



Drivers of Trust in Relational Service Exchange: Understanding the Importance of Cross-Cultural Differences

Jan H. Schumann¹, Florian v. Wangenheim¹, Anne Stringfellow²,
Zhilin Yang³, Sandra Praxmarer⁴, Fernando R. Jiménez⁵,
Vera Blazevic⁶, Randall M. Shannon⁷, Shainesh G.⁸, and Marcin Komor⁹

Abstract

Customer trust is of vital importance for relationship marketing in services. Service providers increasingly market their services globally, yet few researchers have addressed differences in customer trust across cultures. Our research fills this void by proposing a model, based on existing trust literature, that suggests the overall feeling of trust in the service provider depends on customers' beliefs about service providers' ability, benevolence, predictability, and integrity. The model, tested in a banking context with data from 2,284 customers in 11 countries, explains trust well across culturally diverse countries. The results of a hierarchical linear model, however, show that customers differ in the way they build trust in their service provider across cultures. Moderating effects of the cultural values of the target group largely explain this variation. Only the effect of ability on trust is robust across countries. Global service firms should consider all four trust drivers when striving to build trust. The emphasis they put on each of these trust drivers, however, should differ across countries. When applying these principles to the design of marketing activities or market segmentation, marketing managers should collect data on the cultural values of their specific target groups in particular countries or cultural milieus.

Keywords

trust, cross-cultural, professional services, relationship marketing

Introduction

Achieving customer trust represents a central goal for relationship marketing in services (Berry 1995). In varying service contexts, customer trust increases customer commitment (Morgan and Hunt 1994), customer value (Sirdeshmukh, Singh, and Sabol 2002), and loyalty toward the service provider (Garbarino and Johnson 1999). Berry (1996, p. 42) even considers trust as "perhaps the single most powerful relationship marketing tool available to a company." Meta-analyses support this view and demonstrate that trust has a prominent effect on a broad range of relationship outcomes (e.g., Palmatier et al. 2006).

Services also have grown increasingly international in recent decades. According to World Trade Organization statistics, the volume of commercial services being exported has increased fivefold during the past 25 years (WTO 2006). Cross-cultural comparative studies have shown that providing services internationally to customers in different cultures is challenging, since differences in cultural norms and values have been shown to impact customers' service expectations (Donthu and Yoo 1998), their perceptions and evaluations of services (Furrer, Liu, and Sudharshan 2000), as well as consumer behavior (Liu, Furrer, and Sudharshan 2001).

Communicating trustworthiness and developing trusting relationships in foreign cultures is challenging, due to cultural differences in the way people develop trust. For example, American respondents consider honesty more important to trust

¹ Department of Service and Technology Marketing, Technische Universität München, Germany

² Department of International Marketing, Thunderbird School of Global Management, Glendale, AZ, USA

³ Department of Marketing, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong

⁴ Department of Marketing, Otto-Friedrich-Universität Bamberg, Bamberg, Germany.

⁵ College of Business Administration—Marketing, University of Texas at El Paso, TX, USA

⁶ Technology and Innovation Management Group, School of Business and Economics, RWTH Aachen University, Germany

⁷ College of Management, Mahidol University, Bangkok, Thailand

⁸ Department of Marketing, Indian Institute of Management Bangalore, India

⁹ Department of Marketing, University of Economics, Katowice, Poland

Corresponding Author:

Jan H. Schumann, Department of Services and Technology Marketing, Technische Universität München, Arcisstr. 21, München 80333, Germany
Email: jan.schumann@wi.tum.de

development than do Japanese respondents (Yamagishi and Yamagishi 1994). While this area has sparked the recent interest in cross-cultural trust research (e.g., Branzei, Vertinsky, and Camp 2007; Doney, Barry, and Russel 2007), so far comprehensive and conclusive empirical results on cross-cultural differences in trust building are still missing. Schoorman, Mayer, and Davis (2007), in a recent editorial, point out the increasing need for and value of cross-cultural trust research. They particularly “see the greatest opportunities . . . for the relative importance of ability, benevolence, and integrity across cultures” (Schoorman, Mayer, and Davis 2007, p. 352). Previous research has addressed these questions only to a limited extent.

This article aims to fill this void and contribute to a greater understanding of trust by evaluating the belief antecedents and cultural moderators of trust in service providers in different cultures. The research may help service managers develop customer trust in different countries and determine whether they need to apply different strategies to do so. We conduct a multi-country study on four continents using primary data on cultural values. We analyze the research questions in the context of professional services. In professional services, such as medical, legal, or banking services, trust is of particular importance, since customers lack experience and knowledge to fully understand and confidently evaluate their results (Sharma and Patterson 1999).

The remainder of this article is organized as follows. In the next section, we propose a generic model of trust building for service marketing. Using this model, we develop hypotheses about the moderating effects of cultural values on trust building. We test these hypotheses using data collected in the professional service context of banking. Finally, on the basis of the results of our study, we derive theoretical and managerial implications and propose directions for future research.

A Model of Trust Building

According to a widely accepted definition by Rousseau et al. (1998, p. 395), trust is a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another.” Established models in marketing and management research build on this thought and have identified several intentions or behaviors that are key antecedents for developing a feeling of trust (e.g., Doney and Cannon 1997; Mayer, Davis, and Schoorman 1995). Antecedents that have repeatedly been shown to influence trust are beliefs about the trustee’s ability (e.g., Doney and Cannon 1997), benevolence (e.g., Sirdeshmukh, Singh, and Sabol 2002), and integrity (e.g., Morgan and Hunt 1994). Trust further has a future oriented component in that the trustee has to gain confidence in the predictability of a trustee’s behavior (e.g., Anderson and Weitz 1989). Moorman, Desphandé, and Zaltman (1993) refer to this aspect as dependability.

In the context of services, ability reflects a service provider’s capability to deliver high-quality service, based on expertise (Doney and Cannon 1997) and experience (McKnight, Choudhury, and Kacmar 2002). Benevolence reflects the extent to which

a service provider is well meaning and actually pursues the customers’ best interest (Sirdeshmukh, Singh, and Sabol 2002). Evaluations of the predictability of a service provider depend on the extent to which the customer can predict a service firm’s behavior (Anderson and Weitz 1989), for example based on the information provided by the service provider (Eisingerich and Bell 2008).

Finally, a service provider’s integrity results from expressions of honesty as well as the provision of reliable promises and the sharing of reliable information (Crosby, Evans, and Cowles 1990). Taken together, these beliefs constitute the perceived trustworthiness of a service provider, which results in a customer’s sense of trust (Mayer, Davis, and Schoorman 1995; Sirdeshmukh, Singh, and Sabol 2002). We refer to these beliefs as trustworthiness beliefs.

Apart from a stream of research that focuses on Japan (e.g., Dyer and Chu 2000; Yamagishi and Yamagishi 1994), research into established trustworthiness beliefs primarily focuses on Western contexts, especially the United States (e.g., Doney and Cannon 1997; Sirdeshmukh, Singh, and Sabol 2002). Yet, Noorderhaven (1999) questions the applicability of Western models of trust development to other cultural contexts. Qualitative research in Singapore and among Turkish and Chinese samples replicates the core trustworthiness beliefs though, indicating that the model may be applicable across cultures (Tan and Chee 2005). This point of view receives support from a conceptual approach suggested by Doney, Cannon, and Mullen (1998), who argue for the universal validity of trustworthiness beliefs. Furthermore, several cross-cultural comparative studies provide empirical evidence that measures of the trustworthiness beliefs and trust are valid and at least partially invariant across culturally diverse countries (Branzei, Vertinsky, and Camp 2007; Huff and Kelley 2003). Thus, we argue that the proposed trustworthiness beliefs are universal antecedents of trust across cultures, and we propose:

- P: The perceived ability, benevolence, predictability, and integrity of a service provider explain customer trust across different countries.

Cultural Values and Trust Building

According to an often-cited definition by Hofstede (1991, p. 5), culture is “the collective programming of the mind, which distinguishes the members of one group from another.” Hill (1997, p. 67) defines culture as “a system of values and norms that are shared among a group of people and that when taken together constitute a design for living.” These definitions incorporate two aspects that are relevant in the context of this research. First, culture does not automatically correspond to country borders or ethnic groups (Steenkamp 2001) but refers to any form of social environment that shares common values. Second, shared cultural values influence people’s cognitions. Cross-cultural research shows that shared cultural values lead to shared behavioral patterns, because they similarly influence the underlying cognitive constructs (Triandis 1972) and

cognitive processing (McCort and Malhotra 1993) of people in a culture or subculture.

The Moderating Role of Cultural Values on Trust Building

Although perceptions of service providers' ability, benevolence, predictability, and integrity appear to be universally valid antecedents of trust, empirical evidence suggests that the effect of these trustworthiness beliefs on trust may differ across cultures. For U.S. respondents, honesty is more important than it is for Japanese respondents (Yamagishi and Yamagishi 1994), which suggests differences in the relevance of integrity across cultures. Moreover, Chinese people are more responsive than Australians to a target person's conscientiousness when they form trusting intentions (Bond and Forgas 1984), which indicates that service provider predictability should have greater importance in Chinese customers' decision to trust. Qualitative research also shows that Singaporean managers rely heavily on the affective factors of trustworthiness in their decision to trust, which may indicate the particularly high importance of benevolence for this cultural group (Tan and Chee 2005).

Doney, Cannon, and Mullen (1998) propose a conceptual approach incorporating the idea that cultural values may influence cognitive processes and apply it to cross-cultural differences in the development of trust. These authors argue that the values prevalent in a given culture affect the cognitive processes that build trust. Similarly, Schoorman, Mayer, and Davis (2007) suggest that cultural values influence the perception of ability, benevolence, and integrity.

Based on this thought, we propose a theoretical framework, arguing that specific cultural values moderate the effect of each trust driver on trust. We identify the moderating cultural values based on the strong conceptual links between specific, single, trustworthiness beliefs and cultural values as characterized by Hofstede (2001). The cultural value proposed to be most closely linked to ability is individualism/collectivism, which reflects the relationship between an individual and the group in a given culture (Hofstede 2001). It expresses the extent to which people value individual goals and accomplishments. This means it determines to what extent, in a given culture, ability is a relevant issue that is not only openly expressed and recognized but also perceived as a cue for decision making. We therefore argue that, compared to other values, individualism/collectivism is particularly suited to explain the relevance of customers' perception of the service provider's ability for the development of trust. The cultural value that we suggest relates most strongly to benevolence is masculinity/femininity, which expresses the extent to which "tough" values, such as assertiveness, success, or competition, dominate "tender" values such as solidarity, nurturance, or service (Hofstede 2001; Singh 1990). Masculinity/femininity is directly linked to the level of benevolence in a given culture (Gordon 1976). We therefore propose that the level of masculinity/femininity in a given culture should be particularly indicative of the relevance that people ascribe to benevolent behavior, when building trust. The

predictability of a service providers' behavior should have the strongest connection with uncertainty avoidance, because the level of uncertainty avoidance within a culture is expressed as tolerance for unstructured, ambiguous, or unpredictable future events (Hofstede 2001; Singh 1990). Among other cultural values, the level of uncertainty avoidance in a culture should therefore be best suited to predict the relevance of perceived predictability of a trustee when building trust. Finally, we argue that the integrity of a service provider is associated most closely with power distance. Power distance refers to the way a culture handles inequality and authority (Hofstede 2001), as reflected in the emphasis on hierarchical relations in families, social classes, and referent groups (Clark 1990). Moreover, power distance reflects the prevalence of conflict and opportunism in a given culture (Hofstede 2001). The latter should be particularly influential for the importance that the perception of integrity, which is characterized as honesty and accountability of a trustee, has for people's decision making. The level of power distance in a culture should therefore influence the importance of perceived integrity for people's decision to trust more than any other value.

This combination of specific cultural values and trustworthiness beliefs strongly diverges from the approach by Doney, Cannon, and Mullen (1998), who argue for multiple moderating effects per trustworthiness belief. For example, they propose that the effect of predictability on trust is moderated by all cultural values. The effect of predictability on trust should be particularly strong in cultures with a high level of collectivist cultures, more feminine cultures, high power distance cultures, and high uncertainty avoidance cultures. Hofstede's cultural dimensions framework, however, is an "unclassified multidimensional construct" (Law, Wong, and Mobley 1998). This implies that the individual dimensions should not be examined in isolation, since culture is characterized by a combination of these dimensions, which are free to vary. High uncertainty avoidance can, for example, go along with high power distance or low power distance, with more masculine values or more feminine values and so on. Thus, the different cultural values will likely lead to contradictory predictions regarding the effect of a particular trust driver in a given culture (Furrer, Liu, and Sudharshan 2000; Noorderhaven 1999). These contradictory effects, however, cannot all be valid at the same time.

We therefore adopt an approach that is different from Doney, Cannon, and Mullen (1998) and propose that specific cultural values have moderating effects on conceptually linked trustworthiness beliefs. We argue that this combination is rooted in theory insofar as the core definitions of the cultural values by Hofstede (2001) share conceptual links with specific trustworthiness beliefs in our model (e.g., Anderson and Weitz 1989; Mayer, Davis, and Schoorman 1995). It is important to notice here that other combinations of cultural values and trust drivers could be proposed as done by Doney, Cannon, and Mullen (1998) in their theoretical paper. Yet, the specific values have a particularly close link and should ultimately dominate when tested against competing effects as discussed

above. In the following, we develop the hypotheses on the directions of the moderating effects in these respective links.

Individualism/Collectivism as a Moderator of the Ability-Trust Link

Ability should be a more important cue for trust in individualist cultures than in collectivist cultures, because the former value individual accomplishments (Hofstede 2001). Individualists have a strong self-orientation, which favors individual goals above group interests. People are evaluated largely based on their capabilities and excellence is highly regarded and socially rewarded (Kale and Barns 1992). Since performance is measured by individual achievement, people interact in an individual and competitive way. Emphasizing abilities therefore represents not only an accepted but also an essential, behavior for gaining customer trust in individualist cultures. In contrast, collectivist cultures embrace a strong group orientation, which prioritizes group rather than individual achievement (Hofstede 2001). Members of collectivist cultures value joint efforts and group rewards and evaluate performance on the basis of the achievements of the group (Ueno and Sekaran 1992). Standing out from the group and stressing one's own efforts or qualifications is not accepted and less prevalent behavior. In line with Doney, Cannon, and Mullen (1998), we argue that ability thus should play a lesser role in evaluations of a service provider in collectivist cultures than in individualist cultures and predict:

Hypothesis 1: The effect of perceived service provider ability on trust is stronger for customers in more individualist cultures than for customers in more collectivist cultures.

Masculinity/Femininity as a Moderator of the Benevolence-Trust Link

We suggest that benevolence should be more relevant for developing trust in feminine cultures than in masculine cultures. The masculinity/femininity dimension reflects the prevalence of feminine gender roles in a culture (Hofstede 2001). In more "feminine" cultures, both men and women adhere to traditionally feminine gender roles. In "masculine" cultures, men adopt traditionally masculine gender roles and only women adhere to the feminine roles.

Feminine cultures share norms for solidarity and service as well as valuing cooperative behavior. Furthermore, feminine cultures focus more on harmonious relationships and feelings are more openly expressed. Fostering harmonious relationships requires benevolence and feminine cultures are explicitly characterized as having a higher level of benevolence (Gordon 1976). Masculine cultures however are characterized by norms for confrontation and independent thought and actions that are directed at the individual benefit and well-being (Hofstede 2001). The perceived level of benevolence is an indicator for the potential for conflict in critical situations, with a high level of benevolence indicating low potential for conflict.

Benevolence should therefore be particularly important for the development of trust in feminine cultures that focus on good relationship quality. This also implies that a low belief in the benevolence of the trustee would have a particularly detrimental effect on trust in feminine cultures. In masculine cultures, harmonious relationships are less important and therefore benevolence should be a less relevant cue for the development of trust. Therefore, and in line with an analog hypothesis by Doney, Cannon, and Mullen (1998), we propose:

Hypothesis 2: The effect of perceived service provider benevolence on trust is stronger for customers in more feminine cultures than for customers in more masculine cultures.

Uncertainty Avoidance as a Moderator of the Predictability-Trust Link

We propose that predictability has a greater impact on the overall feeling of trust among people in high uncertainty avoidance cultures than low uncertainty avoidance cultures. According to Hofstede (2001, p. 161), uncertainty avoidance is defined as "the extent to which the members of a culture feel threatened by uncertain or unknown situations." The level of uncertainty within a culture is, for example, expressed by the tolerance for unstructured, ambiguous, or unpredictable situations (Singh 1990). High uncertainty avoidance cultures are explicitly characterized by the need for predictability, which goes along with a need for strict rules and regulations (Hofstede 2001). People in high uncertainty avoidance cultures perceive life much more as a threat and experience higher levels of anxiety. Low uncertainty avoidance cultures have a much higher tolerance for ambiguity and perceive uncertainty as a normal feature of life (Kale and McIntyre 1992). Hence, the predictability of future events is not considered as being of high importance. Moreover, people in low uncertainty avoidance cultures have a lower focus on rules and regulations and tend to be less anxious. Therefore, in high uncertainty avoidance cultures, predictability of the service providers' behavior should be a more relevant information source of trust (Doney, Cannon, and Mullen 1998). We propose:

Hypothesis 3: The effect of perceived service provider predictability on trust is stronger for customers in high uncertainty avoidance cultures than for customers in low uncertainty avoidance cultures.

Power Distance as a Moderator of the Integrity-Trust Link

In the service setting, there are different views on the distribution of power between service provider and customer. Donthu and Yoo (1998) argue for a generally higher power of the service provider due to their expertise, knowledge, or equipment; other authors provide examples of less powerful service providers (Mattila 1999; Raajpoot 2004). Following Furrer,

Liu, and Sudharshan (2000), we believe that the distribution of power depends on the type of service as well as on customer characteristics. This research focuses on the context of professional services. In professional services, such as banking, medical, or legal services, the difference in expertise between customer and service provider is particularly large. This imbalance of knowledge in favor of the service provider makes customers particularly vulnerable in professional services (Ostrom and Iacobucci 1995; Zeithaml 1981). Professional service providers should therefore be in a more powerful position than their customers.

People in high power distance cultures share norms for differential prestige, power, and wealth (Hofstede 2001), as well as the belief that talents and capabilities are unequally distributed across society. These beliefs go along with the acceptance of a high level of authoritarianism and conformity by the less powerful people. Customers in high power distant cultures tend to seek advice from more experienced authorities and rely more on the advice of their service provider. At the same time, more powerful people are entitled to privileges and to take advantage of their powerful position. Conflict and opportunism, such as manifested in lying in your own interest, is much more accepted and prevalent among powerful people (Hofstede 2001). This implies that customers need to take into consideration that the service provider might take advantage of them. Accordingly, research consistently shows that customers in high power distant cultures have lower expectations of their service provider's reliability (Donthu and Yoo 1998; Furrer, Liu, and Sudharshan 2000). Thus, overall the service provider's integrity should be an important cue for the decision to trust.

People in low power distance cultures, in contrast, prefer egalitarian relationships (Hofstede 2001), and people place greater value on solidarity and affiliation, with conflicts and opportunism being less prevalent. Thus, the integrity of the service provider should play a less important role for the development of trust in low power distance cultures in general. In the context of professional services, we predict:

Hypothesis 4: The effect of perceived service provider integrity on trust is stronger for customers in high power distance cultures than for customers in low power distance cultures.

Methodology

Study Context

We chose banking as our research setting for several reasons. First, banking services are among the most internationalized service industries (Zeithaml and Bitner 1996). Second, they are relatively comparable across different countries (Malhotra et al. 2005). Third, banking services represent professional high-credence services in which trust plays a pivotal role (Eisingerich and Bell 2008). The level of analysis of this study is the service firm. While we realize that there are differences between trust in the frontline employee and trust in the service

firm (Doney and Cannon 1997; Sirdeshmukh, Singh, and Sabol 2002), we believe the latter to be more inclusive. The overall feeling of trust in the service firm encompasses the entire relationship, including not only personal contacts but also written communication or online banking. Nevertheless, we control for the potential effect of a regular contact service employee, that is a certain service employee with whom they have regular contact, on overall trust in the bank.

We collected data in 11 different countries on four continents. We chose countries that vary considerably according to Hofstede's (2001) cultural framework as well as according to their gross national income (GNI) based on purchasing power parity (PPP) per capita (World Bank 2008). When choosing a sample that was comparable across countries, we opted for a homogenous population since homogenous populations allow for a better test of theory (Calder, Phillips, and Tybout 1981). Business students constitute an appropriate sample group in the context of this study because business students are a well-defined target group that remains homogeneous and highly comparable across countries (Erdem, Swait, and Valenzuela 2006). With this context, we ensure subject pool equivalence (Alden, Steenkamp, and Batra 1999), thus minimizing the impact of other potentially influential factors, such as education, social status, family status, wealth, or age (Bearden, Money, and Nevins 2006). The universities and business schools selected for this study were predominantly public and most institutions were among the top 20 in their respective country. In more than half of the countries, the teaching language was English. Although research shows that culture dimensions are robust across gender (Hofstede 2001), we tried to obtain an equivalent gender ratio when possible. Data collection took place from May 2006 until February 2007 and should be unaffected by the subsequent major financial crisis.

Data Collection

Survey instrument. A paper-and-pencil survey addressed the relationship of customers with their primary bank in different countries. The surveys adopted the official languages of the respective countries where necessary. When English was the official language of instruction, we administered the English version of the survey to reduce potential translation biases. To ensure the equivalence of the scales, several researchers translated and back translated them for the various countries (Steenkamp, ter Hofstede, and Wedel 1999).

Scales and scale development. The survey consists of three sections that include established as well as self-developed scales. The first section gathers participants' perceptions of their banks on the basis of their ability, benevolence, integrity, predictability, as well as overall trust. Each of these scales consists of four items adapted from the marketing literature (Crosby, Evans, and Cowles 1990; Moorman, Desphandé, and Zaltman 1993; Moorman, Zaltman, and Desphandé 1992; Sirdeshmukh, Singh, and Sabol 2002) and consumer trust

Table 1. Intercorrelations, Average Variance Extracted, and Factor Reliabilities

Scale	Intercorrelations								
	a.	b.	c.	d.	e.	f.	g.	h.	i.
a. Ability		.58**	.47**	.65**	.63**	-.17**	.17**	-.17**	-.11**
b. Benevolence	.60**		.54**	.59**	.64**	.00	.14**	-.26**	-.10**
c. Predictability	.50**	.53**		.59**	.70**	-.05*	.19**	-.19**	-.10**
d. Integrity	.67**	.61**	.61**		.75**	-.12**	.21**	-.23**	-.07**
e. Trust	.65**	.66**	.71**	.76**		-.13**	.12**	-.16**	-.05*
f. Power distance	-.11**	.05	.00	-.06*	-.07*		.03	-.12**	.42**
g. Uncertainty avoidance	.21**	.18**	.23**	.25**	.16**	.08**		-.41**	.03
h. Individualism/collectivism	-.11**	-.20**	-.13**	-.17**	-.10**	-.06**	-.34**		-.25**
i. Masculinity/femininity	-.05	-.04	-.04	-.02	.00	.45**	.08**	-.19**	
j. CMV proxy	.16**	.08**	.12**	.19**	.16**	.05	.27**	.11**	.08**
Average variance extracted	.69	.56	.50	.70	.69	.53	.55	.50	.56
Factor reliability	.90	.78	.75	.90	.87	.78	.86	.86	.83

Note. Below the diagonal, we report the zero-order correlations; above the diagonal, we report the correlations that are adjusted for the influence of the common method variance (CMV) proxy.

** $p < .01$.

* $p < .05$.

research in related fields (Gefen 2002; Gefen and Straub 2004; McKnight, Choudhury, and Kacmar 2002) as well as self-developed items. The scales are listed in Table A1 in the Appendix. Scale development was necessary due to the non-existence of generally accepted scales of trust or trustworthiness beliefs but a multitude of different scales that were usually adapted to fit the specific research context. Among these scales, we also could not identify scales for each of these constructs that would have fit our purpose and research context. In marketing, trust has predominantly been conceptualized and operationalized via trustworthiness beliefs regarding the provider (e.g., Morgan and Hunt 1994). Since we conceptually separate trustworthiness from overall trust, we had to develop a measure of overall trust that did not include items on trustworthiness beliefs. We also had to develop scales on the different trustworthiness beliefs, since the existing trust scales entail single items measuring trustworthiness beliefs such as ability, benevolence, integrity, or trust, which do not represent scales of their own (e.g., Doney and Cannon 1997). When designing the scales, we used items from established scales that fit our purpose best and supplemented items that reflected the meaning of the constructs that we captured based on our analysis of the trust literature (Mayer, Davis, and Schoorman 1995; Moorman, Zaltman, and Desphandé 1992; Sirdeshmukh, Singh, and Sabol 2002).

In the second section, we use the Individual Cultural Values Scale (CVSCALE) (Donthu and Yoo 1998; Yoo, Donthu, and Lenartowicz 2001) to assess the cultural values of power distance, uncertainty avoidance, individualism/collectivism, and masculinity/femininity. Hofstede's (2001) fifth cultural dimension long-term orientation was not included, as it was not part of our conceptual model. We chose the CVSCALE since recent research has pointed out the lack of reliability and validity of

Hofstede's VSM 94 (Bearden, Money, and Nevins 2006). The CVSCALE has shown to possess good reliability and validity and to be cross-cultural invariant (Patterson, Cowley, and Prasongsukarn 2006; Yoo, Donthu, and Lenartowicz 2001). All items were measured on seven-point Likert scales, ranging from (1) *strongly disagree* to (7) *strongly agree*. Finally, items pertaining to customer characteristics and demographics, including the length of the relationship, the existence of a regular contact service employee, gender, age, nationality, and time spent in the country, appear in the third section.

Secondary data. To control for differences in the standard of living and level of development across countries, we include the GNI based on PPP per capita (GNI/PPP) of all countries in our analysis, obtained from the World Bank Key Development Data and Statistics (World Bank 2008).

Results

Demographic Profile of the Sample

The sample consists of 2,284 business students from major universities in the United States, Mexico, Australia, China, Hong Kong,¹ Thailand, India, Germany, the Netherlands, Poland, and Russia. Of these 2,284 cases, we retain 1,910 that feature identifiable citizens of the respective countries, who had lived there since birth. This condition is imposed to exclude other major cultural influences. Overall, the sample displays an equal distribution of male and female respondents. More than 70% of the respondents are between 20 and 25 years of age. The average length of the customer relationship with the bank is more than 8 years, which indicates extensive customer experience. About 17% of the respondents have a regular contact service employee. However,

Table 2. Effects of the Trustworthiness Beliefs on Trust by Country

Country	Ability		Benevolence		Predictability		Integrity		R ²
	st. β	T	st. β	t	st. β	t	st. β	t	
Australia	.10	.99	.32	3.16**	.32	4.10**	.27	2.88**	.69
China	.22	1.96*	.00	-.01	.70	3.52**	.18	1.67	.82
Germany	.15	2.38*	.18	2.68**	.16	2.66**	.46	6.01**	.63
Hong Kong	.14	1.49	-.02	-.20	.33	4.28**	.58	5.86**	.84
India	.17	1.23	.16	.94	.17	1.57	.50	5.52**	.72
Mexico	.16	2.11*	.22	2.51*	.33	4.26**	.30	2.98**	.75
Netherlands	.28	3.56**	.23	2.44*	.20	2.82*	.37	3.80**	.87
Poland	.28	3.14**	.09	1.00	.28	3.34**	.33	3.47**	.71
Russia	.06	.40	.10	.88	.33	2.40**	.50	3.80**	.76
Thailand	.08	1.14	.07	.82	.46	5.13**	.31	3.83**	.62
United States	.17	2.28*	.17	2.35*	.45	5.63**	.18	2.03*	.69
Pooled Sample	.13	4.98**	.18	6.67**	.33	11.77**	.36	13.29**	.70

Note. Dependent variable: trust. st.: standardized.

* $p < .05$.

** $p < .01$.

significant differences exist between countries in all of these characteristics. We control for these differences during the analysis.

Reliability Tests

First- and second-generation reliability tests. We test the reliability of the scales using first- and second-generation reliability tests. The tests are conducted on the largest sample (i.e., Germany) first and then extended to the other countries. Based on these analyses, the scales for benevolence and power distance required modification. The Cronbach's α values are acceptable for all scales across countries. Only the three-item benevolence scale in Thailand (.69) is below the recommended level of .70 (Nunnally 1978). We then build a measurement model with the factor structure confirmed in the exploratory factor analysis. The measurement model contains the four trustworthiness beliefs—ability, benevolence, predictability, and integrity—as well as trust and the cultural values. We test the model on the entire sample and achieve a reasonable fit: $\chi^2 = 2,127.95$, $df = 523$, $p < .001$, $\chi^2/df = 4.07$, goodness-of-fit index (GFI) = .94, adjusted goodness-of-fit index (AGFI) = .93, Tucker-Lewis index (TLI) = .95, confirmatory fit index (CFI) = .95, and root mean squared error of approximation (RMSEA) = .04. The intercorrelations between the constructs are acceptable (see Table 1). We further confirm discriminant validity for all scales since the Fornell and Larcker (1981) criterion is met. All factor reliability (FR) scores are greater than the recommended level of .60. Country-specific analyses of the FR scores confirm that this also holds for all countries. Furthermore, all average variance extracted (AVE) scores of the entire sample exceed the suggested level of .50 (Bagozzi and Yi 1988). When analyzed on the country level, the AVE is somewhat lower in single countries for benevolence (.45 to .63), predictability (.43 to .65), trust (.48 to .82), uncertainty avoidance (.44 to .66), individualism/collectivism (.42 to .61), and masculinity/femininity (.45 to .61). We consider these deviations in

single countries as acceptable. All other scales exceed the required criteria in all countries.

Common method variance (CMV). The cross-sectional survey design has the potential for CMV (Podsakoff, MacKenzie, and Lee 2003). We control for CMV using a procedure proposed by Lindell and Whitney (2001). We identify a scale in our survey that was included for other purposes and that is theoretically unrelated to at least one of the scales in our model. This scale on regulation orientation in the banking industry (Cronbach's $\alpha = .75$) can function as a proxy for CMV. We estimate the CMV by selecting the lowest positive correlation ($r = .05$) between the CMV proxy and the variables in our model (power distance). We further adjust the correlations and determine the statistical significance according to Lindell and Whitney (2001). The resulting adjusted correlations are shown in Table 1. The fact that all correlations are still significant suggests that CMV does not cause the interrelation of the variables. To control for the influence of CMV, we nevertheless include the CMV proxy in our further analyses.

Test for measurement invariance. To test for measurement invariance across cultures, we adopt a procedure recommended by Steenkamp and Baumgartner (1998) and follow the steps that are relevant in the context of our research. We first determine the configural invariance of the scales across countries. Overall, the configural invariance models possess a good model fit. Only the TLI of uncertainty avoidance is somewhat lower than the recommended level of .90 (Hu and Bentler 1999). However, since all other fit indices of this scale are in an acceptable range, we do not see any major reason for concern.

In the next step, we control for metric invariance by constraining the factor loadings to be equal across the country groups (Steenkamp and Baumgartner 1998). The majority of

Table 3. Group Means for Cultural Values by Country, Results of an Analysis of Variance, and ICC(1) and ICC(2)

Country	PD		UA		I/C ^a		M/F ^b	
	Mean	SE	Mean	SE	Mean	SE	Mean ^c	SE
Australia	2.35	.10	5.01	.09	2.99	.08	2.49	.11
China	2.62	.12	4.84	.11	2.49	.09	3.76	.12
Germany	2.37	.06	4.24	.05	2.40	.06	3.70	.07
Hong Kong	3.12	.09	4.76	.06	2.47	.06	4.13	.10
India	2.87	.11	5.16	.10	2.16	.10	3.42	.11
Mexico	2.55	.11	4.84	.09	2.18	.10	2.79	.11
Netherlands	2.37	.08	4.44	.08	2.76	.07	3.08	.10
Poland	2.54	.08	4.80	.09	2.86	.08	3.64	.10
Russia	3.73	.12	4.97	.12	2.70	.11	4.66	.13
Thailand	3.12	.08	4.89	.06	2.24	.06	3.94	.09
United States	2.19	.08	5.11	.08	2.69	.09	2.88	.10
<i>F</i> (<i>df</i> 10)	22.73	**	14.97	**	12.25	**	34.08	**
ICC(1)	.11		.07		.06		.16	
ICC(2)	.96		.93		.92		.97	

Note. I/C: Individualism/Collectivism; M/F: Masculinity/Femininity; PD: Power Distance; UA: Uncertainty Avoidance.

^a Reversed coding of the CVSCALE to display level of Individualism. ^b According to Hofstede (2001), the responses of men and women usually differ on the masculinity/femininity dimension. Because the samples from the different countries entail significant differences in gender distribution, we have controlled for these differences when calculating the country means. ^c Estimated marginal means.

** $p < .01$.

the scales fulfill this criterion. Most scales possess at least partial metric invariance and the trust scale shows full metric invariance across the 11 countries. Only masculinity/femininity differs significantly from the unconstrained model. In this case Steenkamp and Baumgartner (1998) suggest consulting other fit indices, which are less sensitive to sample size (van Birgelen et al. 2002). When assessing the other fit indices, the partial metric invariance models of both scales possess a good model fit and the fit indices only differ marginally from the configural invariance model. We therefore conclude that partial invariance is also supported for masculinity/femininity.

For trust as well as the cultural values, we further test for scalar invariance, since we expect differences in the absolute levels of these variables. All full and partial scalar invariance models have a significantly lower model fit than the configural invariance model. Yet, again we assess the change in the other fit indices and find only smaller decreases or even increases in model fit. We therefore consider the scales to be partially scalar invariant.

Analysis of the Validity of the General Model of Trust Building in Different Countries

To test the validity of our model of trust across cultures, we first assess whether the structural model fits the sample. We control for the influence of the CMV proxy and determine reasonable model fit: $\chi^2 = 904.41$, $df = 155$, $p < .001$, $\chi^2/df = 5.84$, GFI = .95, AGFI = .94, TLI = .96, CFI = .97, and RMSEA = .05. All trustworthiness beliefs have a significant impact on trust (see Table 2). Overall, the model accounts for 70% of variance in trust. The results of a multiple-group

analysis show that the model further accounts for a large proportion of variance in trust in all countries, in support of our research proposition regarding the universal applicability of the model. The explained variance ranges between 63% in Thailand and 87% in the Netherlands. The impact of the trustworthiness beliefs on trust, however, differs considerably between countries. In addition, all trustworthiness beliefs are not significant in at least one country. A test of a model that constrains the path coefficients from the trustworthiness beliefs on trust to be equal compared with an unconstrained model shows a significant decrease in model fit ($\Delta\chi^2 = 65.9$, $\Delta df = 39$, $p < .01$). That is, the between country differences in the effect of the trustworthiness beliefs on trust are statistically significant.

After validating the trust-building model, we test whether the overall trust measure also possesses nomological validity across cultures (Mowe and Voss 2008). The overall trust measure contains three items, including the term "trust" in the respective languages. To validate whether trust has the same meaning in the different countries, we determine whether it relates to the acceptance of vulnerability as defined by Rousseau et al. (1998). Two behavioral intentions that incorporate vulnerability are willingness to give personal information and willingness to follow advice (McKnight, Choudhury, and Kacmar 2002). In addition, we analyze the relationship of the trust measure with other well-established behavioral outcomes of trust. Two customer behavioral outcomes that consistently result from trust in a service provider, according to relationship marketing research, are word-of-mouth behavior and repurchase intentions (Palmatier et al. 2006). Overall, trust in the service provider is strongly correlated with all behavioral intentions. The strongest correlation exists between trust and

Table 4. Results of Multilevel Analysis

	Coefficient	SE	t	
Intercept	4.959	.09	55.38***	
Individual-level control variables				
Age	-.044	.03	-1.38	
Gender	-.035	.04	-.90	
Length of relationship	.321 (E + 3)	.28 (E + 3)	1.16	
Regular contact service employee	.089	.05	1.76	
CMV proxy	-.003	.02	-.17	
Individual-level antecedents				
Ability	.176	.02	7.44***	
Benevolence	.182	.02	8.33***	
Predictability	.295	.03	10.62***	
Integrity	.393	.03	14.37***	
Group-level control variables				
GNI/PPP	.160 (E + 4)	.06 (E + 4)	2.60*	
Group-level antecedents				
Power distance	-.087	.40	-.22	
Uncertainty avoidance	.011	.40	.03	
Individualism/collectivism	-.537	.32	-1.69	
Masculinity/femininity	-.081	.26	-.31	
Cross-level interactions				
Ability × Individualism/Collectivism	.118	.06	1.86	Hypothesis 1
Benevolence × Masculinity/Femininity	-.087	.03	-2.59*	Hypothesis 2
Predictability × Uncertainty Avoidance	.181	.07	2.46*	Hypothesis 3
Integrity × Power Distance	.118	.05	2.32*	Hypothesis 4
Model fit				
Deviance	4,526.14			
df	16			
Explained variance (%)				
Individual level	55.48			
Group level	9.80			

Note. Dependent variable: trust; $N = 1,910$.

* $p < .05$.

*** $p < .001$

word-of-mouth behavior ($r = .57, p < .001$) and the weakest between trust and willingness to give personal information ($r = .36, p < .001$). These significant positive relationships exist for all behavioral intentions in all countries. The results confirm that the overall trust measure possesses nomological validity across cultures. Next, we test our hypothesized claims that these differences result from differences in the cultural values among the groups.

Hypothesis Testing

Analysis procedure. There is an extensive debate and diverse practice among cross-cultural researchers on how to account for customers' cultural values. These range from the use of secondary data at the country level, primary data at the target-group level to primary data at the individual level (Bearden, Money, and Nevins 2006; Steenkamp 2001). Our operationalization of cultural values relies on the definition of culture as a group-level phenomenon (Hill 1997; Hofstede 2001). According to the definition of culture as the "collective programming of the mind" (Hofstede 1991, p. 5), it involves shared norms and values among the members of a particular group of

people that differentiate them from other groups. Following Lenartowicz and Roth (1999), we analyze the effect of culture on consumer behavior by first grouping the subjects according to their country, then assessing their shared cultural values with the respective group mean. The group means and standard errors of all cultural values are displayed in Table 4.

To justify aggregation of the cultural values, we calculate two kinds of intraclass correlation coefficients, ICC(1) and ICC(2) (Bliese 2000). The ICC(1) values we obtain range from .06 to .16, which can be considered good and therefore justify aggregation (see Table 4). We further calculate ICC(2), which should be .60 or higher (Ostroff and Schmitt 1993). The ICC(2) of the cultural values are all above .90. The group means can therefore be considered highly reliable. In confirmation of our assumption of cultural distance between the countries, the groups differ significantly in all cultural values (see Table 3).

Multilevel analysis. The data set entails two levels of aggregation, with 1,910 customers that are nested in 11 countries. The data on cultural values are aggregated and analyzed together

with the GNI/PPP at the country level. The trustworthiness beliefs, the overall trust measure as well as the demographics and the CMV proxy are analyzed at the individual level.

The hierarchical structure of the data with people being nested in countries necessitates the analysis with a hierarchical or multilevel design (Bryk and Raudenbush 1992). With a hierarchically nested data structure, ordinary linear models would lead to biased results due to an underestimation of the standard error (Bryk and Raudenbush 1992). Hierarchical linear modeling (HLM) addresses this problem and allows the simultaneous analysis of the effects of data on two or more levels of aggregation.

HLM further allows analyzing cross-level interaction effects between individual and country-level variables. We adopt a stepwise approach to model building. Based on the intercept-only model, we first calculate the ICC, which indicates the amount of between-groups variance in trust (Hofmann 1997). The results show that trust encompasses 6% of between-groups variance. Next, to test the moderating effects of the cultural values on trust, we build a model that encompasses all control variables on both levels, the direct effect of the trustworthiness beliefs on the individual level, the cultural values on the group level and the hypothesized interaction terms. Following the recommendations of Bryk and Raudenbush (1992), we group centered the individual-level variables and grand mean centered the group-level data. They further recommend not specifying all β coefficients as random, since this would have negative effects on model convergence and parameter estimate stability. We therefore only specified the β coefficients of the trustworthiness beliefs as random.

In support of our theoretical framework, all moderating effects are in the expected direction (see Table 4). Among these effects, we find statistical support for our hypotheses 2, 3, and 4. Customers in more feminine cultures build trust to a significantly larger extent based on the perceived benevolence of their service provider than in masculine cultures (Hypothesis 2). In high uncertainty avoidance cultures, the effects of perceived service provider predictability on customer trust is stronger than in low uncertainty avoidance cultures (Hypothesis 3). Compared with low power distance cultures, in high power distance cultures the perceived integrity of a service provider has a stronger effect on customer trust (Hypothesis 4). Hypothesis 1 is not supported. The effect of service provider perceived ability is only insignificantly stronger in more individualistic cultures than in more collectivistic cultures.

To test for potential competing moderating effects of the cultural values, we further build a model that includes the hypothesized interaction terms as well as all other possible interactions of the cultural values and the trustworthiness beliefs as control variables. The model has a reduced model fit (Δ Deviance = 78.11), with none of the variables resulting in a significant effect. To increase the model fit, we reduce the model step by step to achieve a more parsimonious solution that fits the data better. We do so by omitting the

moderating effect of the cultural value for each trustworthiness belief with the lowest *t*-value in the given model. While the explained variance remains relatively stable in all models, the model fit increases with each reduction. The final model is consistent with our research model and supports our theoretical framework.

Discussion

Theoretical Implications

The results of our study contribute to service marketing research in at least three ways. First, we show that our trust formation model is valid across a broad range of countries. The model offers very good fit, and all measures are at least partially invariant across cultures, supporting prior cross-cultural trust research (Branzei, Vertinsky, and Camp 2007; Huff and Kelley 2003; Wasti et al. 2007). The model further explains a major amount of variance across cultures with an average variance explained of 70%, which is consistent with other findings on trust in service providers (e.g., Sirdeshmukh, Singh, and Sabol 2002). Therefore, the trustworthiness beliefs identified in a Western context are valid across culturally diverse countries. Further analyses also confirm that the construct is fairly consistent in terms of its consequences. The overall trust measure correlates with established behavioral consequences of trust that incorporate vulnerability, such as willingness to provide personal information or to follow advice, supporting the nomological validity of trust across cultures (Mowe and Voss 2008). Based on these findings, we would allay Noorderhaven's (1999) concern on the transferability of the trust construct arguing that trust is a fairly consistent construct and established conceptualizations of trust are valid across cultures.

Second, our results show that customers in different countries differ in their trust building in their service provider. The trustworthiness beliefs leading to the development of trust vary significantly in relevance across countries. This finding has important implications for trust measurement. Trust measures that use an indirect approach and assesses trust via trustworthiness beliefs therefore might be flawed when applied to compare consumers with a different cultural background.

Third, the results show that these differences can be explained by the cultural values of the target group. The varying relevance of the trustworthiness beliefs is associated with differences in particular cultural values of the target groups. Customer trust in individualist cultures tends to depend more on the perceived ability of the service provider than is the case in collectivist cultures. However, the effect is not significant, which might be due to the low between-country variance in both the effect of ability on trust and in individualism/collectivism. Research with target groups that are more diverse in this respect should be conducted to retest this assumption. Benevolent behavior by the service provider has a significantly stronger impact on customer trust in feminine, than in

masculine cultures. Predictability also has a stronger effect in high than it has in low uncertainty avoidance cultures. These findings provide empirical support for conceptual propositions by Doney, Cannon, and Mullen (1998). In addition, we show that for professional services, integrity has a stronger effect on customer trust in high, than in low power distance cultures. This effect, however, should only be valid when the service provider is in a more powerful position than the customer. In situations where the customer is in a more powerful situation, such as customers in luxury hotels, this effect should disappear. Research shows that powerful customers in high power distance cultures place a high emphasis on reliability (Raajpoot 2004). Service providers are required to provide excellent service (Mattila 1999) and should act less opportunistically toward their customers. The integrity of a service provider should therefore be a less important antecedent of trust for powerful customers in high power distance cultures.

Overall, our results question the theoretical assumption of Doney, Cannon, and Mullen (1998) that each cultural value moderates all trust-building processes. Instead, we find general empirical support for our hypotheses that the antecedents of trust are moderated only by the specific cultural value with which they share the strongest conceptual link. This finding also holds true when the effects of the cultural values are tested in isolation. These findings support Noorderhaven's (1999) concerns regarding multiple moderating effects of different cultural values.

In summary, despite being subject to much criticism (e.g., McSweeney 2002; Oyserman, Coon, and Kemmelmeier 2002), Hofstede's cultural dimensions again have proven valuable for cross-cultural service marketing research. Our results support previous cross-cultural marketing research that indicates secondary data do not necessarily reflect the cultural values of a specific target group in a country (McCort and Malhotra 1993). When analyzing the correlations between the values suggested by Hofstede (2001) and the primary data of the target group, we obtain high positive correlations for power distance ($r = .725, p < .05$) and individualism/collectivism ($r = .646, p < .05$). When testing our model with the Hofstede values, the effect of both values is supported also with these secondary data. This correspondence supports both the validity of the CVSCALE and our research model.

The uncertainty avoidance and masculinity/femininity scores by Hofstede and our data, however, are not significantly correlated. Yet, the fact that our primary data support our theoretically derived hypotheses backs the validity of the CVSCALE and indicates a difference in the values between the sample and the country characteristics as suggested by Hofstede (2001).

We further tested our model with primary data on the individual level using ordinary least squares (OLS) regression. The results did not show any significant effect. This finding supports the notion that culture is a group-level phenomenon that needs to be studied and analyzed on an aggregated level. Overall, our study shows that the CVSCALE can reliably be applied to capture cross-cultural differences on a group level. Whereas

the authors of the CVSCALE themselves suggest that "researchers can (*use the CVSCALE to*) measure the cultural values of individuals and group (aggregate) them at the level that makes sense in their studies" (Yoo, Donthu, and Lenartowicz 2001, p. 8), to our knowledge, the current study is the first analysis to test and confirm the validity of the CVSCALE on an aggregated level.

With regard to the development of customer trust, we confirm the notion that "as cultures differ in their values systems, evaluations of marketing communications will differ" (McCort and Malhotra 1993, p. 113). The effects of culture we report for the homogenous group of students can even be considered moderate compared with other target groups that are culturally more diverse (Erdem, Swait, and Valenzuela 2006). The validity of our results therefore appears strong. Moreover, the results likely apply to differences in the cultural values of different target groups within a country and may provide important criteria for customer segmentation in service marketing. Finally, despite being studied in the context of banking, our hypotheses are on the level of very fundamental cognitive processes and thus should have broader implications for trust research and should transfer well to other service contexts.

Managerial Implications

For marketing managers of global service firms, the results of this study have several noteworthy implications. Our findings show that trust shares the same beneficial behavioral outcomes across countries with a diverse cultural background. Increasing trust is therefore globally an equally important goal for service marketing managers. We show that simple direct questions regarding the level of trust are reliable and valid measures of customer trust in the service provider across cultures.

The results further show that the ability, benevolence, predictability, and integrity of professional service providers represent relevant drivers of trust across countries with highly different cultural backgrounds. This finding suggests that a consideration of all four issues when striving to assess trustworthiness or develop trust makes sure that the most relevant aspects are covered, independent of the cultural context. When planning standardized global marketing activities, managers should take these aspects into account to ensure coverage of the most relevant facets of trustworthiness in all countries. Also when assessing a service providers' trustworthiness globally, these four trustworthiness beliefs need to be taken into account to cover all relevant aspects of trustworthiness.

Next, we provide examples of how each dimension could be managed. Service providers can improve the perceived ability of their firm by employee training, improving their service design and operations, as well as by investing in facilities that support this impression. We believe that the perceived benevolence of a service provider can be achieved only with a truly relational marketing approach that is actually tailored around the specific needs of a customer. In the case of banking

services, this would imply turning away from a selling-oriented financial consulting approach toward an approach that is determined based on the achieved return for the customer. This change in the business model would need to be accompanied by a change in the image of the customer in the firm's philosophy. To grow the perceived predictability of a service provider, one should care for a clear communication of the terms and conditions of a service or transparency with regard to processes. An increase in perceived integrity requires that information and promises that are given to the customer about the service are accurate and reliable and that the service provider communicates in an honest way. In the case of financial services, this could include, for example, also mentioning negative aspects or risks of a financial product.

The relative importance of most of these attributes for customer trust, however, varies considerably, depending on the cultural values of the particular target group. This means that consumers in different countries may use different cues for their trust development. Signaling benevolence, for example, proved to be a relevant driver of the decision to trust among the Australian, German and Dutch business students, whereas it did not have an impact in China, Hong Kong or Thailand. Marketing managers should consider these differences by adjusting the emphasis they place on each of these attributes in their marketing activities, according to the specific value system of their target group. These differences might occur when targeting customers in different countries or different regions and cultural milieus within a country. Consumers in the southwest of the United States, for example, might share different cultural values than do consumers in the northeast and therefore differ in their trust building. When applying these principles to the design of marketing activities or market segmentation, service-marketing managers should collect data on the cultural values of their specific target group in particular countries or cultural milieus. These values can differ considerably from the overall cultural values of a country, as are communicated in secondary data. As we mentioned earlier, these results also likely transfer to other professional services, such as business consulting, legal, or medical services.

For perceived ability, however, we did not find a significant moderating effect of culture. Our results hence show that the concept and understanding of employee competence is quite universal. Hence, ability is a core element of (banking) service and it is essential for management to ensure a high level of employee competence. It also means that managers globally must design their people-related strategies in such a way that their employees can convey their ability to customers, for example, through global training schemes.

Limitations and Outlook

Several limitations of our study need to be mentioned which suggest avenues for future research. First, we apply measures of overall trust as well as of the trustworthiness beliefs that include self-developed items. Although the scales were tested for reliability and validity, further scale validation is needed

that supports their applicability across different service settings.

Second, our research setting is a cross-sectional analysis of existing relationships. We would argue that our results pertaining to the moderating effects of cultural values on the antecedents of trust should transfer to the decision-making process involved in choosing a new service provider. However, this assumption requires further analyses. Third, we investigate the development of trust at the firm level, yet research findings show differences in trust in service firms and in frontline employees (Doney and Cannon 1997; Sirdeshmukh, Singh, and Sabol 2002). Since we have focused on trust in service firms, research should analyze whether the results also generalize to trust in frontline employees. Fourth, we focus on a homogeneous target group in the specific service industry of banking. Although we argue that the results generalize to other professional services, further research should investigate this claim. Fifth, further research could investigate whether other cultural values or models are of explanatory value for trust development. It might, for example, be of interest to take a closer look at individualism/collectivism and include the horizontal versus vertical dimensions as introduced by Triandis and Gelfand (1998). Future research should also analyze how beliefs in trustworthiness of service providers form in different cultures. Research shows the importance of quality signals on trust in the service firm (San Martín and Camarero 2008). First evidence in an organizational context, however, exists that signals that shape attributions of trustworthiness differ according to cultural values (Branzei, Vertinsky, and Camp 2007). Finally, research is needed to understand whether the cultural differences we find regarding the development of trust also pertain to consequences of trust.

Acknowledgment

People that deserve our thankfulness for supporting our data collection are Ruth Bolton, Antony Peloso, and Lonnie Ostrom from the W. P. Carey School of Business at Arizona State University. We also thank the editor and three unknown reviewers for their invaluable help in improving the article.

Declaration of Conflicting Interests

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research and/or authorship of this article: This work was supported by the German Federal Ministry of Education and research (FKZ: 01HQ0553). A second source of funding was the German Academic Exchange Service.

Note

1. Although the Hong Kong Special Administrative Zone is an integral part of the People's Republic of China, we treat both as separate entities in this research due to the major differences in their recent political history and their economic development.

Appendix

Table A1. Trustworthiness Beliefs and Trust Scales

	Source of the Item
Ability	
My bank knows how to provide excellent service	Adapted from Gefen and Straub (2004)
My bank is competent and has a lot of expertise	Self-developed
The quality of my bank's services is very high	Adapted from McKnight, Choudhury, and Kacmar (2002)
Overall my bank is an experienced financial institute	Adapted from McKnight, Choudhury, and Kacmar (2002)
Benevolence	
The intentions of my bank are benevolent	Adapted from Gefen and Straub (2004)
My bank pursues predominantly egoistic aims (<i>r</i>) ^a	Self-developed
My bank acts in my best interest	Adapted from Sirdeshmukh, Singh, and Sabol (2002)
It is the aim of my bank to actually help me	Self-developed
Integrity	
The information my bank provides is reliable	Self-developed
Promises made by my bank are reliable	Adapted from Gefen (2002)
My bank keeps the promises it makes me	Self-developed
My bank is an honest financial institute	Self-developed
Predictability	
I know what I can expect from my bank in the future	Adapted from Gefen and Straub (2004)
I am quite certain about how my bank will act in the future	Adapted from Gefen and Straub (2004)
I do not expect surprising (positive or negative) activities of my bank	Self-developed
My bank deals with me in a predictable way	Self-developed
Trust	
I have a trusting relationship with my bank	Self-developed
Even if not monitored, I trust my bank to do the job right	Adapted from Gefen (2002)
Overall I trust my bank	Adapted from Moorman, Zaltman, and Desphandé (1992)

Note. Items measured on a seven-point "strongly disagree/strongly agree" scale; reversed items are marked with an (*r*).

^a Excluded from the analysis.

References

- Alden, Dana L., Jan-Benedict E. M. Steenkamp, and Rajeev Batra (1999), "Brand Positioning through Advertising in Asia, North America, and Europe," *Journal of Marketing*, 63 (January), 75-87.
- Anderson, Eugene W. and Barton Weitz (1989), "Determinants of Continuity in Conventional Industrial Channel Dyads," *Marketing Science*, 4 (Fall), 310-323.
- Bagozzi, Richard P. and Youjae Yi (1988), "On the Evaluation of Structural Equation Models," *Journal of the Academy of Marketing Science*, 16 (March), 74-94.
- Bearden, William O., R. Bruce Money, and Jennifer L. Nevins (2006), "Multidimensional Versus Unidimensional Measures in Assessing National Cultural Values: The Hofstede Vsm 94 Example," *Journal of Business Research*, 59 (February), 195-203.
- Berry, Leonard L. (1996), "Retailers with a Future," *Marketing Management*, 5 (Spring), 39-46.
- Berry, Leonard L. (1995), "Relationship Marketing of Services—Growing Interest, Emerging Perspectives," *Journal of the Academy of Marketing Science*, 23 (Fall), 236-245.
- Bliese, Paul D. (2000), "Within-Group Agreement, Non-Independence, and Reliability: Implications for Data Aggregation and Analysis," in *Multi-Level Theory: Research and Methods in Organizations*, Katharine J. Klein and Steve W. J. Kozlowski, eds. San Francisco: Jossey-Bass, 349-381.
- Bond, Michael H. and Joseph P. Forgas (1984), "Linking Person Perception to Behavior Intention across Cultures," *Journal of Cross-Cultural Psychology*, 15 (September), 337-352.
- Branzei, Oana, Ilan Vertinsky, and Ronald D. II Camp (2007), "Culture-Contingent Signs of Trust in Emergent Relationships," *Organizational Behavior and Human Decision Processes*, 104 (September), 61-82.
- Bryk, Anthony S. and Stephen W. Raudenbush (1992), *Hierarchical Linear Models: Applications and Data Analysis Methods*. Newbury Park, CA: SAGE.
- Calder, Bobby J., Lynn W. Phillips, and Alice M. Tybout (1981), "Designing Research for Application," *Journal of Consumer Research*, 8 (September), 197-208.
- Clark, Terry (1990), "International Marketing and National Character: A Review and Proposal for an Integrative Theory," *Journal of Marketing*, 54 (October), 66-79.
- Crosby, Lawrence A., Kenneth R. Evans, and Deborah Cowles (1990), "Relationship Quality in Service Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (July), 68-81.
- Doney, Patricia M., James M. Barry, and Abratt Russel (2007), "Trust Determinants and Outcomes in Global B2b Services," *European Journal of Marketing*, 41 (9/10), 1096-1116.
- Doney, Patricia M., Joseph P. Cannon, and Michel P. Mullen (1998), "Understanding the Influence of National Culture on the Development of Trust," *Academy of Management Review*, 23 (July), 601-620.
- Doney, Patricia M., and Joseph P. Cannon (1997), "An Examination of Trust in Buyer-Supplier Relationships," *Journal of Marketing*, 61 (April), 35-51.

- Donthu, Naveen and Boonghee Yoo (1998), "Cultural Influences on Service Quality Expectations," *Journal of Service Research*, 1 (November), 178-186.
- Dyer, Jeffrey H. and Wujin Chu (2000), "The Determinants of Trust in Supplier-Automaker Relationships in the U.S., Japan, and Korea," *Journal of International Business Studies*, 31 (June), 259-285.
- Eisingerich, Andreas B. and Simon Bell, J. (2008), "Perceived Service Quality and Customer Trust: Does Enhancing Customer's Service Knowledge Matter?" *Journal of Service Research*, 10 (February), 256-268.
- Erdem, Tülin, Joffre Swait, and Ana Valenzuela (2006), "Brands as Signals. A Cross-Country Validation Study," *Journal of Marketing*, 70 (January), 34-49.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.
- Furrer, Olivier, Shaw-Ching Ben Liu, and D. Sudharshan (2000), "The Relationship between Culture and Service Quality Perception: Basis for Cross-Cultural Market Segmentation and Resource Allocation," *Journal of Service Research*, 2 (May), 355-371.
- Garbarino, Ellen and Mark S. Johnson (1999), "The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships," *Journal of Marketing*, 63 (April), 70-87.
- Gefen, David and Detmar W. Straub (2004), "Consumer Trust in B2c E-Commerce and the Importance of Social Presence: Experiments in E-Products and E-Services," *Omega*, 32 (December), 407-424.
- Gefen, David (2002), "Reflections on the Dimensions of Trust and Trustworthiness among Online Consumers," *DATA BASE for Advances in Information Systems*, 33 (Summer), 38-53.
- Gordon, Leonard V. (1976), *Survey of Interpersonal Values—Revised Manual*. Chicago, IL: Science Research Associates.
- Hill, Charles W. (1997), *International Business: Competing in the Global Market Place*. Chicago, IL: Richard D. Irwin.
- Hofmann, David A. (1997), "An Overview of the Logic and Rationale of Hierarchical Linear Models," *Journal of Management*, 23 (December), 723-744.
- Hofstede, Geert (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, 2nd ed. Thousand Oaks, CA: SAGE.
- Hofstede, Geert (1991), *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill.
- Hu, Li-tze and Peter M. Bentler (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives," *Structural Equation Modeling*, 6 (January), 1-55.
- Huff, Lenard and Lane Kelley (2003), "Levels of Organizational Trust in Individualist Versus Collectivist Societies: A Seven-Nation Study," *Organization Science*, 14 (January-February), 81-90.
- Kale, Sudhir H. and John B. Barns (1992), "Understanding the Domain of Cross-Cultural Buyer-Seller Interactions," *Journal of International Business Studies*, 23 (1), 101-132.
- Kale, Sudhir H. and John R. McIntyre (1992), "Distribution Channel Relationships in Diverse Cultures," *International Marketing Review*, 8 (3), 31-45.
- Law, Kenneth S., Chi-Sum Wong, and William H. Mobley (1998), "Toward a Taxonomy of Multidimensional Constructs," *The Academy of Management Review*, 23 (October), 741-755.
- Lenartowicz, Tomasz and Kendall Roth (1999), "A Framework for Culture Assessment," *Journal of International Business Studies*, 30 (Fall), 781-798.
- Liu, Ben Shaw-Ching, Olivier Furrer, and D. Sudharshan (2001), "The Relationship between Culture and Behavioral Intentions towards Services," *Journal of Service Research*, 4 (November), 118-129.
- Lindell, Michael K. and David J. Whitney (2001), "Accounting for Common Method Variance in Cross-Sectional Research Designs," *Journal of Applied Psychology*, 86 (February), 114-21.
- Malhotra, Naresh K., Francis M. Ulgado, James Agarwal, G. Shainesh, and Lan Wu (2005), "Dimensions of Service Quality in Developed and Developing Economies: Multi-Country Cross-Cultural Comparisons," *International Marketing Review*, 22 (3), 256-278.
- Mattila, Anna S. (1999), "The Role of Culture in the Service Evaluation Process," *Journal of Service Research*, 1 (February), 250-261.
- Mayer, Roger C., James H. Davis, and David F. Schoorman (1995), "An Integrative Model of Organizational Trust," *Academy of Management Review*, 20 (July), 709-734.
- McCort, Daniel John and Naresh K. Malhotra (1993), "Culture and Consumer Behavior: Toward an Understanding of Cross-Cultural Consumer Behavior in International Marketing," *Journal of International Consumer Marketing*, 6 (2), 91-127.
- McKnight, Harrison D., Vivek Choudhury, and Charles Kacmar (2002), "Developing and Validating Trust Measures for E-Commerce: An Integrative Typology," *Information Systems Research*, 13 (September), 334-359.
- McSweeney, Brendan (2002), "Hofstede's Model of National Cultural Differences and Their Consequences: A Triumph of Faith—A Failure of Analysis," *Human Relations*, 55 (January), 89-118.
- Moorman, Christine, Rohit Desphandé, and Gerald Zaltman (1993), "Factors Affecting Trust in Market Research Relationships," *Journal of Marketing*, 57 (January), 81-101.
- Moorman, Christine, Gerald Zaltman, and Rohit Desphandé (1992), "Relationships between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations," *Journal of Marketing Research*, 29 (August), 314-328.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.
- Mowe, John C. and Kevin E. Voss (2008), "On Building Better Construct Measures: Implications of a General Hierarchical Model," *Psychology & Marketing*, 25 (June), 485-505.
- Noorderhaven, Niels G. (1999), "National Culture and Development of Trust: The Need for More Data and Less Theory," *Academy of Management Review*, 24 (January), 9-10.
- Nunnally, Jum C. (1978), *Psychometric Theory*. New York: McGraw-Hill.

- Ostroff, Cheri and Neal Schmitt (1993), "Configurations of Organizational Effectiveness and Efficiency," *Academy of Management Journal*, 36 (December), 1345-1361.
- Ostrom, Amy L. and Dawn Iacobucci (1995), "Consumer Trade-Offs and the Evaluation of Services," *Journal of Marketing*, 59 (January), 17-28.
- Oyserman, Daphna, Heather M. Coon, and Markus Kimmelmeier (2002), "Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analysis," *Psychological Bulletin*, 128 (January), 3-72.
- Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal, and Kenneth R. Evans (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta Analysis," *Journal of Marketing*, 70 (October), 136-153.
- Patterson, Paul G., Elizabeth Cowley, and Kriengsin Prasongsukarn (2006), "Service Failure Recovery: The Moderating Impact of Individual-Level Cultural Value Orientation on Perceptions of Justice," *International Journal of Research in Marketing*, 23 (3), 263-277.
- Podsakoff, Philip M., Scott B. MacKenzie, and Jeong-Yeon Lee (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88 (October), 879-903.
- Raajpoot, Nusser (2004), "Reconceptualizing Service Encounter Quality in a Non-Western Context," *Journal of Service Research*, 7 (November), 181-201.
- Rousseau, Denise, Sim B. Sitkin, Ronald S. Burt, and Colin Camerer (1998), "Not So Different after All: A Cross-Discipline View of Trust," *Academy of Management Review*, 23 (July), 393-404.
- San Martín, Sonia and Carmen Camarero (2008), "Consumer Reactions to Firm Signals in Asymmetric Relationships," *Journal of Service Research*, 8 (1), 79-97.
- Schoorman, F. David, Roger C. Mayer, and James H. Davis (2007), "An Integrative Model of Organizational Trust: Past, Present, and Future," *Academy of Management Review*, 32 (April), 344-354.
- Sharma, Neeru and Paul G. Patterson (1999), "The Impact of Communication Effectiveness and Service Quality on Relationship Commitment in Consumer, Professional Services," *Journal of Services Marketing*, 13 (June), 151-170.
- Singh, Joginder P. (1990), "Managerial Culture and Work-Related Values in India," *Organization Studies*, 11 (1), 75-101.
- Sirdeshmukh, Deepak, Jagdip Singh, and Barry Sabol (2002), "Consumer Trust, Value, and Loyalty in Relational Exchanges," *Journal of Marketing*, 66 (January), 15-37.
- Steenkamp, Jan-Benedict E. M. (2001), "The Role of National Culture in International Marketing Research," *International Marketing Review*, 18 (1), 30-44.
- Steenkamp, Jan-Benedict E. M., Frenkel ter Hofstede, and Michel Wedel (1999), "A Cross-National Investigation and National Antecedents of Consumer Innovativeness," *Journal of Marketing*, 63 (April), 55-69.
- Steenkamp, Jan-Benedict E. M. and Hans Baumgartner (1998), "Assessing Measurement Invariance in Cross-National Consumer Research," *Journal of Consumer Research*, 25 (June), 78-90.
- Tan, Hwee Hoon and Dave Chee (2005), "Understanding Interpersonal Trust in a Confucian-Influenced Society—An Exploratory Study," *International Journal of Cross Cultural Management*, 5 (August), 197-212.
- Triandis, Harry C. and Michele J. Gelfand (1998), "Converging Measurement of Horizontal and Vertical Individualism and Collectivism," *Journal of Personality and Social Psychology*, 74 (January), 118-128.
- Triandis, Harry C. (1972), *The Analysis of Subjective Culture*. New York: Wiley.
- Ueno, Susumi and Uma Sekaran (1992), "The Influence of Culture on Budget Control Practices in the USA and Japan: An Empirical Study," *Journal of International Business Studies*, 23, 659-674.
- van Birgelen, Marcel, Ko de Ruyter, Ad de Jong, and Martin Wetzels (2002), "Customer Evaluations of after-Sales Service Contact Modes: An Empirical Analysis of National Culture's Consequences," *International Journal of Research in Marketing*, 19 (March), 43-64.
- Wasti, S. Arzu, Hwee Hoon Tan, Holly H. Brower, and Cetin Önder (2007), "Cross-Cultural Measurement of Supervisor Trustworthiness: An Assessment of Measurement Invariance across Three Cultures," *The Leadership Quarterly*, 18 (October), 477-489.
- World Bank (2008), "World Bank Key Development Data & Statistics." <http://web.worldbank.org/data> (accessed December 7, 2008).
- WTO (2006), "Measuring Trade in Services." www.wto.org/English/res_e/statis_e/services_training_module_e.pdf (accessed April 18, 2008).
- Yamagishi, Toshio and Midori Yamagishi (1994), "Trust and Commitment in the United States and Japan," *Motivation and Emotion*, 18 (June), 129-166.
- Yoo, Boonghee, Naveen Donthu, and Tomasz Lenartowicz (2001), "Individual Cultural Values: A Multi-County Investigation," working paper, Hofstra University.
- Zeithaml, Valarie A. and Mary Jo Bitner (1996), *Services Marketing*. New York: McGraw-Hill.
- Zeithaml, Valarie A. (1981), "How Consumer Evaluation Processes Differ between Goods and Services," in *Marketing of Services*, J. H. Donnelly and W. R. George, eds. Chicago, IL: American Marketing Association. 186-199.

Bios

Jan H. Schumann is an assistant professor at the department of service and technology marketing at the Business School of Technische Universität München, Germany. His primary research interests are cross-cultural service marketing, relationship marketing as well as technology-intensive services. His research has been accepted at the *Journal of International Marketing* and the *Journal of Consumer Behaviour*. He has received a best conference paper award at QUIS 11, and his dissertation proposal has been honored from the AMA SERVSIG and the AMA/Relationship Marketing SIG, among others.

Florian v. Wangenheim is a professor of service and technology marketing at the Business School of Technische Universität München, Germany. His primary research interests are in customer management,

service technology marketing, and functional interfaces in service management. His research has been published in the *Journal of Marketing*, *Journal of the Academy of Marketing Science*, *Journal of Service Research*, the *MSI Working Paper Series*, and other outlets. He has received best article, best conference paper, and best dissertation awards from the American Marketing Association, the Academy of Marketing Science, and the German Ministry for Education and Research, among others.

Anne Stringfellow is associate professor of Global Marketing and Academic Director of Executive MBA Programs at the Thunderbird School of Global Management in Glendale, Arizona. She holds a BS in Electrical Engineering from the University of the Witwatersrand, Johannesburg, South Africa, an EMBA from the University of Utah, and a PhD in Marketing from the University of Florida. Her research focuses primarily on cross-cultural issues in marketing and new product development and has been published in a number of academic journals, including *Management Science*, the *Journal of Product Innovation Management*, the *Journal of Operations Management*, and the *Journal of Retailing*.

Zhilin Yang is an associate professor of Marketing at City University of Hong Kong. He has published in *Journal of Marketing Research*, *Journal of International Business Studies*, *Journal of Business Research*, *Journal of Operations Management*, *International Business Review*, *Journal of Advertising Research*, *Psychology & Marketing*, among others.

Sandra Praxmarer is an assistant professor of Marketing at the University of Bamberg, Germany. She received her PhD at the University of Augsburg, taught at the University of Wollongong, Australia, and was an investment manager at Allianz SE, Germany. One of her main research interests lies in the development of trust in business relationships.

Fernando R. Jiménez is an assistant professor of marketing at The University of Texas at El Paso, Texas. His research interests include customer co-creation, service encounters, and international marketing. His work has been published in *The Journal of Marketing Theory and Practice* and in conference proceedings at the *American Marketing Association*, *Association for Consumer Research*, and *Academy of Marketing Science*, among others.

Vera Blazevic is visiting professor at the Technology and Innovation Management Group at RWTH Aachen University, Germany, and also affiliated with Maastricht University, The Netherlands. She obtained

her PhD in 2005 from the Department of Marketing at Maastricht University, the Netherlands. Her research interests include marketing strategy, customer co-creation in services and innovation, and knowledge interfaces. Her work has so far been published in the *Journal of Service Research*, *Journal of the Academy of Marketing Science*, *Journal of Business Research*, and *International Journal of Service Industry Management*.

Randall M. Shannon is an assistant professor at the College of Management Mahidol University (CMMU) in Bangkok and is the program chair of the Masters in Marketing program. He holds a Bachelor's degree in linguistics, an MBA in engineering and technology management, and a PhD in marketing. He specializes in cross-cultural consumer behavior and retailing, including private label brands. He has been teaching for over 14 years and has published over 30 conference papers and journal articles in international conferences or journals. Prior to becoming a full-time academic, Randall worked as a market researcher with AC Nielsen (Thailand).

Shainesh G. is an associate professor at the Indian Institute of Management Bangalore. His research and teaching interests are in CRM and Services Marketing. His research has appeared in the *International Journal of Technology Management*, *Journal of Relationship Marketing*, *International Marketing Review*, *Revue Francais du Marketing*, *Journal of Marketing & Communication*, *Vikalpa*, and *IIMB Management Review*. His books include *Customer Relationship Management—A Strategic Perspective* (Macmillan India) and *Customer Relationship Management—Emerging Concepts, Tools and Applications* (Tata McGraw Hill). As visiting faculty, he has taught at several schools including the Audencia Nantes School of Management (France), St. Gallen University, Vienna University, Goteborg University (Sweden), Bocconi University (Milan), and Curtin University of Technology (Perth).

Marcin Komor is an assistant professor in University of Economics in Katowice (Poland). His scientific interests deal with international marketing, euromarketing, cross-culture communication. He stayed on scientific probations at the University of Cologne, University of Dortmund, University of Goettingen in the framework of scholarships: German Academic Exchange Service (DAAD), The Catholic Academic Exchange Service (KAAD), The Union of the German Academies of Sciences and Humanities. His dissertation was honored the best dissertation award from the Polish Ministry for Education and Research.