Attribution of Success and Failure in Intercultural Service Encounters:
Moderating Role of Personal Cultural Orientations

Introduction

Intercultural service encounters (ICSEs) refers to interactions between customers and employees from different cultures (Sharma et al., 2009; Stauss and Mang, 1999). These encounters have become more prevalent and important in recent years due to a rapid increase in immigration, international travel and the globalization of service businesses (Sharma et al., 2009, 2012, 2015). There were 232 million international migrants in 2013, accounting for 3.2 percent of the World’s population (United Nations, 2014). International tourism continued its strong growth in 2014, reaching a record 1133 million international tourist arrivals, and these tourists generated about US$1245 billion in receipts in destinations worldwide (World Tourism Organization, 2015). To succeed in such an increasing culturally diverse market place, service firms need to manage the service experience of their customers from diverse cultural backgrounds to ensure their satisfaction with the service.

When a service encounter has an unexpected outcome, customers may attribute this to a number of sources, including service employee or service firm or even themselves (Zeithaml et al., 2013). Stauss and Mang’s (1999) study is one of only a few that link attribution and customer satisfaction in an intercultural service encounter context. They suggest that cultural difference may be an underlying reason for a service failure. Similarly, Hartman et al. (2009b) considered that cultural difference may buffer service firms when a service failure occurs. More recently, Tam et al. (2014) show that intercultural competence may moderate the influence of perceived cultural distance on customer satisfaction and this in turn may be mediated by cultural attributions. However, most of these studies were conducted in the context of a service failure, and did not explore other types of attributions such as customer, service employee and service firm. Moreover, neither of these studies
explicitly measured the cultural factors that may have driven these attributions especially in the context of intercultural service encounters.

Culture is defined as a pattern of norms, values and beliefs whose shared meaning is acquired by members of a group (Hofstede, 1980). Due to differences in cultural norms, values and beliefs, conflicts and misunderstandings may arise when people interact with others from different cultures. According to attribution theory, consumers are viewed as rational information processors who make causal inferences to explain the occurrence of an event (Calder and Burnkrant, 1977), and this attribution process is subject to cultural influence (Mattila and Patterson, 2004). Yet, there is little research on how individual-level cultural factors may influence customers’ attributions in intercultural service encounters.

Notwithstanding the above, there is considerable evidence on how customers’ expectations, perceptions and evaluations are shaped by their respective cultures (e.g., Donthu and Yoo, 1998; Furrer et al., 2000; Mattila, 1999; Patterson et al., 2006; Schoefer, 2010). However, most of these studies were conducted with customers and employees from the same culture and operationalized the concept of culture using Hofstede’s national cultural dimensions, an approach that has drawn considerable criticism in recent research (Oyserman et al., 2002; Sharma, 2010). Hence, we use a more recent conceptualization of culture at an individual level, namely personal cultural orientations (Sharma, 2010), to study the moderating influence of individual-level cultural characteristics on the relationship between service delivery outcome and customer attributions in a service encounter involving a customer and an employee from different cultures.

Research shows that attribution is a significant determinant of customer satisfaction (Bitner, 1990; Tom and Lucey, 1995; Tsiros et al., 2004). When customers experience disconfirmation of their expectations, they experience a psychological disequilibrium state, which may trigger a search for reasons to explain why their expectations are disconfirmed
(Laufer, 2002; Tse, 1990). The perceived reasons for the service outcome have a significant influence on customers’ satisfaction evaluations and behaviors (Folkes et al., 1987; Iglesias, 2009). Despite significant evidence from social psychology about how the attribution process in both unexpected positive and negative outcomes works (Weiner, 1985), most attribution studies in marketing examine customers’ reactions to negative outcomes such as product or service failures. Understanding the customer attribution process for both successful and unsuccessful service encounters can provide useful insights for managers to develop effective strategies to influence customer attribution and satisfaction.

In view of the above, we draw on attribution and social psychology theories, and the literature of cross-cultural psychology and services marketing, to investigate the customer attribution process in an intercultural service encounter context. Our study makes several key contributions to the literature. First, we developed a conceptual model that depicts the relationships between service delivery outcome (success vs. failure), customer attributions and personal cultural orientations in customer satisfaction evaluation in an intercultural service encounter context. Second, we empirically examine various customer attributions, comparing the differences in customers’ attributions between a service delivery success and a service delivery failure. Third, we show that four dimensions of personal cultural orientations, namely independence vs. interdependence, and power vs. social inequality, partially moderate the influence of the service delivery outcome on customer attributions.

The remainder of this article is organized as follows. In the next section, we provide a theoretical basis for the conceptual model and specify research hypotheses. Following this, the research methodology adopted to assess the hypotheses is described, followed by a discussion of the results. The implications of the findings are then discussed, and the article concludes with a discussion of the study and directions for future research.

THEORETICAL BACKGROUND
**Intercultural Service Encounters**

In intercultural service encounters, expectations and perceptions of both customers and service employees are likely to be influenced by their respective cultures. The differences in their expectations and perceptions of each other’s roles and behaviors may cause conflicts and misunderstandings, which can result in unhappy customers, frustrated employees, and loss of business (Sizoo et al., 2005). Research has shown that customers tend to prefer employees of the same race or ethnicity as themselves because of greater trust and familiarity (Kulik and Holbrook, 2000), being respected (Montoya and Briggs, 2013) and language preference (Baumann and Setogawa, 2014). In a similar vein, Sharma et al. (2009) proposed that customers perceive greater interaction comfort and higher inter-role congruence with service employees of similar cultures. Chan et al. (2010) suggested that customers and service employees with “matched” cultural value orientations can facilitate value creation through customer participation.

However, not all studies support the view that customers are more favorable towards intracultural service encounters which involve customers and employees from the same culture than intercultural service encounters which involve customers and employees from different cultures. Pikkemaat and Weiermair (2001) showed that tourists from distant cultures have higher quality perceptions than tourists from similar cultures. Similarly, Yuksel (2004) also found that foreign visitors in Turkey evaluated local services more positively compared to domestic visitors, while Sharma et al. (2012) found a positive effect of perceived cultural distance on interaction comfort. Research has shown that culture influences customers’ expectations, perceptions and evaluations of services (Donthu and Yoo, 1998; Patterson et al., 2006; Zhang et al., 2008), and responses to service failures (Suh et al., 2013; Wan, 2013). Customers from different cultures may have different explanations for the same service encounter, and the differences in their explanations are expected to influence their
satisfaction evaluation and behavior. Although studies have examined cross-cultural
customer attributions in a service failure/recovery context, none of these considered the
influence of culture on customer attributions with both successful and unsuccessful services
in an intercultural service encounter context, i.e. one where customers and service employees
are of different cultures (Chan and Wan, 2008; Mattila and Patterson, 2004; Poon et al., 2004;
Wong, 2004).

Parasuraman et al. (1985) and Grönroos (1984) suggested that customers may
evaluate two aspects of a service encounter: process and outcome. Service process is defined
as the manner in which a service is delivered (e.g. responsiveness of a waiter in a restaurant),
whereas outcome is defined as what customers actually receive from the service (e.g. the
meal at the restaurant). Smith et al. (1999) found that the process of a service is more
significant in influencing customer satisfaction than the outcome of a service. In this study,
we focus on the service process, i.e. the personal interactions between a customer and a
service employee who are from different cultures. We investigate customer attributions in a
successful service delivery (i.e. a service employee performs very well and exceeds customer
expectations, here after service delivery success) and a failure service delivery (i.e. a service
employee performs very badly and falls short of customer expectations, here after service
delivery failure). In this study, we place customer attributions in an intercultural service
encounter context, taking into account the influence of culture.

**Culture and Personal Cultural Orientations**

Hofstede’s (2001) typology of culture provides a useful theoretical foundation to
explore cross-cultural differences in consumer behavior. It includes four cultural value
orientations, namely individualism-collectivism, power distance, masculinity-femininity, and
uncertainty avoidance. In his work with Bond (1988), a fifth cultural value orientation known
as long-term vs. short-term was added. Researchers have assumed that these national cultural
values scores pertain to the individual level and used them to explain cross-cultural differences in consumer attitudes and behaviors (e.g., Birgelen et al., 2002; Ladhari et al., 2011). However, others have pointed out that there are individuals whose cultural value orientations may be different from the value orientations ascribed to the nation, hence inferences made about individual cultural value orientations on the basis of national cultural value orientations to predict individual behaviors may result in “ecological fallacy” (Patterson et al., 2006; Schoefer, 2010, Sharma, 2010). In fact, there is growing evidence that individual cultural value orientations may be better explanatory variables in cross-cultural consumer research (Donthu and Yoo, 1998; Patterson et al., 2006; Schoefer, 2010). This study therefore used individual respondents as the unit of analysis and examined their cultural orientations as potential moderators influencing the relationship between customer attributions and service delivery outcome. In particular, we are interested in individualistic and power distance orientations as they are considered important in studying cultural influence rather than other cultural value orientations (Hofstede, 2001; Triandis, 2004).

Sharma (2010) reconceptualized Hofstede’s five cultural value orientations as ten personal cultural orientations at the individual level and developed a multi-dimensional scale to measure these. Specifically, instead of viewing individualism-collectivism as two opposite poles of a single dimension, Sharma (2010) proposed two separate dimensions, namely independence (IND) and interdependence (INT), based on Markus and Kitayama’s (1991) work on self-construals. Similarly, power (POW) and social inequality (IEQ) were introduced as two separate dimensions to represent Hofstede’s power distance dimension. These personal cultural orientations offer a wider range of cultural differences at the individual level, and we predict that IND, INT, POW and IEQ will be useful in explaining differences in customer attributions for a successful vs. unsuccessful service encounter.

**Attribution**
Attribution theory is concerned with the ways in which people explain or attribute the behavior of others or the causes of events they observe (Heider, 1958). People make causal attributions so that they can better understand themselves and the context in which behaviors or events are embedded, and be able to predict and maintain a sense of control over their behaviors and the environment. An attribution process is more likely to follow an unexpected event than an expected event (Pyszczynski and Greenberg, 1981). Oliver (1997) explained that attribution requires a motivating stimulus. In a service consumption context, expected outcomes may not generate an attribution process because they are, in most cases, foregone conclusions. But when a service performance is perceived as either greatly exceeding or falling short of expectations, this may lead to a psychological disequilibrium state which triggers consumers’ search for an explanation of the perceived discrepant performance (Laufer, 2002; Tse, 1990).

According to Heider (1958), people attribute causes of events to two types: internal and external ones. Internal or “dispositional” attributions assign causality to factors within the person (self or other), such as ability or personality traits. For example, customers may perceive a service employee to be competent or incompetent, or they may perceive themselves as partially responsible for the outcome. Customers also attribute an unexpected service outcome (i.e. failure) to service firms (Folkes, 1984; Hess et al., 2003; Iglesias, 2009). For example, they may blame the service firm for its inadequate human resources management. This can be considered an internal attribution as the source of the failure originated within the service firm. External or situational attributions assign causality to outside factors such as the weather or situational conditions (Oliver, 1997). For example, consumers may think that the prompt service they received is due to good luck or the long wait is due to bad weather.
The study by Stauss and Mang (1999) was one of the few studies to suggest cultural difference as an underlying cause of a service outcome. Attributing a service failure to cultural difference is considered a form of situational or external attribution. In their study, customers were found to perceive negative incidents in *intercultural* service encounters less negatively than those in *intra* cultural service encounters. They explained that customers may attribute the negative incidents to the cultural differences between themselves and service employees. Similarly, Hartman et al. (2009a) considered that cultural differences may serve as a cushion that mitigates the negative aspects of the experience in intercultural service encounters. Tam et al. (2014) also found that cultural difference is a common underlying source of unsatisfactory outcomes especially for those customers who have less intercultural service experience.

In this study, we are interested in causal attributions that customers make in an intercultural service encounter context, whether the perceived cause of a service delivery success or failure is attributed to service employee, service firm, self or cultural difference, and we explore the differences in customer attributions between successful vs. unsuccessful service encounters. Since culture influences our values, beliefs and the ways we see ourselves and others, we predict that it exerts an influence on customer attributions. In the following section, we present the conceptual model and develop specific hypotheses about the moderating impact of the four dimensions of personal cultural orientations, namely independence vs. interdependence and power vs. social inequality, on the relationship between service delivery outcome and customer attributions including service employee, service firm, self, and cultural difference.

**HYPOTHESES DEVELOPMENT**

The conceptual model for this study is presented in Figure 1. As shown, we propose that a service delivery outcome (success vs. failure) elicits consumers’ attributions, which in
turn influence their level of satisfaction. We also propose that personal cultural orientations such as IND, INT, POW and IEQ influence the relationship between service delivery outcome and customer attributions. We include the relationship between customer attributions and customer satisfaction in the conceptual model, but we do not develop any specific hypotheses about their relationship as this study focuses on the effect of service delivery outcome and personal cultural value orientations on customer attributions. Moreover, the relationship between customer attributions and customer satisfaction has been well documented in the literature (Folkes, 1984; Iglesias, 2009; Tse, 1990; Weiner, 2000).

<Insert Figure 1 about here>

**Intercultural Service Encounters and Customer Attributions**

Attribution theory views individuals as rational information processors who make causal inferences to explain the occurrence of an event (Folkes, 1984). Research has shown that customers use more than one causal explanation for an attribution of the discrepancy between their expectations and perceived product performance (Tse, 1990). In an intercultural service encounter context, when customers experience disconfirmed expectations during service delivery, they may have different perceived causes of their disconfirmed expectations. For example, customers may attribute their perceived discrepant performance to internal / dispositional factors, such as the ability of a service employee, service firm, customer, and or external / situational factors such as the context in which the service delivery occurs, in this case the cultural differences between service employee and customer. Heider (1958) found that people tend to overvalue dispositional factors to explain an individual’s behavior in a given situation and undervalue situational factors which may have contributed to the situation. Such attributional bias is common in Western cultures and is referred to as “fundamental attribution error” (Ross, 1977) or “correspondence bias” (Gilbert and Malone, 1995).
Correspondence bias is defined as the tendency to draw inferences about people’s individual dispositions from their behaviors rather than the situational context in which they occur (Gilbert and Malone, 1995). Although there is some evidence to suggest that people in Western cultures tend to prefer dispositional attribution more than people in East Asian cultures, Krull et al. (1999) found that correspondence bias exists in both cultures. Choi et al. (1999) also found that East Asians make dispositional attributions just as Americans do, but it is only when situational constraints are salient that East Asians tend to perceive that situational factors are more significant in shaping a person’s behavior. We predict that correspondence bias exists in both Western and non-Western cultures in intercultural service encounters; however, we predict that the preference for dispositional attribution vs. situational attribution may vary between the cultures.

Prior to a service encounter, customers will form expectations regarding the performance of a service employee. During the service encounter, customers’ attention usually focuses on the service employee, and the employee’s performance is most visible and prominent (Aronson et al., 2013). According to cognitive miser theory, people tend to use accessible and simple rules to form their judgment (Fiske and Taylor, 1991). We expect that when the performance of a service employee deviates from a customer’s expectations, the customer tends to blame the service employee, who is the focal person in the service encounter, rather than to assess the situation and or context in which the service encounter occurs. We also predict that customers will hold the service employee more accountable for a negative service encounter than for a positive service encounter because in a purchase situation, customers normally expect good service and may feel that the employee is supposed to provide good service. Although any cultural differences between customer and service employee are relevant in this context, we expect that cultural attribution is less significant compared to dispositional attribution as cultural attribution may require more
effort and cognitive resources to recognize and comprehend the differences (Augoustinos et al., 2006).

Service employees represent their service firm. Bitner et al. (1994) found that the underlying reasons for the behaviors of service employees are related to the firm’s management. Hence, we predict that customers’ attribution of the service encounter to service employee can be carried over to the service firm because customers may feel that the service employee performs on behalf of his or her firm. After all, it is the firm that offers the service, so it has the responsibility to manage and monitor the performance of its staff. Thus, the customers may feel that the firm should be responsible for a discrepant service performance. We also expect that customers’ attributions to the firm will be more resolute for a negative service encounter than for a positive service encounter because while customers may take good service for granted, they will blame the firm for poor service.

All service encounters involve some level of customer participation (e.g. customers place an order with a waiter in a restaurant). According to self-serving bias, customers are more likely to take credit for a successful service encounter and less likely to blame themselves for an unsuccessful service encounter (Miller and Ross, 1975). Extensive reviews of the literature have shown that self-serving bias is a robust phenomenon in human cognition (Mezulis et al., 2004). Attributing success to self and failure to others not only can enhance individuals’ feelings of self-worth, but also protect them from feeling bad when they do not perform well so as to maintain their mental health (Baumgardner and Arkin, 1988; Crisp and Turner, 2010; Mezulis et al., 2004; Zuckerman, 1979). There is some evidence in the marketing literature for the view that customers take credit for their roles in positive outcomes but that they blame others for negative outcomes (Bitner et al., 1994; Meuter et al., 2000). Based on the preceding discussion, we hypothesize as follows:
H1: Compared to service delivery success, customers tend to attribute service delivery failure more to (a) service employee and (b) service firm than to (c) self and (d) cultural differences between self and service employee.

**Moderating Role of Independence and Interdependence**

Independence (IND) is defined as a personal cultural orientation associated with acting independently, a strong self-concept, autonomy and personal achievement, whereas Interdependence (INT) is associated with acting as part of one or more in-groups, a strong group identity, a sense of belonging and giving importance to group goals over own individual goals (Sharma, 2010). These cultural orientations, posited at an individual level, correspond to Hofstede’s (1980) national cultural concept of individualism-collectivism. Both IND and INT orientations can coexist in individuals and societies (Oyserman et al., 2002).

High independent (IND) people are more likely to emphasize internal abilities, thoughts and feelings, being unique and expressing the self, realizing internal attributes, promoting own goals, and being direct in communication (Markus and Kitayama, 1991). They are self-focused and often refer to their internal abilities and attributes when thinking about themselves rather than the thoughts, feelings and actions of others. Similarly, when thinking about others, they will consider others’ individual abilities and attributes rather than relational or contextual factors (Singelis, 1994).

We predict that high IND customers are more likely to hold the service employee and the firm responsible for a service delivery failure in an intercultural service encounter, and compared to low IND customers, are less likely to perceive the service delivery failure due to cultural differences between service employee and themselves. For high IND people, the primary sources of self-esteem are emphasizing one’s uniqueness, expressing inner attributes and stressing the positive (Hooghiemstra, 2008). We expect that high IND customers will
exhibit greater self-enhancing biases for a service encounter success compared to low IND customers who place less emphasis on internal abilities and attributes. In other words, high IND customers are more likely to feel personally responsible for a service delivery success compared to low IND customers. Hence, we hypothesize as follows:

H2: Independence (IND) moderates the relationship between service delivery outcome and customer attribution such that there is a difference between high and low IND customers in terms of their extent of attributing failure (success) to (a) service employee, (b) service firm, (c) self and (d) cultural differences between self and service employee.

In contrast, interdependent (INT) people value their relationships with in-group members and have a strong group identity. Markus and Kitayama (1991) described that interdependent people emphasize external elements such as social status, roles and relationships, belonging, fitting in and occupying one’s proper place, engaging in appropriate action, promoting others’ goals, and being indirect in communication and reading others’ minds. They maintain proper relations with others and modify their behavior in accordance with the nature of the relationship. Hence, they are more likely to consider the self, others and the situation, and adopt a holistic view in a social setting (Singelis, 1994).

INT people emphasize social connections, but they draw a greater distinction between in-groups and out-groups than IND people (Triandis, 1989). Social identity theory suggests that people tend to discriminate in favor of their in-group members and against out-group members (Tajfel et al., 1971). Hence, we predict that high INT people may show greater distrust towards out-group members. Al-Zahrani and Kaplowitz (1993) showed that Saudis (high in collectivism) are more likely to derogate members of out-groups and to show intergroup bias than Americans (high in individualism). While there is evidence suggesting that INT people prefer situational attribution over dispositional attribution, we propose a
competing argument based on social identity theory, and suggest that when a service delivery failure occurs in intercultural service encounters, where customers and service employees are of different cultures, high INT customers are more likely to assign blame to the service employee who is of a different culture and the firm which is responsible for the service employee’s behavior, and are less likely to assign blame to themselves, and the cultural difference between service employee and customer. Hence, we hypothesize as follows:

H3: Interdependence (INT) moderates the relationship between service delivery outcome and customer attribution such that there is a difference between high and low INT customers in terms of their extent of attributing failure (success) to (a) service employee, (b) service firm, (c) self and (d) cultural differences between self and service employee.

Moderating Role of Power and Social Inequality

Power distance is defined as the extent to which the less powerful members of a society expect and accept that power is distributed unequally (Hofstede, 1991). It characterizes social systems and national cultures, rather than individuals, indexing shared cultural acceptance of the role of social hierarchy (Torelli and Shavitt, 2010). Power (POW) and social inequality (IEQ) were introduced to represent Hofstede’s national cultural concept of power distance at an individual level (Sharma, 2010). POW represents the extent to which individuals accept differences in the power wielded by various members in a society, whereas IEQ represents the degree of inequality among people in a society which the individual accepts as normal (Taras et al., 2009). In other words, POW represents how people relate to authority, whereas IEQ is concerned with hierarchical vs. egalitarian values (Schwartz, 1992).

Power is associated with control over many rewarding resources (Schwartz and Bilsky, 1987). These rewarding resources can be personalized such as acquiring personal wealth and status, and socialized such as gaining social recognition and respect through the
use of power for the benefit of others. Based on Schwartz’s (1992) studies of value structures, Torelli and Shavitt (2010) viewed personalized power as associated with acquiring wealth and achieving status, and socialized power as associated with helping others. To distinguish power from social inequality, we adopt the concept of socialized power, which values cooperation and helping others. We view high POW-oriented people as not only accepting power asymmetry in society, but also as respecting seniors and complying with their wishes, whereas high IEQ-oriented people are viewed as accepting differences in social status and structure, and that everyone should know his or her rightful place in society.

Torelli and Shavitt (2010) suggested that people frequently activating a socialized power concept would develop strong mental associations between power and the beliefs and goals that are instrumental in helping others. High POW-oriented people are expected to be considerate and concerned about the welfare of others, and tend to exhibit prosocial behaviors such as helping and co-operating with others and earning their respect and appreciation. In intercultural service encounters, we expect that high POW-oriented customers are more likely to co-operate with service employees, and when conflicts arise, will attempt to understand the situation from the service employees’ perspective even though they may not agree with them. When a service failure arises, high-POW oriented customers may consider their roles and other possible factors leading to the service failure, and may be less likely to blame the service employees and the firm for the failure. Hence, we hypothesize as follows:

**H4:** Power (POW) moderates the relationship between service delivery outcome and customer attribution such that there is a difference between high and low POW-oriented customers in terms of their extent of attributing failure (success) to (a) employee, (b) service firm, (c) self and (d) cultural differences between self and service employee.
High IEQ-oriented people expect and accept differences in social status among members of a society whereas low IEQ-oriented people value equality and fairness (Sharma, 2010). In intercultural service encounters, we expect that customers who are high IEQ-oriented not only perceive the status differences between service provider and themselves, but they may also perceive the service provider as more powerful compared to themselves because of the resources possessed by providers, such as language, knowledge and skills, whereas customers who are low IEQ-oriented may not perceive any status difference and asymmetrical power balance between service provider and themselves. Hence, we predict that low-IEQ oriented customers, who demand to be treated as equals in the service delivery, will be less likely to tolerate service failure, and are more likely to blame service employees and the firm when failure arises, thus are less likely to blame themselves and cultural difference than high IEQ-oriented customers. On the other hand, as high IEQ-oriented customers may feel more dependent on the service provider to provide the service, they are more likely to give credits to service employees and the firm in a service encounter success compared to low IEQ-oriented customers. Thus, we hypothesize as follows:

H5: Social inequality (IEQ) moderates the relationship between service delivery outcome and customer attribution such that there is a difference between high and low IEQ-oriented customers in terms of their extent of attributing failure (success) to (a) employee, (b) service firm (c) self and (d) cultural differences between self and service employee.

METHOD

Research Setting

The setting for this study was Hong Kong, China. Hong Kong is one of the most popular shopping and tourism destinations in the world, with arrivals of nearly 60.8 million
people, and outbound departures of about 84.4 million in 2014 (HKSAR, 2015). The inbound and outbound travel presents many opportunities for intercultural encounters, thus it is an appropriate setting for the study of intercultural service encounters. In order to enhance the variance within each personal cultural orientation, we followed the practice of prior research, and collected data from both Chinese (Hong Kong and mainland China) and Western customers (North America, Western Europe and Australia), who were aged 18 years or above (Patterson et al., 2006).

**Study Design and Procedure**

A scenario-based experiment was adopted to assess the hypothesized relationships in the conceptual model. The use of a quasi-experimental approach is common in consumer research and can enhance internal validity by increasing control over the manipulated variables and by reducing the influence of extraneous variables (Cook and Campbell, 1979). Other advantages of using a scenario approach are that it can minimize the problems of intentionally imposing service failures on customers and memory biases in self-reports of past service failure incidents (Patterson et al., 2006; Smith et al., 1999). In-depth interviews were conducted with customers who had had experiences of intercultural service encounters to identify relevant service attributes to be used in the scenarios. Several versions of the scenarios involving interaction between an employee and a customer were then developed, based on inputs from the in-depth interviews. The scenarios were then pretested with a sample of 30 customers, drawn from the target population of the study. The participants in the pre-tests evaluated the scenarios in terms of realism and relevancy (Feick and Higie, 1992). We chose the scenarios considered to be the most realistic and relevant.

An English-language version of the questionnaire describing the scenario was developed. The questionnaire was translated into Chinese, and then back-translated. Both success and failure scenarios described a customer visiting a restaurant, and interacting with a
service employee. The failure scenario described the service employee as unresponsive, impolite and unhelpful. These service demeanors are commonplace in service encounter failures (Hess, 2008; Keaveney, 1995; Surachartkumtonkun et al., 2013). The success scenario described the service employee as responsive, polite and helpful. Both the English and Chinese language questionnaires were pretested using a sample of 30 local Chinese customers and 30 Western customers respectively to ensure clarity and unambiguous questions. The scenarios are presented in Appendix I.

A team of trained research assistants recruited customer participants using a mall-intercept approach. Shoppers were invited to participate in an academic study prior to entering a shopping mall. In order to ensure that both Chinese and Western samples contained a good cross-section of the population with respect to gender and age, research assistants were instructed to select potential respondents such that no more than 55 percent of the sample could be of one gender and no more than 50 percent of the sample were aged 30 years or younger. A screening question was asked to ensure that the participants had had an experience with a restaurant service in the last three months. The service setting was used in a randomized manner to avoid any systematic bias. We used real customers and developed both success and failure scenarios based on the input from the in-depth interviews in order to provide this study with a reasonable degree of experimental and mundane realism (Bitner, 1990).

We prepared an intercultural service encounter scenario by showing the same picture of a South-Asian service employee to all research participants who were Chinese or Western. A South-Asian service employee was used because physical appearance is readily observable (e.g., skin color, shape of eyes, body structure) and provides an important visual cue to customers as to whether the service employee shares the same or a similar culture as theirs (Alley and Schultheis, 2001; Hopkins et al., 2009; Levin, 2000). The participants were then
asked to read one version of the two scenarios (i.e. success vs. failure), and imagine themselves as the customer described in that situation (same as their role in real life) and the person in the picture as the service employee. However, they were not informed about the ethnicity of the service employee in the picture. After reading the scenario, the participants were asked to complete scales that measured scenario realism, disconfirmation, satisfaction, attributions of the cause of the service delivery outcome, perceived cultural distance, intercultural competence, and personal cultural orientations, namely independence vs. interdependence, and power vs. social inequality. Finally, they completed the demographic questions concerning age, ethnicity, gender, marital status, and education. A cash coupon valued at HK$20 (≈US$2.6) was given at the end of the interview as a token of thanks for their participation in the study.

Sample

The data collection was conducted over a four-month period. About 2800 shoppers were invited, and approximately one of five shoppers agreed to participate in the study. The questionnaire took on average 15 minutes to complete. Ten respondents did not finish completing the questionnaire and 25 responses were removed due to missing data. The resultant final sample was 640 participants. Half of the sample were randomly assigned to the success scenario and half to the failure scenario. Fifty percent of participants were Chinese and 50% Western. About 38% of participants were aged 21-30 years, 48% were single, 51% were male and 49% female, and 31% had attained secondary school education or below. The demographic profiles of the Chinese and Western samples are comparable. Table 1 displays the demographic characteristics of the overall samples, Chinese and Western.

<Insert table 1 about here>

Measures
The measures used in this study were adapted from well-established scales and applied to an intercultural service encounter context in a restaurant setting. The items measuring perceived cultural distance were adapted from Ng et al. (2007), disconfirmation (Yi and La 2004), attributions (Hui and Toffoli, 2002; Russell, 1982; Tam et al., 2014), customer satisfaction (Brady et al., 2005), and intercultural competence (Ang et al., 2007; King and Howard-Hamilton 2003). Personal cultural orientations, namely independence vs. interdependence and power vs. social inequality, were adapted from Sharma (2010). We also included Feick and Higie’s (1992) scale for assessing the realism of the scenarios. The mean of the scenario realism was 5.60. All items were measured on a 7-point scale.

**Control Variables**

We included the following three control variables in the analysis for their likely influence on causal attributions:

**Age:** Mezulis et al. (2004) found that age has an effect on self-serving attributional bias among children and older adults. Older customers are relatively limited in their information search and information processing capacity, and this may subsequently influence their cognitive process (Mittal and Kamakura, 2001). Hence, we controlled for the effect of age on attributions.

**Gender:** Research has shown that female customers tend to blame the service firm more readily than male customers in a product harm crisis because they feel more personally vulnerable (Laufer and Gillespie, 2004). Rosenthal et al. (1996) also found that there was a significant difference between female and male managers in their explanations for successful performance in an organizational setting, but no such effect was observed for unsuccessful performance. Moreover, Khan et al. (2015) found that gender has an effect on comfort in intercultural service encounters. Hence, we included gender as a control variable.
**Intercultural competence:** Intercultural competence (ICC) is the ability to think and act in appropriate ways in interactions with people from other cultures (Friedman and Antal, 2005). We included ICC as a control variable as prior research has shown that low ICC people are more likely to attribute the cause of a failure to cultural differences than high ICC people (Tam et al., 2014).

**Data Analysis and Results**

*Manipulation check.* Prior to data analysis, a manipulation check was conducted. Independent sample t-tests were performed with disconfirmation and satisfaction as the test variables. The results show that the participants exposed to the successful service delivery reported their expectations resulted in more positive disconfirmation (disconfirmation mean=5.88) and are more satisfied with the service (satisfaction mean=6.14) than those exposed to failure service delivery (disconfirmation mean=1.64; t=48.5, p<0.00; satisfaction mean=1.90, t=58.7, p<0.00). Hence, our manipulation was effective. Further, we also assessed the perceived cultural distance between the respondents and the South-Asian service employee in the scenario. Both Chinese and Western respondents perceived a significant difference between themselves and the South-Asian service employee in terms of ethnicity, nationality and culture. For the Chinese sample, the mean was 6.05 and for the Western sample, the mean was 5.74.

**Assessment of Measures**

**Measurement Equivalence**

Before we pooled and analyzed the data from the Chinese and Western samples, we followed the procedures recommended by Steenkamp and Baumgartner (1998) to assess the cross-cultural measurement invariance, including configural invariance, metric invariance and scalar invariance. We used multi-group confirmatory factor analysis via LISREL to
assess two measurement models for personal cultural orientations and customer attributions respectively (Jöreskog and Sörbom, 1993; Milfont and Fischer, 2010).

To assess configural invariance for personal cultural orientation items, we developed an unconstrained four-factor measurement model across the two groups (Chinese vs. Western). The results show an acceptable fit ($\chi^2=295.97$, $df=106$, $\chi^2/df=2.79$, RMSEA=0.075, CFI=0.94, NFI=0.91), providing support for configural invariance (van de Schoot et al., 2012). To assess metric invariance, a model with the matrix of factor loadings was constrained as invariant across the two groups. The results show a poorer fit than the configural invariance model ($\chi^2=355.86$, $df=118$, $\chi^2/df=3.02$, RMSEA=0.079, CFI=0.93, NFI=0.90). Based on the modification indices, two equality constraints were relaxed yielding a better fit ($\chi^2=335.80$, $df=116$, $\chi^2/df=2.89$, RMSEA=0.077, CFI=0.93, NFI=0.90). To assess scalar invariance, we followed the recommendation by Steenkamp and Baumgartner (1998). After relaxing four intercepts altogether, the results show an acceptable fit ($\chi^2=354.59$, $df=118$, $\chi^2/df=3.00$, RMSEA=0.079, CFI=0.93, NFI=0.90). In sum, the results provide support for partial metric invariance and partial scalar invariance.

Similar analyses were performed for attribution items. An unconstrained four-factor measurement model across the two groups (Chinese vs. Western) shows an acceptable fit ($\chi^2=314.56$, $df=106$, $\chi^2/df=2.97$, RMSEA=0.079, CFI=0.95, NFI=0.93) (van de Schoot et al., 2012), providing support for configural invariance. A model with the matrix of factor loadings constrained as invariant across the two groups shows a slightly better fit than the configural invariance model ($\chi^2=343.51$, $df=118$, $\chi^2/df=2.91$, RMSEA=0.077, CFI=0.95, NFI=0.93), providing support for full metric invariance. Next, the intercepts were constrained to be equal, and the results show an acceptable fit ($\chi^2=365.83$, $df=122$, $\chi^2/df=3.00$, RMSEA=0.079, CFI=0.95, NFI=0.93), providing support for full scalar invariance (van de Schoot et al., 2012).
Measurement Properties

After establishing partial metric and partial scalar equivalence for personal cultural orientation measures and full measurement equivalence for attribution measures, we pooled the two samples data (Chinese vs. Western) for further analysis (Patterson et al., 2006; Steenkamp and Baumgartner, 1998). We first performed exploratory factor analysis and reliability analyses. All items were heavily loaded on their respective factors and Cronbach alpha values ranged from 0.77 to 0.91, well exceeding the threshold of 0.70 (Churchill, 1979; Nunnally and Bernstein, 1994). Confirmatory factor analysis using LISREL was then performed to assess the psychometric properties of the measures of personal cultural orientation and attribution.

The measurement model shows a reasonably good fit ($\chi^2$=588.26, df=224, RMSEA=0.050, NFI=0.93, CFI=0.96). All the parameter estimates ($\lambda$s) are significantly different from zero at the 5% level, providing evidence of convergent validity. Moreover, none of the confidence intervals of the correlation coefficients for each pair of scales ($\Phi$ estimates) includes 1.0, thus supporting the discriminant validity of the scales (Anderson and Gerbing, 1988). For an additional test of discriminant validity, we constrained the estimated correlation parameters among all the factors to 1.0 and found that the $\chi^2$ value for this constrained model was significantly higher than for the unconstrained model. Hence, none of the factors are perfectly correlated (Anderson and Gerbing, 1988). All composite reliabilities (0.76 to 0.92) exceed the recommended criterion of 0.60, and the average variance extracted (AVE) (0.53 to 0.78) exceed 0.50 (Bagozzi and Yi, 1988). Tables 2 and 3 show the correlation matrix and psychometric properties of the measures respectively.

Hypotheses Tests
To assess H1, we first computed the average score for each of the four attribution dimensions and used these scores to perform MANCOVA. The four attribution dimensions (employee, firm, self, cultural difference) were the dependent variables; service delivery outcome was an independent variable with a value of 0 (failure) and 1 (success) (i.e. dummy variable); and age, gender and intercultural competence were covariates. The results show that there was a significant main effect (F(4,632)=79.78, p<0.05). Intercultural competence was significant at the 5% level, while age and gender were not significant. Univariate analysis shows that there were significant differences between service delivery success and failure on employee attribution (F(1,635)=94.82, p<0.05), firm attribution (F(1,635)=49.64, p<0.05), self attribution (F(1,635)=173.27, p<0.05) and cultural difference attribution (F(1,635)=29.99, p<0.05). Customers were found to attribute service delivery failure to service employee and service firm higher than to self and cultural difference, compared to service delivery success. Hence, H1 was supported. The results of the univariate analysis on the four attribution dimensions between success and failure outcome are presented in Table 4.

H2-H5 predicted that independence, interdependence, power and social inequality would moderate the relationship between service delivery outcome and four types of attributions. Moderated regression analysis was used. First, independence, interdependence, power and social inequality were mean-centered, and the relevant interaction terms were created using the mean-centered scores, that is (outcome x independence), (outcome x interdependence), (outcome x power), and (outcome x social inequality) to minimize the possibility of multi-collinearity (Aiken and West, 1991).

Each attribution dimension (employee, firm, self, cultural difference) was treated as the dependent variable in the moderated regression analysis. We performed four separate moderated regressions analyses with service delivery outcome with a value of either 0
(failure) or 1 (success) (i.e. dummy coded), mean-centered independence, interdependence, power and social inequality, interaction terms and control variables, i.e. gender, age and intercultural competence, as independent variables (Cohen et al., 2003). The results show that the main effects’ coefficients for the relationship between service delivery outcome and the four types of attributions were in the expected direction and significant at the 5% level, which is in accord with MANCOVA results. Table 5 presents the results of the four moderated regression analyses.

<Insert Table 5 about here>

**Attributions to service employee:** As shown in Table 5, social inequality (IEQ) moderated the negative relationship between service delivery outcome and employee attribution at the 5% level, providing support for H5a. The coefficient of the interaction term between outcome and IEQ was 0.221. However, the interaction terms between outcome and independence, outcome and interdependence, and outcome and power were not significant at the 5% level, hence H2a, H3a and H4a were not supported.

**Attributions to service firm:** The results in Table 5 show that all the interactions were not significant at the 5% level, hence, H2b, H3b H4b and H5b were not supported.

**Attributions to customer (self):** As shown in Table 5, interdependence (INT) and social inequality (IEQ) moderated the positive relationship between service delivery outcome and self-attribute at the 5% level, thus providing support for H3c and H5c. However, H2c and H4c were not supported.

**Attributions to cultural differences:** The results in Table 5 show that interdependence (INT) moderated the positive relationship between service delivery outcome and cultural attributions at the 5% level, thus providing support for H3d. However, none of the other interactions were significant at the 5% level, hence H2d, H4d and H5d were not supported.

**DISCUSSION AND IMPLICATIONS**
This study contributes to the services literature by empirically investigating the role personal cultural value orientations play in customer attributions for both successful and unsuccessful intercultural service encounters. Based on attribution and social psychology theories and an extensive review of the literature in cross-cultural psychology and services marketing, we developed a model that links service delivery outcome with customer attributions and customer satisfaction, taking into account the influence of personal cultural value orientations. While prior studies in marketing focused on customer attributions in a product or service failure context, our study examined customer attributions in both successful and unsuccessful intercultural service encounters. Moreover, unlike many previous studies that used respondents’ ethnicity or nationality to explain cross-cultural differences in attributions (e.g. Asian vs. Western), we considered personal cultural value orientations as the potential moderators in the influence of service delivery outcome on customer attributions.

Our results show that customers tend to hold service employee and firm responsible for service delivery failure rather than themselves and cultural difference, compared to service delivery success. This finding is consistent with studies in social psychology which showed that attributing failure to others and success to self can enhance one’s feelings of self-worth and protect his or her ego when faced with negative events (Mezulis et al., 2004). Prior research has shown that customers are likely to feel more dissatisfied with the service (Iglesias, 2009), and more anger at the firm (Folkes, 1984) when service employee and/or firm are perceived to be responsible for a product or service failure. Hence, influencing customer attribution seems to be a viable strategy to enhance customer satisfaction particularly in the intercultural service encounter context, where service problems and failures may be related to cultural differences between service employee and customer. For example, perception of time may vary across cultures (Graham, 1981; Voldnes et al., 2012), where the same wait length may seem to be acceptable in one culture but unacceptable in
another. Although our findings suggest that customers may not attribute a service delivery failure to cultural differences, firms could educate their culturally diverse customers about local norms and practices, and prompt them to consider cultural differences before making negative evaluations of service employees or the firms (Brislin, 1981).

On the other hand, rather than letting customers take good service for granted, service firms should encourage them to attribute it to service employees and firms through marketing communications or “customer appreciation programs”, e.g. “give the employee a “LIKE” when you are satisfied with the service” or “you can enjoy 5-star quality service because we have invested over $1 million to improve it for you”. The aims are not only to enhance the image of service firms, but also to encourage customers to make more attributions of positive encounters to service employees and firms to achieve high customer satisfaction. In addition, service firms can also provide customers with forms for recording their compliments and appreciative comments. Positive feedback should also be disseminated among employees, and used to motivate employees to strive for service excellence.

Although culture has been suggested to influence customers’ evaluations and satisfaction with a service, we find that not all four personal cultural orientations exhibited a moderating effect on customers’ attribution responses to successful and unsuccessful service delivery. The lack of empirical support for some of the hypotheses suggests that personal cultural orientations may not affect all customer attribution responses in a similar manner, and managers should pay attention to the personal cultural orientations that have an influence on customer attributions to achieve customer satisfaction. Schoefer (2010) showed that individual cultural orientations did not influence all aspects of emotions equally in service recovery satisfaction.

We find that customers with high interdependent orientation tend to take credit for a successful service delivery in intercultural service encounters. This result seems to be
contrary to the findings of prior studies that self-serving attribution bias tends to be attenuated among Asians who are high in collectivism. A plausible explanation is that high interdependent customers are more likely to favor a service employee of a similar culture (in-group) and relatively more likely to show dissatisfaction with a service employee of a different culture (out-group) (Surachartkumtonkun et al., 2013). Hence, in the case of a successful intercultural service encounter, customers with high interdependent orientation tend to give credit to themselves rather than to a service employee who may be considered as an out-group member. Service firms can attempt to match high interdependent customers with service employees of a similar culture to achieve high customer satisfaction. Although this may seem costly and not feasible, with advances in technology and CRM systems, tracking of customers’ personal cultural value orientations, and matching customers with service employees of a similar culture, may be desirable in some service establishments such as luxury hotels, private banking, healthcare and exclusive clubs (Patterson et al., 2006).

We also find that customers with high social inequality orientation (IEQ) tend to give credit to service employees and firm in a successful service delivery, and feel responsible for an unsuccessful service delivery, while low IEQ customers may be less tolerant of a service failure, and feel more injustice when a service failure occurs, and thus are more likely to blame service employee and firm. Hence, understanding and tracking customers’ personal cultural orientations will enable service firms to devise appropriate strategies to address and respond to the diverse needs of multicultural customers. For example, when customers with low IEQ orientation encounter a service failure, it would be useful to provide a prompt explanation to mitigate their feelings of injustice and improve their satisfaction.

**LIMITATIONS AND FUTURE RESEARCH**

Despite its useful contribution this study has several limitations. First, we used the same picture of a South Asian employee to create an intercultural service encounter setting
for both Chinese and Western research participants. Although such a visual cue is important and salient for customers to perceive any cultural difference with the employee, other cues such as accent, communication style and body language may also influence customers’ perceptions of cultural difference to the employee (Hopkins et al., 2009). Future research could consider incorporating these other cues in experiments by using multi-media stimuli to provide a more realistic intercultural service encounter setting. Moreover, future research should consider using a service employee of another nationality to replicate the results of this study.

Second, we used scenario-based experiments in an effort to reduce the influence of extraneous variables (Cook and Campbell, 1979). However, this may limit the generalizability of the results. Future research could consider using other methodologies such as critical incident techniques and surveys to examine the research model. Third, this study focuses on causal attributions but other dimensions such as stability and controllability may also play a role in customer satisfaction with an intercultural service encounter. Future research is warranted to consider these various dimensions and examine their influence on customers’ evaluation of their satisfaction intercultural service encounters. Fourth, while this study examined the moderating influence of independence vs. interdependence and power vs. social inequality orientations on the relationship between service delivery outcome and customer attributions, future research should consider the role that other personal cultural orientations may play in customer attributions.

Fifth, although we included cultural competence as a control variable in this study, another variable such as cultural adaptation may have an influence on customers’ evaluation of an intercultural service encounter. It is advisable that future research should take into account the influence of this variable in intercultural service encounter. Lastly, a restaurant provides a high contact service involving long duration and frequent dyadic interactions
between customer and service employee. Because duration of interaction may be another factor, it would be beneficial in future research to examine the research model in other service settings such as hotels with an extended stay and dry cleaning operations with a short duration and limited social interactions.
REFERENCES


Appendix I. Service delivery success vs. failure scenarios

Service delivery success

“You walk into a restaurant and see that it is about half full. You see a waiter and try to get his attention. The waiter sees you immediately and helps you locate a vacant table nearby. As soon as you settle down, he comes promptly to your table, gives a menu in your hands, and asks you politely “What would you like to order?” You are not familiar with the menu and ask him to recommend a dish. He replies in a pleasant voice “Sure, what kind of food do you like?” You ask him to get a glass of water while you look at the menu. He looks unperturbed and says with a smile “Please take your time; I will wait for you”. He returns about one minute later with a full glass of water, and stands nearby to take your order.”

Service delivery failure

“You walk into a restaurant and see that it is about half full. You see a waiter and try to get his attention. The waiter seems to ignore you. You look around and sit at a vacant table nearby. After almost five minutes, the waiter walks slowly towards your table, and asks in an unpleasant voice “What do you want to order?” You are not familiar with the menu and ask him to recommend a dish. He replies with a frown “I don’t know” and turns back to walk away. You ask him to get a glass of water while you look at the menu. He looks irritated and says in a rude voice “Decide quickly, I haven’t got all day”. He returns about fifteen minutes later with a half-filled glass of water, and walks away.”