

**IT'S ALL IN THE MIND: CULTURAL DISTANCE,
PSYCHIC DISTANCE, AND EXPATRIATION OUTCOMES**

Abstract

This paper examines the relationship between cultural distance and psychic distance, and their effects on expatriation outcomes such as adjustment, satisfaction and withdrawal intentions. The data were collected through a web survey conducted on international business expatriates from 29 nationalities, assigned to 39 different countries. Overall, the results corroborate the contention that cultural distance and psychic distance are two different and separate concepts: cultural distance refers to differences between national cultural norms and values, while psychic distance is a subjective indication of those differences. Moreover, cultural distance and psychic distance are significantly and positively correlated, though have a distinct influence on expatriation outcomes. These results challenge the dominant paradigm in expatriation literature, according to which adjustment difficulties grow with cultural differences. Implications for theory and practice are discussed.

IT'S ALL IN THE MIND: CULTURAL DISTANCE, PSYCHIC DISTANCE, AND EXPATRIATION OUTCOMES

Introduction

In the age of globalization, firms are increasingly expanding their investments abroad, which require a global staffing strategy. In this context, obtaining, maintaining, and retaining international talent grows in importance; and so it does the interest in issues of cultural differences and their impact on expatriation (e.g., Bhaskar-Shrinivas, Harrison, Shaffer & Luk, 2005; Black, Mendenhall & Oddou, 1991; Selmer 2000; Selmer & Leung, 2003a, b; Shaffer, Harrison & Gilley, 1999; Shay & Baack, 2004).

The basic assumption in the literature is that cultural differences between countries influence the managers' perceptions of the risks and costs of investing abroad and generate uncertainty that ultimately affect investment decisions and the expatriates' selection, adjustment, and success. For instance, during international assignments, expatriates face an added complexity in the form of cultural differences among home and destination countries. According to Hofstede (1980), culture is "the collective programming of the mind which distinguishes the members of one human group from another" (Hofstede, 1980: 21). This "collective programming" is therefore responsible for conditioning individuals' behaviours, which account for substantial differences between countries. Several studies indicate that these cultural differences influence the manner in which people act and interact with each other, which in turn affect expatriation. In the expatriation literature, this widespread view that cultural differences are the main reason for expatriation failure has not led, however, to an increased interest for expatriation adjustment processes; and, expatriation outcomes tends to be generally

neglected. Most studies have examined the effects of cultural differences (for a review see Harzing, 2003; and Sousa & Bradley, 2008), and have relied almost exclusively on the use of Hofstede's (1980) cultural indices, which have narrowed the study of culture's influence.

According to Sousa and Bradley (2008), cultural differences can be measured by two separate and distinct concepts: cultural distance and psychic distance. Cultural distance refers to cultural differences at a national level, and related norms and values; while psychic distance refers to cultural differences at an individual level, related with individuals' perceptions of national cultural differences.

In the context of expatriation, cultural distance exists regardless of individual perceptions of cultural differences. And psychic distance may occur regardless of cultural distance. Therefore, this research aims to take the study of these two concepts – cultural distance and psychic distance – and their interconnections one step further by exploring their theoretical and methodological properties and examining the way they may affect expatriation outcomes such as adjustment, satisfaction, and withdrawal intentions.

BACKGROUND AND HYPOTHESES

Cultural differences

Cultural distance and psychic distance seem to account for the effects of cultural differences and have been applied to different topic areas such as the study of multinationals' choice of an entry mode into a foreign market (Harzing, 2003; Kogut & Singh, 1988) and the study of expatriation (Colakoglu & Caligiuri, 2008; Selmer, 2006;

Selmer, Chiu & Shenkar, 2007; Ward & Kennedy, 1993). The main assumption is that cultural differences between home and foreign countries create a “*distance*” that affects both the firms’ activity abroad and the expatriation of human resources. The transaction cost theory (Williamson, 1985) helps underscore how greater cultural differences increase transaction costs (e.g. information acquisition costs and integration costs), impact firm and individual performance, and, thus, overall success abroad. The empirical evidence supporting these connections, however, has been mixed. Some scholars have found support for a significant influence of cultural differences on the firms’ entry mode (Kogut & Singh, 1988), performance (Colakoglu & Caligiuri, 2008; Reus & Lamont, 2008), and expatriates’ adjustment (Bhaskar-Shrinivas et al., 2005; Black et al., 1991; Ward & Kennedy, 1993), while others have found no significant relationships between those variables (Harzing, 2003; Jun & Gentry, 2005; Selmer, 2006; Selmer et al., 2007). Although a number of studies attempted to measure cultural differences using the concepts of cultural distance and psychic distance indistinctively, Sousa & Bradley (2008) argue that these two concepts are distinct. Cultural distance refers to cultural differences measured at a national level, while psychic distance refers to individuals’ perceptions of cultural differences. Acknowledging these conceptual differences is important to the expatriation literature because it sheds some more light on the assessment of cultural differences and helps to understand their effects on expatriation. The theoretical and empirical clarification of how cultural differences can be differently assessed by cultural distance and psychic distance, and how each construct affect expatriation, notably expatriation adjustment, satisfaction and turnover is also a step forward in the discussion of culture influence.

Cultural distance and psychic distance

Cultural distance refers to differences between national cultural norms and values and is defined as the degree to which countries differ in their cultural values (Sousa & Bradley, 2008). Cultural distance can be captured using instruments such as the Kogut & Singh's (1988) composite index, which computes cultural distance as a Euclidean distance on the four Hofstede cultural dimensions. Such a construct offers a simple and standardized measure of cultural differences, which can be combined with other quantitative data.

This appealing framework has several theoretical and methodological properties, which have been under attack (Shenkar, 2001, Harzing, 2003). First, the construct of cultural distance reduces *culture* complexity and *cultural differences* to a stable and numeric index, computed as the numeric difference among national cultural dimensions. By doing so, the cultural distance between country A and country B is identical and reciprocal (e.g., symmetrical). Moreover, country A and country B may be equally distant culturally, as country C and country D, although differing in all separate cultural dimensions. The reduction of cultural differences to a composite numeric score, underestimates the specific combinations along the cultural dimensions, which actually undermines the construct of *cultural differences* itself.

Other assumptions of the cultural distance concept are equally relevant to the context of expatriation: the idea of linearity and negative causality. The first assumption implies that the higher the cultural distance, the greater the difficulties to adjust; and the second assumption implies that cultural differences (e.g., cultural distance), are the main cause of expatriation failure (e.g., low adjustment, low satisfaction, and high withdrawal intentions).

These underlying assumptions may undermine cultural distance theoretical validity and limit its application (Harzing, 2003; Shenkar, 2001). For instance, there is little evidence suggesting either symmetry (equal distance) between any two countries or homogeneity within national cultures. Also, the aggregate measure of cultural distance assumes that cultural differences are constant even when measured at a single point in time, and equivalent among any two countries, though there is no evidence suggesting that the cultural differences faced while going from country A to country B are identical to cultural differences facing while moving from country B to country A.

To the expatriation literature these limitations are particularly relevant. In other words, a clarification of what constitutes culture and a cultural difference is required in order to adequately measure the construct and assess its effects. Besides, it remains unclear whether every cultural gap is critical to expatriation. Different cultural differences or different perceptions of those differences may be relevant. For instance, language differences were found to have a significant influence on expatriation adjustment while other differences seem have trivial effects (Bhaskar-Shrinivas et al., 2005; Kraimer, Wayne & Jaworski, 2001; Selmer, 2006; Shaffer et al., 1999). In sum, the use of multiple measures to assess cultural differences at different levels becomes relevant to explore the relationship between culture and expatriation outcomes.

In contrast with cultural distance, psychic distance is defined as “*the individual’s perception of the differences between the home country and the foreign country*” (Sousa & Bradley, 2008: 470) and is measured in terms of the individual’s perceptions. Due to their perceptive nature, psychic distance is a subjective indication of those differences and is influenced by the individual’s previous experiences. In other words, the individuals’ perceptions of the differences between the home and the foreign

country vary with their different personal experiences. Briefly, psychic distance and cultural distance are distinct concepts.

In their framework, Sousa and Bradley (2008) suggested that cultural distance influences psychic distance. Apparently, the wider the cultural difference between two countries, the less interaction is expected between individuals from those countries, and the less they are expected to know about each other. Inversely, a short cultural distance between two countries may promote more social and cultural interactions, thus reducing psychic distance between them. Based on this line of argument, psychic distance is expected to positively relate to cultural distance, and hypothesis 1 is formulated as follows:

H1: Psychic distance (e.g., individuals' perceptions of differences between two countries) is positively related to cultural distance (e.g. cultural differences between the same two countries, measured in terms of national cultural indices).

Exploring the distinction between the concepts of cultural and psychic distance is an important starting point for further research by addressing earlier criticisms regarding conceptual and methodological properties of cultural distance. Some of the most relevant conceptual and methodological inadequacies associated with the cultural distance construct (Harzing, 2003; Shenkar, 2001) can be overcome, and the use of a separate measure of perceived cultural differences such as psychic distance helps to better account for the perceived impact of culture, as suggested earlier by Harzing (2003).

Also, this paper further explores the association of cultural distance and psychic distance with expatriation outcomes. Based on earlier findings, cultural distance and psychic distance are expected to be related, as to impact expatriation outcomes.

Cultural differences and expatriation outcomes

Cross-cultural differences are often considered from a stress-strain perspective, a source of stress, to which international employees are particularly exposed. There is considerable evidence in the literature to suggest that cultural differences affect negatively expatriation adjustment, and thereafter assignment satisfaction, expatriation performance and withdrawal cognitions (Bhaskar-Shrinivas et al., 2005; Black et al., 1999). The underlying assumption is that expatriation is easier in familiar countries than in very different destinations. Empirically, this assumption has been tested and confirmed (Bhaskar-Shrinivas et al., 2005; Black & Stephens, 1989; Gregersen & Stroh, 1997; Mendenhall & Oddou, 1985; Shaffer et al., 1999). National cultural differences are negatively and strongly associated with the three forms of adjustment: work, interaction, and general adjustment. Moreover, cultural distance is negatively related with the spouses' general adjustment, though the negative relationship between cultural distance and the spouse's interaction and role adjustment is not significant (Mohr & Klein, 2004).

Some more recent studies, however, have not found support for a negative association between perceived cultural differences and cross-cultural adjustment. Selmer (2006) investigated the association between culture novelty and expatriate adjustment in Western expatriates assigned to China. In that study, Selmer (2006) found that Western expatriates felt relatively adjusted, even though China as a host location

was perceived as highly distinct culturally. Moreover, regression analysis did not support the hypothesis of a negative association between perceived cultural differences and adjustment. These results suggest that adjustment can be as difficult (or easy) in a very culturally different location as in one perceived to be culturally similar. However, these results might also be explained by sample idiosyncrasies such as the use of expatriates from one single country and assigned to a particular destination, and the use of a sole measure of cultural differences.

Another exploratory study from Selmer et al. (2007) found that the impact of cultural distance on adjustment was asymmetric. In their study, cultural differences were measured with Hofstede's (1980) cultural indices, using Kogut and Singh's (1988) methodology. Two convenience samples of U.S. and German expatriates were used. Their findings revealed that German expatriates were better adjusted in the U.S. than U.S. expatriates in Germany, thus questioning the cultural distance symmetry assumption. Apparently, these results support Shenkar's (2001) criticism regarding the cultural distance construct and suggest that cultural distance between reciprocal countries has asymmetrical effects on adjustment. As the cultural distance index disregards the individuals' perceptions of national cultural differences (that affect individuals' decisions) the influence of culture on expatriation remains unclear.

Following previous criticism of the misuse of the cultural distance concept (Harzing, 2003; Shenkar, 2001), this research assesses culture's influence on expatriation outcomes through the use of two different measures of cultural differences: cultural distance, measured according to the Kogut and Singh's (1988) cultural index; and psychic distance, measured using a scale adapted from Selmer (2006). Despite the mixed evidence provided in the literature, cultural distance and psychic distance are

expected to be distinct and negatively related with expatriation adjustment, as formulated in the following hypotheses:

H2: Cultural distance (e.g. cultural differences measured in terms of differences between home and destination national cultural indices) is negatively associated with: (a) work adjustment; (b) interaction adjustment; and (c) general adjustment.

H3: Psychic distance (e.g. cultural differences measured in terms of individuals' perceptions of differences between home and destination countries) is negatively associated with: (a) work adjustment; (b) interaction adjustment; and (c) general adjustment.

Previous research has not systematically examined the relationship between cultural differences and other assignment outcomes, such as satisfaction with the assignment and withdrawal intentions. While these variables have been considered important consequences of expatriation adjustment, little is known about the direct influence that cultural differences have on them. One exception is the work of Jun and Gentry (2005), who conducted a study of Korean business expatriates assigned to different countries, to assess the effects of cultural similarity on expatriates' level of cognitive uncertainty, satisfaction, social interaction with locals, and empathy for the host culture. The Kogut and Singh's (1988) cultural distance index was used to determine the level of cultural similarity between home and destination countries. The results revealed that cultural distance was positively correlated with satisfaction. Undermining their expectations, these results suggest that Korean business expatriates assigned to culturally distant countries were more satisfied with the assignment than expatriates assigned to culturally similar countries. The authors concluded that the

cultural similarity hypothesis that had been supported in the context of international students did not apply to business Korean expatriates. It is apparent that further research is required to determine whether the cultural similarity hypothesis remains valid with expatriates from other locations.

Despite this somewhat contradictory empirical evidence, a negative association is expected between cultural differences and general assignment satisfaction. According to the transaction cost theory, wider cultural differences may increase transaction costs and uncertainty about what is appropriate behaviour, thus leading to a decrease in satisfaction with the assignment. Hypotheses 4 and 5 posit:

H4: Cultural distance (e.g. cultural differences measured in terms of differences between home and destination national cultural indices) is negatively associated with general assignment satisfaction.

H5: Psychic distance (e.g. cultural differences measured in terms of individuals' perceptions of differences between home and destination countries) is negatively associated with general assignment satisfaction.

In the expatriation literature, several studies showed a significant and negative relationship between cross-cultural adjustment and expatriates' turnover intentions and withdrawal cognitions (Black & Stephens, 1989; Gregersen & Black, 1990; Takeuchi, Tesluk, Yun & Lepak, 2005; Bhaskar-Shrinivas et al., 2005). However, less is known about the relationship between cultural differences and expatriates' withdrawal intentions. Some indirect evidence come from a study with domestic employees (Carmeli, 2005), which indicated that organizational culture (and job challenge, in particular) is negatively associated with individuals' withdrawal intentions. Three

distinct dimensions have been considered to describe withdrawal intentions: (1) job withdrawal intentions; (2) organization withdrawal intentions; and (3) occupation withdrawal intentions (Blau, 2000; Carmeli, 2005). Withdrawal intentions from the job have been defined as an individual's judgement that he, or she, will be leaving the current job in the near future, though remaining in the same organization. Organization withdrawal intentions reflect the individual's intention to leave the employing company in the near future (Carmeli, 2005). The intention to leave the current job though remaining in the same organization might be an easier decision to make, but the intention to leave the occupation requires a more careful thought and involves a major career change (Carmeli, 2005).

Although the evidence is indirect, one can expect a negative association between cultural and psychic distance on the one hand, and withdrawal intentions on the other. In particular, cultural differences are expected to lead to a growing distance and uncertainty and increased expatriates intentions to withdraw from the assignment and, ultimately, to withdraw from the organization and the occupation. Therefore, cultural and psychic distances are expected to be negatively associated with the three dimensions of withdrawal intentions, as stated in hypotheses 6 and 7:

H6: Cultural distance (e.g. cultural differences measured in terms of differences between home and destination national cultural indices) is positively associated with expatriates' intentions to withdraw from: (a) the assignment; (b) the organization, and (c) the occupation.

H7: Psychic distance (e.g. cultural differences measured in terms of individuals' perceptions of differences between home and destination countries) is positively associated with expatriates' intentions to withdraw from: (a) the assignment; (b) the organization, and (c) the occupation.

Control variables

Several demographic variables that were found to influence the perception of cultural differences and expatriation outcomes were considered in this study, such as age, gender, educational level, host language fluency, previous international experience, previous cross-cultural training, and spouse adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova, Beehr & Neil, 2003; Takeuchi, Yun, & Tesluk, 2002; Takeushi, Wang & Marinova, 2005). Some company demographics were also considered such as industry sector, company size, and company foreign experience, since there is evidence that these variables can affect company success abroad (e.g., Harzing, 2003) and, therefore, expatriation outcomes.

Figure 1 shows the hypothesized relationships among cultural distance and psychic distance, and expatriation outcomes variables: adjustment, satisfaction and withdrawal intentions.

Insert Figure 1 about here

METHODOLOGY

Procedure and participants

This study examined the influence of cultural differences, measured by two distinct concepts - cultural distance and psychic distance - on expatriation outcomes (such as adjustment, satisfaction and withdrawal intentions). A mail message was sent to human resource managers registered with the Society for Human Resource Management

(SHRM) inviting their companies to participate in this study. Overall, 13 multinationals operating in more than 16 countries and employing more than 20,000 people worldwide agreed to participate. Three multinationals were based in the U.S., six in Europe, one in South America, and three in Asia. Altogether, they represent different industries such as manufacturing (pharmaceuticals, automotive, and electronics), telecommunications, and the service sector. The HR representatives of the participating companies agreed to send a questionnaire to 337 expatriates, of which 166 were returned, representing a response rate of 49.3%. This response rate compares well with other studies on cross-cultural adjustment (Black, 1992; Gregersen & Stroh, 1997; Shaffer et al., 1999). The survey was made available through a web link and was written in English, which was the business language of all potential respondents.

Overall, 127 individuals were male (76.5%), 39 were female (23.5%), and the majority were married (103, or 62%). The proportion of females in this study is slightly above the average rate in the international workforce reported to range from 10% to 18% (e.g., GMAC, 2009). The average age was 40.8 years, ranging from 25 to 68 years old. In general, respondents were highly educated with 78 (47%) having earned a post-graduate degree, 22 (13.3%) had some post-graduate studies, 48 (28.9%) held a college degree and only 14 (8.4%) had no higher-education experience. Respondents were from 29 nationalities and were assigned to 39 different countries. Expatriates from the U.S. and India represented 25% and 15% of the sample and no other country exceeded 10% of the respondents. Regarding destinations, China was found to be the main destination country, representing about 16% of all cases. No other host country represented more than 10% of the overall number of cases. Similarly, responses distributed evenly by all the 13 participating companies, and no significant differences were found for the

research variables, based on employing companies. In general, the sample demographics are similar to what has been reported in other cross-cultural studies (Gregersen & Stroh, 1997; Selmer & Leung, 2003b; Stahl & Cerdin, 2004).

Measures

A survey instrument was designed to collect information on the dependent and independent variables, and contained four separated sections.

The first section assessed cultural differences. It first asked individuals to name their birth and home country (if different from birth country), and this information was used to determine the cultural distance index between home and destination country. The Kogut and Singh (1988) formula was used, whereas cultural distance is calculated as the deviation along each four cultural dimensions of Hofstede (e.g. power distance, uncertainty avoidance, masculinity/femininity and individualism) between the mentioned home and destination country:

$$(1) \quad CD_j = \sum_{i=1}^4 \frac{\{(I_{ij} - I_{iu})^2 / V_i\}}{4}$$

In this study, the index of cultural distance (CD_j) is the cultural distance of the destination country (I_{ij}) from the home country, (I_{iu}), for the i^{th} cultural dimension of Hofstede, and (V_i) is the variance of the index for the i^{th} cultural dimension.

The first section also collected information about the psychic distance, by asking individual's perceptions of cultural differences between home and destination country. Perceived cultural differences were measured using a five-point similarity scale, ranging from (1) highly similar, to (5) highly different, in terms of: (a) everyday customs; (b)

general living conditions; (c) using health care facilities; (d) transportation systems; (e) general living costs; (f) available quality and type of food; (g) climate; (h) general housing conditions; (i) language(s); (j) education facilities and opportunities; (k) socializing on a day-to-day basis; (l) entertainment/recreation facilities and opportunities; (m) work facilities and opportunities; (n) communication system(s); (o) political system(s) and (p) religion(s). This scale was developed using the initial eight-item scale suggested by Torbiorn (1982) and later adapted by Black & Stephens (1989) and Shaffer et al. (1999). Eight new items were added to increase reliability. Both measures - cultural distance and psychic distance - were based on data comparing home and destination countries, regardless of individuals' birth country, because international employees often have nationalities that do not coincide with their perceived "home country", especially when they were educated within an international family. This procedure aimed to assure data comparability.

A second section of the questionnaire used Black & Stephens' (1989) measures of cross-cultural adjustment including work adjustment, interaction adjustment, and general adjustment. These measures have been widely used in the literature (Bhaskar-Shrinivas et al., 2005; Black, 1990; Black & Stephens, 1989). This section includes 14 items to assess cross-cultural adjustment on a seven-point Likert scale ranging from (1) highly unadjusted to (7) highly adjusted. Work adjustment was measured in terms of: (a) performance standards and expectations; (b) specific job responsibilities, and (c) supervisory responsibilities. Four items measured interaction adjustment: (a) speaking with natives; (b) interacting with natives outside work; (c) interacting with natives in general, and (d) socializing with natives. Finally, seven items assessed general adjustment: (a) housing conditions; (b) shopping; (c) food; (d) cost of living; (e) living

conditions in general; (f) health care facilities, and (g) entertainment/recreation facilities and opportunities. A measure for spouse' adjustment was also included as a moderating variable. Eleven items assessed spouse's adjustment, similar to the above mentioned for interaction and general adjustment. Respondents were also asked to rate their spouse's adjustment using a seven-point Likert scale ranging from (1) highly unadjusted to (7) highly adjusted.

A third section measured expatriates general satisfaction with the assignment based on Bonache's (2005) scale of job satisfaction. Five items compose general assignment satisfaction, such as "I am satisfied with my international assignment" or "I would take the same international assignment again". To reply, respondents were provided with a five-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree.

The fourth section measured withdrawal intentions from the assignment, the organization, and the occupation, in accordance with Carmeli's (2005) procedure. Three items composed each variable and responses were made on a five-point Likert scale from (1) strongly disagrees to (5) strongly agree. Sample items used were "I think a lot of leaving the present assignment/organization/occupation", "As soon as it is possible, I will leave the present assignment/organization/occupation", and "I am actively searching for an alternative to the present assignment/organization/occupation".

Individual and business demographic questions were also included such as age, gender, education, previous international experience, pre-assignment cross-cultural training, host language fluency, spouse adjustment, company size, industry, and duration of the foreign investment at the destination. Previous international experience, tenure in the assignment and duration of the foreign investment at destination were

computed in years. Pre-assignment cross-cultural training was enquired in terms of "yes" or "no". Respondents rated their host language fluency on a four point-Likert scale, from (1) poor, to (4) proficient. All statistical analyses were carried out using the SPSS statistical computer package.

RESULTS

General Procedure

A three-step procedure was adopted in the analysis. Firstly, responses to the items measuring psychic distance, adjustment, general satisfaction, and withdrawal intentions were factor analyzed, and factor scores obtained were used for subsequent data analysis. Secondly, correlations between the major variables of the study were calculated, and ANOVA was used to compare the mean factor differences for the independent and dependent variables. Thirdly, regression analyses were conducted to assess the extent to which the expatriation outcomes can be predicted using measures of cultural and psychic distance. Two sets of regressions were conducted separately for the two dependent variables: - model 1 - cultural distance, and model 2 - psychic distance. The following independent variables entered into the equations: individual demographics in step 1, organizational demographics in step 2, spouse adjustment variables in step 3, and main predictors (e.g. cultural distance or psychic distance) on step 4.

Psychic Distance

Factor analyses of the perceived cultural differences items yielded a single nine-item factor after varimax rotation, with a Cronbach's alpha coefficient of 0.828. This factor

alone explained 42.66% of the variance. From the initial 16-item scale, five items with loadings below 0.5 were removed. The psychic distance factor is most strongly defined by comparing home and destination countries in the following items: (a) everyday customs, (b) general living conditions, (c) transportation systems, (d) available quality and type of food, (e) general housing conditions, (f) education facilities and opportunities, (g) entertainment/recreation facilities and opportunities, (h) political system, and (i) religion.

Cross-cultural Adjustment

Factor analysis of the 14 items used to assess socio-cultural adjustment suggested that three factors could be extracted, which is in line with previous results (Black & Stephens, 1989; Black et al., 1991). The three factors account for 66.38% of the variance and Cronbach's alpha coefficients range from 0.806 for work adjustment, to 0.864 for interaction adjustment, and 0.877 for general adjustment. In addition, the 11 items of the spouse's adjustment were also factor analyzed and two factors with eigenvalues greater than one were extracted. The first factor includes seven items that measure general adjustment. The second factor consists of four items and measure interaction adjustment. Both factors accounted for 91.93% of the variance and Cronbach's alpha coefficients ranged from 0.981 to 0.984.

Cultural Distance

To compute cultural distance between expatriates' home and destination countries, the Kogut and Singh's (1988) cultural distance index was adopted. Hofstede country scores

on the four cultural dimensions: power distance, individualism, masculinity and uncertainty avoidance, available through the web, were used (ITIM International, 2010).

Common Method Bias

Because data come from the same source (expatriates), common method bias may occur. To mitigate it, a number of actions were taken: instructions were included indicating that replies would not be given in terms of right or wrong; the questions and the questionnaire were kept as short as possible; different response formats were used; and the questionnaire was pilot-tested. Since the social desirability feature of common method variance often conducts to a compressed range of answers, all other measures were factor analyzed. The interpretation was based on factors with eigenvalues greater than one and items with a loading of more than 0.5. The factor analyses confirmed the expected constructs and the independence of variables, thus suggesting there was no contamination across the various inputs and outputs and the theoretical integrity of the research model. Having taken these measures it is less likely that respondents have checked previous responses and modified subsequent answers to appear consistent.

Hypotheses Testing

Table 1 indicates sample means, standard deviations and zero-order correlations for the main research variables.

Insert Table 1 about here

The mean scores indicate that expatriates from this sample are internationally experienced, fluent in the host language, and work for internationally experienced companies at the foreign locations. The mean scores for the adjustment variables and general assignment satisfaction are significantly higher than the midpoint of the respective scales suggesting that expatriates are well adjusted and satisfied. Similarly, the mean scores for withdrawal intentions are significantly lower than the midpoint of the scale, which suggest that most respondents do not intend to leave the assignment, the organization or the occupation. The mean score for the psychic distance is also significantly higher than the midpoint of the scale ($t = 18.37$; $p < .001$), indicating that respondents perceived strong cultural differences between home and destination countries.

The correlation analysis shows that cultural distance is positively and significantly correlated with psychic cultural distance ($r = 0.18$, $p < .05$), which supports hypothesis H1. Although the correlation is not strong, this result suggests that expatriates assigned to cultural distant countries subjectively perceive several cultural differences. Interestingly, psychic distance is not significantly correlated with previous international experience, which questions Sousa and Bradley's (2008) arguments that psychic distance is mostly influenced by individuals' previous experiences. There is a significant negative correlation between host language fluency and cultural distance ($r = -0.397$; $p < .01$), suggesting that the more dissimilar the destination culture is, the better the expatriates' host language fluency seems to be. No other dependent variables are significantly correlated with cultural distance and psychic distance, which indicate cultural differences are unrelated with adjustment abroad, general satisfaction with the

assignment, and withdrawal intentions, preliminary leaving hypotheses H2 to H7 unsupported.

Cultural Differences and Expatriation Outcomes

To determine whether mean scores for the dependent variables (expatriation adjustment, general satisfaction and withdrawal intentions) varied with cultural differences; several one-way analyses of variance (ANOVA) were run. No statistically significant mean differences were found for the dependent variables, according to cultural distance and psychic distance. Further, regression analyses were performed to test hypotheses H2 to H7. To test the influence of cultural distance and psychic distance, each of the two variables were entered into a separate regression analysis, herein named model 1 for cultural distance, and model 2 for psychic distance. For each model, individual and organizational demographics entered into the first two steps, followed by spouse adjustment (e.g., interaction and general adjustment) in step three. The predictors (e.g., cultural distance or psychic distance) were added in the final step. Table 2 summarizes the main results.

Insert Table 2 about here

Hypothesis 1 (stating that psychic distance is wider for high cultural distant countries) was supported ($\beta = 0.11, p < .05$), and the regression model explains 10% of the variance of psychic distance. Hypotheses H2 and H3 predicted associations between cultural and psychic distance and expatriation adjustment. The results indicate that

cultural distance is negatively associated with work and general adjustment, and is positively associated with interaction adjustment, but the t tests failed significance, which does not support H2. Similarly, hypothesis 3 predicted that adjustment would be easier with low psychic distance but that was not supported by the data collected. In fact, results suggest the other way round: psychic distance is positively associated with all three adjustment dimensions. The regression model explains 4% of the variance of work adjustment, 23% of the variance of interaction adjustment, and 6% of the variance of general adjustment, but t tests failed significance, thus not supporting H3.

Hypotheses H4 and H5 predicted a negative association between cultural and psychic distance and general assignment satisfaction. Though the effects were in the expected direction, only hypothesis H5 was supported. That is, psychic distance is negatively associated with satisfaction ($\beta = -0.24$, $p < .01$). Altogether, the model explains 7% of the variance (Adj. $R^2 = 0.07$; $F = 2.67$; $p < .05$). These results indicate that expatriates staying in perceived culturally distant countries reported lower satisfaction with the assignment, which is consistent with predictions.

Hypotheses H6 and H7 predicted a positive association between cultural and psychic distance and withdrawal intentions. Hypothesis H6 is not supported, as cultural distance does not predict expatriates withdrawal intentions. In case of psychic distance, it is positively associated with assignment withdrawal intentions ($\beta = 0.22$; $p < .01$) and organization withdrawal intentions ($\beta = 0.21$; $p < .01$). The regression models explain 8% of the variance of withdrawal intentions from the assignment (Adj. $R^2 = 0.08$; $F = 3.07$; $p < .01$) and 7% of the variance of the withdrawal intentions from the organization (Adj. $R^2 = 0.07$; $F = 2.72$; $p < .05$) thus supporting hypotheses H7a) and b). Regarding occupation withdrawal intentions, besides a positive association with psychic distance,

the regression model failed statistical significance, thus not supporting hypothesis H7c). Consistent with predictions, these results indicate psychic distance is a predictor of assignment and organization withdrawal intentions: the higher the perceived cultural differences between home and destination countries, the stronger the intentions to leave the assignment and the organization.

DISCUSSION AND CONCLUSIONS

This research builds on Sousa & Bradley (2008) work, which discussed the conceptual and empirical differences between cultural distance and psychic distance, to examine the association between the two constructs on the one hand, and their influence on expatriation outcomes such as adjustment, satisfaction, and withdrawal intentions, on the other. The research findings suggest cultural distance and psychic distance are distinct and separate constructs having a significant influence on expatriation outcomes.

The analyses indicate that cultural distance correlates positively and significantly with psychic distance, and explains 10% of the variance of psychic distance. This result suggests that individual's perceptions of cultural differences are partially influenced by actual differences in cultural values and norms, while other variables, most likely related with individual experiences, can affect the perception of cultural distinctiveness. In this study, host language fluency emerged as a negative predictor of psychic distance, which suggests that language is an important bridge to decrease cultural gaps, and previous international experience is also another significant positive predictor of psychic distance. Cultural distance and psychic distance are also significant, and yet distinct, predictors of expatriation outcomes.

Regarding expatriation adjustment, results indicate that work and general adjustment tend to be more difficult when cultural distance is wide, which is consistent with earlier empirical evidence (Bhaskar-Shrinivas et al., 2005; Black, Gregersen, Mendenhall & Stroh, 1999), but do not support the cultural similarity hypothesis. Unlike expectations, cultural distance and psychic distance are not significant predictors of adjustment. In other words, expatriates adjust equally well when displaced to familiar or unfamiliar places. Based on this study results, the best predictors for expatriation interaction and general adjustment are spouse adjustment, which confirms earlier evidence (Bhaskar-Shrinivas et al., 2005; Hechanova, Beehr & Neil, 2003; Takeuchi, Yun, & Tesluk, 2002; Takeuchi, Wang & Marinova, 2005). Also, host language fluency and cross-cultural training are significant predictors for expatriation interaction adjustment, regardless of cultural differences. Regarding work adjustment, the single predictor was previous international experience, which supports results from earlier studies (Bhaskar-Shrinivas et al., 2005).

Consistent with predictions, psychic distance (but not cultural distance) is a significant predictor of expatriation satisfaction and withdrawal intentions. In this case, the stronger the perceptions of cultural differences, the lower the satisfaction with the assignment, and the stronger the intentions to leave the assignment and the organization.

Altogether, these results are consistent with the argument that adjustment can be just as difficult to a similar as they are to a very different culture (Brewster, 1995; Selmer, 2006) and corroborate the importance of exploring the concept of cultural differences. Results suggest that individual's assertions of cultural differences are more significant than actual differences, which is consistent with the social learning theory (Bandura, 1977). Accordingly, those entering a new culture tend to focus on the more

familiar aspects of the destination environment, distinguishing only the most visible and salient differences. Perceptions of cultural proximity tend to increase satisfaction with the assignment and decrease withdrawal intentions, but perceptions of cultural differences tend to produce the reverse outcomes. Cultural differences are easier to grasp when expatriates relocate to cultural distant countries, than when they move to countries that might be considered culturally close. Therefore, more relevant than the actual cultural distance seems to be the psychic distance.

This study attempted to fill a gap in the literature by examining the extent to which culture, measured at different levels by cultural distance and psychic distance, influences expatriation. Cultural distance assess culture at a national level and refers to actual cultural differences among countries, measured in terms of broad cultural indices, and psychic distance assess culture at a personal level, and refers to individuals' perceptions of differences between countries. Results lend empirical support to this conceptual distinction. Making this distinction is relevant because results indicate that the expectations expatriates hold about national cultural differences (psychic distance) are more significant to their satisfaction with the assignment and to their intentions to remain or withdraw from the assignment and the organization, than actual cultural differences (cultural distance). Briefly, it's all in the mind when it comes to cultural differences and their implications.

This distinction also helps to make sense of previous contradictory findings on the influence of culture, as most researchers used indistinctly the two concepts. For instance, Selmer (2006, 2007) tested the cultural similarity hypothesis, using a modified measure of psychic distance, which he named "cultural novelty". And Selmer et al. (2007) tested the symmetry assumption of cultural distance employing Hofstede's

cultural indices. While in the initial study, Selmer (2006) found no significant association between culture novelty and socio-cultural adjustment, in the other study, Selmer et al. (2007) rejected the symmetry hypothesis, as German expatriates were found to be better adjusted in the U.S. than American expatriates in Germany. Obviously, none of these studies accounted for the distinction and impact of actual and perceived cultural differences, and that is the gap the current study is seeking to fill.

The findings from the present research are also consistent with the arguments of Reus and Lamont (2008) on the double-side effects of cultural distance in international acquisitions. The authors suggested a model, supported by empirical evidence collected among a sample of U.S. multinationals, postulating that cultural distance impedes communication between acquiring and acquired companies, thus affecting international acquisitions negatively. And yet, cultural distance contributes to successful acquisitions when acquirers use these learning opportunities to improve their integration capabilities. Transposing these arguments to expatriation adjustment, cultural distance might affect adjustment negatively, because it raises uncertainty and ultimately affects the identification of the appropriate behaviours. However, cultural distance associated with individual's perceptions of cultural differences can lead to more and new learning opportunities, and to greater adjustment.

The contributions of this study are threefold. The first refers to the theoretical and empirical clarification of how cultural differences can be assessed at different levels of analysis, namely by contrasting national differences in values and norms (cultural distance) with individuals' perceptions of those differences (psychic distance). The second contribution relates with the extension of the existing knowledge on the effects of cultural differences on expatriation, namely on expatriation adjustment, satisfaction

and withdrawal intentions. The results of this study reveal that cultural distance is not simply positively associated with psychic distance, but both affect differently expatriation: more important than the national cultural differences is the personal perception of those differences. Finally, the third contribution, perhaps the most important one, is that these results open an important route for future research on the effects of culture on expatriation. Based on this study results, one can presume that if cultural distance affects psychic distance, then it is possible that culture distance also affects organizational culture, and both might affect psychic distance. Therefore, psychic distance would reflect not only individual perceptions, resulting from personal experiences abroad, as well as national and organizational differences in culture and norms. Moreover, in context of expatriation, less is known about the relationships between cultural and psychic distance and another equivalent construct, assessed at the organizational level, and named “organizational distance”. In this case, one can presume “organizational distance” could measure the differences between cultural values and norms held by home and host organizational units. The effects of cultural differences, assessed at these different levels: national, organizational, and individual, remain largely unexplored, which can be further studied in future. For instance, regarding the influence of organizational variables, perceived organizational support was found to be positively related with expatriates adjustment (Kraimer et al., 2001); and perceived home and host organizational cultures were found to affect expatriation adjustment, regardless of national cultural differences (Pinto, Cabral-Cardoso & Werther, forthcoming). Thus, further research, exploring these conceptual links is therefore needed, particularly among international employees who are typically exposed to different cultural influences.

In addition to these contributions to theory, this study has also practical implications for individuals and organizations. The findings of this study suggest that individuals can face adjustment difficulties at culturally familiar and unfamiliar contexts. When assigned to a destination perceived to be culturally close, expatriates often feel satisfied with the assignment and reveal fewer intentions to withdraw from it or from the organization. Yet, when difficulties arise, the assignment outcome is more likely to become problematic when individuals are assigned to distant countries. As problems are often attributed to perceived cultural differences, solutions are harder to find. Consequently, expatriation adjustment can be as difficult in lower psychic distant places as in higher cultural distant destinations, but satisfaction and withdrawal intentions can increase with perceived cultural differences. Therefore, organizations and individuals must address expatriation expectations to improve expatriation outcomes. Preparation and training can be useful, since empirical evidence suggests realistic previews positively influence expatriation adjustment (Templer, Tay and Chandrasekar, 2006; Caligiuri, Phillips, Lazarova, Tarique and Burgi, 2001), and many firms underestimate anticipatory adjustment (Black et al., 1991). Appropriate and realistic expectations make all the difference to expatriation success.

This study also has limitations that should be considered when interpreting the findings. The approach adopted – a cross-sectional survey – proved quite useful to examine some relationships unexplored before, but those relationships should not be interpreted as implying one-way influence. Additionally, results are limited by the use of self-reported data that may be under the influence of common method variance. Although precautions were taken to prevent it, the risk of a social desirability bias persists. Finally, adjustment and individuals' perceptions of cultural differences are

evolving processes and the method employed to collect data only captured them at a certain point in time. Therefore, collecting data from other sources in addition to expatriates, such as family and colleagues, and the adoption of a longitudinal approach should be considered in the future to explore these relationships further.

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FIGURE 1

Theoretical Model and Hypotheses

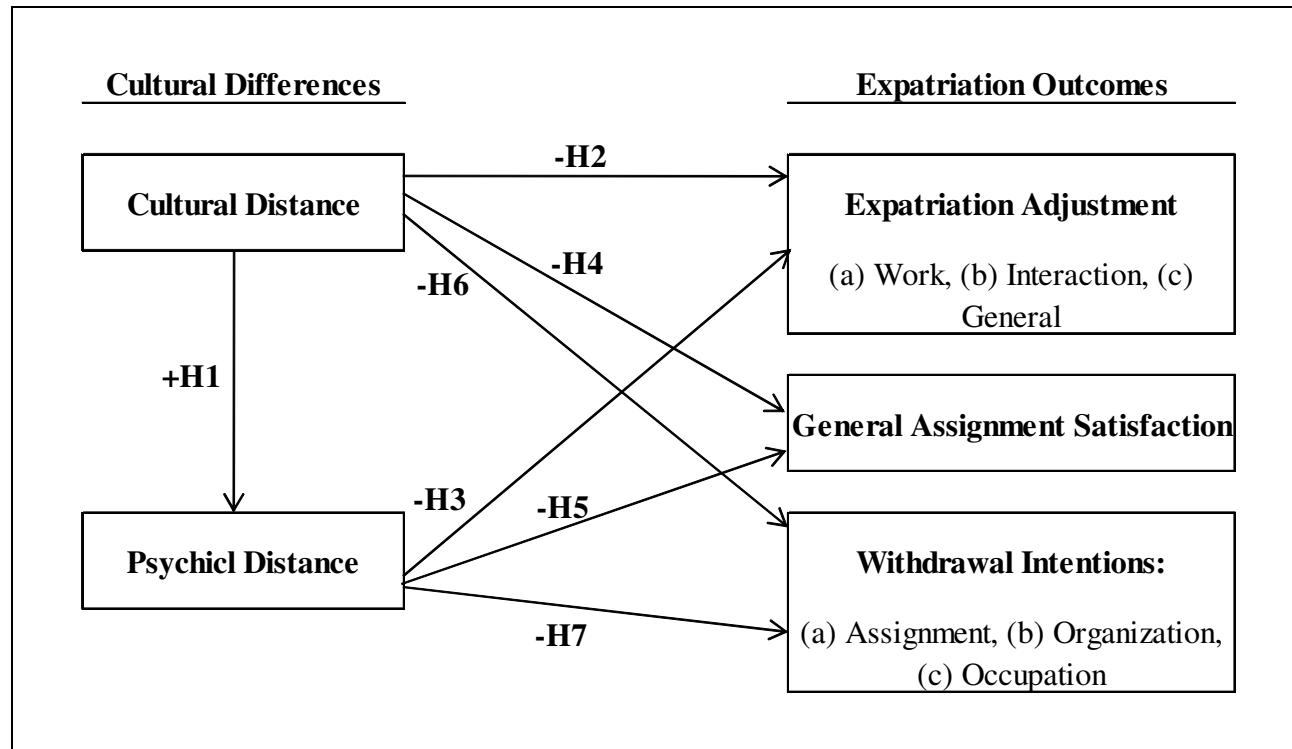


TABLE 1
Intercorrelation matrix

| Variable | N | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|--------------------------------------|-----|-------|-------|-------|-------|--------|---------|--------|---------|--------|---------|---------|---------|---------|--------|--------|-------|-------|
| 1. Previous international experience | 153 | 5.53 | 6.58 | | | | | | | | | | | | | | | |
| 2. Previous cross-cultural training | 162 | 1.33 | 0.47 | 0.08 | -0.03 | | | | | | | | | | | | | |
| 3. Host language fluency | 162 | 2.27 | 1.19 | 0.10 | 0.10 | -0.01 | | | | | | | | | | | | |
| 4. Company experience at destination | 130 | 37.12 | 34.79 | 0.01 | 0.01 | 0.15 | -0.02 | | | | | | | | | | | |
| 5. Work Adjustment | 166 | 5.11 | 1.33 | 0.15 | 0.18 | -0.01 | 0.13 | 0.14 | | | | | | | | | | |
| 6. Interaction Adjustment | 166 | 4.26 | 1.47 | 0.14 | .233* | -0.04 | .323** | 0.11 | .347** | | | | | | | | | |
| 7. General Adjustment | 166 | 4.88 | 1.25 | 0.01 | 0.11 | 0.04 | 0.02 | 0.16 | .494** | .415** | | | | | | | | |
| 8. Interaction Adjustment | 161 | 2.83 | 2.46 | 0.12 | 0.07 | 0.06 | .263** | 0.05 | .220** | .417** | .163* | | | | | | | |
| 9. General Adjustment | 166 | 3.35 | 2.54 | 0.12 | 0.06 | 0.07 | .167* | 0.05 | .243** | .227** | .298** | .859** | | | | | | |
| 10. General Assignment Satisfaction | 166 | 3.56 | 0.98 | 0.06 | 0.14 | .178* | -0.07 | 0.13 | .346** | .265** | .345** | .248** | .274** | | | | | |
| 11. Assignment Withdrawal | 166 | 2.31 | 1.19 | 0.00 | -0.08 | -.154* | 0.07 | -0.16 | -.274** | -.176* | -.205** | -.196* | -.231** | -.562** | | | | |
| 12. Organization Withdrawal | 166 | 2.09 | 1.23 | 0.06 | -0.01 | -.182* | -0.03 | -.185* | -0.12 | -0.11 | -0.08 | -.226** | -.218** | -.447** | .725** | | | |
| 13. Occupation Withdrawal | 166 | 2.05 | 1.12 | -0.11 | -0.17 | -0.08 | 0.08 | -0.15 | -0.10 | -0.03 | -0.03 | -0.12 | -0.15 | -.310** | .627** | .735** | | |
| 14. Psychic Distance | 166 | 3.60 | 0.06 | 0.14 | 0.12 | 0.02 | -0.09 | -0.17 | 0.10 | 0.05 | 0.02 | 0.04 | 0.08 | -0.12 | 0.12 | 0.08 | 0.03 | |
| 15. Cultural Distance | 158 | 2.06 | 0.11 | 0.00 | -0.12 | 0.08 | -.397** | -0.09 | -0.11 | 0.08 | -0.08 | -0.06 | -0.03 | 0.10 | -0.08 | -0.09 | -0.08 | .176* |

Notes: ** $p < .01$ level; * $p < .05$

TABLE 2

Hierarchical Regression Models of Cultural Distance and Psychic Distance and Expatriation Outcomes

| Variables | Psychic Distance β | Adjustment β | | | | | | General Assignment Satisfaction β | | Withdrawal Intentions β | | | | | |
|-----------------------------------|--------------------------|--------------------|---------|-------------|---------|---------|---------|---|---------|-------------------------------|---------|--------------|---------|------------|--------|
| | | Work | | Interaction | | General | | | | Assignment | | Organization | | Occupation | |
| | | Model 1 | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 | |
| Step 1 - Individual demographics | | | | | | | | | | | | | | | |
| Host language fluency | -0.21* | 0.02 | 0.05 | 0.32** | 0.28** | 0.07 | 0.13 | -0.03 | -0.09 | 0.05 | 0.13 | -0.05 | 0.03 | -0.04 | 0.01 |
| Previous cross-cultural training | 0.06 | -0.09 | -0.11 | -0.14* | -0.14* | 0.00 | -0.03 | 0.13 | 0.13 | -0.13 | -0.15 | -0.10 | -0.12 | 0.00 | -0.03 |
| Previous international experience | 0.16* | 0.16* | 0.12 | 0.12 | 0.09 | -0.02 | -0.06 | 0.02 | 0.04 | 0.03 | 0.00 | 0.11 | 0.08 | -0.08 | -0.10 |
| Adjusted R ² | 0.05 | 0.02 | 0.02 | 0.11 | 0.12 | -0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | -0.01 | -0.01 |
| F value | 3.07* | 2.24 | 1.88 | 7.68*** | 8.29** | 0.65 | 0.81 | 1.12 | 0.73 | 1.49 | 1.44 | 1.68 | 1.63 | 0.68 | 0.63 |
| Step 2 - Employer demographics | | | | | | | | | | | | | | | |
| Foreign experience at destination | -0.06 | 0.09 | 0.09 | 0.10 | 0.06 | 0.10 | 0.11 | 0.04 | 0.01 | -0.14 | -0.12 | -0.15 | -0.13 | -0.13 | -0.11 |
| Adjusted R ² | 0.08 | 0.03 | 0.03 | 0.11 | 0.12 | 0.00 | 0.00 | 0.00 | -0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.00 | 0.00 |
| F value | 3.19** | 2.07 | 1.68 | 6.08*** | 6.48** | 0.91 | 0.94 | 0.91 | 0.59 | 1.93 | 1.87 | 2.08 | 2.06 | 1.13 | 1.02 |
| Step 3 - Spouse adjustment | | | | | | | | | | | | | | | |
| Spouse Interaction Adjustment | 0.04 | 0.03 | -0.03 | 0.71*** | 0.68** | -0.30** | -0.33* | 0.01 | 0.00 | 0.07 | 0.06 | 0.16 | 0.14 | 0.14 | 0.13 |
| Spouse General Adjustment | 0.06 | 0.20 | 0.21 | -0.50** | -0.47** | 0.49** | 0.50** | 0.19 | 0.23 | -0.22 | -0.26 | -0.25 | -0.27 | -0.23 | -0.25 |
| Adjusted R ² | 0.06 | 0.07 | 0.05 | 0.24 | 0.23 | 0.06 | 0.06 | 0.02 | 0.02 | 0.04 | 0.04 | 0.03 | 0.03 | 0.01 | 0.01 |
| F value | 2.28* | 2.84* | 2.42* | 9.25*** | 9.31** | 2.60* | 2.69* | 1.63 | 1.56 | 2.02 | 2.23* | 1.18 | 1.95 | 1.18 | 1.16 |
| Step 4 - Culture predictors | | | | | | | | | | | | | | | |
| Cultural Distance | 0.11* | -0.08 | | 0.21 | | -0.07 | | -0.01 | | 0.01 | | -0.02 | | 0.03 | |
| Psychic Distance | | | 0.04 | | 0.08 | | 0.07 | | -0.24** | | 0.22** | | 0.21** | | 0.18** |
| Regression Model | | | | | | | | | | | | | | | |
| Explained Variance R ² | 0.11 | 0.11 | 0.09 | 0.31 | 0.27 | 0.10 | 0.10 | 0.06 | 0.11 | 0.07 | 0.12 | 0.07 | 0.11 | 0.05 | 0.07 |
| Adjusted R ² | 0.10 | 0.06 | 0.04 | 0.27 | 0.23 | 0.06 | 0.06 | 0.02 | 0.07 | 0.03 | 0.08 | 0.03 | 0.07 | 0.00 | 0.03 |
| F value | 1.99* | 2.55* | 2.09* | 9.52*** | 8.15** | 2.33* | 2.41* | 1.39 | 2.67* | 1.73 | 3.07** | 1.61 | 2.72* | 1.02 | 1.68 |

Notes: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; $n = 166$. Model 1: regression analysis with cultural distance as main predictor; Model 2: regression analysis with psychic distance as main predictor. Values are standardized regression coefficients (β) of the final model, with significance of t , except for the regression model, where rows represent explained variance (R) and F values.