<tr>
<td>Number of estimated parameters</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

Level 1: N=389. Level 2: N=30
***p<.001, **p<.01, *p<.05, +p<.10 (two-tailed tests)

**Random-coefficient regression model:** We assess whether significant between-group variance exists in the intercepts and slopes using a random-coefficient regression model. Based on the information from the null and random-coefficients regression models, we calculate R² for the relationship between perceived performance and confirmation. There is significantly positive relationship between perceived performance (γ_{10} = .54, p < .001, τ_{00} = .008, p < .05) (Table 3) and expectation confirmation. Therefore, Hypothesis 3 is supported. Hypothesis 6 predicts that individual-level self-determination motivation is positively related to loyalty. There is significantly positive relationship between self-determination motivation (γ_{10} = .234, p < .005, τ_{00} = .099, p < .001) (Table 4) and loyalty. Therefore, Hypothesis 6 is supported.

**Intercepts-as-outcomes model:** The level 2 analysis uses the intercept estimates obtained from level 1 as outcome variables and regresses these on the organizational-level predictors, including mimetic motives, to assess the main effects of the organizational-level factor. The study’s Hypothesis 7 predicts that organizational-level mimetic motives will negatively moderate the relationship between individual customers’ perceived performance and confirmation. Hypothesis 8 also predicts that organization-level mimetic motives will negatively
moderate the relationship between self-determination motivation and loyalty. To test Hypothesis 7, we estimate an HLM model in which the perceived performance variable is the level-1 predictors, and then add the grand-centering variable (mimetic motives) at level-2 first. The mimetic motives ($\gamma_{10} = -.016, p > .10$) (Table 3) demonstrated have no significant direct relationship with expectation confirmation. Same as Hypothesis 8, we estimate an HLM model in which the self-determination motivation variable is the level-1 predictor and then add the grand-centering variables (mimetic motives) at level-2. There is no significant and direct relationship between the mimetic motives ($\gamma_{10} = -.051, p > .10$) (Table 4) and loyalty. As a group, the specified organizational-level variable accounts for 3.0% of the between-group variance in loyalty.

**Table 4: Hierarchical linear modeling results for mimetic motives, self-determination motivation and loyalty**

<table>
<thead>
<tr>
<th>Model</th>
<th>Outcomes model</th>
<th>Random coefficient regression model</th>
<th>Intercepts-as-outcome model</th>
<th>Slopes-as-outcome model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self model</td>
<td>loyalty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>$\gamma_{00}$</td>
<td>3.615*** 3.515*** 3.560*** 3.560***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>$\gamma_{10}$</td>
<td>0.234* 0.258* 0.220*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td>$\gamma_{20}$</td>
<td>-0.083 -0.087</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>$\gamma_{12}$</td>
<td>0.255*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>$R^2$ between groups</td>
<td>0.796</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$R^2$ between groups</td>
<td>0.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deviance</td>
<td>646.228</td>
<td>618.077 618.857 615.192</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Slopes-as-outcomes model:** In the last step, we then examine whether the variance in the slope across groups is significantly related to the organizational-level independent variable (mimetic motives). This is a direct test for the cross-level moderator (Hypothesis 7). An HLM analysis is performed, with expectation confirmation as the dependent variable, perceived performance variable as the level-1 variable, and mimetic motives as the level-2 variable. The organizational-level mimetic motives do not have significant moderating effects on the relationship between perceived performance and expectation confirmation ($\gamma_{10} = .035, p > .10$) (Table 3). Therefore, Hypothesis 7 is not supported.

To test Hypothesis 8, an HLM analysis is performed, with loyalty as the dependent variable, self-determination motivation variable as the independent variable of level-1, and mimetic motives as the level-2 variable. The organizational-level, mimetic motives have significantly positive moderating effects on the relationship between self-determination motivation and loyalty ($\gamma_{10} = .255, p < .05$) (Table 4), is opposite to the direction of Hypothesis 8. Therefore, Hypothesis 8 is not supported (see Fig. 2). The Fig. 2 reveals that comparing to the organization of low mimetic motives (i.e., one standard deviation below the
mean), if the organization with high mimetic motives (which means that higher than the average one standard deviation), it has significant positive moderation effects on the relationship between SDT and loyalty.

Figure 2: The interaction effect of mimetic motives and self-determination motivation to loyalty

4 Results and Discussion

4.1 Results

The academia appeal of recent marketing research has been directed to interdisciplinary research; however, the research that combines organization theory and marketing theory is rarely seen. The current research is intended to apply institutional theory to marketing practice. In addition, this research examines whether a firm’s mimetic motives (institutional theory) would affect consumers’ perception of the firm’s performance, and whether consumers’ psychological motivation would affect loyalty. This study makes an effort to bridge the theoretical gap by exploring the effects of customers’ satisfaction and loyalty with SDT.

This study proposes 8 hypotheses. Among these hypotheses, H3, H4, H5 and H6 have the empirical support. The results of hypotheses tests are shown in the Table 5.

Table 5: Results of hypotheses tests

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Expected Result</th>
<th>Empirical Result</th>
<th>Significance</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual-level customers’ expectation is positively related to satisfaction, controlling for organization-level variance.</td>
<td>Positive</td>
<td>Positive</td>
<td>$p &lt; 0.01$</td>
<td>Supported</td>
</tr>
<tr>
<td>2. Individual-level customers’ expectation is negatively related to expectation confirmation, controlling for organization-level variance.</td>
<td>Negative</td>
<td>Negative</td>
<td>$p &lt; 0.01$</td>
<td>Supported</td>
</tr>
<tr>
<td>3. Individual-level perceived performance is positively related to expectation confirmation, controlling for organization-level variance.</td>
<td>Positive</td>
<td>Positive</td>
<td>$p &lt; 0.01$</td>
<td>Supported</td>
</tr>
<tr>
<td>4. Individual-level expectation-confirmation is positively related to satisfaction, controlling for organization-level variance.</td>
<td>Positive</td>
<td>Positive</td>
<td>$p &lt; 0.01$</td>
<td>Supported</td>
</tr>
<tr>
<td>5. Individual-level satisfaction is positively related to self-determination motivation, controlling for organization-level variance.</td>
<td>Positive</td>
<td>Positive</td>
<td>$p &lt; 0.01$</td>
<td>Supported</td>
</tr>
<tr>
<td>6. Individual-level self-determination motivation is positively related to loyalty, controlling for organization-level variance.</td>
<td>Positive</td>
<td>Positive</td>
<td>$p &lt; 0.01$</td>
<td>Supported</td>
</tr>
<tr>
<td>7. Organization-level mimetic motives negatively moderate the relationship between individual customers’ perceived performance and confirmation.</td>
<td>Negative</td>
<td>Positive</td>
<td>$p &lt; 0.01$</td>
<td>Not supported</td>
</tr>
<tr>
<td>8. Organization-level mimetic motives negatively moderate the relationship between individual self-determination motivation and loyalty.</td>
<td>Negative</td>
<td>Positive</td>
<td>$p &lt; 0.05$</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
4.2 Discussion

Expectation Confirmation Theory: The unsupported hypotheses of H1 and H2 are interesting. Van Ryzin [58] [59] finds that perceived performance and perceived confirmation affects satisfaction more than expectation does. They are not statistically significant except the direct effect of expectation on satisfaction with highway safety. In addition, the fact that the relationship between expectation and satisfaction is not strong, also reinforces James’ findings [56]. In this study, after considering customers expectation, their satisfaction is indirectly affected by their perceived performance (an indirect effect). Therefore, even though perceived performance is low, satisfaction is still slightly increased because of expectation much lower. This suggests an indirect impact of the perceived performance on satisfaction through the confirmation is stronger than expectation.

Integrative perspective of ECT and SDT: Self-determination motivation has been used as a mediator between students’ satisfaction and behavioral intentions [33]. It is interesting that the hypotheses that introjected and external regulation are positively related to loyalty respectively is not supported [26]. SDT implies the extent of a person’s resolution for what he/she is doing; all behavior can be regarded as lying along a continuum of relative autonomy [28]. The psychological needs decide whether to accept the external norms or relatedness and enhance or lessen motivation and behavior. Hence, to investigate the continuum of relative autonomy, we test the SDT constructs directly instead of testing the four dimensions separately.

According to Table 5, H5 and H6 are supported, and the theoretical integration of ECT and SDT has been confirmed. While the previous research considers self-determination motivation as one construct that contains four dimensions, including intrinsic, identified, introjected and external regulation, it fails to test the introjected and external regulation. This study suggests that these four dimensions should be examined together in the future consumer research due to their continuum of relative autonomy over loyalty.

Integrative mimetic motives and ECT: H7 predicts that organization-level mimetic motives negatively moderate the relationship between individual customers’ perceived performance and confirmation. The moderation effect of mimetic motives on perceived performance to confirmation produces an insignificant effect and is slightly positive, which does not support the hypothesis. According to Hillebrand et al., [20], when the service firms are compared with the product-based firms, the former seem to process more relational information, but have lower performance spillovers where loyal customer relationship is involved. The reasons may be that relationship management is more important for service firms [40], so the firms focus more on customer relationship management. The unimportant effect on customers’ perceived performance to confirmation may be because switching is easier in lots of service sectors. Namely, the firms may use a pretty mechanistic way to collect, store and analyze data.

Management and marketing staff will assure CRM system is established and used because they have invested a lot in the system. This might show that CRM system make firms process more information, and it is likely that using CRM technology makes it difficult to tell whether the information is useful or unfitting [20]. Firms with high mimetic motives, low customer relationship management and busy with processing information are connected with very little customers’ perceived performance. Seemingly, this shows instances of ceremonial adoption.

Integrative mimetic motives, ECT and SDT: H8 proposes that organization-level mimetic
motives negatively moderate the relationship between individual self-determination motivations and loyalty. The moderation effect of mimetic motives on SDT to loyalty produces a significant but positive effect that is opposite to what is hypothesized (Table 4 and 5). According to simple slope analysis (see Fig. 2), the influence of SDT on customer loyalty is stronger when mimetic motives are high than when they are low. It is remarkable that the effect is moderated further by the mimetic motives of firms. Therefore, the expected compensating or buffering influence of mimetic motives on SDT (as suggested in Hypothesis 8) is encountered. We do find a positive interaction effect between mimetic motives and SDT on customer loyalty. Probably extracting customer loyalty from SDT is such a subtle process that it always requires the right motivation and can be compensated by having mimetic motives. The lack of support for Hypothesis 8 thus confirms that mimetic motives have a positive impact on the effectiveness of this marketing practice. It is interesting that institutional theory hypothesizes that the organization behavior of firms will be influenced in social contexts [29], and firms in the industry will thus employ similar structures and practices. The role of social processes, norms and expectation in explaining firms’ acts is an emphasis by institutional theorists [29].

When organizations’ responses to institutional pressure and expectation are not presumed invariably passive and conforming across all institutional conditions, it is suggested that institutional theory can accommodate interest-seeking and active organizational behavior. Oliver [36] puts forward five types of strategic behaviors, including acquiescence, compromise, avoidance, defiance, and manipulation. Organizations may use these strategic behaviors to respond to pressure of conforming with the institutional environment, which differs in active agency of organizations from passivity to active resistance. Among the five types, acquiescence is worthy of noting. Acquiescence may have different forms that include habit, imitation, and compliance, even though organizations often assimilate under institutional pressure. Habit means adherence that we are unaware of or do not judge to rules or values that we are preconscious or take for granted [36]. Imitation, consistent with the concept of mimetic isomorphism, refers to either knowing or unknowing mimicry of institutional models, for instance, including imitating successful organizations and accepting suggestions from consulting firms or professional associations [16] [36]. Compliance suggests a conscious conformity with or combination of values, norms or institutional needs [36]. It is deemed that compliance is more active than habit or imitation, to the degree that organizations consciously and strategically chooses to comply with institutional pressure because it expects specific self-serving benefits that may range from social support to resources or predictability [16] [30] [43]. For instance, organizations are likely to conform with external pressure because the approval of external constituents or society strengthens its legitimacy and stability, or supports the logic of confidence required to manage organizational activities in good faith [30].

When firms’ compliance behavior is high, they would be more aggressive than imitating and focus on customer relationship management activities. In the insurance industry, maintaining good interaction with customers is critical. The firms must take the initiative to care for customers to meet the needs and motivation. Thus the interaction of mimetic motives and SDT to customer loyalty is stronger than when mimetic motives are low. In other words, based on the high degree of imitation motivation and compliance behavior, firms are still likely to have a positive impact on customers.
5 Implications and Limitation

5.1 Implications for Research

This study aims at disentangling the factors between organizations and customers of institutional environment is by its very nature multi-level insofar as organizations are matched with customers according to CRM implement (i.e., customers are nested under organizations’ purview). This study attempts to use illuminating insights with another hypothesis, which is an integrative perspective of institution theory, ECT and SDT that using the cross-level concept. This article makes the potential contribution that institutional theory can help understand the success of marketing practices.

Institutional theory can be used to not only explain the adoption of practices [19] [61], but also help understand the effectiveness of marketing. In other words, this study has provided an illustrative example of how a research model of institutional theory may be extended by integrating three complementary theories that help obtain insights into marketing practices. This is the first study to examine institution theory, ECT and SDT together.

The moderation effect of mimetic motives on SDT to loyalty produces a significant but positively effect that suggests institutional processes are also important factors in consumers’ behavior. This study suggests that they can at least partly explain the mixed results for institutional theory reported in the literature. With the current trend emphasizing on marketing activities and meeting customers’ needs, the strategic responses that firms make will be different based on the institutional pressure of conformity used on organizations. The responses can differ from passive to active, from conforming to resistant, or from preconscious to controlling [36]. In face of great environmental pressure, the service industry can enhance customer motivation and confidence by actively reinforce various service activities even though the firms have a high degree of imitation motivation and the effects of the mimetic motives are insignificant according to the left-hand side of the model. Thus, this study provides insights into marketing and organization theory research.

Furthermore, this study tries to validate the role in which the interaction mechanism between satisfaction, SDT, mimetic motives and loyalty. Hillebrand et al., [20] stresses that the motivation for imitative behavior is crucial, whereas the act of imitation not necessarily causes harm to firms. On this basis, the study herein helps to expand the boundaries of extant marketing research by considering subtle impacts of customers’ motivation and by incorporating theories and constructs from institutional theory within marketing field.

Lastly, the current research to date also employs a full cognitive expectancy confirmation model in finding that the direct effect of expectation on satisfaction is positive as hypothesized but much smaller in magnitude, and indirectly through perceived confirmation, is negative as hypothesized but much smaller in magnitude. Therefore, researchers can focus on the indirect relationship between perceived performance and satisfaction rather than the relationship between expectation and satisfaction.

5.2 Implications for Practice

This study is critical for managers. It suggests that managers should not adopt CRM only because other insurance industries are using it or because it is recommended by management.
press and management consultants. Instead, they should adopt it based on an in-depth understanding of strategic activities, including the full application of data mining technology, to provide customers service that they need and maintain a sincere and friendly relationship with customers.

The empirical results of this study indicate that loyalty is positively influenced by SDT, and SDT is positively influenced by customer satisfaction. If the firms cannot continue to meet customers’ psychological motivation and needs, customer loyalty will be weakened. Management may arrange a series of surveys to measure customers’ motivation particularly on the construct of SDT that ultimately transforms satisfaction to loyalty.

The effects of perceived performance to confirmation and confirmation to satisfaction are stronger than customers’ expectation to confirmation, which means in essence that respondents with higher expectation are more likely to be disappointed. Thus, in circumstances where insurance managers believe customers’ dissatisfaction reflects unrealistically high expectation for how well service should be performed, these managers might consider explaining to customers what they believe realistic expectation would be, given available resources and effectiveness on service delivery. On the other hand, managers should be more committed to customers’ perceived performance to reduce the expected disconfirmation of the case. After all, customers' perceived performance is the result of actual experience, and this study also confirms that it has a strong impact on confirmation and satisfaction.

In addition to the insurance industry, other industries should also pay attention to mimetic behavior (such as CRM implementation) on customers’ satisfaction and motivation. Although the manufacturing and service industries have different levels of customer contact, it is important to understand what customers care about. The firms have to rule out the factors that make customer dissatisfied, even if the firms learn from other peers or competitors on the basis of imitation motives. They can try to learn as much as they can and meet customers’ actual needs. In this case, increasing customer loyalty is feasible.

5.3 Limitations and Future Research

This study has several limitations, which offer areas for further research. First, while our research shows how mimetic motives for adoption influence CRM effectiveness and customers’ motivation, Oliver [36] puts forward five types of strategic behaviors, including acquiescence, compromise, avoidance, defiance, and manipulation. Organizations may use these strategic behaviors to respond to pressure of conforming with the institutional environment, which differs in active agency of organizations from passivity to active resistance. This study focuses on only this pressure, even though mimetic isomorphism obtains disproportionate attention in research that employ these to institutional pressure based on empirical studies [31]. We suggest that researchers cannot completely rule out the possibility that taps into more rational considerations and strategic behaviors. Overall, as the data indicates that mimetic motives have a positive moderation effect, and rational perspective has a relatively important position. In this situation, the moderating effect of mimetic motives on the CRM model is probably positive; imitators would have to learn from competitors’ performance, prudent analysis of costs and active responses to the pressure of environment [20]. We encourage future researchers to account for both the effect of rational perspective and strategic behaviors on imitation, and develop a new measure for mimetic motives with separate items for both perspectives.
Secondly, the sample used in this study specifically targets on teams of an insurance company. Other types of sample may have different reactions or feedback as each has distinct purposes. Researchers should be cautious about applying these results to other types of companies.

Thirdly, although mimetic motives have a potential effect on customers’ perceived performance and SDT, future research may further explore whether there are other mediators between mimetic motives and customers’ perceived performance/SDT, such as business performance, organizational effectiveness and so on.

Lastly, additional research across different countries and industries may be required for any complementary research in the future, because the generalizability of other countries might be limited due to the cultural differences of firms and consumers’ behavior. We suggest that future research take account of the specific cultural differences that react between conservative and open societies, so as to explore the differences of the moderation effect of mimetic motives and SDT on loyalty.

6 References


