

行政院國家科學委員會專題研究計畫 成果報告

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行政院國家科學委員會專題研究計畫成果報告

學習服務期望與績效：

一種自我決定動機的組織觀點

Learning the service expectation and performance: An organizational perspective of self-determined motivation

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一、中文摘要

本研究從「自我決定理論」的組織觀點提出一個概念性模式，在所提出的模式當中，服務業組織的「顧客忠誠」透過四個中介構念而間接受到「服務品質滿意」的影響，其中這四個中介構念包括該組織的「內在性自律」、「自我期許自律」、「趨避性自律」和「外在性自律」。此外，「服務品質滿意」則受到「服務期望」和「服務確認」的影響，同時「服務確認」亦受到「服務期望」與「知覺服務績效」之影響。本模式將使用收集自台灣服務業組織的顧客資料來進行檢視，最後，實證發現之意涵也將會被進一步地討論。

關鍵詞：自我決定動機、期望、確認、滿意

Abstract

This study proposes a conceptual model from an organizational perspective of self-determined motivation. In the proposed model, loyalty towards service organizations is influenced by service quality satisfaction simultaneously through four mediating constructs: intrinsic regulation, identified regulation, introjected regulation, and external regulation. In addition, service quality satisfaction is influenced by both

service expectation and service confirmation, while service confirmation is influenced by both service expectation and perceived service performance. The model will be examined using data collected through service organizations in Taiwan. Finally, implications of the empirical findings will be also discussed.

Keywords: Self-determined motivation, expectation, confirmation, satisfaction.

二、緣由與目的

A critical theoretical framework that is being increasingly applied to study customer satisfaction, motivation, and future behavior (e.g., loyalty) is self-determination theory (SDT) (Ntoumanis, 2005), whereas expectation-confirmation theory (ECT) is widely used to study customer satisfaction, repeat purchase (or loyalty), and their antecedents (Bhattacharjee, 2001). ECT alone might be applied to predict customer loyalty via understanding the direct influence of satisfaction (e.g., Gotlieb, Grewal and Brown, 1994; Dabholkar, Shepherd and Thorpe, 2000; Olsen, 2002), but such a direct influence on loyalty has been challenged in previous research (Andreassen and Lindestad, 1998), suggesting a potential

gap that is unexplored between satisfaction and loyalty. This problem, which is challenged in previous research for the potential gap, may be improved by embedding SDT into the gap between satisfaction and loyalty. For example, self-determined motivation in SDT has been applied as a mediator between students' satisfaction and their behavioral intentions (Ntoumanis, 2005) and between students' satisfaction and their positive affect towards the educational service provided (Standage, Duda and Ntoumanis, 2005). Consequently, it becomes important and interesting to integrate SDT and ECT together for exploring loyalty, given that satisfaction is a critical success factor shared across both theories. To sum up, the purpose of this research is to conceptualize and test an integrative model by linking two important theories (ECT and SDT) so that customer loyalty may be clearly examined.

Expectation is the first step in the decision-making process before customers reveal their attitude, intention, or behavior towards a service. ECT theorizes service expectation as an important determinant of satisfaction towards service, since service expectation offers the baseline or reference level for customers to form evaluative judgments about the focal service (Bhattacharjee, 2001). Support for such a relationship initially comes from Helson's (1964) adaptation level theory, which addresses that human beings perceive stimuli relative to or as a deviation from a baseline stimulus level. A high baseline level or expectation tends to enhance customers' satisfaction, while low expectation consequently reduces satisfaction (Bhattacharjee, 2001). This perspective has been supported empirically in various areas such as retail service (Swan and Trawick, 1981), course instruction service (Oliver, 1993), online banking service (Bhattacharjee, 2000), and so on.

Meanwhile, service confirmation refers to the consistency between a customer's perceived performance of a service and his

or her expectation levels. Given the constant performance perceived by customers, service confirmation decreases if their expectation is lifted, suggesting an existing negative relationship between service expectation and service confirmation. In this study the process by which customers reach satisfaction based on the ECT theory (Bhattacharjee, 2001; Oliver, 1980) may be described as follows: First, customers form an initial expectation of a specific service from a business unit prior to take the service. Second, they take the service provided by the business unit. Following a period of experience in the service, they form perceptions about the service quality from that unit. Third, they assess its perceived service vis-à-vis their original expectation and determine the extent to which their expectation is confirmed. Note that satisfaction herein indicates customer satisfaction after having his or her actual experience on a service. Thus, the hypotheses are derived as follows.

H1: Service expectation is positively related to satisfaction.

H2: Service expectation is negatively related to service confirmation.

Even though some studies have postulated perceived performance as a direct influence on satisfaction, the initial theoretical study of ECT (Oliver, 1980) and a further refined study using auxiliary theories and empirical tests (e.g., Bhattacharjee and Premkumar, 2004) have both confirmed an indirect relationship between perceived performance and satisfaction (Bhattacharjee, 2001). This indirect relationship is also logical in business practices. For example, the perceived performance of a product from China is often bad and inferior to that from other countries such as Taiwan and Japan. In case the perceived performance does influence satisfaction directly, there is no point for the poor performance product from China to still get popular in the market as it happens. In fact, the poor performance product from China is still welcome by many

customers, because their satisfaction is indirectly influenced by their perceived performance after their expectation is taken into consideration (an indirect effect). Thus, perceived performance is low, but satisfaction is still somewhat enhanced based on an even lower expectation, suggesting an indirect influence of perceived performance on satisfaction through the confirmation.

At any rate, ECT suggests that satisfaction of customers is determined by two antecedents, including service expectation and service confirmation of expectation following actual service from the provider (Bhattacharjee, 2001). Given a constant level of service expectation, perceived service performance becomes an influential factor that decides the level of service confirmation of customers. The hypotheses are thus derived as follows.

H3: Service confirmation is positively related to satisfaction.

H4: Perceived service performance is positively related to service confirmation.

Satisfaction undoubtedly plays an important role in affecting customer viewpoints on a specific service and accordingly changes customer motivation. Specifically, satisfaction is influential to customer motivation, because it provides a certain psychological accelerator - for example, a feeling of pleasure - to adjust their primary motivation. Customer motivation is tempered by the customer's actual perceived satisfaction on service and is therefore more realistic. For instance, identified regulation (e.g., to improve a person's skincare and appearance), a dimension of self-determined motivation, may be enhanced if customers discover service benefits highly beyond their initial perception.

As SDT holds that the customer satisfaction based on customer needs is needed for optimal psychological functioning (Deci and Ryan, 2000), overall satisfaction is expected to be an important

mediator between a service-supporting perception (or service confirmation) and self-determined motivation (or four motivational regulations) (Standage et al., 2005). In other words, the motivation of customers is likely strengthened after they experience the satisfactory service, consequently leading to their loyalty towards the service. This phenomenon is supported by previous literature stating that a full understanding of loyalty needs to consider both motivation and satisfaction constructs simultaneously (Yoon and Uysal, 2005). Restated, when the customer satisfaction is achieved, customers are strongly motivated by their inherent interest on the service (intrinsic regulation), recognition on the importance of the service (identified regulation), avoidance of guilt, feelings of worth (introjected regulation), and compliance of rules and avoidance of punishments (external regulation). The above deduction is in accordance with SDT (Deci and Ryan, 1985), which postulates that satisfaction is essential for self-determined motivation, intrinsically and extrinsically (Ntoumanis, 2005). The hypotheses are therefore developed as follows.

H5: Satisfaction is positively related to intrinsic regulation.

H6: Satisfaction is positively related to identified regulation.

H7: Satisfaction is positively related to introjected regulation.

H8: Satisfaction is positively related to external regulation.

SDT has received empirical support in a variety of service contexts related to physical education, sport, and exercise (Standage et al., 2005). SDT is also a framework of motivation that considers humans to be actively searching for optimal challenges and new experiences to master and integrate (Deci and Ryan, 1991), predicting positive motivational outcomes including customer loyalty (Ntoumanis, 2005). According to SDT, the degree to which service providers support their customers' needs would

influence the latter's service need satisfaction, predicting an index of self-determined motivation including intrinsic, identified, introjected, and external regulations (Ntoumanis, 2005). In turn, it is expected that self-determined motivation positively influences their future intention and behavior toward an entity (brand/service/store/vendor) and repeat patronage (Ntoumanis, 2005). Loyalty is then influenced positively by four dimensions of self-determined motivation. Restated, customers are likely to yield strong loyalty when they experience enjoyment (intrinsic regulation), value (identified regulation), internal rewards (introjected regulation), and external rewards (external regulation) of the service (Ryan and Deci, 2000).

H9: Intrinsic regulation is positively related to loyalty.

H10: Identified regulation is positively related to loyalty.

H11: Introjected regulation is positively related to loyalty.

H12: External regulation is positively related to loyalty.

三、結果與討論

3.1 Methods

3.1.1 Participants

The subjects surveyed in this study are made up of part-time students in a department of business administration (BA) in an evening college in Taiwan. These students work as full-time professionals in a variety of industries during the daytime and are financially independent for their daily consumption. Surveying those working adults helps facilitate improved external validity. Furthermore, given that perceived service performance and service confirmation are examined in this study, those who have experienced the service of a skincare and beauty salon were invited to participate in this study by filling out the

questionnaires. After surveying four hundred and six students about their experiences on the service mentioned above, this study collected data from two hundred and seven students who have encountered the service of a skincare and beauty salon, given that the other respondents are unable to complete the questionnaires due to their inexperience on such a service. Note that the constructs utilized in this study are measured using five-point Likert scales drawn and modified from existing literature.

3.2 Data Analysis

Following data collection, SEM (Structural Equation Modeling) is applied to conduct data analysis. SEM is a multivariate statistical technique used to confirm the causal relations among latent variables. This study follows a two-step procedure proposed by Anderson & Gerbing (1988). The first step involves developing an effective measurement model with confirmatory factor analysis, while the second step analyzing the structural model. Both SAS and AMOS are adopted as the tools for analyzing the data for reconfirmation.

3.2.1 Testing of the Measurement Model

Following data collection, SEM (Structural Equation Modeling) is applied to conduct data analysis. This study follows a two-step procedure proposed by Anderson & Gerbing (1988). After repeated filtering for measurement model testing, every construct in the measurement model is measured using at least three indicator variables. The overall goodness-of-fit indices shown in Table 2 (χ^2/df is smaller than 2.0; RMR is smaller than 0.05, CFI and NNFI are greater than 0.9, while NFI and GFI are slightly lower than 0.9; RMSEA is smaller than the recommended maximum of 0.10) indicate that most fits of the model are satisfactory, given that a model's fits need not meet all of the criteria in order to be deemed acceptable (Hatcher, 1994).

3.2.2 Reliability and Convergent Validity

Reliability can reflect the internal consistency of the indicators measuring a given factor. Reliabilities for all constructs of this study exceed 0.7, satisfying the general requirement of reliability for research instruments (Hatcher, 1994). Support for convergent validity is provided if different indicators used to measure the same construct obtain strongly-correlated scores (Hatcher, 1994). In this study all factor loadings for indicators measuring the same construct are statistically significant, showing that all indicators effectively measure their corresponding construct and support convergent validity (Anderson & Gerbing, 1988).

3.2.3 Discriminant Validity

The chi-square difference test is used to assess the discriminant validity of two constructs. Because we need to test the discriminant validity for every pair of five constructs, we should control the experiment-wise error rate (the overall significance level). In this study, by using the Bonferroni method under the overall 0.01 levels, the critical value of the chi-square test is $\chi^2(1, 0.01/28) = 13.21$. Since the chi-square difference statistics for every two constructs all exceed 13.21 for the model, discriminant validity is successfully achieved.

3.3 Results and Discussions

Based on the test results of entire sample, ten paths out of twelve are significant (H_1 - H_{10} are supported), while the linkages from introjected regulation and external regulation to loyalty are insignificant (H_{11} and H_{12} are not supported). The failure of the unsupported hypotheses H_{11} and H_{12} is interesting and may arise, because both external regulation and introjected regulation

reveal the perceived external locus of causality (Ryan and Deci, 2000) that may be least autonomous regarding consuming behaviors, leading to no adaptive response (Standage et al., 2005). This is consistent with previous works (Ntoumanis, 2001; Standage, Duda and Ntoumanis, 2003; Standage et al., 2005), and this study did not find either external regulation or introjected regulation to significantly predict any outcome variable. It was speculated in previous research that any consequences of external regulation and introjected regulation might be displayed in a longitudinal investigation (Standage et al., 2005).

The goal of this study has been to explore the mechanism of loyalty formation in a service context and to learn through what paths loyalty is influenced by its exogenous determinants. Toward this goal, the theoretical integration of ECT and SDT has been adapted from previous behavior literature to theorize an integrative model of loyalty. In other words, this study has provided an illustrative example of how a research model of customer loyalty may be extended by integrating two complementary theories that help obtain insights into relationship marketing. Although the significant influence of satisfaction on loyalty based on ECT is not new and has been already confirmed in the previous literature, only a few research studies have tried to explore the mediating effects of self-determined motivation between satisfaction and loyalty as shown in Figure 1. More specifically, this study tries to open the black box in which the self-determined motivation dominates the mediating mechanism between satisfaction and loyalty. In this sense, the study herein helps expand the boundaries of extant relationship marketing research by considering atypical impacts of self-determined motivation and by incorporating theories and constructs from SDT within relationship marketing research.

By validating the SDT and ECT hypotheses using primary data collected

directly from users, this study serves as a complement to prior studies that have employed secondary data from service providers for proving similar hypotheses. Our findings confirm that users' self-determined motivation that affects loyalty is not arbitrary, but rather it is based on key attributes of the target motivation. These attributes include the intrinsic regulation and identified regulation. On the other hand, this study may save time and efforts for future researchers by indicating the insignificant influence of introjected regulation and external regulation in relationship marketing research. While previous research considers self-determined motivation as one construct that contains four dimensions - including intrinsic, identified, introjected, and external regulation - this study suggests that these four dimensions should be examined respectively in future consumer research due to their substantial differences in influencing loyalty.

Loyalty is influenced by satisfaction via the mediation of intrinsic regulation and identified regulation, indicating that an improvement on service quality is an efficient way to strengthen customer loyalty. These findings based on self-determined motivation can be conceptually understandable since customers who enjoy the service (intrinsic regulation) or appreciate its value instrumentally (identified regulation) will be likely to stick to the service. Additionally, intrinsic regulation and identified regulation may be applied as two potential checkpoints for management to learn the actual status of customer loyalty based on a constant service quality offered by the service provider. Management may arrange a battery of surveys to measure customers' motivations particularly on these two dimensions that transform satisfaction to ultimately loyalty. On the other hand, the findings of this study suggest that management should take efforts to foster these highly adaptive forms of motivations in all customers, given the relatively strong influences from intrinsic

regulation ($\beta = .54$) and identified regulation ($\beta = .45$) to loyalty. The promotion of these two self-determined regulations via creating superior service quality may serve to significantly foster loyalty.

四、計畫成果自評

In summary, the findings of this study show that the integrative model of ECT and SDT helps learn loyalty formation and its mediating mechanism in service contexts. By opening a black box of self-determined motivation between satisfaction and loyalty, this study calls for attention on customers' intrinsic regulation and identified regulation that critically convert satisfaction to relative loyalty levels.

Finally, this study written as a paper has been submitted and accepted by SSCI journal titled *Journal of Business and Psychology*.

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