

## **THE RELATIONSHIPS AMONG PERCEIVED LEVEL OF CONTACT, SELF-CONSTRUAL, PERCEIVED RISK, AND CONSUMER INVOLVEMENT**

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### **ABSTRACT**

Consumer involvement is critical for service industries, because it can enhance the quality of services and satisfaction of consumers. This study aims to link perceived level of contact, perceived risk, self-construal, and consumer involvement. The respondents were international students of a university in Taiwan. A total of 195 cases from 65 respondents were included in analyses. Regression analysis demonstrated the positive impacts of perceived level of contact and self-construal on perceived risk. The influence of interdependent self-construal on perceived risk was found to be stronger than that of independent self-construal. In addition, the positive effect of perceived risk on consumer involvement was also found. This study contributes to the literature by tapping the factors influencing perceived risk, enhances consumer involvement. This study also offers some implications for practice. For example, marketers need to educate consumers in order to develop suitable perceived risk, which in turn encourages adequate consumer involvement promoting service quality. In addition, the knowledge about the linkage of self-construal and perceived risk would provide a new insight on how to design appropriate marketing programs for specific markets. Limitations and future directions are also discussed in the last section of this paper.

**Keywords:** perceived level of contact, self-construal, perceived risk, consumer involvement

**JEL Classification:** M31

### **INTRODUCTION**

Service industries have been becoming important sectors in modern economy and absorbing more workforces nowadays (Lovelock & Wright, 2002, p. 53). Service differs from goods in the context of the nature of process. Specifically, during service delivery, the involvement of consumers is highly needed, or even mandatory (Gursoy & Gavcar, 2003). Consumer involvement may promote service quality and the satisfaction of consumers. Consumer satisfaction, in turn, may enhance overall organizational performance. Therefore, service organizations need to understand factors impacting consumer involvement. This study was intended to test the relationships among perceived level of contact, perceived risk, self-construal, and consumer involvement (see Figure 1). Lovelock and Wright (2002) have suggested the three levels of services based on consumer contact, namely high-contact, medium-contact, and low-contact services. Although extant research has demonstrated the link of perceived

risk and consumer involvement (Warnakulasooriya, 2009), the assessment of the link based on the three levels of contact has received a little attention. In addition, the influences of perceived level of contact and self-construal on perceived risk as it relates to consumer involvement have been unexplored.

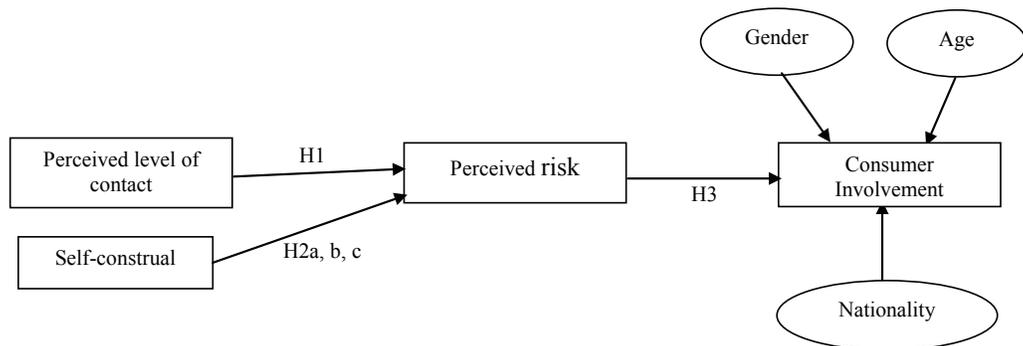
Scholars have suggested numerous definitions and dimensions of consumer involvement (see Naderi, 2011; Traylor & Joseph, 1984 for a review; Zaichkowsky, 1985). However, the scope of consumer involvement in this paper is narrowed. The term involvement in this study is focused on the involvement of service consumers. Consumer involvement is defined as the interaction undertaken by a consumer during service delivery. On the other hand, perceived level of contact is defined as the consumer’s perception of the degree to which his/her interaction during service encounter is required. It is suggested that perceived level of contact may differ from consumer involvement. Perceived level of contact places an emphasis on consumer’s feeling on whether a service considered as a high-interaction needed or a low-interaction needed service, whereas consumer involvement refers to the real actions of a consumer in undertaking interaction. Self-construal refers to a constellation of thoughts, feelings, and actions concerning one’s relationship to others (Singelis, 1994). Following extant literature, in this study people’s self-concept can be grouped as independent- and interdependent self-construal (Singelis, 1994; Singelis, Bond, Sharkey, & Lai, 1999; Singelis & Sharkey, 1995). Finally, perceived risk is defined as the consumer’s perception of the extent to

which risk may be experienced as a consequence of buying a service. Taken together, this study examines the following research questions; (1) will perceived level of contact and self-construal influence perceived risk?, (2) will the independent- and interdependent self-construal influence perceived risk differently?, (3) will perceived risk influence consumer involvement? The research framework is depicted in the Figure 1.

**THEORETICAL DEVELOPMENT AND HYPOTHESES**

**Perceived level of contact and Perceived Risk**

According to Lovelock and Wright (2002), high-contact services are those which involve a great amount of contacts among consumers (or consumers), service personnel, equipment, and facilities. The authors pointed out that all people processing services, such as health care, good restaurant, and education can be classified into the high-contact services. The roles of consumers in such services are thus mandatory. Medium-contact services are those which involve only a limited amount of contacts between costumers and elements of service organizations. In the type of services, the involvement of consumers is needed, but not in throughout process of services. Management consulting and car repair can be classified into this category. Also, physical possession services such as computer maintenance and car repair can be included into the medium-contact services. Lastly, low-contact services are those which require only minimum direct contact between consumers and service organizations.



**Figure 1**  
**Research Framework**

For example, radio, cable TV, and car insurance can be classified into this category.

Meanwhile, perceived risk was firstly proposed by Bauer (1960). Although it has been more than 30 years since this concept proposed, up to now research on this topic has been remaining flourishing (Pérez-Cabañero, 2008; Warnakulasooriya, 2009). Perceived risk is considered as one important antecedent impacting the attitudes and behavior of consumers (e.g., Koklič, 2011; Warnakulasooriya, 2009). Specifically, it has been suggested that in the perspective of consumers, the more the contacts of a service is perceived, the greater perceived risk of the service will be (Warnakulasooriya, 2009). Consistent with the notion, this study also expected that perceived level of contact may positively contribute to perceived risk.

As noted, a consumer may involve the different levels of contact when buying services. When the customer buys a service from Organization A, he/she may be required to participate in an intense contact with the organization during service delivery. When the consumer buys a service from Organization B, he/she may need to undertake specific tasks or cases. When the consumer buys a service from Organization C, he/she may be required to undertake some trivial activities. In enhancing the consumer's participation, the service organizations should educate the consumer to be knowledgeable with the services. Specifically, the organizations need to inform what types of contacts ought to be undertaken by the consumer.

It is likely that the more information about contacts are known by consumers enhancing the perception of service contact, the higher they will perceive about risk. Consistent with the idea, prior studies found that the high-contact services (e.g., dentist, lawyer/tax adviser, nursery, and house repair) were mostly perceived as highly risky services (see also Pérez-Cabañero, 2008; Warnakulasooriya, 2009). In contrast, the low-contact services may be realized as also low-risk services. The roles of consumers in the high-contact services are highly needed. Moreover, consumers of the high-contact services act as co-producers of the services. In the high-contact services, consumers and service organizations share risks in enhancing the quality of services. Therefore, the performance of the services should be relied on the cooperation between consumers and organizations. This situation may increase the

perception of risk, because a lack of cooperation of both parties may result an unexpected service quality and dissatisfaction. In summing, the higher perceived level of contact of a service, the higher risk perceived by consumers. It is formulated that:

**H1:** Perceived level of contact will be positively related to perceived risk.

**Self-Construal and Perceived Risk**

Grubb and Grathwohl (1967) have suggested that self-concept may be an important factor to count the attitudes and behavior of consumers. Self-concept is defined as the totality of the individual's thoughts and feelings giving reference to himself or herself as an object (Hawkins & Mothersbaugh, 2010). As noted, extant literature has categorized people into two types of selves, namely independent- and interdependent self-construal (Singelis, 1994; Singelis, et al., 1999; Singelis & Sharkey, 1995). The independent self-concept emphasizes personal goals, characteristics, achievements, and desires. When thinking about themselves, individuals with highly developed independent self-construal will have as referents their own abilities, attributes, characteristics, or goals rather than referring to the thoughts, feelings, or actions of others (Singelis, 1994; Singelis, et al., 1999). These people are labeled as individualist, egocentric, separate, and autonomous. In contrast, Singelis (1994) argued that the interdependent self-concept emphasizes on family, cultural, professional, and social relationships. Moreover, he also suggested that the interdependent self-construal individuals tend to seek harmony by adjusting various situations.

This study suggests that both self-construals have positive effects on perceived risk. However, compared to the independent self-construal consumers, the interdependent self-construal consumers may observe risk differently. As noted, highly independent selves focus on their own interests. For the independent self-construal consumers are likely to emphasize on linking their consumption goals and potential risks of buying services. They can involve mainly in certain risks in relation to their expected goals or threshold values (see Markus & Kitayama, 1991 for a review). Unlike the independent-self construal consumers who may try to match services attributes to their personal characteristics, the interdependent self-construal consumers are

likely to evaluate service risks more complicatedly. It is because they are inclined to seek harmony with important people and related situations (Kwan, Bond, & Singelis, 1997; Shih & Wijaya, 2014; Singelis, 1994; Singelis, et al., 1999) and by seeking connectedness with and acceptance from other people in their social environment. Service risks for the interdependent selves might be evaluated not only based on their own interests, but also the interests of their significant others (e.g., family members, close friends, coworkers, important societies) (Markus & Kitayama, 1991, 1994). In summing, first, the levels of independent- and interdependent self-construal will positively contribute to perceived risk. Second, because the level of risk-taking may be varied across groups (Clark, 1974), this study expected the positive effects of both self-construals on perceived service risk should be different. As previously noted, in observing risk, highly developed interdependent selves may look beyond his/her own goals. It is likely that the observation of service risk will be more complicated for interdependent selves. The magnitude of the association between interdependent self-construal and perceived risk should be stronger than that of independent self-construal. Hence, this study proposes the following set of hypotheses:

**H2a:** Independent self-construal will be positively related to perceived risk.

**H2b:** Interdependent self-construal will be positively related to perceived risk.

**H2c:** The positive effect of interdependent self-construal on perceived risk will be stronger than that of independent self-construal.

This study also suggests the association between perceived risk and consumer involvement. Risk is well-known as an important factor to affect consumer intention and behavior (Pérez-Cabañero, 2008). More specifically, Naderi (2011) argued that especially for situational involvement, consumers may intensify their involvement by perceiving risk. From this notion, it can be implied that consumers may use their perception of risk to measure appropriate levels of involvement in order to meet an expected level of value or satisfaction. Thus, it is concluded that the degree of risk perceived by consumers will positively influence consumer involvement. The higher service risk, the deeper consumer involvement will be. Finally, it is proposed:

**H3:** Perceived risk will be positively related to consumer involvement.

## METHOD

### Respondents

The respondents of this study were all international students studying at a university in Taiwan. By involving respondents from numerous countries and cultures, the researcher might wish to get the different types of respondents in terms of their buying attitudes and behavior, and self-construal. The study questionnaire was administered in English, because they were presumed to be competent with the language. The study questionnaire was distributed to 80 targeted respondents and a total of 65 responses were received, representing an 81% response rate. The data were all valid and usable. Fifty seven percent of the respondents were women. The average age was 28 years. Eighty nine percent of the respondents were Asian (e.g., Indonesian, Thai, Vietnamese, Mongolian, etc.) and 11% were non-Asian (i.e., American, Seychellois, Australian, and Russian).

### Measures

To test the relationships of the study variables, the present study chose three services, (1) health care that represents a high-contact service, (2) car repair that represents a medium-contact service, and (3) cable TV that represents a low-contact service (Lovelock & Wright, 2002).

**Perceived level of contact.** Perceived level of contact was measured with a single-item scale developed for this study. The item is "I need to have intense contact with each of the following service organizations for service being well-delivered." The respondents measured the levels of contact of the 3 services. Response options ranged from *fully disagree* (1) to *fully agree* (5).

**Perceived risk.** Perceived risk was measured with 6-scale of Laurent and Kapferer (1985). The scale consists of 4-item risk probability scale and 2-item risk importance scale. The scale has been validated in the several studies (Gursoy & Gavcar, 2003; Pérez-Cabañero, 2008). This present study used this scale for

measuring the levels of risk of the 3 services. Response options ranged from *fully disagree* (1) to *fully agree* (5). Alphas for this measure were .77, .72, and .72 for perceived risk of health care, car repair, cable TV, respectively, thus reliable.

**Self-construals.** Independent- and interdependent self-construal were measured with 24-item scale of Singelis (1994). Response options ranged from *fully disagree* (1) to *fully agree* (5). Alphas for independent- and interdependent self-construal were .82 and .75, respectively, thus also reliable.

**Consumer involvement.** Respondents' involvement of the 3 services was measured with a single-item developed for this study. The item is "I need to get involved during service process in each of the following service organizations." Response options ranged from *fully disagree* (1) to *fully agree* (5).

**Control variables.** To count the effects of several demographics variables, this study controls for gender (1 = men, 0 = women), age (years), and nationality (1 = Asian, 0 = non-Asian).

To note, the respondents were requested to measure perceived level of contact, perceived risk, and involvement of the 3 services. In addition, they also measured the independent- and interdependent self-construal scales. The researcher received 3 sets of cases from

each respondent. In total, 195 data (65 respondents x 3 cases) were therefore used for analyses.

**RESULTS**

Eight variables comprising 5 study variables (to note that self-construal consists of 2 variables) and 3 controls were included in this study. Table 1 shows the means, standard deviations, and correlations among the variables. As shown, perceived risk was positively correlated with perceived level of contact ( $\beta = .33, p < .01$ ) and interdependent self-construal ( $\beta = .27, p < .01$ ). Consumer involvement was positively correlated with perceived level of contact ( $r = .82, p < .01$ ) and perceived risk ( $r = .39, p < .01$ ). See Table 1.

**Hypotheses Testing**

Table 2 shows the results of regression analysis. This study expected the positive impacts of perceived level of contact, independent- and interdependent self-construal on perceived risk (H1, H2a, and H2b). As shown, the positive effect of perceived level of contact on perceived risk was found ( $\beta = .32, p < .001$ , Model 1). H1 was supported. The results demonstrated the positive effects of independent self-construal on perceived risk ( $\beta = .15, p < .05$ , Model 2) and inter-

**Table 2**  
**Results of Regression Analysis**

Independent variable	Dependent variable			
	Perceived risk			Consumer involvement
	Model 1	Model 2	Model 3	Model 4
Constant	2.90***	2.67***	2.05***	.67
Gender	-.11	-.11	-.13	-.03
Age	-.06	-.03	-.05	.05
Nationality	.09	.12	.03	-.03
Perceived level of contact	.32***			
Self-Construals				
Independent self-construal		.15*		
Interdependent self-construal			.27***	
Perceived risk				.39***
F	7.37***	2.66*	4.94**	8.85***
R <sup>2</sup>	.13	.05	.09	.16

N = 195. \* p < .05, \*\*\* p < .001.

dependent self-construal on perceived risk ( $\beta = .27$ ,  $p < .001$ , Model 3). The results supported H2a and H2b. In addition, it was predicted that the effect of interdependent self-construal on perceived risk would be stronger than that of the effect of independent self-construal on perceived risk (H2c). The results demonstrated that the effect of interdependent self-construal on perceived risk was stronger than that of independent self-construal (see the betas in Model 2 and 3). The results thus supported H2c. Finally, this study also expected a positive impact of perceived risk on consumer involvement (H3). As expected, the positive impact of perceived risk on consumer involvement was demonstrated ( $\beta = .39$ ,  $p < .001$ , Model 4). H3 was also supported.

## DISCUSSION

This study intends to test the effects of perceived level of contact, independent- and interdependent self-construal on perceived risk. This study also intends to investigate the association between perceived risk and consumer involvement. The proposed hypotheses were all supported. As predicted, the results suggested that the impact of interdependent self-construal was found to be stronger than that of independent-self construal. The findings suggest that when consumers perceive the services to be high-contact, they also tend to perceive that the risk is also high. The finding validates the finding of prior research suggesting that high-contact services were more likely to be perceived as highly risky services (i.e. academy/nursery, travel agency) (Pérez-Cabañero, 2008). This study found that perceived risk can promote consumer involvement. The finding is consistent with prior research that also suggests the relationship (Warnakulasooriya, 2009). In addition, this study taps the importance of perceived level of contact and self-construal in influencing the perceived risk of consumers.

### Theoretical Implications

Although prior study has suggested the perceived contact-involvement link (Warnakulasooriya, 2009), this study was not totally a replication. This study may contribute to theory. First, the use of Lovelock and Wright's (2002) conception of the levels of contact should deliver a new perspective from what

that has offered by the prior study. Second, the investigation of the impacts of self-construals may offer a new insight to the perceived risk literature. This study demonstrated the different effects of the two selves on perceived risk. Overall, because perceived risk is conceptualized to be an antecedent of consumer involvement, this study thus discloses how perceived level of contact and self-construal may impact perceived risk, which in turn impacts consumer involvement.

### Practical Implications

For practice, this study offers a new understanding for service organizations and marketers. Service organizations and marketers however should see "risk" as something manageable, not something avoidable. Scholars have suggested that perceived risk can be well anticipated by informing service attributes to consumers (Lovelock & Wirtz, 2004). From the context of this study, perceived risk may be developed as a result of the increase of perceived level of contact. This study suggests that the knowledge of perceived risk can benefit for service organizations and consumers, because it can enforce consumer to offer suitable levels of involvement, enhances service quality and consumer satisfaction. Self-construal is one of personal attributes that should be considered by service organizations and marketers. As found, the interdependent selves tend to be more complicated in perceiving risks rather than the independent selves. When promoting their services to the interdependent selves, marketers should emphasize on other aspects rather than only the personal goals-service attributes. The knowledge about the relationships between self-construals (independent and interdependent) and perceived risk should make marketing programs designed by marketers to be more suitable and effective in certain markets.

### LIMITATIONS AND FUTURE DIRECTIONS

Several limitations of this study should be noted. First, the respondents completed all measures at one point in time. Future research should eliminate the possibility of common method variance issue by covering multiple times in data collection. Second, 89% of the respondents were Asian. The researcher must admit that it is an unbalanced proportion between the groups, since this study involved self-construals as one

of the main variables. Extant literature suggests that country cultures (i.e., Eastern versus Western) should affect the levels of independent- and interdependent self-construal. Therefore, future research may wish to balance the data based on the country origins. Third, the correlation coefficient between perceived level of contact and consumer involvement was very high ( $r = .82$ ). However, since this study did not link the variables, this problem should not be a big issue. Other researchers should consider the possibility of collinearity, if they wish to predict the relationship between the variables, for example the coefficient of regression should be interpreted with caution. Finally, this study employed a single-scale for measuring perceived level of contact and perceived involvement. The scales might not cover the scope of the constructs. Specifically, consumer involvement should be much wider than as depicted in the one-item question (Gursoy & Gavcar, 2003; Traylor & Joseph, 1984). Therefore, future research can replicate the findings by using better measures.

This study focuses on investigating the effects of personal attributes on perceived risk. Future research may wish to examine the effects of other personal attributes such as personality and cultural profiles of respondents (e.g., low/high risk avoidance and individualism/collectivism). For example, the use of the Big Five personality dimensions as they relate to perceived risk may provide novel perspectives on the antecedents of perceived risk. Future research may also offer deeper insights by elaborating self-construal and other personal variables (e.g., gender, age, personality, norms, and locus of control). Consumers may experience various types of risks when buying services (e.g., functional, financial, and social risk, Lovelock & Wright, 2002). Because perceived risk was found to impact consumer involvement, the use of the types of risks perhaps should depict the different nuances of the relationships.

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**Table 1**  
**Means, Standard Deviations, and Correlations**

Variable	M	SD	1	2	3	4	5	6	7
1. Gender	.43	.50							
2. Age	28.22	5.76	.00						
3. Nationality	.69	.31	-.30**	.00					
4. Perceived level of contact	3.23	1.36	.00	.04	.05				
5. Independent self-construal	3.40	.63	.08	-.11	-.09	.00			
6. Interdependent self-construal	3.76	.49	.02	.02	.28**	.01	.37**		
7. Perceived risk	3.40	.78	-.13	-.05	.14	.33**	.14	.27**	
8. Consumer involvement	3.18	1.37	-.08	.03	.03	.82**	-.01	.00	.39**

Note. N = 195. \*\* p < .01, two-tailed.