

Antecedents of Expatriate Spouse Adjustment: An Analysis of Japanese Spouses in the United States

Riki TAKEUCHI

University of Maryland

The effects of a rapid increase in the amount of international trade over the last several decades [e.g., Adler 1991; Dowling, Schuler and Welch 1994; Phatak 1995] have even been evident for Japan, a country that entered the international trade arena relatively late [Kuwabara 1990]. One of the natural effects of this increase has been a rise in the number of Japanese expatriates sent overseas [Iwauchi 1992].

During the decade from 1980 to 1990, the Japanese Ministry of Foreign Affairs reported an increase in the number of "long-period sojourners" from 178,605 to 302,510 [Nihon Zaigai Kigyō Kyōkai 1990]. In 1990, the Ministry estimated that 194,532 people (65.1% of long-period sojourners) were Japanese expatriates sent by companies [Nihon Zaigai Kigyō Kyōkai 1990]. The rest of the long-period sojourners includes students and scholars (18.7%), government employees (6.3%), liberal professionals (2.3%), employees in mass communications (0.7%), and others (6.9%). Not surprisingly, North America is the geographical area where the largest number of these sojourners stay (41.6%). It is followed by West Europe (26.5%) and Asia (20.7%) [Nihon Zaigai Kigyō Kyōkai 1990].

Hence, it is important to understand the antecedents and consequences related to the adjustment of Japanese expatriates and their spouses. This is particularly important since the largest number of expatriates are sent to North America (80,608, 41.4% of all expatriates) [Nihon Zaigai Kigyō Kyōkai 1990]. Developing a better understanding of Japanese expatriates (and their spouses) may also be helpful for American managers who may have to interact with Japanese expatriates. This is particularly important for people working with Japanese expatriates toward a common goal, such as a joint venture or technology transfer.

Despite the recent increase in studies dealing with various aspects of expatriate adjustment in the U. S. [e.g. Black 1988, 1990a, 1990b; Black and Gregersen 1991b; Hawes and Kealey 1981; Ruben and Kealey 1979; Stening and Hammer 1992; Torbiorn 1982; see Mendenhall and Oddou 1985; Black, Mendenhall and Oddou 1991; for review] and in Japan [e.g., Fukumoto 1990; Iwauchi 1992a, 1992b; Jinnōchi 1992; Koyō Kaihatsu Center 1990a, 1990b; Nihon Zaigai Kigyō Kyōkai 1990; Ogoshi 1990; Sakurai 1995; Tanaka 1990]; there have been only two studies dealing with U.S. spouses [Black and Gregersen 1991a; Black and Stephens 1989], and virtually none focusing on the adjustment of Japanese spouses. Of course, many studies on expatriates focus some secondary attention on the educational problems related to the children, yet they still tend to neglect spouses, who play important roles during an overseas assignment.

Understanding the adjustment of expatriate spouses is critical, because the inability of a spouse or family to adjust has consistently been cited as one of the most important reasons for American expatriates' "success" and "failure" [Hays 1971, 1974; Stone 1991;

Tung 1982, 1987]. For example, Arthur and Bennett [1995] recently found support for the importance of spouses. In their study, a "family situation" factor received the highest importance rating for predicting expatriate success.

Regrettably, scholars have neglected spouse adjustments until recently [Harvey 1985]. Accordingly, the current study attempts to remedy the lack of studies pertaining to spouse adjustment and improve our understanding about its antecedents. One reason for the lack of studies of Japanese expatriate spouses may stem from the belief that the Japanese spouses do not play a major role in expatriate adjustment processes. Tung [1987] posited that Japanese spouses' obedience and dependence are the primary reasons for this. Such a belief, that the spouse's adjustment does not affect expatriate success, may be unfounded, however.

When a Japanese spouse accompanies their partner on an international assignment, the couple's children also accompany them in the majority of cases [e.g., 73.5%, *Nihon Zaigai Kigyō Kyōkai* 1991]. Given the emphasis put on education in Japan and the spouse's primary responsibility for taking care of the children and school related matters [Iwachi 1992b], spouse adjustment may be more important for Japanese expatriates than had been assumed. Given this backdrop, the main purposes of this research are to 1) increase our understanding of spouse adjustment and its antecedents and 2) extend the findings of the limited number of previous studies on this topic.

In the next section, we review the literature on expatriate and spouse adjustments and then describe the methodology used. Our discussion of results follows. Finally, we discuss the implications of our findings for research and practice.

LITERATURE REVIEW

Generally, adjustment has been conceptualized as the degree of an individual's psychological comfort with various aspects of a new environment [Black 1988; Oberg 1960; Ruben and Kealey 1979]. Several studies on cross-cultural adjustment have conceptualized adjustment as a unitary construct [Oberg 1960; Torbiorn 1982]. Others, however, have conceptualized cross-cultural adjustment as multidimensional [Ruben and Kealey 1979]. In particular, Black [1988, 1990a, 1990b] and his colleagues [Black and Stephens 1989] have found tentative support for the multidimensionality of expatriate adjustment. In their conceptualization, it has three facets; general, work, and interaction adjustment. With regard to the notion of spouse adjustment, two dimensions, interaction and general adjustment, have been confirmed [Black and Gregersen 1991a, 1991b; Black and Stephens 1989].

Prior to this, only three studies have investigated the concept of spouse adjustment [Black 1990b; Black and Gregersen 1991a; Black and Stephens 1989]. Two of the studies used a common sample of North American spouses [Black and Gregersen 1991a; Black and Stephens 1989], and the other one used a Japanese sample [Black, 1990b]. Of the three, only one [Black and Gregersen 1991a] specifically investigated spouse adjustment as the central construct of the study. In the other two, spouse adjustment was used to predict expatriate adjustment.

As is the case for expatriate adjustment, when examining spouse adjustment, it seems appropriate to consider antecedents at the individual, organizational, and national level. Hence, we focus on four individual variables (experience, knowledge, language

proficiency, willingness to communicate), one organizational variable (training), and one national variable (culture novelty) in this study. These concepts are reviewed in detail in the section that follows.

Individual Factors

Several studies have investigated the relationship between adjustment and previous international experience [Black 1988; Black and Gregersen 1991a, 1991b; Black and Stephens 1989]. Conventional wisdom suggests that the more experience an individual has, the better he/she will be able to adjust to a new environment. Indeed, Black [1991a] found a direct relationship between previous international experience and adjustment. The theoretical support for this finding lies in social learning theory [Bandura 1977].

According to Bandura [1977], learning occurs when an individual attends to a model, retains the modeled behavior, and translates and reproduces the modeled behavior overtly. Within the learning process, (1) exposure to the model, (2) similarity of the model, and (3) repeated availability of the model have been found to influence learning. Therefore, previous international experience should increase the likelihood of exposure to a model that is appropriate in a particular culture. Thus, it can be expected that previous international experience should be positively related to adjustment. Of course, there are relative degrees of usefulness of experience, depending on the similarity or dissimilarity of the model and its cumulative effects on adjustment. For instance, the purpose of the experience may vary greatly. Spending time as a student differs from spending time as a worker or tourist. Thus, we hypothesize:

Hypothesis 1: There is a direct relationship between previous international experience and both facets of spouse adjustment (general and interaction).

Previous knowledge about the host country and its culture has been posited as another individual factor that will influence adjustment [Baker and Ivancevitch 1971; Tung 1981, 1982]. However, the evidence regarding this factor is mixed. Black [1988] found a positive correlation between expatriates' predeparture knowledge and general adjustment, but he found a negative correlation between predeparture knowledge and work adjustment. In another study [Black and Stephens 1989], positive correlations between knowledge and all three facets of adjustment (general, interaction, and work adjustment) were observed. On the other hand, knowledge was not correlated with either facet of spouse adjustment (general and interaction adjustment). Although these findings are not unequivocal, there is still reason to believe that predeparture knowledge should improve the accuracy of individuals' expectations about the host country and its culture. For example, previous knowledge can be expected to facilitate formation of accurate expectations, which facilitate individuals' adjustment [Black, Mendenhall and Oddou 1991]. This may be one of the primary reasons that the so-called "honeymoon" stage does not occur for some individuals. As such, we hypothesize:

Hypothesis 2: Previous knowledge is directly related to both facets of spouse adjustment (general and interaction).

A third individual factor, and perhaps the most important one affecting adjustment, is the language proficiency [Benson 1978; Hiroko 1985] and communicative ability of the

sojourners [Abe and Wiseman 1983]. For instance, the ability to effectively communicate emerged as a relevant factor in a study of intercultural effectiveness conducted by Hammer, Gudykunst, and Wiseman [1978]. Likewise, Stening and Hammer [1992] found a positive correlation between communication and effectiveness in a study on expatriate managers. Also, this skill is closely related to the notion of interaction posture and interaction management, as suggested by Ruben and Kealey [1979]. In short, an individual who has good communication skills will be able to obtain important information about various aspects of the culture from host nationals, and this should be useful in adjusting to the host culture. All to say, communicating with the host nationals appears to be an important aspect of adjustment. Therefore, we hypothesize:

Hypothesis 3: Language proficiency is directly related to both facets of spouse adjustment (general and interaction).

Willingness to communicate has also been suggested, in a review by Mendenhall and Oddou [1985], as an important factor for adjustment. Indeed, Black [1990b] found willingness to communicate to be positively correlated with all three facets of adjustment. Despite the apparent similarity between willingness to communicate and language proficiency, willingness cannot be equated with or considered to encompass proficiency, as implied by Mendenhall and Oddou [1985]. The former is a motivational factor and the latter is an acquired ability. Those willing to communicate may not necessarily have more language proficiency, although one's willingness to communicate may be affected by one's language proficiency. As noted above, language proficiency is useful for gathering information about the environment, especially that which is crucial for comfort and, perhaps even, survival. This information includes where and how to buy food, clothes, cars, etc. In addition, a willingness to communicate with host nationals further enables individuals to capitalize on this information. Thus, we hypothesize the following:

Hypothesis 4: Willingness to communicate is directly related to both facets of spouse adjustment (general and interaction).

Not unlike many other countries, in Japan English is a very popular second language. As the students progress through the Japanese educational system, they are exposed to various forms of English media (including books, tapes, and videos) and additional language instruction. The language instruction and exposure to the various media help acculturate Japanese people to Western lifestyles. Therefore, individuals are likely to obtain more information (via courses and interactions with diverse range of people) about the world (in general) and the U.S. (in particular) through additional education. In other words, the higher one's education, the greater will be their general knowledge about other countries and the easier will be their adjustment process. Therefore, we hypothesize:

Hypothesis 5: Educational level is directly related to both facets of spouse adjustment (general and interaction).

Organizational Factors

At the organizational level, one factor that is known to be important to adjustment

is the cross-cultural training provided by the company [Baker 1984; Lee 1983; Tung 1981, 1982]. The purpose of this training is to enable individuals to understand and adjust to the environment more quickly and, thus, be more effective in their new assignment faster [Black and Mendenhall 1990]. Recent meta-analytic work by Deshpande and Viswesvaran [1992] found correlations between training and adjustment in the 0.39 to 0.56 range. This implies that cross-cultural training has a major impact on the adjustment of expatriate managers and their spouses. Hence, we hypothesize:

Hypothesis 6: Cross-cultural training is directly related to both facets of spouse adjustment (general and interaction).

National Factors

At the national level, cross-cultural transfers will involve a cultural transition from an individual's own culture to that of the host country. Hence, the similarity (or dissimilarity) between the cultures should affect both adjustment and the social learning processes. Black and Stephens [1989] conceptualized the differences between home and host culture in terms of culture novelty. They found culture novelty to be negatively related to some dimensions of spouse and expatriate adjustment. Therefore, we hypothesize:

Hypothesis 7: Culture novelty is inversely related to both facets of spouse adjustment (general and interaction).

Time since Arrival

According to some research, it takes individuals 3–5 years to be fully effective (to reach the mastery phase) in a different culture [Black and Mendenhall 1991]. Living in a culture increases the individuals' exposure and the likelihood of the individual to model behavior that is appropriate for that particular culture. This repeated availability of the model increases the attractiveness of the model, which leads to increased attention to and retention of the modeled behavior. Thus, length of time in a culture is expected to positively affect adjustment. As such, we hypothesize:

Hypothesis 8: Time since arrival in the U.S. is directly related to both facets of spouse adjustment (interaction and general).

METHOD

Questionnaire Development and Sampling Procedure

At the onset of this study, discussions with the Director of a chapter of the Japan-American Society (JAS) and several Japanese expatriate executives indicated that the range of time since this particular sample of expatriates and their spouses arrived in the U.S. and their English proficiencies varied tremendously. Since there is some preliminary evidence indicating a different response pattern from bilinguals when using one's home language (used in high context cultures [Hall 1976]) versus using English (used in low context cultures [Bennett 1977; Hall 1976]), it was deemed that a Japanese language questionnaire was most suitable for this study.

The questionnaire was first developed in English and translated by one of the researchers into Japanese. Several revisions were made by the researchers after which a Japanese professor in the field of human resource management, one who is an expert in Japanese business practices and fluent in English, was presented with both the original English and a translated Japanese version of the questionnaire. He made several modifications to improve upon the relevancy of the questions in light of Japanese business customs and to improve upon the readability of the survey instrument. Next, a panel of Japanese businesspeople examined the revised questionnaire to check for further difficulties with the face validity, readability, and comprehensibility of the items. Additional comments and suggestions were provided. We used these suggestions only when both the researcher and the expert agreed that the change did not alter the item's original meaning. This precaution was taken in order to ensure the validity of the items used in the Japanese questionnaire. In the end, any threats to the validity of the translated items for the Japanese questionnaire were minimized due to the rigor of the procedures for translating and retranslating the items.

Recall that this study explores adjustment from the perspective of Japanese expatriates' spouses. Accordingly, two different questionnaires were developed for the expatriates and their spouses. Questionnaires and envelopes were sent to corporate contacts working in 50 different companies located within several midwestern states. All of them were affiliated with the local JAS. Accompanying the questionnaire was a letter from the Director (encouraging participation) and the researchers with instructions for administering the survey. Select corporate representatives distributed the questionnaires and envelopes to the expatriates and their spouses who returned the completed questionnaires anonymously in sealed envelopes. The envelopes were then bundled by the representatives and sent back to the researchers. This precautionary measure was taken to help minimize the occurrence of social desirability response bias.

Sample

The sample consisted of 164 Japanese expatriate spouses. The response rate was 82% (200 spouse questionnaires were distributed). This response rate is comparable to earlier studies that mailed questionnaires to expatriates' spouses (Black and Gregersen, 1991b; Black and Stephens, 1989). Of the 164 responses, 141 (86%) did not have missing data and were deemed usable. Although the level of nonresponse bias could not precisely be ascertained, a relatively low nonresponse rate and a wide range of responses to adjustment items (1–7) helped to insure comparability between the respondents and nonrespondents.

Not surprisingly, all of the respondents were female, and they had an average age of 35.9 ($SD = 7.3$). No one held job in the U.S., even though 61.7% had worked while they were in Japan. Educational level was bimodal with 32.1% having finished high school and 37.0% having an associate degree, 20.4% having a bachelor's degree, but only 1.6% having a master's degree. Nearly half (48.8%) did not receive any predeparture training, but when they did, language training was the most common component (31.7%). Time since arrival to the U.S. averaged 32.1 months ($SD = 21.5$), but varied greatly—from less than 1 month to 106 months (8 years and 10 months).

Measures

Dependent Variable

Spouse Adjustment. Expatriate adjustment has been proposed and found to be a multidimensional construct [Black, 1988]. In this study, 9 (of 14) items were used to tap two (of the three) dimensions of adjustment identified by Black and Stephen's [1989]. Since they did not work outside the home, none of the items tapping the work adjustment dimension were included. In this study, 7 items were used to measure *general* adjustment (in accordance with Torbiorn [1982]) and 2 items gauged the *interaction* with host nationals dimension of adjustment. The items for these adjustment scales, which were measured using 7-point scales ranging from 1 (very unadjusted) to 7 (very adjusted), may be found in Table 1. The reliabilities for the *general* and *interaction* adjustment scales used in the current study are .79 and .89, respectively.

Explanatory Variables

Previous International Experience. In this study, previous international experience was operationalized as having three attributes: type of experience (travel, work, or study), duration of experience, and country in which the experience was obtained. For this sample of spouses, two types of prior experience (work and travel) were relevant. Duration of stay was measured in months, and the countries were categorized into seven different groups based on Hofstede's [1980] dendrogram (using a cut-off point of 30% error sum of squares). The group that included the U.S. was assigned an effectiveness rating of 7, and the group that included Japan, at the opposite end of the scale, was assigned a 1. The other five groups were assigned effectiveness ratings of 6 through 2, accordingly. Countries not included in Hofstede's study were assigned a conservative rating of 1. The effectiveness rating, duration of stay, and type of experience were combined to form a scale for the international experience construct.

Previous Knowledge. Items for measuring previous knowledge were adopted from a study conducted by Black [1990a]. Respondents were asked to assess the extent of their agreement on a Likert-type scale of 1 (strongly disagree) to 7 (strongly agree) for 5 items. These 5 items (which appear in Appendix A) were factor analyzed and produced a single factor which has a reliability of .90.

Language Proficiency. Language proficiency was measured by 5 items that asked the respondents to rate the extent they agree or disagree on a Likert-type scale of 1 (strongly disagree) to 7 (strongly agree). These 5 items (listed in Appendix A) produced a single factor that has a reliability of .97.

Willingness to Communicate. Three items for willingness to communicate were adopted from the review by Mendenhall and Oddou [1985]. Respondents used a 7-point Likert-type scale with the same anchors as above. From the 3 items (which are shown in Appendix A), a single factor emerged which has a reliability of .89.

Training. Spouses were asked to indicate whether they had received any organization-provided predeparture training. When they did, the kind of cross-cultural training they received was placed in one of six categories (see Appendix A) as described by Tung [1982]. The rigor of the training was determined by assigning a rating of 1 (least rigor-

ous) to environmental briefing through 6 (most rigorous) to field experience. This is in accordance with Tung's description of training intensity [1982].

Culture Novelty. Culture novelty was measured using the eight culture novelty items adopted from Torbiorn [1982] and found in Black and Stephens' [1989]. Two items, novelty of interaction style and novelty of the general environment, were added to the original scale to address the multidimensional conceptualization of culture [e.g. Boldt 1978; Hofstede 1980; Kluckhohn and Strodtbeck 1961]. Overall, 10 items were used to investigate the factor structure of culture novelty. The reliabilities for the three dimensions of culture novelty were .62, .80, and .74.

Time since Arrival. Since adjustment is considered a time-dependent construct that is usually measured over time, time since arrival in the U. S. was measured in months for this study.

Educational Level. Educational level was measured by asking respondents to indicate the highest level of education they had finished. The highest value (7) indicates obtaining a master's degree and the lowest value (2) indicates finishing junior high school.

Control Variables

Age. Age was used as a control measure. In and of itself, age is not expected to affect the adjustment process directly. In the current study, age was measured in years.

Previous Work Experience. Previous work experience should facilitate the adjustment of an individual, especially if that individual is in a work environment. However, most spouses who accompany their expatriate partners on international assignments do not work overseas, especially Japanese spouses. Thus, previous work experience is not expected to affect their adjustment. Here it was measured by simply asking respondents for a binary response to indicate whether they had previous work experience in Japan.

Methods

Factor Analysis: Adjustment

Relying on the work of Black and Stephens' [1989], a 9-item scale was deemed appropriate for the study. Due to missing data, a total of 151 (of 164) observations were used in the factor analysis. Since the ratio of five cases to one item was exceeded [Nunnally 1978], we can have confidence in the robustness of the results obtained here. Principal component analysis with varimax rotation, using a minimum eigen value of 1.0 and visual inspection of the scree plot, revealed a two-factor structure (general and interaction adjustment) that explained 60% of the variance in spouse adjustment. The rotated factor structure is shown in Table 1.

Table 1. Factor Analysis: Expatriate Spouse Adjustment ^a

<u>Survey Items</u>	<u>Factor Loadings</u>	
	1	2
I. General		
Food	.46	.35
Health Care Facilities	.64	.38
Cost of Living	.75	.04
Shopping	.77	.17

Housing Conditions	.66	.05
Living Conditions in General	.70	.41
II. Interaction		
Socializing with Host Nationals	.15	.91
Speaking with Host Nationals	.10	.93
Entertainment, Recreation Facilities and Opportunities ^b	.47	.51
Eigen Values	4.07	1.31
Percentage of Variance Explained	.45	.15
Total Variance Explained	.45	.60

Note: ^an=151

^bdropped from subsequent analysis due to mutual loading

Six items loaded strongly on Factor 1 (General Adjustment) and two items loaded strongly on Factor 2 (Interaction Adjustment). However, one item, adjustment to entertainment/recreation facilities and opportunities, loaded almost equally on both factors, and thus, was dropped from subsequent analyses. The general and interaction adjustment scales had reliabilities of .79 and .89, respectively (see Table 3). This factor analysis provides confirmatory support for a two-dimensional conceptualization of spouse adjustment.

Factor Analysis: Culture Novelty

Given the multi-dimensional conceptualization of culture elsewhere [e.g., Boldt 1978; Hofstede 1980; Kluckhohn and Strodtbeck 1961], there is reason for concern about the unidimensionality of the culture novelty scale used in the previous study by Black and Stephens [1989]. Hence, a factor analysis for culture novelty was conducted (principal components with varimax rotation). A three-factor structure emerged. Together, these factors explain 56% of the variance in culture novelty. The rotated factor structure is shown in Table 2. Five items (using health care facilities, available quality and types of foods, climate, interaction style, and general environment) loaded on Factor 1. One item (using health care facilities) loaded nearly equally on Factor 1 and 3. Consequently, this item was dropped from subsequent analysis. Two items (everyday customs that must be followed and general living conditions) loaded strongly and distinctly on Factor 2. Three items (transportation systems used, general living costs, and general housing conditions) loaded on Factor 3. The three factors had reliabilities of .62, .80, and .74, respectively.

Table 2. Factor Analysis: Culture Novelty^a

Survey Items	Factor Loadings		
	1	2	3
I. Environment			
Available Quality and Types of Food	.65	.04	.02
Climate	.74	.05	-.06
Interaction Style	.51	.31	.15
General environment	.65	.29	.29
II. Social Conditions			
Everyday custom that must be followed	.18	.90	-.01
General living conditions	.21	.81	.18
III. Infrastructure			

Transportation Systems Used	-.15	.40	.59
General Living Costs	.03	-.00	.84
General Housing Conditions	.39	.02	.65
Eigen Values	3.15	1.28	1.14
Percentage of Variance Explained	.32	.13	.11
Total Variance Explained	.32	.45	.56

Note: ^an=151

These three factors will be tentatively labeled as the environmental, social condition, and infrastructure dimensions of culture novelty. Factors 2 and 3 may have emerged as a result of the relatively unadjusted state of spouses as a whole. Indeed, spouses often have fewer opportunities to socialize with host nationals. However, since everyday customs must be followed and general living conditions must be reckoned with, they might not have been able to recognize these differences. Of course, many of them have limited contact with host nationals. Also, note that the items that loaded on Factor 1 may be particularly salient for Midwestern states since the climate and environment differ greatly from that in Japan, the availability and quality of foods are limited, and health care facilities are not utilized much. Also, the factor structure for this study differs from the previous study's since the expatriate's self-evaluation of culture novelty was used as a proxy for spousal culture novelty there.

RESULTS

Intercorrelations

Table 3 gives the means, standard deviations, coefficient alphas, and intercorrelations for all of the variables. The coefficient alpha for the environmental dimensions of culture novelty was less than ideal (.70). However, all the variables in this study still exceeded Nunnally's [1967] criterion of a minimum of .50 for adequate reliability. Also, note that the social conditions dimension of culture novelty and the interaction adjustment scales were comprised of only two items. Nunnally [1978] suggests that in the case of scales with only two items, the inter-item correlation will be a better indicator of reliability and suggests .25 as a minimum. Here, the two items measuring social conditions, culture novelty, and interaction adjustment had inter-item correlations of .67 ($p < .0001$) and .81 ($p < .0001$), respectively, both of which clearly exceed the .25 standard.

There are several noteworthy relationships in Table 3. First, all of the significant correlations for general and interaction adjustment are in the expected direction except age. The more educated one is, the better they adjust. The longer one has been in the country, the easier their adjustment. The more international experience one has, the better they adjust. The more previous knowledge a person possesses, the easier their adjustment.

Second, although several of the culture novelty items might appear to use assessments similar to those for adjustment, the correlations between culture novelty and adjustment are relatively low ($r = .01$ to $.23$), the largest being $x.23x$. Thus, it appears that these items do, in fact, measure two separate concepts.

Third, it is clear that the better and more willing one is to communicate, the greater their adjustment. The first-order correlations between language proficiency and *general* and *interaction* adjustment were .31 and .63, respectively. Similarly, the first-order cor-

	Mean	SD	a	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Control																	
1. Age	35.86	7.31	--														
2. Work experience	0.62	0.49	--	-0.29													
Individual																	
3. Educational level	4.48	1.21	--	0.01	-0.01												
4. Time since arrival	32.36	21.57	--	0.38	-0.06				-0.01								
5. Previous international "travel" experience	3.33	4.66	--	-0.1	0.15	0.22			0								
6. Previous international "work" experience	26.71	121.69	--	0.21	-0.19	0.08	0.11	-0.07									
7. Previous knowledge	2.21	1.09	0.9	0.2	0.01	0.21	0.13	0.22	0.16								
8. Language proficiency	2.27	1.39	0.97	0.17	-0.01	0.2	0.25	0.25	0.04	0.59							
9. Willingness to communicate	4.71	1.49	0.89	0.03	0.11	0.13	-0.03	0.24	-0.05	0.33	0.4						
Organizational																	
10. Training		1.49	1.8	-0.01	0	-0.19	-0.05	0	-0.11	-0.03	0.01	-0.06					
National-culture Novelty																	
11. Environment	2.88	0.94	0.62	0.05	0.07	-0.05	0.06	0	-0.03	0.23	0.14	-0.03	-0.02				
12. Social conditions	3.91	1.16	0.8	0	0.01	-0.09	-0.07	-0.08	-0.07	0.18	0.07	0.04	-0.07	0.42			
13. Infrastructure	3	1.21	0.74	-0.08	0.04	-0.27	-0.17	-0.17	-0.05	0.04	-0.07	-0.03	0.13	0.3	0.33		

also partially supported. Willingness to communicate was also positively related to *interaction* adjustment ($b = .222, p < .01$). Hypothesis 5 was conclusively confirmed. Educational level was positively associated with both *general* ($b = .122, p < .05$) and *interaction* ($b = .200, p < .05$) adjustment. Neither training (Hypothesis 6) nor culture novelty (Hypothesis 7) were related to either dimension of adjustment. Finally, Hypothesis 8 was partially supported. Time since arrival to the U.S. was directly related to *general* adjustment ($b = .006, p < .05$). Since 5 of the 22 (18%) relationships examined here were significant at the .05 level, we can assume that the findings described above did not occur by chance alone.

Table 4. Results of Regression Analysis for Expatriate Spouse Adjustment

Variables	General adjustment		Interaction adjustment		
	<u>b</u>	<u>se</u>	<u>b</u>	<u>se</u>	
Intercept	3.974**	0.580	-0.332	0.876	
Controls					
Age	0.003	0.010	0.019	0.016	
Previous work experience	-0.138	0.142	0.235	0.215	
Individual					
Previous international "travel" experience	0.015	0.015	0.001	0.023	
Previous international "work" experience	0.000	0.000	0.001	0.001	
Previous knowledge	0.014	0.078	0.077	0.118	
Language proficiency	0.103	0.063	0.474++	0.094	
Willingness to communicate	0.019	0.050	0.222++	0.076	
Educational level		0.122+	0.059	0.200+	0.089
Organizational training	0.003	0.037	0.080	0.056	
National					
Culture novelty (environment)	0.029	0.077	0.100	0.117	
Culture novelty (social conditions)	0.039	0.064	-0.055	0.096	
Culture novelty (infrastructure)	-0.07	0.058	-0.057	0.088	
Time since arrival		0.006+	0.003	0.001	0.005
df	13,140		13,140		
F	2.427**		9.063**		
R ²	0.199		0.481		
n	141		141		

Note * $p < .05$, two-tailed. ** $p < .01$, two-tailed.

+ $p < .05$, one-tailed. ++ $p < .01$, one-tailed.

DISCUSSION

One purpose of this study was to re-examine the dimensionalities of and relationships between culture novelty and spouse adjustment [Black 1990b]. This study also

sought to extend the findings from several previous analyses which focused on individuals' willingness to communicate by investigating the effect of language proficiency on adjustment. In addition, educational level, a new variable, was introduced here to measure its affect on spouse adjustment.

With respect to the dimensionality of spouse adjustment, our results provided support for a two dimensional conceptualization of spouse adjustment (*general* and *interaction* adjustment). With respect to the dimensionality of culture novelty, our results also suggest a multidimensional operationalization of this construct. This concurs with the theoretical perspectives on culture and beckons us not to treat culture novelty as uni-dimensional. It also highlights the need for improvement in culture novelty scales in future empirical studies.

Our results also provide support for the hypothesis that educational level is positively related to both facets of adjustment. In addition, the results provide some support for the assertions that previous international experience, previous knowledge, language proficiency, and willingness to communicate are positively related to adjustment.

Somewhat surprisingly, these results did not provide support for the hypotheses that the predeparture training and culture novelty are related to adjustment. It is possible that culture novelty was not related to adjustment, because spouses might have been relatively homogeneous in responding to the culture novelty items. The reason for the homogeneity may be that the responses for the more experienced individuals might have been affected by a retrospective bias. For instance, spouses who have lived in the U.S. for a prolonged period might have become aware of the subtle differences between Japanese and American cultures. This awareness could have manifested itself in more conservative responses to the novelty items. Those who were relatively new to the U. S. might have responded likewise because everything they see and hear is novel. With respect to training, our sample size might have been inadequate to detect the effect of training, since nearly half of the spouses (80/164, 48.8%) never received any formal training at all. In addition, the quality of the training might have been inadequate for it to affect adjustment. Before dismissing the importance of these potential relationships, however, more research is needed.

In summary, it appears that future research should 1) include multiple operationalizations of training, 2) improve the culture novelty scale, and 3) use additional samples across different cultures. It will be also helpful to examine other explanatory variables that may be related to adjustment, particularly *general* adjustment.

As is the case for other research on this topic, the interpretations and conclusions drawn here should be considered tentative because of issues related to common method variance. To address this, both objective and subjective data were obtained. Furthermore, the variables included in this study do not encourage respondents to be overly consistent in their responses. Nevertheless, respondents could have provided consistent responses for certain explanatory variables and adjustment. In an effort to diminish this problem, precautions were taken in developing, administering, and analyzing the survey. In the future, the use of expatriates' evaluations of spouse adjustment or ratings from other spouses (peers) may be explored.

Also, adjustment to the *general* environment may encompass more and different factors than are included in this study. It is also possible that the items we used to measure

general adjustment were less reliable and should include different items for Japanese spouses, such as adjusting to other Japanese, as suggested by one respondent. All to say, improvements in the adjustment scale for Japanese spouses may be needed in the future. In addition, longitudinal studies are always valuable in evaluating the adjustment of spouses as time since arrival increases.

In the end, the results of this study may help to explain the alleged high failure rates of expatriates and their families [Tung 1981, 1982]. We know that Japanese, and Western European, expatriates and their spouses tend to have more international experience and greater proficiency in languages other than their own. Our results suggest that these attributes facilitate adjustment.

These findings also suggest some practical implications for multinational corporations, U.S. corporations in particular, for selecting and training employees and spouses to be sent on international assignments. It appears as if companies would be well advised to emphasize the importance of language proficiency and training in their employee selection and development practices. Unfortunately, neither has been given enough attention in the past [Miller 1972, Tung 1982]. Moreover, in light of the preliminary linkage between preparation and spouse adjustment, and the documented relationship between spouse adjustment and expatriate adjustment [Black and Gregersen 1991b; Black and Stephens 1989], it appears that companies should expand the involvement of spouses in their selection and development activities.

With the increasing trend of dual career families, companies will need to consider an ever widening range of alternative preparatory procedures. Future research should address this phenomenon to further improve our understanding of the cross-cultural adjustment processes. Doing so could help expatriates, their spouses, and companies to be more effective before, during, and after their international assignments.

APPENDIX

Previous knowledge

1. I had sufficient understanding of the host country's language
2. I had sufficient knowledge of the local social customs
3. I had sufficient knowledge of the local business practices
4. I had sufficient knowledge about the local living conditions
5. I had sufficient understanding about the general facts about the host country, before going overseas

Language proficiency

1. I feel confident in using the host country's language in general
2. I feel confident in writing with the host country's language
3. I feel confident in speaking the host country's language
4. I feel confident in reading and understanding the host country's language
5. I feel confident in listening to the host country's language

Willingness to communicate

1. I am trying to use host country's language as much as possible
2. I am trying to interact with people in the host country as much as possible

3. I am trying to understand and relate with the host nationals as much as possible

Training

1. Environmental briefing
2. Cultural orientation
3. Cultural assimilator
4. Language training
5. Sensitivity training
6. Field experience

REFERENCES

- Abe Hiroko and Richard L. Wiseman. 1983. "A Cross-Cultural Confirmation of the Dimensions of Intercultural Effectiveness." *International Journal of Intercultural Relations*, 7: 53-67.
- Adler, Nancy J. 1991. *International Dimensions of Organizational Behavior* (2nd ed.). Belmont, CA: Wadsworth.
- Arthur, Winfred, Jr. and Winston Bennett, Jr. 1995. "The International Assignee: The Relative Importance of Factors Perceived to Contribute to Success." *Personnel Psychology*, 48: 99-114.
- Baker, James C. 1984. "Foreign Language and Predeparture Training in the U.S. Multinational firms." *Personnel Administrator*, 29: 68-72.
- Baker, James C. and John M. Ivancevich. 1971. "The Assignment of American Executives Abroad: Systematic, Haphazard, or Chaotic?" *California Management Review*, 13 (3): 39-41.
- Bandura, Albert. 1977. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Benson, Philip G. 1978. "Measuring Cross-Cultural Adjustment: The Problem of Criteria." *International Journal of Intercultural Relations*, 2: 21-37.
- Black, J. Stewart. 1988. "Work Role Transition: A study of American expatriate managers in Japan." *Journal of International Business Studies*, 19 (2): 277-294.
- . 1990a. Factors related to the adjustment of Japanese Expatriate Managers in America." *Research in Personnel and Human Resources Management*, Suppl. 2: 109-125.
- . 1990b. "The Relationship of Personal Characteristics with the Adjustment of Japanese Expatriate Managers." *Management International Review*, 30 (2): 119-134.
- Black, J. Stewart and Hal B. Gregersen. 1991a. "Antecedents to Cross-Cultural Adjustment for Expatriates in Pacific Rim Assignments." *Human Relations*, 44 (5): 497-515.
- and ———. 1991b. "The Other Half of the Picture: Antecedents of Spouse Cross-Cultural Adjustment." *Journal of International Business Studies*, 22 (3): 461-477.
- Black, J. Stewart and Mark Mendenhall. 1990. "Cross-Cultural Training Effectiveness: A Review and a Theoretical Framework for Future Research." *Academy of Management Review*, 15 (1): 113-136.

- and ———. 1991. "U-curve Adjustment Hypothesis Revisited: A Review and Theoretical Framework." *Journal of International Business Studies*, 22 (2): 225–247.
- Black, J. Stewart and Gregory K. Stephens. 1989. "The Influence of the Spouse on American Expatriate Adjustment and Intent to Stay in Pacific Rim Overseas Assignments." *Journal of Management*, 15 (4): 529–544.
- , Mark Mendenhall and Gary Oddou. 1991. "Toward a Comprehensive Model of International Adjustment: An Integration of Multiple Theoretical Perspectives." *Academy of Management Review*, 16 (2): 291–317.
- Boldt, E. 1978. "Structural Tightness and Cross-Cultural Research." *Journal of Cross-Cultural Psychology*, 9: 151–165.
- Deshpande, Satish P. and Chockalingam Viswesvaran. 1992. "Is Cross-Cultural Training of Expatriate Managers Effective: A Meta Analysis." *International Journal of Intercultural Relations*, 16: 295–310.
- Dowling, Peter J., Randall S. Schuler and Denice E. Welch. 1994. *International Dimensions of Human Resource Management* (2nd ed.). Belmont, CA: Wadsworth.
- Hall, Edward T. 1976. *Beyond culture*. New York: Doubleday.
- Hammer, Mitchell R., William B. Gudykunst and Richard L. Wiseman. 1978. "Dimensions of Intercultural Effectiveness: An Exploratory Study." *International Journal of Intercultural Relations*, 3: 382–393.
- Harvey, Michael G. 1985. "The Executive Family: An Overlooked Variable in International Assignments." *Columbia Journal of World Business*, 20 (1): 84–92.
- Hawes, Frank and Daniel J. Kealey. 1981. "An empirical Study of Canadian Technical Assistance." *International Journal of Intercultural Relations*, 5: 239–258.
- Hays, Richard D. 1971. Ascribed behavioral determinants of success-failure among U. S. expatriate managers. *Journal of International Business Studies*, 2: 40–46.
- . 1974. Expatriate selection: Insuring success and avoiding failure. *Journal of International Business Studies*, 5: 25–37.
- Hofstede, Geert. 1980. *Culture's consequences*. Beverly Hills: Sage.
- Iwachi, Ryōichi. 1992a. "Zaigai nikkei kigyō no keiei to kaigai chūzaiin no seikatsu" [Management of Overseas Japanese Companies and the Lives of Expatriates]. In *Kaigai nikkei kigyō to jinteki shigen: Genchi keiei to chūzai in no seikatsu* [Overseas Japanese Corporations and Human Resources: Local Management and the Lives of Expatriates] (pp. 1–14). Tokyo: Dōbunkan.
- . 1992b. "Kaigai chūzaiin no shigoto to seikatsu" [Content of Work and Lives of Expatriates]. In *Kaigai nikkei kigyō to jinteki shigen: Genchi keiei to chūzai in no seikatsu* (pp. 183–210).
- Jinnōchi Yasuhiko. 1992. "Kaigai shijo kyōiku mondai ni miru Nihon no kyōiku taishitsu" [Japanese Educational Constitutions as Evidenced by the Problems Associated with the Education of the Children of Japanese Expatriates]. In *Kaigai nikkei kigyō to jinteki shigen: Genchi keiei to chūzai in no seikatsu* (pp. 211–236).
- Kluckhohn, Florence. and Fred L. Strodtbeck. 1961. *Variation in Value Orientations*. New York: Row, Peterson.

- Kuwabara Yasuo. 1990. "Maegaki" [A preface]. In *Kigyō no kokusaika to kaigai haken yōin yōsei ni kansuru chōsa: Daiichibunsatsu* [Survey on Internationalization of Corporations, and Training and Development of Expatriates: Volume 1] (pp. 1–2). Tokyo: Shūkōsha.
- Lee, C. 1983. "Cross-Cultural Training: Don't Leave Home without It." *Training*, 20: 20–25.
- Miller, Edwin L. 1972. "The Selection Decision for an International Assignment: A Study of the Decision Maker's Behavior." *Journal of International Business Studies*, 4 (2): 49–65.
- Mendenhall, Mark and Gary Oddou. 1985. "The Dimensions of Expatriate Acculturation: A Review." *Academy of Management Review*, 10 (1): 39–47.
- Nishida Hiroko. 1985. "Japanese Intercultural Communication Competence and Cross-Cultural Adjustment." *International Journal of Intercultural Relations*, 9: 247–269.
- Nunnally, Jum C. 1967. *Psychometric Theory*. New York: McGraw-Hill.
- . 1978. *Psychometric Theory*. New York: McGraw-Hill.
- Phatak, Arvind V. 1995. *International Dimensions of Management* (4th ed.). Cincinnati, Ohio: South-Western College.
- Ruben, Brent D. and Daniel J. Kealey. 1979. "Behavioral Assessment of Communication Competency and the Prediction of Cross-Cultural Adaptation." *International Journal of Intercultural Relations*, 3: 15–47
- Shadan-Hōjin Nihon Zaigai Kigyō Kyōkai. 1990. *Kaigai hakensha no tameno jōken seibi: Kenkyūinkai no hōkoku to teigen* [Adjustment of Conditions for Expatriates: A Report by the Research Committee and Propositions]. Tokyo: Shadan-Hōjin Nihon Zaigai Kigyō Kyōkai.
- Stening, Bruce W. and Mitchell R. Hammer. 1992. "Cultural Baggage and the Adaption of Expatriate American and Japanese Managers." *Management International Review*, 32 (1): 77–89.
- Stone, Raymond J. 1991. "Expatriate Selection and Failure." *Human Resource Planning*, 14 (1): 9–18.
- Torbiorn, Ingemar. 1982. *Living Abroad*. New York: Wiley.
- Tōyō Keizai Shinpōsha. 1990. *Kaigai shinshutsu kigyō sōran 1990-nen ban* [1990 Annual Listing of Companies Branching Out into Foreign Countries]. Tokyo: Author.
- Tung, Rosalie L. 1981. "Selecting and Training of Personnel for Overseas Assignments." *Columbia Journal of World Business*, 16: 68–78.
- . 1982. "Selection and Training Procedures of U.S., European, and Japanese Multinationals." *California Management Review*, 25 (1): 73–85.
- . 1987. "Expatriate Assignments: Enhancing Success and Minimizing Failure." *Academy of Management Executive*, 1 (2): 117–126.