

**CHAPTER 6: THE EFFECT OF CULTURE OF ORIGIN ON THE
ADJUSTMENT PROCESS**

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ABSTRACT

This paper is a synthesis of the author's doctoral work on the impact of culture of origin on the three facets of expatriates' adjustment (work, interaction and general) and their antecedents (Waxin, 2000, 2003; Waxin Chandon, 2003, Waxin et Panaccio, 2005) The research model integrates organizational, individual and contextual variables and introduces culture of origin as a direct and a moderator variable. We Used self-administered questionnaire data from French, German, Korean and Scandinavian expatriated managers in India, and multiple regressions with moderator variable. The results establish that culture of origin has a direct effect on the three facets of expatriate adjustment and a moderator effect on their antecedents.

INTRODUCTION

Expatriates' adjustment to their new role and environment is of great significance, both to the organization and to the managers themselves. From the organization's perspective, expatriates' degree of adjustment partially predicts performance and completion of the mission (Parker and McEvoy 1993). From the managers' perspective, adjustment is a factor of job satisfaction and psychological well being (Aryee and Stone 1996). As a result, there has been a burgeoning academic and practical interest in understanding and measuring the adjustment process and its antecedents. Black (1988) defined intercultural adjustment (IA) as “the degree of an individual’s psychological comfort with various aspects of a host country”.

Black (1988) conceptualized and demonstrated that intercultural adjustment contains three related but conceptually distinct facets: adjustment to work in regard to setting, responsibilities and performance, relational adjustment in regard to interaction with members of the host community and general adjustment in regard to living conditions in the foreign country. Although these three facets have a strong correlation, each has its own distinct antecedents. Many authors have utilized this typology (Black et Gregersen, 1991; Parker et McEvoy, 1993, Cerdin (1999)). In this research, we will study these three facets of adjustment.

Much of the research on expatriates has focused on adding to the list of antecedents, which influence cross-cultural adjustment. However, the theoretical development for understanding *how* these antecedents impact on cross-cultural adjustment has not advanced much since the initial work of Black and his colleagues (Caligiuri, 2000). In particular, there has been a paucity of research on the effect of culture of origin (CO) on expatriates’ adjustment. Parker and McEvoy (1993) reported that culture novelty (Hofstede's cultural distance) explains as much variance in interaction and general living adjustment as the other organizational and individual variables, but that additional research is needed to truly understand its impact on the adjustment process. Redmond (1999) showed that cultural distance was a mediating factor between stress and intercultural communication competence. Black and Gregersen (1991) and Gregersen and Stroh (1997) found contradictory effects of subjective cultural distance on interaction adjustment. One possible explanation could be the impact of cultural differences among the respondents. The cultural differences might modulate the effects of the classical antecedents of adjustment. Surprisingly, existing models have not considered how expatriate's culture of origin interacts with the classical antecedents to predict adjustment. No research has been organized to control systematically for culture of origin in order to examine its effects on expatriates’ adjustment.

This research seeks to contribute to our understanding of the expatriate experience by first, partially replicating previous research on expatriates' adjustment, and, second, by examining the effect of culture of origin on adjustment and its antecedents. The research questions are the following: What is the relative importance of the antecedents of each adjustment facet? What is the direct effect of culture of origin on each adjustment facet? What is the moderator effect of culture of origin on the antecedents of each adjustment facet? The paper examines these issues in the literature; develops a model of the

antecedents of the adjustment process as moderated by culture of origins effects; discusses the methodology and the findings; and finally draws out the implications of this research.

LITERATURE REVIEW AND HYPOTHESES

A review of the literature (summarized in the model and explained below) suggests that there are three major categories of factors influencing expatriates' adjustment following expatriation: organizational, individual and contextual factors. Our contribution to this field of research consists in introducing the country of origin as a moderator variable of the relations between adjustment and its antecedents.

Organizational Antecedents

Organizational variables comprise two job-related variables (role clarity and role discretion), three social support factors (supervisory, coworker(s), home-country organizational support), logistical support, expatriation training, and organizational culture similarity. In the adjustment literature, work-related variables are only related to work adjustment.

Role clarity. The lack of clarity or the level of uncertainty surrounding expectations about a single role has been generally treated as a source of stress in the organizational literature (Ilgen & Hollenbeck, 1991); and role clarity as leading to a faster Time to proficiency (Pinder and Schroeder, 1987 and to be positively related to work adjustment (Black and Gregersen, 1991).

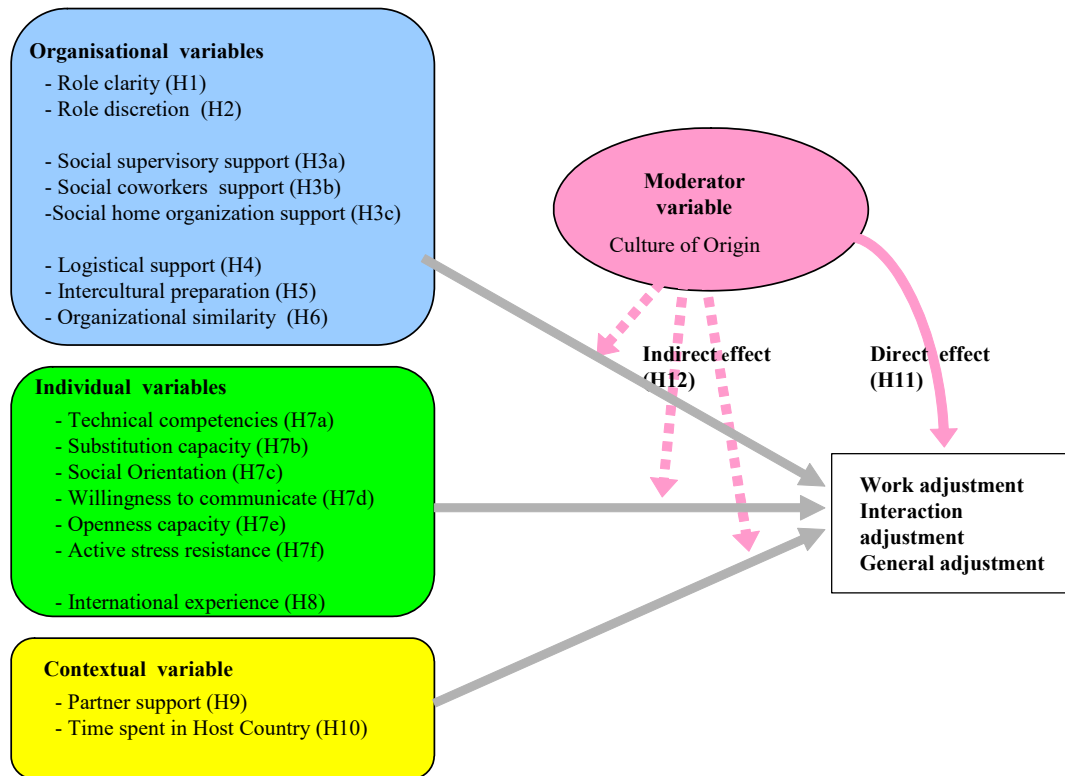
(H1) Role clarity is positively related to work adjustment (H1)

Role discretion. Role discretion (Karasek, 1979) reduces uncertainty in a new situation, because it enables individuals to adapt their work role and setting by themselves rather than adapting themselves to the work setting (Black and Gregersen, 1991). Aryee and Stone (1996), Black (1988), Black and Gregersen (1991) and Cerdin (1999) have shown that role discretion is positively related to work adjustment.

(H2) Role discretion is positively related to work adjustment (H2)

Organizational social support. Organizational social support encompasses supervisory, co-workers and home-country organization social support. Black et al. (1991) suggested that social support provide expatriates with information about what is acceptable and unacceptable in the new work context. Organizational social support has been shown to reduce the time to proficiency of French expatriates in Norway (Waxin, Roger and Chandon, 1997) and to be positively related to the three facets of adjustment (Cerdin 1999). We hypothesize that *supervisory (H3a), coworkers (H3b) and home-country organization (H3c) social support are positively related to the work, interaction and general adjustment.*

Figure 1: *Conceptual frame, based on Black, Mendenhall et Oddou (1991).*



Logistical support. Organizational logistical support can include a career assistance service for the spouse or a relocation service, which helps to reinstall the transferee's family. If these services do not directly help the individual adapt to his new post, they at least help to diminish fear of the unknown. Black et al.'s (1991) model of adjustment associates logistical support for interaction integration with general adjustment, but not with work adjustment. Cerdin (1999) confirms these results. However, for interaction adjustment to occur, the help given by the organization must not isolate the expatriate manager from his environment, or the acculturation process might be inhibited (Tung, 1993). (H4) *Logistical support is positively related to I and G adjustment.*

Intercultural Training. Much of the literature suggests that training enhances expatriates adjustment (Black and Mendenhall, 1990; Black et al., 1991; Deshpande and Vivwesvaran, 1992; Eschbach et al., 2001; Waxin and Panaccio, 2005). (H5) *Expatriation training is positively related to W, I, G adjustment.*

Organizational dissimilarity. Perceived dissimilarity between home-country and host-country organizations is a source of uncertainty and stress (Parker and McEvoy, 1993) and thus is expected to relate negatively to expats adjustment. (H6) *Organizational similarity is negatively positively related to W, I, G adjustment.*

Individual antecedents

Individual antecedents of expatriates' interaction adjustment are the six dimensions of expatriates' adjustability and prior international experience.

Adjustability. Based on the works of Mendenhall and Oddou (1985) and Black (1990), recent studies (Cerdin, Chandon and Waxin 1999, Waxin 2000, Waxin, 2004) have identified six dimensions of the expatriate's adjustability, each one being measured by a battery of items. The dimensions are confidence in their own technical competencies (H7a), social orientation (H7b), willingness to communicate (H7c), substitution capacity (H7d), cultural openness (H7e) and stress resistance (H7f).

(H7a-f). The six dimensions of adjustability are positively related to W, I, G adjustment.

Prior international experience. Theoretical discussions have, for a long time, included previous international experience as relevant for the adjustment process (Church, 1982; Black 1988). However, empirical evidence, particularly when focused on the length of exposure, has been weak (Haslberger, 1999). Black (1988) finds that prior international experience facilitates general adjustment, but not interaction and work adjustment. Parker and McEvoy (1993) found that it correlates significantly only with general adjustment. Black and Gregersen (1991) point out that the problem may lie in the quantitative measurement of the variable rather than its lack of relevance. Theoretically and intuitively, it makes sense to assume that international experience allows a quicker and more complete adjustment.

(H8) Prior international experience is positively related to W, I, G adjustment.

Contextual antecedents

Finally, contextual antecedents encompass partner social support, time spent in the host country and culture of origin.

Partner social support. Partner social support is viewed in the literature as an important influence on the worker abroad. According to Fenlason and Beer (1994), partner social support reduces the stress generated by the new work environment and thus facilitates expatriates' adjustment.

(H9) Partner social support is positively related to W, I, G adjustment.

Length of time spent in host country. Adjustment is a time related process. Individuals need time to get accustomed to their new environment and learn the host country culture and appropriate and acceptable behaviors. Whereas Janssens (1995) did not find any significant relationship between time spent in the host country and adjustment, in a sample of Belgian and British expatriates, Cerdin (1999) obtained the opposite results for French expatriates. *(H10) Time spent in the host country will be positively related to W, I, G adjustment.*

Culture of origin. Previous research suggest that the more different the host culture is from the home culture, the more demanding the adjustment will be (Black et al., 1991; Gao and Gudykunst, 1990). Although it may also be difficult to adjust to a similar culture (Brewster, 1995; O'Grady and Lane, 1996; Selmer, 2005), the balance of the

literature is clearly that cultural distance makes adjustment harder. This phenomenon is known variously as the effect of cultural distance (Church, 1982) or culture toughness (Mendenhall and Oddou, 1985). Furnham and Bochner (1982) identified cultural differences as one of the primary factors contributing to culture shock. In their study, they found general support for a relationship between the level of social difficulty and cultural distance. Gudykunst and Hammer (1984) posited that cultural similarity (short cultural distance) produces more accuracy in a sojourner's ability to predict and explain host behavior. In the international adjustment literature, Parker and McEvoy (1993) and Gregersen and Stroh (1997) show that host culture novelty is negatively associated to expatriates' adjustment. We term this the direct effect of culture of origin. We hypothesize that expatriates' adjustment degree will vary significantly according to their culture of origin.

(H11) Culture of origin has a direct effect on W, I, G adjustment.

There is a further point arising out of the cultural differences literature. Different cultures may be more or less effective as expatriates in certain countries. It may be the case, for example, that countries with low uncertainty avoidance have less trouble finding individuals who make successful expatriates. On the other hand, it may be that some cultures will have problems finding people who are less modest (the Swedish "lagom") and who therefore rate their success more highly. Furthermore, it is anticipated that the antecedents of TTP will vary according to the specificities of expatriates' culture of origin. We term this the moderator effect of culture of origin. Redmont (2000) notes that Hofstede (1991) does not discuss the impact of cultural dimensions on intercultural interactions.

(H12) Country of origin has a moderator effect on the antecedents of adjustment.

METHODOLOGY

Sample and data collection

Our sample consisted of 224 managers, of which 56 were French, 53 German, 60 Korean and 57 Scandinavian (note 1)¹, who were expatriated in New Delhi, India. Respondents were working in multinational companies from their home culture, assigned to general management or high technical positions, for a maximum period of four years there. There was no relationship between gender, time, and seniority and scores on the dependent variables. The response rate was above 75%.

Measures and questionnaire

Adjustment. There is an ongoing debate about the way to measure adjustment. The three facets of adjustment identified by Black and Stephens (1989) are in fact strongly correlated with each other. Some authors therefore prefer to measure the degree of overall adjustment (Caligiuri, 2000). Others prefer to measure the time required for the expatriate to reach an equilibrium between contribution and retribution while taking into account integration time or "time to proficiency" (Pinder and Schroeder, 1987;

Waxin, Roger Chandon, 1997; Waxin, Brewster, 2005). In this research, we reuse the scale created by Black and Stephens (1989), measuring all three adjustment facets with 14 statements. The scale goes from (1) not at all adjusted to (7) completely adjusted.

Role clarity and discretion were averaged respectively from eight items created by Breugh and Colihan (1994) and nine items created by Black and Gregersen (1991). Supervisory and co-workers social support were averaged from four-item scales adapted from Pinder and Schroeder (1987). Home country-organization social and logistical support were averaged from the respectively four-and three-items scales adapted from Cerdin (1999). Organizational similarity was averaged from an adjustment of the six-item-scale created by Cerdin (1999). To measure the first five dimensions of expatriate's adjustability, we used Waxin (2000) scales, adapted from Cerdin (1999): willingness to communicate (4 items), substitution capacity (3 items), social orientation (3 items), confidence in one's technical competencies (3 items) openness capacity (3 items), and active stress resistance (8-item index based on the work of Folkman et al. 1986). Partner social support was measured adapting Roques' four-item scale (1999). For all these quantitative variables, we used seven-point Likert scales, ranking from totally agree to totally disagree. International experience was assessed by collating the duration in months of expatriate's international experiences (studies, internships and expatriations). Respondents were also asked to indicate if they had received any kind of intercultural training (later scored on a yes (1) / no (0) basis) and to describe it, the time they had already spent in the host country, their position 's level (top or middle management), their company's branch activity (production, services, transport and telecommunication, public sector, other), their gender, age and marital status.

All the multi-item scales used in this research are one-dimensional with a percentage of variance accounted for by PCA's first axis greater than 66%. All the scales show good reliability, with Cronbach's alpha greater than 0.83.

To conduct the empirical part of this study, we wanted to control the cultural factors, i.e. the host country and expatriates' culture of origin. To meet the statistical requirements, we needed to get at least 4 "culture-of-origin samples", containing each at least 50 expatriates, all located in the same area of the same host country. India has been chosen as host country for the following reasons. First, we wanted a host-country, which presents some difficulties for westerners. Second, very few studies on expatriates' adjustment have focused on India. Third, India attracts a lot of foreign firms, and so has many expatriates. To counteract the fact that India has considerable cultural variability, we focused on the New Delhi area. Korea, France, Germany and Scandinavia have been chosen as country / culture of origin for the following reasons. First, these countries are relatively culturally homogeneous. Second, there were more than 50 expatriates coming from these countries in the region of New Delhi. We wanted to include a Scandinavian culture. However, no Scandinavian country alone could offer 50 expatriates in the region of New Delhi. As Denmark, Norway and Sweden are relatively culturally close, and very different from the other countries in this study (Hofstede, 1991), we decided to form a Scandinavian sample. Our discussion below uses the terms "country" or "national sample" rather than culture, in order a) to reflect our data more accurately (we identified country of origin but did not test for culture)

and b) not to confuse the discussion of cultural difference. With apologies we use these terms to include the three Scandinavian samples in the one category.

Statistical analysis

In a preliminary step, we verified that we would indeed find all 3 distinct facets of adjustment and that the averages for each of the facets varied in accordance with the country samples. We then examine each adjustment facet individually, so the following analyses are run for W, I and G adjustment. The analysis of the data consists of three major parts. First, we test the classical model of adjustment (H1 to H10), using multiple regression analysis on the global sample. Second, to test the direct effect of culture of origin on adjustment (H11), we introduce culture of origin' indicator variables in the regression of adjustment and we use a Chow test (note 2). Third, to test the moderator effect of culture of origin on adjustment' antecedents (H12), we use multiple regressions with moderator variable and a Chow test. This allows us to propose simplified models of adjustment per culture of origin.

RESULTS

The three facets of adjustment: the analyses of the main components of Black and Stephens (1989) 14 statements, taking the *global sample* and then the 4 *country samples*, showed that adjustment is in fact tri-dimensional. The statements of general adjustment, interaction adjustment and work adjustment were all grouped according to the three expected factors. For each dimension, the percentage of variance explained by the first axis varied according to the facet and the sample between 64 and 91%. The Cronbach alpha coefficient oscillates between 0.89 and 0.94. These results are comparable to the previous studies carried out on different samples (0.88, 0.92 and 0.87 for Black and Gregersen, 1991; 0.83, 0.91 and 0.86 for Cerdin, 1999).

One way analyses of variance show that the mean degrees of adjustment vary significantly among the four cultures of origin (Table 1). The eta² coefficients indicate that culture of origin explains respectively 5.4, 12.6 and 27.2 % of the total variance in W,I, G adjustment.

For all samples, the averages for work and general adjustment were significantly higher than for interaction adjustment (with the 5% threshold). Among Koreans, the average of general adjustment was also significantly superior to interaction adjustment (with the 5% threshold).

Table 1: Analyze of variance: mean degree of adjustment according to culture of origin

Country of Origin	N	Work	Interaction	General	Comparison Bonferroni test
Global	224	5.16	4.42	4.77	I<G<T
France	54	5.68	4.89	5.44	I < G, T
Germany	53	5.13	4.67	4.98	I < G, T
Scandinavia	57	5.03	4.56	4.87	I < G, T
Korea	60	4.83	3.67	3.87	I, G < T
Bonferroni		F > K, S	F, G, S > K	F > S > K, G > K	
F test		4.22, p < 0.01	10.60, p < 0.001	27.79, p < 0.000,	
eta ² =		0.054, p < 0.06	0.126, p < 0.001.	0.272, p < 0.000	

Only significant differences in accordance with the Bonferroni test with a 5% threshold are indicated

1. Testing the Classical Model of adjustment on the global sample(H1 to H10)

The test of the classical model is necessary because it gives us a comparative basis on which to evaluate the effect of culture of origin on the three facets of adjustment.

We conducted the regressions of W, I and G adjustment separately on the 17 classic antecedents, on the global sample. In Table 2, we present the antecedents retained with a risk factor of less than 5%. The antecedents are classified in order of significance (decreasing t test). The different facets of adjustment are explained by different antecedents. These antecedents explain 50 to 52 % of the variance in each adjustment facet. However, all the classical antecedents globally produce a high multicollinearity (CI ranging from 49 to 68). The next step therefore is to examine the direct effect of the culture of origin on the model of adjustment.

Table 2. Summary of the results: Regression of W,I,G adjustment on all the classical antecedents, on the different samples : Global (N=224), France (N=54), Germany (53), Korea (N=60), Scandinavia (N=57). The antecedents are classified in order of significance in the regression (decreasing T test).

Antecedents / Samples	Work					Interaction					General				
	Global	F	G	S	K	Global	F	G	S	K	Global	F	G	S	K
Role clarity (H1)	4	2	5		3										
Role discretion (H2)	1	3	1	1											
Supervisory social support (H3a)	2	4			2	5	1		6	6	3	5			1
Co workers social support (H3b)			3		5			5		1			4	3	9
Home org. social support (H3c)	8			2					5					6	
Logistical support (H4)											6	2	7	7	2
Intercultural training (H5)			6			6	4	3					3	5	7
Organizational similarity (H6)		6		4											
Technical competencies (H7a)	6		4		4										
Substitution capacity (H7b)											2	1	2	2	3
Social orientation (H7c)	7			3		2	3		2		5				
Willingness to communicate (H7d)			2			3		1	1	4					
Openness capacity (H7e)						4	2	4	3	3			6	4	
Active Stress resistance (H7f)	5	5		5			7			2		3			5
International experience (H8)					6					5					6
Partner social support (H9)				6		1	5	2	4		1	4	1	1	8
Time spent in India (H10)	3	1			1		6				4		5		4
R2 adjusted	0,51	0.70	0.66	0.86	0.72	0.50	0.55	0.69	0.71	0.60	0.52	0.58	0.70	0.69	0.765
F	12.41	22.16	17.56	59.51	23.04	13.59	10.38	26.36	25.42	15.78	13.09	15.45	18.43	18.85	22.38
CI	59.6,	15.6	19.9	21.3	18.4	48.8	27.34	25.85	29.94	19.69	67.71	15.67	26.85	32.06	21.71
Standard error	0.95	0.61	0.64	0.563	0.78	0.94	0.94	0.145	0.56	0.73	0.764	0.566	0.39	0.59	0.51

F= France, G= Germany, C = Korea, S= Scandinavia

2. Testing the direct effect of culture of origin on adjustment (H11)

To test the direct effect of culture of origin on adjustment, we introduce indicator variables of the culture of origin in the regression of each facet of adjustment. The results show a substantial increase in the model's quality (Table 3). For each facet, we observe 3 arguments. First, the percentages of explained variance increase and F tests increase clearly. Second, the standard errors diminish clearly. Third, the high values of the Chow tests ($p < 0.001$) indicate that the direct effect of culture of origin on adjustment is significant. We conclude that H11 is validated, and that culture of origin has a significant direct effect on expatriates' adjustment.

Table 3: The direct effect of culture of origin (CO) on W, I, G adjustment, on the global sample

	Work		Interaction Without		General Without	
	Without CO	With CO	CO	With CO	CO	With CO
Adjusted R²	0.50	0.59	0.50	0.59	0.52	0.74
F test	12.1	15.27	13.59	17.89	13.09	28.11
Standard error	0.95	0.86	0.94	0.85	0.764	0.566
Chow test	16.1, $p < 0.001$		17.58, $p < 0.000$		62.5, $p < 0.000$	

3. Testing the moderator effect of culture of origin on adjustment's antecedents (H12)

To test the moderator effect of culture of origin on each adjustment facet's antecedents, we will proceed in two steps. First, we examine whether the quality of the model increases significantly when the global regression is replaced by four separated regressions per culture. Second, we test the possibility to propose culture-specific models of adjustment.

First, we run a regression of each adjustment facet on the 17 classical antecedents, in the four cultural samples. The results indicate that regressions per culture elicit several improvements: adjusted R² and standard error in culture-specific samples are respectively higher and weaker than in the global sample, and the high values of the Chow tests indicate that the moderator effect of culture of origin on each adjustment facet is significant. We conclude that H12 is validated and that there is a significant and strong moderation effect between culture of origin and the classical antecedents of each adjustment facet.

The purpose of the second step is to reinforce the validation of H12 and to propose specific, simplified models of adjustment per facet and culture of origin, which would retain only significant antecedents. We perform hierarchical regressions of each adjustment facet on the 17 classical antecedents, in using the backward regression method, on each culture-sample. Results show that the optimal models contain five to seven variables, depending on the adjustment facet and culture of origin. The moderator

effect of culture of origin appears very clearly since, for the same facet, the significant variables retained in the regressions diverge from one culture to another.

For example, let's focus on interaction adjustment. The unique common antecedent of interaction adjustment in the four culture samples is openness capacity. The others antecedents are culture-specific (Table 2). The results concerning social support related antecedents are clearly distinct. Whereas supervisory support is significantly predictive of interaction adjustment in the French, Korean and Scandinavian samples, co-workers support is significant in the German and Korean samples, home country organization support is significant in the Scandinavian sample and partner support is significant in all the samples except the Korean one. Intercultural training is significant in the German and French ones. The results regarding individual antecedents are equally contrasted. Openness capacity is significant in all national samples. Whereas social orientation is significant in the French and Scandinavian samples, willingness to communicate is significant in the German, Scandinavian and Korean samples, and active stress resistance is significant in the French and Korean ones. Previous international experience facilitates the interaction adjustment of Koreans. Finally, time spent in India is only significant in the French sample.

The culture specific models present a much better statistical fit than the classical one. The adjusted R^2 increases substantially when passing from the global to the specific model. For example, adjusted R^2 for interaction adjustment increases from 0.50 in the global to 0.71 in the Scandinavian one. As shown in the table 2, culture-specific models present higher F tests and weaker standard errors. In all culture specific models, all antecedent present t tests with absolute values larger than 2, indicating a significant effect on adjustment.

DISCUSSION

Limitations of the research

A number of features of the design of the research should be acknowledged and addressed before discussing the results. The first limitations of the research concern the sample. Only four countries of origin and one host country are examined. Due to sample size limitation, Danish, Norwegian and Swedish expatriates had to be bundled together within one sample called «Scandinavia». Future studies should include more countries of origin, more respondents per culture and more host countries. Moreover, the samples excluded de facto those who had left for any reason after the expatriation. There are also limitations concerning the data collection. First, the questionnaire was written in English, which is a foreign language for all the respondents (although pre test showed that the expatriates did not have any comprehension problems). English is the working language of expatriates in India. Second, the dependent and independent variables were collected simultaneously via a single questionnaire from individual respondents, at a single point in time. To check that retrospective rationality was not responsible for the results of this study: we verified that the W,I,G adjustment means were not significantly different for expatriates who had requested the expatriation and those who had not, and

for expatriates who had been promoted and those who had not. A third limitation concerns the focus of this research on the perception of expatriates themselves. However, Nicholson (1984) notes in his person-centered theory of work role transitions, that what is operationally important is a person's subjective perceptions of the reality at work, following the reasoning that what is perceived as real is real in its consequences. The model also presents several limitations. First, we used the classical adjustment facets. Further studies should concentrate on managerial oriented measures, like time to proficiency. Second, further research is needed to investigate the impact of culture on the other factors of expatriates' adjustment. Organizational factors, such as compensation and benefits policies, individual factors, such as motivation to go abroad, and contextual factors such as family / spouse adjustment should also be taken into consideration. Finally, this research presents methodological limits. It would be useful in future to use more sophisticated data analysis methods, like structural equation modeling, allowing simultaneous analysis of several facets of adjustment. The size of our sample did not allow us to use this method. Qualitative methods could also bring complementary information. Given the temporal aspect of adjustment, longitudinal studies would also be very useful. Finally, future research could include several host countries and more countries of origin, and study more precisely the relationships between adjustment and culture of origin's characteristics, like Hofstede's (1991) cultural factors.

Discussion of the results

Despite these considerations, the results are instructive. This research aimed to increase understanding of the intercultural adjustment process first by replicating previous research (H1 to H10) and second by examining the direct (H11) and moderating (H12) effects of culture of origin on the interaction adjustment process.

Our preliminary results confirm the existence of three dimensions of adjustment, in our global sample as well as in our national samples. Our research therefore confirms the findings of previous works. However, the three facets of adjustment are strongly correlated with each other. The strongest correlation exists between general adjustment and interaction adjustment. Cerdin (1999) remarks that future research might take an interest in the meaning of the relationships between the different facets of adjustment. Our results also show that expatriate managers adjust better to work than to living conditions or interaction, confirming the findings of Cerdin (1999). The author suggests that the level of uncertainty in relation to the sphere of work is weaker than the levels of uncertainty related to general living conditions and relations with members of the host country. However, the three facets are explained by different factors in each sample.

First, we will discuss the results related to the classical antecedents. The variables related to work are not significantly related only to work adjustment. The social and organizational support variables have a beneficial effect on all three facets. On the global sample, **supervisory support** facilitates the three facets of adjustment. The culture-specific samples allow us to be more specific. It was noted that supervisory support remains significant specifically for the expatriates whose culture is characterized by a large power distance (French and Koreans). Not surprisingly, **co-workers** support turns out to be the most significant factor of I adjustment for the

Korean managers, characterized by Hofstede as collectivist. Co-workers support is also significant of W, I and G adjustment for the German managers. Future studies may need to examine whether the co-workers are locals or fellow expatriates and the role of the expatriate community in assisting expatriates to adjust (Brewster and Pickard, 1994). **Home country org. support** facilitates W adjustment. This antecedent is significant of the three facets of adjustment in the Scandinavian sample. Finally, **partner support** is a very significant predictor of I and G adjustment in all the samples. There are however two exceptions: partner support is not significant of IA for Korean managers, but is also significant of WA for Scandinavian ones. **Logistical support** contributes to all the regression equations of GA. **Organizational dissimilarity** only has a significant effect on work adjustment for the French and Koreans.

Analyses of variance revealed that expatriates who received any kind of **intercultural training** reported a higher interaction adjustment mean than those who did not receive any training. Intercultural training contributed to the I adjustment regression equations in the global sample, and in some other regressions in the country samples. In this article, the type of intercultural training was not taken into consideration. However, Waxin and Panaccio (2005) demonstrate that the three facets of intercultural adjustment vary significantly according to the type of cross-cultural training received, that experimental methods of training that focus on the host country are the most effective ones, that the positive effects of cross-cultural training are even more noticeable for managers who have little or no prior international experience and finally, that the larger the cultural distance between the country of origin and the host country, the more pronounced are the effects of cross-cultural training.

Among the **six facets of expatriates' adjustability**, technical competencies facilitate W adjustment in the global and in two country samples. Social orientation appears to be a very important facet since it facilitates the three facets of adjustment significantly. The results in the culture-specific samples are more contrasted. Willingness to communicate and openness capacity were found to be very significantly predictive of interaction adjustment. Stress resistance facilitates W adjustment in the global sample and appears also in the French and Korean country samples regressions of W, I, and G adjustment. Openness capacity contributes to all the regression equations of GA.

Our data on the global samples did not support the hypothesis that **international experience** would be a factor of adjustment, although it correlated clearly. In the Korean sample, though, international experience predicts adjustment. This may be explained by the fact that the international exposure of Korean managers is relatively recent in comparison to the European ones.

Length of time spent in India had a significant relation with W and G adjustment on the global samples. Time spent in the host country is a significant factor of work and general living adjustment, allowing routine to take place and then reducing uncertainty. Cerdin (1999) notes that interaction adjustment implies other intermediary processes, like personal motivation to adjust and willingness to make efforts to "move towards" locals, and that these processes are not linked with the length of time spent in the host country. Nevertheless, the results in the culture-specific samples are more contrasted.

That may be explained by the fact that perception and apprehension of time and its consequences are culture bound.

Then we discuss our results related to the direct and moderator effects of **country of origin** on expatriates' adjustment. First, our research demonstrates that culture of origin has a direct effect on the three adjustment facet, accounting for respectively 9, 9 and 22 % of the explained variance of W, I and G adjustment. So, our research shows that adjustment will be more or less difficult according to the expatriate's country of origin. For example, in our sample, the Koreans all together report a lesser degree of W, I and G adjustment than the French. Our results are consistent with Hofstede's (1991) work: French, German and Scandinavian managers report decreasing degrees of W, I and G adjustment and increasing Hofstede's cultural distance to India (respectively 91, 96 and 125-142). So, the bigger the cultural distance, the lesser the adjustment degree. Koreans are the exception: they report a lesser degree of adjustment than Scandinavians (3.67), but their cultural distance to India is larger (109) (see Table 1 and Annex 1). This exception could be explained by the fact that the international exposure of Koreans is relatively recent in comparison to the Europeans one.

Second, our research demonstrates that culture of origin effects what antecedents, and to which degree play a role in the explanation of expatriates' adjustment. The antecedents that significantly contributed to the regression equations of each facet of adjustment varied in nature and strength according to the country of origin. For example, supervisory social support is a very important antecedent of adjustment for French and Korean expatriates, but less so for the Scandinavians, who rely more on the partner support and on home org. support. These country-of-origin-effects are consistent with Hofstede's (1991) work, at least on two points. First, for French and Korean expatriates, whose cultures are characterized by a high score on power distance factors, it seems logical that supervisory support is an important factor of adjustment. Second, for Korean expatriates, whose culture is characterized by strong collectivism, it seems also logical that co-workers support should be helpful in facilitating adjustment.

Further research is needed to examine the effects of culture of origin and its characteristics on expatriates' adjustment. What hides behind the culture of origin effect? Which cultural characteristics are mostly affecting the adjustment process? What are the effects of Hofstede's cultural factors on the adjustment process? How do they impact on the different facets of cross cultural adjustment?

Practical implications

The results of this research have important implications for the management of expatriates, especially in the fields of recruitment, intercultural training and support management policies. As far as expatriate recruitment is concerned, technical expertise and domestic track record are by far the dominant selection criteria (Brewster and Scullion, 2002). Factors like language skills, relational and perceptual adjustability are much less commonly taken into account (Stone, 1991; Barnham and Devine, 1991). Our results show that different facets of adjustability, including expatriates' willingness to communicate, social orientation, active stress resistance and openness capacity are crucial to the adjustment process. Crucially, knowledge that culture of origin/cultural

distance is a significant predictor of adjustment suggests that organizations may need to revise their international staffing policies. If culture of origin is critical then selecting third country nationals for whom the country of assignment is not that different culturally from their own may be a sensible policy (Parker and McEvoy, 1993).

Cross-cultural training appears to be an important factor of adjustment, especially when it comes to interaction and general adjustment. Nevertheless, corporations often neglect to provide any kind of cross-cultural training to their international managers. The mere existence of some kind of cross-cultural training is not sufficient (Waxin, Panaccio, 2005). The training must be in accordance with the hardness of the culture of the host country. The more different that culture is from that of the country of origin, the more important and necessary is the use of cross-cultural training programs. Furthermore, the method of training should be tailored to the cultural distance between the expatriate's country of origin and the host country, but also to the nature of his assignment, to his position and to the duration of his contract. As an alternative to pre-departure training, cross-cultural training in the host country could also be envisaged. Briody and Chrisman (1991) and Selmer (2001) report that some expatriates and their families would have preferred to receive the training in the host country. Mendenhall and Stahl (2000) mention "in country real-time training" as one of the three new tendencies that are emerging for HR managers who work in the international HR area, alongside with global mindset training, and CD-ROM/Internet-based training. However, since culture shock manifests itself in the first few months of expatriation, pre-departure training seems indispensable. Black et al (1992) believe that pre-departure training would be more effective if it were continued in the host country, considered as the ideal place for learning a new culture. Further, Barham and Devine (1991) mention that cross-cultural training of the accompanying family is an often-neglected aspect of the cross-cultural preparation of international managers. Harris (1989) notes that corporations would benefit from using their former expatriates as trainers for the new expatriates.

Finally, managers might use the results of this study to facilitate the adjustment of expatriates to their new position abroad. Antecedents of adjustment are not the same across the national groups of expatriates. Our results suggest that management may be well advised to implement policies and practices to provide effective support and encouragement to expatriates, which take account of cultural and personal needs.

Notes

1: "Scandinavian" includes 35 Danish, 13 Swedish and 9 Norwegian expatriates.

$$2: F = \frac{(SSE_{cum} - SSE_K - SSE_F)/(k)}{(SSE_K + SSE_F)/(n - 2 * k)}$$

When it is significant (large F test and low level of significance), the null hypothesis (equal regression coefficients in the different samples) can be safely rejected and interaction is demonstrated.

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Annex 1: Calculation of intercultural distance, Hofstede (1991)

Country	Power distance	Uncertainty avoidance	Individualism	Masculinity	Intercultural distance to India *
France	68	86	71	43	91
Germany	35	65	66	31	96
Korea	60	85	18	39	109
India	77	40	48	56	-
Norway	31	50	69	8	125
Sweden	31	29	71	5	131
Denmark	18	23	74	16	142

(*: Distances were calculated using the "city block" method)

