The intercultural adaptation of expatriate spouses and children

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Chapter 5

The Determinants of Intercultural Adaptation Among Expatriate Spouses

In this chapter, we discuss the results of an empirical study of the intercultural adaptation of expatriate spouses, where the model presented in Chapter 4 was (see Figure 4.1) was tested. We start this chapter with the method employed to recruit expatriate spouses for the study. Next, the demographic characteristics of expatriate spouses who participated in the study are discussed. Then follows a description of all the measures that were used. Subsequently, the empirical results of the first study are presented and followed by the results of the longitudinal study. We end this chapter by discussing the implication of the findings.

5.1 Method

5.1.1 Procedure

Stage 1 (First stage of pilot study)
There are a number of expatriate spouses organizations scattered all over the Netherlands. An expatriate spouses organization, ACCESS in The Hague was contacted. ACCESS is a non-profit organization that aims to help all nationalities to settle in the Netherlands. A lot of expatriate spouses work for ACCESS as volunteers. The researcher volunteered himself at ACCESS as a means of familiarization with the sample of the present study. Another objective of volunteering was to get information and to form a general impression of the lives of expatriate spouses in an informal setting. First, a number of unstructured interviews with expatriate spouses were carried out at ACCESS. The purpose of the interviews was to obtain more specific information on the expatriate spouses' experiences during their stay in a foreign country. The experiences gained from these interviews together with the results from a literature review were used to develop the first version of the questionnaire.

Stage 2 (Second stage of pilot study)
For each of the model variables, existing scales were selected and a few scales were developed. The first version of the questionnaire was a combination of semi and fully structured questions. A second pilot study was performed in order to test the suitability of the developed questionnaire. This phase of the study was carried out in the Netherlands. During interviews the questionnaire was presented to twenty participants and they were asked to complete the questionnaire. In addition, they were interviewed about their experiences in adjusting to the new environment. More specifically they were asked to provide their ideas and opinions with respect to the support and assistance they received from their partners and their respective companies. At the end we asked them how they felt while answering the questions. In addition, they were asked to comment on the questions in the questionnaire. The feedback and comments from expatriate spouses were used to adjust the questionnaire.

Stage 3 (Distribution of the questionnaires at T1)
At Time 1 (T1), approximately 80 organizations for expatriate spouses all over the world were approached for participation in the final study (e.g., Hong Kong, Malaysia, Egypt, South Africa, Brazil, United States of America, Russia, France and the Netherlands). Thirty-two of these

organizations expressed their willingness to participate. The contact persons of the organizations further distributed the questionnaires among the members (for a complete sample of the questionnaire, see Appendix B). Completed questionnaires were either collected through the organizations or were returned by individual participants in a stamped, self-addressed envelope. In addition, members of expatriate's clubs listed on the World Wide Web (internet) were approached and they received and returned their questionnaires through electronic mail.

Stage 4 (Longitudinal Study, T2)
After a year interval, Time 2 (T2), a second set of questionnaires containing the indicators of intercultural adaptation, among other things, were sent to participants who in the first questionnaires mentioned their consent to participate in the second study. In that way, we were able to examine the longitudinal effect of our model variables on expatriate spouses' intercultural adaptation.

5.1.2 Participants

In total, 1000 questionnaires were sent out and finally, 275 were returned (response rate 27.5%). Although this figure seems rather low, it is at least comparable and in most cases higher than figures reported in other international studies (e.g., Black & Gregerson, 1991; Tung, 1981). Out of 275 questionnaires, 248 were usable for data analysis. The participants of the present study consisted of expatriate spouses (both males or females), both repatriated and currently expatriating, residing all over the world. The participants were from 29 different countries, the majority of whom came from the United Kingdom (24.6%), United States of America (18.1%), Australia (8.9%), and the Netherlands (8.5%).

The majority of participants were female; 6.9% was male. In terms of age, 6.9% was aged between 20-29 years, 31% between 30-39 years, 33.9% between 40-49 years, 27% between 50-59 years, and 1.2% above 60 years. 38.9% of the respondents resided in large cities (population over 500,000); 21.1% lived in cities (200,000 to 500,000); 24.7% settled in small cities (25,000 to 200,000), and 15.4% stayed in towns (less than 25,000). Of the respondents, 76.2% had one or more children. The respondents' partners mostly worked in the technology sector (36.7%), service sector (19.0%), manufacturing sector (12.9%), and other sectors (31.4%). Most of the respondents stated that the total annual family income (US$; 2001 level) in their family was over $90,000 (40.1%); $70,001 to $90,000 (25.6%); $50,001 to $70,000 (18.5%); $35,001 to

$50,000 (9.3%), and less than $35,000 (6.6%). The sample was highly educated: 34.1% obtained higher education and 17.1% had a university degree. The majority of the spouses were not engaged in either paid or volunteer work; 23.4% of the respondents worked full-time or part-time and 27.0% was engaged in volunteer work. Participants had been expatriated an average 1.5 times and had been living abroad for 8.0 years (SD = 8.5). In total, 63.7% of the respondents visited the host country prior to international relocation; 38.1% of the respondents indicated that they were able to speak the host country's language.

At T2, after one-year period, the participants from the present study who indicated in the questionnaires that they were willing to participate in the follow-up study were contacted. 150 questionnaires were sent via regular mails and electronic mails. This time, among other things, the questions on the three indicators of intercultural adaptation were included (i.e., Psychological Well-being, Intercultural Interaction, and Socio-cultural Adjustment). Twelve email addresses were rejected and three regular mails were undelivered indicating the high mobility rates among the expatriates. Nevertheless, 50 completed questionnaires were returned (30.0 % return rate). Two of the participants mentioned that they had separated from their partners. Another two participants had been relocated to their home countries and via e-mail contacts, they were asked to refer to their last few months of experiences in the host countries while answering the questionnaires. One of the participants stated that only she had moved back to the home country while her husband was still working in the Netherlands. The participants were from 25 different countries, in majority from the United Kingdom (30.0%), the Netherlands (12.0%), United States of America (7.0%), Australia (8.0%) and the rest (43.0%).

At Time 2, all the respondents were females. In terms of age, 8% was aged between 20-29 years, 38% between 30-39 years, 26% between 40-49 years, 24% between 50-59 years, and 4% above 60 years. 34.0% of the respondents resided in large cities (population over 500,000); 12.0% lived in cities (200,000 to 500,000); 30.0% settled in small cities (25,000 to 200,000), and 24.0% stayed in towns (less than 25,000). Of the respondents, 76.0% had one or more children. The respondents' partners mostly worked in the technology sector (14.0%), service sector (26.0%), manufacturing sector (34.0%), and other sectors (26.0%). Most of the respondents stated that the total annual family income (in US Dollar) in their family was over $90,000 (41.9%); $70,001 to $90,000 (20.9%); $50,001 to $70,000 (16.3%); $35,001 to $50,000 (7.0%), and less than $35,000 (14.0%). The sample was highly educated: 34.0% had a higher educational level and 18.0% had a university degree. The majority of the

spouses were not engaged in either paid or volunteer work (52.0%); 24.0% of the respondents worked full-time or part-time, and 24.0% was engaged in volunteer work. Participants had been expatriated an average 1.5 times and had been living abroad for 8.1 years (SD = 8.5). In total, 68.0% of the respondents visited the host country prior to international relocation and 44.0% of the respondents indicated that they were able to speak the host country's language.

Chi-square test revealed that the non-respondents at T2 did not differ from respondents at T1 with respect to gender, age, city size, visited the home country prior to the relocation, number of children, partners' industry sector, annual income, education level, employment status, and local language. A look at the distributions (in percentage) suggests that respondents and non-respondents are much alike in most of the cases. Apparently, the non-response occurred aselects.

5.1.3 Instruments

At T1, a questionnaire was developed to obtain demographical information. In addition, it incorporated features from the Multicultural Personality Questionnaire (Van der Zee & Van Oudenhoven, 2000) and Family Inventories (Olson, McCubbin et al., 1992). The questionnaire also contained a scale, which measured support from the company, and a scale in which the expatriates' work satisfaction could be used to reflect the intercultural adaptation of expatriate spouses. The final section assessed respondents' intercultural adaptation that consisted of questions concerning psychological well-being, intercultural interaction (interaction with the local nationals) as well as scales related to socio-cultural adjustment.

Both independent and dependent variables were entered at T1. At T2, the participants' intercultural adaptation was measured again, which included psychological well-being, intercultural interaction, and socio-cultural adjustment.

5.1.3.1 Demographic information

In the first section, respondents were asked to provide information with respect to their gender, age, and their home country. Regarding the host country, respondents were asked to state their present host country, the countries where they have lived before, duration of their stay abroad (in years and months), the size of the city where they were residing according to population size and if they have visited the host country prior to

expatriation. In addition, respondents were also asked about general personal circumstances which included the number of children, the sector in which their partners worked, the family annual income (in US $), their highest completed level of education, their employment status in the host country, and finally, their ability to speak the local language.

5.1.3.2 Personality

The Multicultural Personality Questionnaire (MPQ) was developed by Van der Zee and Van Oudenhoven (2000) as a multidimensional instrument to measure multicultural effectiveness of expatriates. Participants could give their answers on a 5-point scale, from [1] not at all applicable to [5] totally applicable. It took participants approximately 10 to 15 minutes to complete the entire questionnaire of 91 items that covered five dimensions: Cultural Empathy (18 items, α = .87), Open-mindedness (18 items, α = .87), Social Initiative (17 items, α = .78), Emotional Stability (20 items, α = .75), and Flexibility (18 items, α = .78). Scale scores were obtained by taking the unweighted mean of the item scores, after first recoding the items that were mirrored. In case of missing values, the personal mean over the remaining scale items was computed, provided at least half of the items were answered. Examples of items from the Cultural Empathy scale are "Tries to understand other people's behaviour" (+) and "Finds it hard to emphasize with others" (-). Examples of items from the Open-mindedness scale are "Tries out various approaches" (+) and "Puts his or her own culture in a perspective" (+). "Takes initiatives" (+) and "Is a slow starter" (-) are two examples of the items from the Social Initiative scale. Examples of items from the Emotional Stability scale are "Is not easily hurt" (+) and "Is nervous" (-) and finally, two examples of items from the Flexibility scale are "Changes easily from one activity to another" (+) and "Avoids surprises" (-).

5.1.3.3 Family Inventories

The scales for family cohesion, adaptability, and communication were drawn from Family Inventories, which were developed by Olson, McCubbin et al. (1992 and permission granted). For the purpose of the present study, only the items that were applicable to expatriate spouses' in a host country were selected. Family cohesion was defined as the emotional bonding that family members share with each other. The construct was measured by nine items on a 5-point answering scale ranging from [1] strongly disagree to [5] strongly agree. Examples of items are "Family members are supportive of each other during difficult times" (+) and "Family members feel very close to each other" (+)

(α = . 92). Family adaptability refers to the extent to which the family system is flexible and able to change. Respondents were asked to answer nine items on a 5-point Likert-type scale, ranging from [1] strongly disagree to [5] strongly agree. Sample items are "Things work out well for us as a family" (+) and "Sometimes I feel lonely or homesick and cannot concentrate on my daily activities" (-) (α = .75). Third, family communication was measured by eight items on a 5-point scale ranging from [1] strongly disagree to [5] strongly agree. Examples of items are "I find it easy to discuss problems with my family members" (+) and "I am happy about how we make decisions and resolve conflicts" (+) (α =. 92).

5.1.3.4 Support from Company

For the purpose of the present study, a scale was developed which aimed to measure the support that expatriate spouses received before and during the expatriation period. Participants were asked to evaluate the information package about the country given by the company, cultural training program, assistance in employment opportunities, and financial support on a 5-point Likert-type scale from [1] strongly disagree to [5] strongly agree. Examples of items are "The company provided us with the information (books, brochures etc.) about the host country" (+) and "There was cultural training provided by the company" (+). The internal consistency of this scale was moderate, α = .67 probably due to the fact that respondents in majority indicated that they "strongly disagreed" with the statements (a consistency in answering pattern exist).

5.1.3.5 Expatriates' Work Satisfaction

An additional (10-item) scale was developed in order to measure the expatriates' work satisfaction from their spouses' point of view. Examples of these items are, "My partner likes the working climate in the organization he/she works for" (+) and "My partner complains more about his/her work than he/she used to" (-). A 5-point scale was used, ranging from [1] strongly disagree to [5] strongly agree. The reliability of this scale was moderate (α = .70).

5.1.3.6 Intercultural Adaptation

Since there are three different aspects of intercultural adaptation, we were interested in examining the dependent variables of the model separately. First, in order to measure the psychological well-being of expatriate spouses in the host country, we used the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985). This scale has five

items referring to general satisfaction with life (e.g., "In most ways my life is close to my ideal" (+) and "I am satisfied with my life, everything taken together" (+)). Participants could respond according to a 5-point scale ranging from [1] strongly disagree to [5] strongly agree. The reliabilities of this scale at both times were high, α = .90 at T1 and α = .92 at T2.

Second, a scale was developed in order to measure the Intercultural Interaction/Interaction with Local People. The participants were asked to rate their interaction with local nationals on a 5-point Likert-type scale ranging from [1] strongly disagree to [5] strongly agree. Examples of the items are, "I spend some time with the local nationals" (+) and "I feel comfortable talking to local people" (+). This scale was moderately reliable, α =. 71 at T1 and acceptable at T2, α = .86.

Third, to measure the expatriate spouses' Socio-cultural Adjustment, that is, the expatriate spouses' adjustment to the general and external environment in the host country, 10 items were drawn from Black's (1988) study on expatriates. Expatriate spouses were asked to rate their socio-cultural adjustment on a 7-point Likert-type scale ranging from [1] not adjusted at all to [7] completely adjusted. Examples of the items are "Health care facilities" and "Living conditions in general". The reliability estimates for this scale were high at both times, α =. 90 at T1 and α = .92 at T2.

5.2 Results

First, we were interested in the pattern of intercorrelations between the independent variables in our model. As can be seen in Table 5.1, the MPQ scales were significantly related to three family characteristics. The only exception concerned the correlation between Flexibility and Family Cohesion that failed to reach significance level. With respect to the work-related variables, it was found that, whereas all MPQ scales except Flexibility correlated significantly with expatriate work satisfaction, only Cultural Empathy and Emotional Stability were significantly related to support from the company. All MPQ scales were significantly and positively related to Intercultural Interaction. The three family characteristics appeared to be significantly related to Expatriates' Work Satisfaction, but unrelated to Support from Company. It must be noted that the intercorrelations between personality-, family- and work-related variables were not very high, and we felt justified to discriminate between them. In addition, the intercorrelations between the dependent variables were significantly related but they were dependent enough to regard as

Table 5.1
Correlations Between the Variables

	2	3	4	5	6	7	8	9	10	11	12	13
1. Cultural Empathy	.69**	.52**	.29**	.22**	.36**	.35**	.31**	.34**	.16**	.30**	.30**	.21**
2. Open-mindedness		.68**	.41**	.41**	.31**	.25**	.25**	.02	.22**	.39**	.35**	.39**
3. Social Initiative			.54**	.48**	.25**	.23**	.17**	.11	.19**	.35**	.23**	.27**
4. Emotional Stability				.46**	.38**	.35**	.32**	.19**	.28**	.47**	.18**	.16*
5. Flexibility					.15*	.19**	.11	.11	.12	.23**	.18**	.22**
6. Family Cohesion						.70**	.74**	.06	.25**	.45**	.23**	.01
7. Family Adaptability							.69**	.10	.29**	.49**	.27**	.09
8. Family Communication								.09	.26**	.41**	.17**	.07
9. Support from Company									.19**	.20**	.11	.09
10. Expatriates' Work Satisfaction										.32**	.26**	.29**
11. Psychological Well-being											.47**	.27**
12. Socio-cultural Adjustment												.45**
13. Intercultural Interaction/Interaction with Locals												

*correlation is significant at the 0.05 level (2-tailed)
** correlation is significant at the 0.01 level (2-tailed)

separate variables. Moreover, we were interested in the predictive value of the model variables against the three separate indicators of intercultural adaptation.

5.2.1 Personality Characteristics and Intercultural Adaptation

The first hypothesis concerned the relation between personality and adaptation. As Table 5.1 shows, the five MPQ scales were by no means independent. Particularly the scales for Cultural Empathy and Open-mindedness and the scales for Open-mindedness and Social Initiative were highly interrelated. It was nevertheless decided to consider them as separate scales. To what extent did the MPQ scales 'predict' intercultural adaptation? Examining the raw correlations (Table 5.1), it was found that all five dimensions were significantly related to the three indicators of adaptation. Hierarchical regression was performed to examine the independent predictive value of the MPQ scales against the three indicators of adaptation. Subsequently, Psychological Well-being, Intercultural Interaction, and Socio-cultural Adjustment were regressed on the MPQ scales. As Table 5.2 reveals, Open-mindedness appeared as a significant predictor of all three criteria. Psychological Well-being was also significantly predicted by Emotional Stability.

Table 5.2
Results from Hierarchical Regression Analysis of Intercultural Adaptation According to the MPQ dimensions

Dependent variable: Psychological Well-being			
	β	R	R^2
Cultural Empathy	.05		
Open-mindedness	.23**		
Social Initiative	-.03		
Emotional Stability	.40**		
Flexibility	-.05	.53	.28
Dependent variable: Intercultural Interaction/Interaction with local people			
	β	R	R^2
Cultural Empathy	-.09		
Open-mindedness	.44**		
Social Initiative	-.01		
Emotional Stability	-.02		
Flexibility	.07	.40	.16

Dependent variable: Socio-cultural Adjustment	ß	R	R^2
Cultural Empathy	.11		
Open-mindedness	.29**		
Social Initiative	-.07		
Emotional Stability	.16		
Flexibility	.15	.37	.14

Significance level : ***p<.001, **p<.01, *p<.05

There may be a problem of collinearity because MPQ scales are interrelated. Nevertheless, the relative strength of each dimension as a predictor of adaptation equaled the relative strength of the raw correlations.

5.2.2 Family Characteristics and Intercultural Adaptation

The family characteristics appeared unrelated to the amount of interaction with the locals. Significant raw correlations of all three family characteristics with both Satisfaction with Life and Socio-cultural Adjustment were found. Again, hierarchical regression analysis was performed to examine the independent predictive value of Family Cohesion, Family Communication, and Family Adaptability against adaptation criteria. As Table 5.3 reveals, both Psychological Well-being and Socio-cultural Adjustment were significantly predicted by Family Cohesion, whereas Psychological Well-being was also significantly predicted by Family Adaptability. Family Communication did not appear as an independent predictor of spouses' intercultural adaptation. Again, there may be a problem of collinearity because the family characteristics are interrelated. However, the relative strength of each dimension as a predictor of adaptation equalled the relative strength of the raw correlations.

Table 5.3
Results from Hierarchical Regression of Intercultural Adaptation According to Family Characteristics

Dependent variable: Psychological Well-being	ß	R	R^2
Family Cohesion	.19*		
Family Adaptability	.33**		
Family Communication	.04	.51	.26

Dependent variable: Intercultural Interaction/Interaction with local people			
	ß	R	R^2
Family Cohesion	-.13		
Family Adaptability	.15		
Family Communication	.05	.13	.02
Dependent variable: Socio-cultural Adjustment			
	ß	R	R^2
Family Cohesion	.14		
Family Adaptability	.23**		
Family Communication	-.09	.28	.08

Significance level: ***p<.001, **p<.01, *p<.05

5.2.3 Expatriates' Work Characteristics and Intercultural Adaptation

The third group of independent variables in our model concerned aspects of expatriates' work characteristics. In the present study, we focused on support from the international company and the extent to which the expatriates were satisfied with their job. The pattern of raw correlations revealed that Support from Company was only significantly related to Psychological Well-being, whereas Expatriates' Work Satisfaction was significantly related to the three indicators of intercultural adaptation. Regression analyses confirmed this pattern of findings (Table 5.4).

Table 5.4
Results of Hierarchical Regression of the Intercultural Adaptation of expatriate spouses on Aspects of Expatriates' Work Characteristics

Dependent variable: Psychological Well-being			
	ß	R	R^2
Expatriates' Work Satisfaction	.30***		
Support from Company	.14*	.36	.13
Dependent variable: Intercultural Interaction/Interaction with local people			
	ß	R	R^2
Expatriates' Work Satisfaction	.28***		
Support from Company	.03	.29	.08
Dependent variable: Socio-cultural Adjustment			
	ß	R	R^2
Expatriates' Work Satisfaction	.25***		
Support from Company	.06	.27	.07

Significance level : ***p<.001, **p<.01, *p<.05

5.2.4 Personality, Family, and Expatriates' Work Characteristics and Intercultural Adaptation

In the previous sections, support was provided for the predictive value of personality, family and work characteristics in relation to intercultural adaptation. Finally, we performed a regression analysis with all the model variables in one equation. Table 5.5 shows the results from regression analysis. Only significant predictors are included in the table. Psychological Well-being was best predicted from the personality variables of Open-mindedness and Emotional Stability, the family variables of Cohesion and Adaptability, and finally from Support from Company. Together, these variables explained 39% of variance. The extent to which spouses interacted with the locals was significantly predicted by Open-mindedness and Expatriates' Work Satisfaction (20% of variance). Finally, expatriate spouses' Socio-cultural Adjustment was predicted by Open-mindedness, Family Adaptability, and Expatriates' Work Satisfaction.

Table 5.5
Results from Hierarchical Regression of Significant Predictors

Dependent variable: Psychological Well-being			
Variables	R	R^2	β
Open-mindedness			.18**
Emotional Stability			.24***
Family Cohesion			.17*
Family Adaptability			.20**
Support from Company	.62	.39	.11*

Dependent variable: Intercultural Interaction/Interaction with the locals			
Variables	R	R^2	β
Open-mindedness			.34***
Expatriates' Work Satisfaction	.42	.20	.18*

Dependent variable: Socio-cultural Adjustment			
Variables	R	R^2	β
Open-mindedness			.28***
Family Adaptability			.13*
Expatriates' Work Satisfaction	.42	.18	.16**

Significance level : ***p<.001, **p<.01, *p<.05

5.2.5 Demographic Characteristics and Intercultural Adaptation

Finally, we explored the relationship between a number of demographic characteristics and our chosen indicators of intercultural adaptation. With respect to biographical characteristics, having children had little impact on the indicators of adaptation or on the independent variables. Only Family Cohesion was weakly and negatively related to the number of children ($r = -.11$, $p < .05$), indicating that the more children, the less cohesion among the family members.

Second, we were interested in the impact of employment status on adjustment. No multivariate effect of being employed on indicators of adjustment was found, $F < 1$. We did find a univariate significant effect for intercultural interaction, $F(2, 246) = 3.14$, $p < .05$, indicating the highest level of intercultural interaction among spouses who were engaged in paid employment ($M = 3.81$) and interestingly the lowest level of interaction among spouses who engaged in volunteer work ($M = 3.49$). The non-working group scored in-between ($M = 3.61$). This finding should be treated with caution, however, because of the insignificant multivariate result. With respect to the independent variables, personality was related to employment status, $F(10, 476) = 1.83$, $p < .05$. Univariate, a significant effect was found for Flexibility, $F(2, 242) = 3.00$, $p < .05$. Interestingly, spouses who undertook volunteer work were more flexible ($M = 3.41$) than non-working spouses or spouses engaged in paid employment ($M = 3.23$). Although no multivariate effect of being employed on family characteristics was found, $F(6, 482) = 1.21$, n.s., a univariate significant effect was found on Family Cohesion, $F(2, 243) = 2.61$, $p < .05$. Not surprisingly, the level of Family Cohesion was the highest when the spouse was not working ($M = 4.14$), followed by spouses who were volunteers ($M = 4.04$). Working spouses scored the lowest level of Family Cohesion ($M = 3.89$). Again, this finding should be treated with caution. The employment status of the spouse was unrelated to Expatriates' Work Satisfaction and Support from Company.

The annual income of the expatriate family did have an impact on the adjustment of spouses. Interestingly, the higher the family income, the higher the Psychological Well-being of the expatriate spouses ($r = .12$, $p < .05$) and the higher their Socio-cultural Adjustment ($r = .12$, $p < .05$), but the lower the level of Intercultural Interaction ($r = -.14$, $p < .05$). It must be noted however that these relations are rather weak. Annual income was also related to the personality scores. The higher the family income, the higher the spouses scored on Cultural Empathy ($r = .12$, $p < .05$), Social Initiative ($r = .20$, $p <. 05$), Emotional Stability ($r = .14$, $p <$

.05) and Flexibility (r = .12, p < .05). Family income was unrelated to the family and work-related predictors of adjustment.

In addition, multivariate analyses revealed that being able to speak the language of the host country had an effect on intercultural adaptation, F(3, 231) = 5.20, p < .01. At the univariate level significant effects were found for Intercultural Interaction, F(1, 233) = 6.24, p < .01, and Socio-cultural Adjustment, F(1, 233) = 8.91, p < .01. Not surprisingly, participants who were able to speak the language of the host country revealed higher levels of Intercultural Interaction (M = 3.84 versus M = 3.51) and higher levels of Socio-cultural Adjustment (M = 5.60 versus M = 5.21). Interestingly, where the predictors of adaptation were concerned, command of the host country language also appeared to be related to personality, F(5, 228) = 4.63, p < .01. At the univariate level findings appeared to be significant for Open-mindedness, F(1, 232) = 8.72, p < .01 and Flexibility F(1, 223) = 2.77, p < .05. The group that was unable to speak the local language scored lower on both traits (M = 3.57 and 3.22 for Open-mindedness and Flexibility, respectively) than the group that did speak the local language (M = 3.75 and 3.34, respectively). No effects of language on the family and work related variables were found.

Having visited the host country prior to relocation was found to have a multivariate significant effect on spouses' adaptation, F (3, 242) = 2.78, p < .05. At the univariate level, this effect was solely significant for Socio-cultural Adjustment, F(1, 244) = 8.25, p < .01, revealing a higher level of Socio-cultural Adjustment among spouses that did visit the host country prior to relocation (M = 5.50) than among spouses that did not (M = 5.12).

Finally, duration of stay in the host country was related to Psychological Well-being (r = .11, p < .05), Intercultural Interaction (r = .15, p < .05), and Socio-cultural Adjustment (r = .30, p < .01). Moreover, this variable was also related to three of the five personality variables: Cultural Empathy (r = .17, p < .01), Open-mindedness (r = .21, p < .05), and Social Initiative (r = .14, p < .05), indicating higher levels of these traits among spouses who were expatriated for a longer time. The family and work-related variables were unrelated to duration of stay.

Table 5.6 summarizes the major findings of the present study at T1.

Table 5.6
Major Findings on Expatriate Spouses' Intercultural Adaptation

	Psychological Well-being	Intercultural Interaction	Socio-cultural Adjustment
1. Cultural Empathy			
2. Open-mindedness	X	X	X
3. Social Initiative			
4. Emotional Stability	X		
5. Flexibility			
6. Family Cohesion	X		
7. Family Adaptability	X		X
8. Family Communication			
9. Support from company	X		
10. Expatriates' Work Satisfaction	X	X	X
11. Employment status		X	
12. Annual income	X		X
13. Command of the local language		X	X
14. A visit prior to the relocation			X
15. Duration of stay (total number of years of expatriation)	X	X	X

X – significant relationship

5.3 Results of Longitudinal Study on Expatriate Spouses' Intercultural Adaptation

Table 5.7 presents the median and standard deviation of the three indicators of intercultural adaptation of the 50 respondents at both T1 and T2. No significant increase in the mean of Psychological Well-being was found and both the means of Intercultural Interaction and Socio-cultural Adjustment decreased marginally over a time interval of a year.

Table 5.7
Median and Standard Deviation of the Three Indicators of Intercultural Adaptation

	T1		T2		
	M	SD	M	SD	F
Psychological Well-being	3.69	.76	3.71	1.00	$F(1, 49) = 0.03$, n.s.
Intercultural Interaction /Interaction with the local people	3.87	.71	3.47	.79	$F(1, 49) = 8.78$, $p < .00$
Socio-cultural Adjustment	5.82	.84	5.11	1.38	$F(1,49) = 9.78$, $p < .00$

5.3.1 Correlations Between Variables and the Indicators of Intercultural Adaptation

First, we look at the correlations between the variables from the first study, which include all the independent variables and the three indicators of intercultural adaptation at both Time 1 and Time 2 (see Table 5.8).

Correlations between Variables and Well-being

At T1, all the variables except Cultural Empathy appeared as significant predictors of expatriate spouses' Well-being. However, at T2, only Social Initiative, Emotional Stability, and Flexibility displayed marginal correlations with expatriate spouses' Psychological Well-being. However, no significant relationship was found in the partial correlation (after controlling for Well-being at T1).

Correlations between Variables and Intercultural Interaction

At T1, personality characteristics (Cultural Empathy, Open-mindedness, and Social Initiative) dominated as significant predictors of expatriate spouses' Intercultural Interaction/Interaction with locals. Moreover,

Table 5.8
Correlations between the Variables

	Well-being			Intercultural Interaction			Socio-cultural Adjustment		
	T1	T2	T2(T1) β	T1	T2	T2(T1) β	T1	T2	T2(T1) β
1. Cultural Empathy	.08	.00	-.03	.26*	-.00	-.06	.25*	-.01	.01
2. Open-mindedness	.44***	.09	-.09	.39***	.38***	.34***	.41***	.24*	.28*
3. Social Initiative	.39***	.29**	.17	.29**	.15	.10	.13	.41***	.41***
4. Emotional Stability	.51***	.30**	.15	.15	.15	.12	.04	.26*	.26*
5. Flexibility	.21*	.25*	.18	-.00	.23*	.23*	.00	.40***	.40***
6. Family Cohesion	.27*	.13	.03	-.02	-.02	-.01	.06	.08	.08
7. Family Adaptability	.56***	.15	-.08	.34***	.11	.03	.22*	.07	.06
8. Family Communication	.27**	.16	.07	.01	-.02	-.02	-.03	.10	.11
9. Support from Company	.20*	.05	-.01	.18	.02	-.03	.06	-.13	-.12
10. Expatriates' Work Satisfaction	.41***	.01	-.10	.37***	.21*	.15	.21*	-.14	-.05

Correlations at 1-tailed : p* <.1, p* * < .05, p*** < .01

Family Adaptability and Expatriates' Work Satisfaction displayed significant correlations with this variable. In contrast, at T2, only Open-mindedness and Expatriates' Work Satisfaction turned out to be significant predictors. Interestingly, Flexibility appeared to show a marginal correlation with Intercultural Interaction. After controlling for Well-being at T1, only Open-mindedness and Flexibility showed significant effects on Intercultural Interaction.

Correlations between Variables and Socio-cultural Adjustment

Again, personality characteristics dominate the predictors of expatriate spouses' Socio-cultural Adjustment. At T1, Cultural Empathy and Open-mindedness showed significant relations with Socio-cultural Adjustment. Interestingly, at T2, Flexibility surfaced as a significant predictor in addition to Open-mindedness. Social Initiative and Emotional Stability showed marginally significant correlations with Socio-cultural Adjustment. Both Family Adaptability and Expatriates' Work Satisfaction indicated marginal correlations at T1 but not at T2. Partial correlation was exhibited by Socio-cultural Adjustment T1(T2) which indicated that Social Initiative and Flexibility appeared as significant predictors of Socio-cultural Adjustment whereas Open-mindedness and Emotional Stability showed marginal effects on Socio-cultural Adjustment.

5.3.2 Results of Hierarchical Regression Analysis

In this section, we regressed all the significant relationships that appeared from the partial correlations, i.e., T2(T1) as shown in Table 5.8 above.

Since there was no significant effect found in T2(T1) with regard to Well-being, then the first relationship that we were interested in was the relationship between the significant variables found from partial correlation and the expatriate spouses' Intercultural Interaction at T2. The results of regression analysis as shown in Table 5.9 reveal that at T2, Open-mindedness appeared to be the only significant predictor of expatriate spouses' Intercultural Interaction.

Table 5.9
Results from Hierarchical Regression Analysis of Intercultural Interaction on the Significant Relationships, T2(T1) with Intercultural Interaction at T1 as a Control

Model		β	R	R^2
1	Intercultural Interaction T1	.23	.23	.05
2	Intercultural Interaction T1	.09	.39	.15
	Open-mindedness	.34**		
3	Intercultural Interaction T1	.11	.41	.17
	Open-mindedness	.29**		
	Flexibility	.14		

*p < .1, **p < .05

The last relationship concerned the significant variables found in the partial correlation T2(T1) and the expatriate spouses' Socio-cultural Adjustment at T2. Interestingly, as Table 5B.4 shows, Open-mindedness, Social Initiative, and Flexibility appeared as significant predictors of expatriate spouses' Socio-cultural Adjustment at T2.

Table 5.10
Results from Hierarchical Regression Analysis of Socio-cultural Adjustment on the Significant Relationships, T2(T1) with Socio-cultural Adjustment at T1 as a Control

Model		β	R	R^2
1	Socio-cultural Adjustment T1	.02	.02	.00
2	Socio-cultural Adjustment T1	-.09	.26	.07
	Open-mindedness	.28*		
3	Socio-cultural Adjustment T1	-.05	.41	.17
	Open-mindedness	.04		
	Social Initiative	.39**		
4	Socio-cultural Adjustment T1	-.04	.42	.18
	Open-mindedness	.02		
	Social Initiative	.36**		
	Emotional Stability	.11		
5	Socio-cultural Adjustment T1	-.00	.49	.24
	Open-mindedness	-.04		
	Social Initiative	.29*		
	Emotional Stability	.08		
	Flexibility	.28*		

*p < .1, **p < .05

5.4 Discussions

The first purpose of this study was to examine the relation between personality characteristics and the intercultural adaptation of spouses in a host country. In all cases, as compared to family and work characteristics, personality variables appeared to be the strongest determinants of the adaptation of the expatriate spouses. An important predictor appeared to be Open-mindedness that was related to psychological and socio-cultural adaptation of expatriate spouses and to the extent to which they engaged in intercultural interaction as well. Moreover, the findings from the present study show that Emotional Stability is related to psychological adaptation. The present findings are consistent with a study conducted among international oriented students in Taiwan (Mol et al., 2001). The researchers also found that Open-mindedness and Emotional Stability were featured prominently among the indicators of multicultural effectiveness among these students. Therefore, the present study provides support for our assumption that the traits that are critical to the success of international employees and students may also be relevant to those who accompany them on their international assignment, that is, their partners and other family members. The present data thus provide support for the concurrent validity of the MPQ for this group. International companies may make use of the MPQ scales as a selection or diagnostic tool, for example, to be used in consulting families in their decision to accept or refuse an international job offer. Alternatively, the scales can be used to identify expatriate spouses who may need additional help and support during the expatriation period.

In addition, the present study examined the relationship between family characteristics and the expatriate spouses' intercultural adaptation. Particularly Family Adaptability was found to be related to intercultural adaptation of expatriate spouses. Family Cohesion and Family Communication were less consistent as independent predictors. Olson et al. (1984) refer to communication as a dimension that facilitates adaptability and the same may hold for family cohesion. Family Adaptability can be seen as a final outcome of healthy family processes that in turn determine the level of adaptation during the expatriation period. Expatriate family members who are able to change and adapt to the new environment in a host country seem to demonstrate a higher level of intercultural adaptation. This seems to require a certain level of cohesion as well as open communication in the family.

Finally, the present study examined the relationship between the expatriates' work life and intercultural adaptation of their spouses.

Support received from the international company prior and during the expatriation period contributed to the psychological adaptation of the expatriate spouses. At the same time, expatriates' work satisfaction contributed to both socio-cultural adaptation and intercultural interaction. The results showed that support given by the international companies to expatriate spouses prior and during the expatriation period facilitated their process of adapting to the host country. Support can be given for example by means of cultural training and information sources (books, brochures, etc.) about the host country. In this regard, Black and Gregersen (1991) also found that firm-provided cross-cultural training as well as involvement of the expatriate spouse with regard to the latter's views and opinion about the overseas assignment were significantly related to the spouse's adaptation to the general environment in a host country. However, it must be noted that the correlations between work characteristics and indicators of adaptation were not very strong. Possibly, this is caused by the fact that the scales used to measure the work-related variables were not highly reliable, thereby reducing the level of the intercorrelations with other variables.

In addition, demographic data revealed interesting findings. Being employed, earning a high annual income, the ability to converse in the local language, having visited the host country before the relocation, and the longer the duration of expatriation contribute to expatriate spouses' intercultural adaptation. It was found that having visited the country prior to relocation yielded the same result as reported in Black and Gregersen's (1991) finding.

It is interesting to discover that even though more and more companies admit that they have tried their best to support the expatriate spouses, most of the respondents of the present study said that they did not receive enough support from their partners' international companies ($\underline{M} = 2.86$). Punnet (1997) suggested that international companies should give full support to expatriate spouses prior and during the early stage of the expatriation. Human Resource Departments usually do not maintain contact with expatriate spouses who may in turn feel that there is nobody to turn to when problems arise in the host country. It is highly recommended that Human Resource Departments of international companies extend more support and concern to the expatriate spouses. Expatriates' work satisfaction also showed a high positive relation to the intercultural adaptation of their spouses. Again, companies can take a responsibility here to closely follow up on the well-being of their expatriate employees. For example, a mentor system in which an

expatriate is coached by a fellow-expatriate or a local employee may help to diagnose problems at work in an early phase.

Interestingly, over an interval of a year, personality characteristics still dominate as the main predictors of expatriate spouses' intercultural adaptation. Open-mindedness showed significant relationships with expatriate spouses' Intercultural Interaction and Socio-cultural Adjustment, whereas Social Initiative indicated a significant effect on expatriate spouses' Well-being and finally, Flexibility was highly related to expatriate spouses' Socio-cultural Adjustment. The longitudinal results suggest that expatriate spouses' intercultural adaptation depends largely on their individual personality characteristics compared to family characteristics and expatriates' work characteristics. Thus, we strongly suggest expatriate spouses to be open-minded towards the local people and cultures, be active in interacting with the other expatriates and local people while in a host country, and be flexible with the host country's people and culture.

Even though we conducted a longitudinal study on expatriate spouses' intercultural adaptation, it is impossible to draw any conclusions with respect to cause and effect. Perhaps the low work satisfaction of the expatriates was the result rather than the cause of their spouses' adaptation problems. A second limitation to the present study was that participation in the study occurred on a voluntary basis, probably resulting in a sample that was not completely representative of the population of expatriate spouses. Although we expect that this limitation may have affected the absolute level of the scores on each variable, but that it is not likely that it has also affected the intercorrelations between the variables. Moreover, common method variance may be responsible for the high correlations between the independent and dependent variables. All measures relied on self-reporting and, for example, some of the items from the MPQ resembled criterion variables (e.g., I am a person who likes to interact with people from different cultures vs. I feel comfortable talking to local people). However, this problem was less an issue in the satisfaction with life scale that revealed equally high correlations. In addition, in an earlier study that included comparable dependent variables, the correlations between the MPQ scales and dependent variables increased over time, which cannot be explained away by common method variance (Van Oudenhoven & Van der Zee, 2002). Despite these limitations, the present study clearly highlighted some important variables associated with expatriate spouses' successful intercultural adaptation.