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# Expatriates' Acculturation Strategies: Going Beyond "How Adjusted Are You?" To "How Do You Adjust?"

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Expatriates' Acculturation Strategies:  
Going Beyond "How Adjusted Are You?" To "How Do You Adjust?"

by

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A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
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## DEDICATION

This dissertation is dedicated to my father, James Lineberry, who sparked my interest in mathematics; to my mother, Rose Lineberry, who has unfailingly nurtured my intellectual development; to my brother, Kent Lineberry, with whom I learned to strive for excellence; to my son, Carter Lineberry, who I hope to share all these gifts with; and most of all to my wife, who has graciously borne all the challenges of this endeavor by my side.

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## **Abstract**

Expatriates' degree of adjustment to living and working in a foreign country is well-accepted as an important outcome variable in expatriate management research. However, measures of degree of adjustment do not capture the breadth of strategies expatriates may use to achieve such adjustment, which may be critical for understanding whether expatriates have achieved a healthy and productive orientation to life abroad. Borrowing from research on immigrant populations, this study examines the construct of expatriate acculturation strategies, which characterize expatriates' mode of adjustment along two independent dimensions reflecting maintenance of one's home culture and engagement of the host culture, respectively. One hundred U.S. expatriates were recruited and completed an index of acculturation strategies. In addition, participants completed survey and reaction-time based measures of proposed antecedents, correlates, and outcomes of varying acculturation strategies. Results suggest that expatriates largely pursue either a maintenance-focused or engagement-focused strategy and that acculturation strategies are not redundant with degree of adjustment. Relationships between acculturation strategies and relevant individual differences, characteristics of expatriate positions, and outcomes are discussed.



## **Introduction**

Expatriates – individuals who live and work outside their home country for an extended period of time – are an important part of modern global business and a source of considerable interest to researchers and practitioners in international management.

Traditionally, the term “expatriate” refers to those employees who are assigned to offices outside of their home country for a period of months or years. Organizations use these assignments to meet a variety of objectives, most notably to fill a skills gap in another country, build management expertise, or encourage transfer of knowledge and organizational culture between the organization’s home country and its foreign offices (“Brookfield”, 2009). More recently, the term has come to include those individuals who are not assigned abroad but rather seek international employment themselves (Suutari & Brewster, 2000).

Working and living overseas can be very stimulating and transformational, and is often perceived to have career benefits as well (Benson & Pattie, 2008). At the same time, it can be a challenging and very stressful experience for expatriates. Moving abroad alters fundamental aspects of expatriates’ daily life, puts them at distance from their previous friends and family, and requires them to gain the trust and cooperation of coworkers and clients who may hold quite different values, norms, and shared experiences. These stressors quickly add up: After one year, many expatriates show increased physiological markers of strain (e.g., serum prolactin) as well as increased consumption of cigarettes and alcohol (Anderzen & Arnetz, 1997).

If it isn't managed well, the difficulty of life abroad can result in negative outcomes for expatriates and organizations. Harzing (1995, 2002) has pointed out that researchers have overstated the proportion of expatriate assignments that are deemed outright "failures." However, a recent large-scale survey of expatriate management professionals suggests that in some of the most common expatriate destinations, the failure rate is indeed fairly high (e.g., 10% for the United Kingdom and India; 22% for China; "Brookfield", 2009). Shaffer & Harrison (1998) suggest that the actual failure rates of expatriate assignments are likely much higher, as organizations are understandably motivated not to term an employee's performance – or their management of that expatriate – as a "failure". Failure rates aside, Bennett, Aston, and Colquhoun (2000) suggested that expatriates who abort their assignment early are probably only the "tip of the iceberg," and it is likely that many assignments result in less visible but equally-serious negative consequences such as production delays and damaged relationships with foreign employees and clients. The potential for negative outcomes in expatriates' personal lives and careers is no less dire, given the aforementioned spike in stress levels and the disruptions to personal and professional connections in one's home country.

Knowledge of what makes expatriates succeed or fail abroad is therefore extremely valuable, and research in this area has been brisk. Much of the research in the last two decades has focused on expatriate *adjustment* as a criterion of particular importance (Gelfand, Erez, & Aycan, 2007). Adjustment refers to the degree of fit an expatriate achieves with their new environment, both at work and in daily life. It is generally thought that expatriates who are able to adjust well to the foreign environment

are more likely to remain abroad and to perform well on their job. Indeed, meta-analyses show that adjustment relates to important criteria such as withdrawal cognitions and task performance (e.g. Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005; Hechanova, Beehr, & Christiansen, 2003), and individual studies suggest that adjustment acts as a mediator for other antecedents of those outcomes, such as perceived organizational support (Kraimer, Wayne, & Jaworski, 2001) and goal orientation (Wang & Takeuchi, 2007).

While a large body of research has looked at adjustment as an outcome which expatriates achieve to varying degrees, relatively few studies have looked at adjustment as a *process* which may differ considerably from one expatriate to another. Rather than being a static entity, the “environment” that expatriates encounter and to which they adjust is engaged selectively, according to each expatriate’s preferences. A person could wholly embrace life in the new culture; conversely, one could recreate former ways of living among fellow compatriots in an “expat enclave.” More likely, each expatriate pursues some combination of the two approaches with differing emphasis on engaging the host culture vs. maintaining their home culture.

Referred to as pursuing different *acculturation strategies*, this variance in *how* people adapt has been widely studied among other populations such as immigrants and refugees (e.g., see Berry, 1997), but is almost entirely unstudied among expatriates. This is unfortunate, as an understanding of what strategies expatriates pursue, the factors influencing those choices, and the consequences of their pursued strategies would be quite valuable. Such knowledge promises to help explain, predict, and enhance expatriates’ experiences abroad, just as it has enhanced understanding of the experiences of immigrants and similar populations.

The present study seeks to address this gap in the literature, examining how differences in the nature of expatriate assignments and individual characteristics of expatriates relate to the acculturation strategies expatriates use, as well as how these strategies relate to perceived adjustment, withdrawal cognitions, and task performance. In selecting variables to model, I draw first from the literatures on adjustment and acculturation. I also draw heavily from recent work in the area of implicit cognitions relevant to intercultural encounters (e.g., Cunningham, Nezlek, & Banaji, 2004), as such implicit cognitions may be particularly relevant to acculturation strategy choice.

The value of this research endeavor is in its promise to increase our understanding of why people behave as they do in the complex, unfamiliar, and often stressful context of a cross-cultural position. This understanding can then inform the cultivation of more optimal approaches to living and work abroad – or managing those who do so.

## ***Expatriate adjustment***

### **Black et al.'s (1991) model of adjustment**

The model of adjustment that has attracted the largest body of supporting empirical work is that proposed by Black, Mendenhall, and Oddou (1991), which specifies numerous antecedents or “inputs” of adjustment to an international assignment. Prior theory in expatriate management had treated adjustment as an outcome contingent on two broad categories of antecedents: *pre-departure factors*, including previous overseas experience, cross-cultural training, and selection processes; and *post-arrival factors*, including individual differences and non-work factors such as family adjustment and cultural distance. Black et al.'s (1991) model was an effort to incorporate unique

theoretical perspectives from the *domestic* adjustment literature, e.g. research on how employees adjust to domestic relocation.

Based on their reading of that literature, Black et al.'s (1991) model added a number of factors believed to predict international adjustment. Previous overseas experience and cross-cultural training were again included, but their effect on adjustment was considered to be mediated by the accuracy of expectations expatriates have about their upcoming assignment. Those expectations, along with organizational selection processes, were modeled as antecedents of 'anticipatory adjustment', the degree to which a prospective expatriate is adjusted prior to arriving on their assignment. On the post-arrival side of the model, three new categories of factors were incorporated from the domestic relocation literature: job factors (e.g., role conflict), organization culture factors, and organization socialization factors.

Black et al.'s (1991) model also re-conceptualized 'international adjustment' itself. Based on earlier work (e.g. Black, 1988), their model treated adjustment as having three dimensions, with separate consideration for adjustment to work, adjustment to interacting with host country nationals, and adjustment to the general environment (e.g., housing, recreation). Most expatriate adjustment research has adopted and confirmed this three-dimension factor structure, and the dimensions have since shown unique relationships with antecedents and outcomes. For instance, a meta-analysis by Hechanova et al. (2003) found that female expatriates showed greater social interaction adjustment, but that gender was unrelated to either work or general adjustment; meanwhile, role stressors such as role ambiguity and role conflict relate more strongly to work adjustment than to general or social interaction adjustment. Another meta-analysis by Bhaskar-Shrinivas et

al. (2005) also suggests the three facets have unique antecedents and outcomes. For instance, language ability and relational skills were found to be most strongly related to social interaction adjustment, culture novelty was most strongly related to general adjustment, and task performance is best predicted by work adjustment. While the three facets have shown unique relationships, they do have considerable conceptual overlap, most notably because both work and daily life abroad often involve interacting with host country nationals. For instance, Wang and Takeuchi (2007) found that social interaction adjustment was strongly related to work and general adjustment ( $r = .42$  and  $.50$ , respectively), and that the effects of social interaction adjustment on expatriate outcomes were mediated by work and general adjustment.

### **Mode of adjustment vs. degree of adjustment**

Besides addressing the dimensionality of adjustment, Black et al. (1991) noted that prior expatriate management research only treated adjustment as a variable of degree (i.e., how adjusted expatriates perceived themselves to be). In addition to their three-dimension structure of adjustment, Black et al.'s (1991) model featured another major innovation: drawing from domestic job transition research by Dawis and Lofquist (1984) and Nicholson (1984), they included the *mode* of adjustment an expatriate uses to adjust to their work role. Mode of adjustment can be distinguished as involving either efforts to change the environment ('*active* adjustment' or 'role innovation') or efforts to change the self ('*reactive* adjustment' or 'personal change'). In a later article, Black (1992) noted that while degree of adjustment had received considerable empirical investigation, mode of adjustment had not.

Since then, their mode-of-adjustment construct has been absent from almost all empirical work that followed. The recent meta-analysis by Bhaskar-Shrinivas et al. (2005) explicitly sought to test Black et al.'s (1991) model, and found support for most of the factors predicting degree of adjustment; however, they made no mention of the mode of adjustment construct. The authors noted that some variables, such as supervisor support, were omitted due to lack of research. However, mode of adjustment was conspicuously absent from their meta-analytic model without explanation. Indeed, there has been almost no empirical work on the mode of adjustment construct, and if Bhaskar-Shrinivas et al.'s (2005) treatment is any indication, it appears to have effectively been “revised out” of Black et al.'s (1991) model, at least by most researchers.

The only published research on mode of adjustment among expatriates is a pair of studies reported by Shay and Baack (2004, 2006) from data on expatriate managers in multinational hotel companies. As with Black et al. (1991), the authors treat mode of adjustment along two dimensions, borrowing from Nicholson's (1984) theoretical work on domestic job transitions. On one hand, employees could respond to the demands of a new job or role by undergoing varying amounts of *personal change*, specifically in reference to changes in values, attitudes, career goals, and/or personality. Additionally, the employees could try to change the new job demands by engaging in *role innovation*, e.g. adding or deleting their responsibilities, altering the purpose of their job, changing the procedures for their job, etc. Nicholson (1984) proposed that employees can be categorized into four types, based on whether they are high or low on each of the two strategies: *Replication*, when the employee changes neither their self nor their job; *Absorption*, when they change only their self; *Determination*, when they change only

their job; and *Exploration*, when both the self and the job are changed. Certain modes are more likely to be seen, depending on the job or individual. For instance, the priesthood, being highly formalized and regimented, tends to elicit absorption in new initiates (Hall & Schneider, 1973), while salespeople transitioning into a similar sales position in a new office often exhibit replication (Brett, 1980).

Shay & Baack (2004) showed that among expatriates, the purpose of the overseas assignment relates to the expatriate's relative use of the two modes of adjustment. Expatriates who reported that "managerial development" was a major objective of their assignment were also more likely to report undergoing personal change, and slightly more likely to report engaging in role innovation. When expatriates reported that "control of the foreign subsidiary" was a major objective, their host country subordinates were the ones who reported personal change (though not greater role innovation); among the expatriates, there was no relationship between the control objective and either personal change or role innovation. Thus it appears that organizational objectives may influence whether expatriates are oriented to changing themselves and/or their jobs vs. bringing about change in their host country subordinates.

Shay & Baack (2006) then examined how varying modes of adjustment related to Black & Stephen's (1989) three dimensions of degree of adjustment, again surveying expatriate hotel managers. They hypothesized that when reported personal change was high, it was likely indicative of a culturally "tough" assignment, making it likely that a lower degree of general adjustment would be reported; this was supported in their study ( $r = -.22$ ). No other relationships among the two modes of adjustment and the three



dimensions of degree of adjustment were statistically significant, suggesting that mode of adjustment and degree of adjustment are conceptually distinct constructs.

This limited empirical work on mode of adjustment leaves a number of questions, and more importantly, it is based on a fundamentally deficient concept of mode of adjustment. Specifically, the Black et al. (1991) version of the expatriate mode of adjustment construct is unnecessarily restrictive, simply borrowing the construct from the domestic relocation literature without consideration of the unique nature of expatriate assignments. Despite treating degree of adjustment as multi-dimensional, Black et al. (1991) did not consider whether mode of adjustment was also multi-dimensional. Consistent with how the variable was presented in the domestic relocation literature, mode of adjustment was considered only in reference to work adjustment (e.g., an employee's work-specific reactions to being given a work role with greater role discretion).

However, when expatriates are the population of interest,<sup>1</sup> mode of adjustment is relevant not only to how people adjust to their work, but also to the other two of Black et al.'s (1991) aforementioned degree of adjustment dimensions: social interaction with host country nationals and general environmental adjustment. For instance, in interacting with host nationals, one expatriate may focus on influencing them to adopt their preferred style of communication, or may avoid such interactions altogether, instead interacting with home country compatriots whenever possible. Another expatriate may opt to adjust themselves to adopt host nationals' preferences, and may actively seek out interpersonal relationships with host nationals. Unfortunately, Black et al.'s (1991) propositions do not

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<sup>1</sup> It may also be argued that general and interaction adjustment are sometimes relevant even for workers relocated domestically, when such relocation involves a considerable change in interaction partners and/or environment.

explore mode of adjustment in social interactions or general environmental adjustment, and subsequent research has similarly ignored this possibility, though Aycan (1997a) did point out this gap in review chapter on expatriate research.

Furthermore, even if we take the Black et al. (1991) mode of adjustment construct only as a measure of mode of adjustment to *work*, it is focused on capturing the changes employees might make in response to a change in role or responsibility, but does not capture changes in response to working among people from a different culture. Of course, it may be that some expatriate assignments do feature a shift in level of responsibility, work procedures, etc., relative to the expatriate's prior domestic assignment. However, such changes are not defining features of an expatriate assignment. What is a defining feature of such assignments is a shift in the cultural context of work, and thus an understanding of how expatriates choose to adjust to that shift is relevant to a greater number of expatriate assignments. On the whole, the mode of adjustment construct from Black et al.'s (1991) model was not as well-developed as their degree of adjustment construct, perhaps partly explaining why it has been so rarely researched.

### **Acculturation strategies as mode of adjustment**

While the Black et al. (1991) conceptualization of mode of adjustment is problematic, the general idea is worth revisiting and improving. A major problem with the dominant conceptualization of expatriate "adjustment" is that it does focus solely on *degree* of adjustment, glossing over the wide variety of strategies expatriates can use to achieve such adjustment. The Black and Stephens (1989) measure of expatriate degree of adjustment, very frequently used as the measure of adjustment in empirical studies, is what Kristof (1996) terms a "direct" measure of person-environment (P-E) fit. When fit

is measured directly, respondents simply indicate the degree to which they perceive P-E fit on some dimension (e.g., “preferred distance when speaking”) without indicating separate, absolute levels on that dimension for the person vs. the environment (e.g., “I prefer two feet of separation between me and a conversation partner; host country nationals seem to prefer only half a foot”). Fit may be obtained by altering P, E, or both, but direct measurement of fit does not indicate which of those has occurred; that is, the separate P and E effects are confounded (Edwards, 1991).

To be clear, direct measure of degree of adjustment is still useful for many purposes. It is parsimonious, it is conceptually consistent with the notion that degree of adjustment represents an expatriate’s overall sense of balance with their environment, and such direct measures show stronger relationships with related variables (though this may be due to common method variance; Kristof-Brown, Zimmerman, & Johnson, 2005). Even so, it remains true that knowing how adjusted an expatriate feels to a foreign environment says little about how they achieved that feeling of adjustment, or the “environment” to which they are referring. For that, we need a measure separate from degree of adjustment.

Arguably the most valuable and parsimonious way to consider expatriate mode of adjustment is to examine how expatriates orient themselves between their previous, home-country values and behaviors vs. those values and behaviors typical among citizens of their host country. On one hand, expatriates may resolve a lack of fit between themselves and their environment by altering themselves, sometimes referred to as “going native.” Learning the local language, participating in host country daily routines, and related behaviors indicate active efforts to alter oneself to the local environment.

On the other hand, expatriates may resolve fit through attempts to alter the environment. Such attempts may be direct, as when expatriates insist that host country nationals adopt the expatriate's norms or practices. For instance, an expatriate might insist that their host country subordinates behave informally toward them, despite local norms of formality toward those in authority. An expatriate can also *indirectly* alter the environment through avoidance, as is the case when expatriates spend most or all of their discretionary time in an "enclave" of fellow expatriates, circumventing the need to interact with host country nationals to meet daily needs. Again, degree of adjustment does not capture any such differences in how fit is achieved. That is, two expatriates may report equally high degrees of adjustment, one because they have adapted themselves to the local environment, the other because they have adapted their (selective) local environment to themselves. More likely, expatriates will rely on both strategies, but to varying degrees. If such different adaptive strategies relate to antecedents and outcomes of interest, it will not be possible to discern such relationships by assessing degree of adjustment.

I've noted above that the Black et al. (1991) mode of adjustment construct is deficient for a number of reasons. Thankfully, a very suitable conceptualization for expatriate mode of adjustment already exists in the scholarly literature on *acculturation*, a term referring to the negotiation of cultural identity that occurs within and between co-existing dominant and non-dominant culture groups (i.e., an ethnic majority vis-à-vis refugees, immigrants, ethnic minorities, etc.). Specifically, Berry's two-dimensional model of acculturation strategies (Berry, 1997) and attitudes toward such strategies (Berry, Kim, Power, Young, & Bujaki, 1989) is an appropriate framework for classifying

how expatriates may strive to achieve adjustment. In Berry's model, individuals' intercultural attitudes and behavior are rated along two dimensions, one reflecting emphasis on maintenance of one's home-country culture, the other reflecting engagement of other cultures. Often, "other cultures" refers specifically to one salient, geographically proximal culture, e.g., the dominant culture in the country where a refugee seeks asylum.

These two dimensions, *cultural maintenance* and *cross-cultural engagement*, are considered orthogonal and are thus analyzed separately; a person may be high on both, low on both, or emphasize one over the other. Many studies have found that the two dimensions are negatively correlated, suggesting people do tend to emphasize one approach over the other; however, some studies have found non-significant or even positive correlations (Arends-Toth & Van de Vijver, 2007). Kang (2006) found that the response format of various acculturation scales accounts for some of the inconsistency between studies. Specifically, studies using a frequency response format (e.g., "How often do you eat American food?" "How often do you eat Chinese food?") tend to exhibit larger negative correlations between the two dimensions, due to the mutual exclusivity implied by the frequency format. When endorsement-format scales are used, no such correlations are found. However, it would be wrong to conclude that these correlations are necessarily dictated by the measurement whims of researchers. In certain domains of life, behaviors are by nature mutually exclusive; the more time you spend with home country compatriots, the less time you have to spend with host country nationals. Consistent with this, Shaffer and Harrison (2001) found that the depth of support that expatriate spouses reported receiving from host country nationals was inversely related to the depth of support they reported from non-host country nationals ( $r = -.44$ ).

As further justification for Berry's bi-dimensional model, the two dimensions show unique relationships with external criteria. For instance, Ryder, Alden, & Paulhus' (2000) study of ethnic Chinese living in Canada found that while both the maintenance and engagement modes of adjustment are positively related to Conscientiousness and negatively related to Neuroticism, only engagement showed positive correlations with Extraversion and Openness to Experience. Higher engagement scores were also associated with participants having more independent self-construals, lower depression, less symptoms of psychological distress, and less maladjustment; maintenance scores were not associated with these variables. In the aforementioned study by Shaffer and Harrison (2001), expatriate spouses' depth of support from host country nationals was positively related to personal, social interaction, and cultural adjustment, while depth of support from non-host country nationals was unrelated to these adjustment variables. Studies such as Ryder et al. (2000) and Shaffer and Harrison (2001) point to the value of separately assessing the two modes of adjustment when modeling degree of adjustment.

By crossing individuals' high-low standing on both the maintenance and engagement acculturation strategies, Berry proposed that four possible acculturation types emerge: *Integration*, when both cultural maintenance and cross-cultural engagement are valued; *Separation*, valuing cultural maintenance but not cross-cultural engagement; *Assimilation*, when cultural maintenance is not valued, but cross-cultural engagement is; and *Marginalization*, when neither cultural maintenance nor cross-cultural engagement are valued. These four modes correspond roughly to Nicholson's (1984) aforementioned modes of Exploration, Determination, Absorption, and Replication, respectively. Individuals generally give preference to one of these four

strategies (Berry et al., 1989), though it is possible that one may adopt different strategies in different life domains (e.g., public vs. private; Berry, 1997; Arends-Toth & Van der Vijver, 2007). In rare cases, some strategies are less feasible. For instance, either assimilation or integration is difficult if a host country's government imposes strict separation between visiting foreigners and host country nationals (e.g., employees of Saudi ARAMCO; Glasze, 2006). Additionally, the Marginalization type has been criticized as being an implausible strategy which is almost never evident among surveyed populations (Del Pilar & Udasco, 2004; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). However, the three remaining types have been extracted from cluster analyses of immigrants (e.g. Schwartz & Zamboanga, 2008).

Though Berry's model has been used extensively in empirical studies involving immigrants, sojourners, refugees, and ethnic minorities, it has only rarely been mentioned in the expatriate literature, and has never been applied in an empirical study. Zeynep Aycan (1997a, 1997b) called for its use in research, proposing that an integrationist strategy is likely to be the most optimal for expatriate satisfaction and effectiveness. As justification for this proposition, she noted that willingness to interact with host country nationals has been shown to relate positively to adjustment (Mendenhall & Oddou, 1985; Black, 1988, 1990), that lack of such willingness inhibits expatriates' understanding of host country nationals (Kealey, 1989), and that the most satisfied expatriates maintain valued aspects of their own cultural identity while adopting aspects of the host culture that they perceive positively (Lee & Larwood, 1983). Unfortunately, no subsequent empirical work has explicitly tested Aycan's proposition.

However, a study by Stahl and Caligiuri (2005) comes close to answering this call for research on how expatriates adjust, somewhat inadvertently. The authors interviewed 116 German expatriates assigned to either the United States or Japan to evaluate what coping strategies they used when encountering difficulties abroad. Each interviewee reported problem events they had experienced on their assignment (with an average of 8 reported events) and the strategies they used to cope with those events (averaging 4 coping strategies per event). Coping strategies were then content analyzed and assigned to categories.

Even though the expatriates' responses were open-ended, many of the most frequently-reported coping strategies correspond to acculturation strategies. Coping strategies reflecting the Separation strategy were reported quite frequently. For instance, strategies falling under the category "Ethnocentrism" were cited as having been employed in response to 25% of problem events, making it the 3<sup>rd</sup>-most frequently reported category out of 30 strategies. This category reflects such behaviors as intentionally violating host country cultural norms. The category "Negative comparisons" was also reported as a coping response to 21% of problem events; this category referred to making unfavorable comparisons of the host culture vis-à-vis one's home culture.

Conversely, evaluations and behaviors reflecting an Assimilation strategy were also often reported, e.g. "Positive comparisons" (making comparisons that favor the host culture; 24%) and "Assimilation" ("adopts local norms and values"; 17%). Unfortunately, it is not possible based on the data reported in Stahl and Caligiuri (2005) to evaluate whether individuals tend to favor certain acculturation strategies over others,



nor to evaluate how such differing strategies may relate to important outcomes. Still, their study provides some initial validation for the assertion that attitudes, behaviors, and cognitions related to acculturation strategies are a relevant part of expatriates' coping repertoires.

Additionally, clues about the role of acculturation strategy in expatriate adjustment can be found in studies that examine expatriates' quality and/or frequency of social interaction with host country nationals. Shaffer and Harrison (2001) found that depth of support from host country nationals was related to expatriate spouses' degree of adjustment (personal adjustment,  $r = .15$ ; social interaction adjustment,  $r = .40$ ; cultural adjustment,  $r = .19$ ), while home country national support was unrelated to the adjustment variables. This seems to indicate that host country nationals make particularly good associates for expatriates, owing perhaps to their greater knowledge of local practices, capacity to express welcome and acceptance to the expatriate, etc. Other studies have similarly found that greater contact with host country nationals is related to improved expatriate adjustment (e.g., Caligiuri, 2000; Johnson, Kristof-Brown, Van Vianen, De Pater, & Klein, 2003). In fact, in the Hechanova et al. (2003) meta-analysis, frequency of social interaction with host country nationals was the strongest predictor of social interaction adjustment (corrected  $r = .49$ ; however, this estimate is based on only two studies).

While it is unclear how expatriates acculturate in other life domains (e.g., recreation, work, food, customs, etc.), the evidence available suggests that in the particular domain of intercultural interaction, expatriates do vary in their orientation toward home vs. host country social interaction partners, and this variance relates to

expatriate outcomes. More research is needed to establish how acculturation to all domains of life abroad relates to both antecedents and outcomes. In the sections that follow, a number of potential antecedents and outcomes of acculturation strategies are proposed which show promise for enhancing our understanding of these strategies.

### ***Antecedents of acculturation strategies: Assignment characteristics***

#### **Cultural distance**

Occasionally termed “culture novelty” (e.g., Black et al., 1991) or “cultural toughness” (Mendenhall & Oddou, 1985), cultural distance refers to how unique two cultures are from one another along attributes such as standard of living, cultural values, political systems, food, etc. Expatriates tend to show lower degrees of adjustment when the host culture is markedly different from their home culture (Torbiorn, 1982; Searle & Ward, 1990). Evidence from studies of international students suggests that acculturation strategies are also similarly affected by perceived cultural distance, as one might expect: students are less likely to engage the host culture when perceived cultural distance is great (Suanet & van de Vijver, 2009; Galchenko & van de Vijver, 2007). A similar pattern is expected to hold for expatriates. However, as noted by Black et al. (1991), it is likely that cultural distance in the host country workplace will be somewhat lessened, given the proliferation of Western business practices and the transmission of policies and culture between the home and host country offices.

*Hypothesis 1: Cultural distance is negatively related to host-culture engagement, particularly for social interaction and general acculturation.*

## **Purpose of assignment**

When expatriates are assigned to positions abroad by their organization, these assignments can vary widely in their objectives, and these objectives relate to the mode of adjustment expatriates adopt in their work roles (Shay & Baack, 2004). In the recent Brookfield (2009) survey of expatriate management professionals, the most commonly cited assignment objective was to fill a managerial or technical skills gap in a foreign subsidiary. This primarily means “bringing” something from the headquarters to the foreign subsidiary; the expatriate is intended, at least in part, to be who they were at headquarters (e.g., a top manager or technician). If this objective is predominant, it is likely that the expatriate will be inclined to maintain their work values and practices and transmit them to foreign coworkers, not the other way around; they may even make extra efforts to conspicuously display their home country values and practices. Conversely, the next most commonly cited objective in Brookfield (2009) was managerial development of the expatriate. With this objective, the expatriate is explicitly meant to learn something from their time with the foreign subsidiary. While they may maintain their prior work values and practices, they are also more likely under this objective to engage the host culture in order to become a more “global” leader.

Shay and Baack (2004) found the managerial development objective related to personal change and role innovation, and the control objective related to neither. With mode of adjustment re-conceptualized as differing acculturation strategies, however, I expect to find that the control objective relates to greater maintenance and less engagement, while the managerial development objective relates to greater engagement. I expect these effects to be strongest for acculturation to work, with weaker “carryover” effects also evident for social interaction and general environment acculturation.

*Hypothesis 2: Increasing importance of control of the foreign subsidiary as an assignment objective is related to greater maintenance of the home culture and less engagement of the host culture.*

*Hypothesis 3: Increasing importance of managerial development as an assignment objective is related to greater engagement of the host culture.*

## **Correlates of acculturation strategy: Individual characteristics**

### **Ethnocentric attitudes**

One individual difference which shows particular promise for research in expatriate management is ethnocentrism. Most definitions of ethnocentrism given in the literature describe it as a tendency to positively evaluate characteristics of one's own culture and fellow cultural members, while negatively evaluating characteristics and adherents of other cultures (e.g., Black, 1990; Stening, 1979). That is, people with more ethnocentric attitudes are those who consistently judge home culture members and artifacts more favorably than foreign culture members and artifacts. As with any other generalized attitude, this would be expected to relate to an individual's generalized pattern of behavior towards relevant attitude objects (Ajzen & Fishbein, 1977).

Studies looking at the role of ethnocentrism in expatriate assignments are few in number, and do not form a coherent whole. In a study of Japanese expatriate managers, Black (1990) examined how expatriates' degree of adjustment related to their self-reported ethnocentrism, as well as to four other cultural competency variables: cultural flexibility, social orientation, willingness to communicate, and conflict resolution. Using a 20-item scale derived from Adorno, Frenkel-Brunswick, Levinson, and Sanford (1950), they computed partial correlations between ethnocentrism and the three factors of degree

of adjustment, controlling for a number of variables. None of the partial correlations for ethnocentrism were significant. Conversely, statistically significant correlations were found for all of the other four cultural competency variables and each of the three adjustment factors. This early study seems to suggest that ethnocentrism is unrelated to degree of adjustment.

However, Shaffer, Harrison, Gregerson, Black, and Ferzandi (2006) found that ethnocentrism – relative to cultural flexibility, task orientation, and people orientation – was the most consistently strong predictor of adjustment, withdrawal intentions, and performance among an expatriate sample from a variety of nations. Shaffer et al. (2006) concluded that ethnocentrism is “especially relevant for expatriate effectiveness” (p. 121). At the same time, they acknowledged that self-reported ethnocentrism items are very transparent (e.g., “I think my culture is better than other cultures”; item 14 from Chen & Starosta, 2000).

As it is with many self-report personality scales (Morgeson, Campion, Dipboye, Hollenbeck, Murphy, & Schmitt, 2007), response distortion is a major concern here. In some nations, ethnocentrism is socially undesirable, and it is especially likely to be considered undesirable among multinational corporations placing expatriates on foreign assignments. Particularly when under consideration for such assignments, employees are likely to underreport ethnocentrism. This is not to say that such employees are necessarily being deliberately dishonest or “faking” as it is often termed. For instance, it has been suggested that on personality scales, some respondents may simply be giving answers based on their aspirational or ideal self, rather than their typical self (Morgeson et al., 2007).

While such response distortion may not affect observed validity coefficients (Hough, Eaton, Dunnette, Kamp, & McCloy, 1990), it may alter the rank order of candidates (Rosse, Stecher, Miller, & Levin, 1998), causing those with the greatest response distortion to be hired with greater likelihood in a top-down selection system. It has also been found that the constructs measured by personality tests in applicant vs. non-applicant samples are distinct (Stark, Chernyshenko, Chan, Lee, & Drasgow, 2001), potentially leading researchers to apply the label “ethnocentrism” to a construct which is better termed something else, such as “self-monitoring” or “socially-desirable response style”. Shaffer et al. (2006) suggest that it may be necessary to develop veiled tests of ethnocentrism, such as conditional reasoning tests or implicit measurement techniques, the latter of which is described below.

### **Implicit vs. explicit measurement of ethnocentrism**

In recent decades, many researchers have explored how attitudes operate at a non-conscious or “implicit” level. Although people are often uncomfortable with the assertion that their thoughts and actions are influenced outside of conscious control, the relevance of automatic cognitive processing to the field of psychology is increasingly evident (Bargh & Chartrand, 1999). Numerous researchers have asserted that social behavior is determined by two separate information-processing modes: one characterized by conscious and purposeful processing, the other characterized by rapid, automatic processing based on prior associations (for a review of dual-process theories, see Chaiken & Trope, 1999). Neuropsychological research demonstrating the mediating role of the hippocampus in quickly creating new associations, and its non-operation in more gradual

learning processes, suggests that the dual-mode distinction is grounded in basic neuropsychological processes (Smith & DeCoster, 2000).

These two processing modes function in different ways. The *deliberative* processing mode involves evaluating whether associative propositions are true or false (e.g. “when it is cold, a person should wear more clothes” = TRUE), and it triggers behavior through intentions (e.g. “I’m going to put on a coat”). The *automatic* mode involves no such evaluation or overt intention, instead triggering behavior through spreading activation between the object of perception and the behavioral schemata that are already associated with that object (Strack & Deutsch, 2004). Upon perception of a person from another culture, if deliberative processing were well engaged, the perceiver would likely draw from their rationally-determined, explicitly-held beliefs about other people (e.g. "all people deserve respect" = TRUE). If automatic processing predominates, rational beliefs are not queried; instead, the most frequently activated associations one holds regarding people from different cultures are activated and more accessible to retrieval. Such associations may be opposed to a person’s rationally-held beliefs. For instance, a person may rationally believe that all people are equal; however, if they are constantly exposed to negative portrayals of foreigners in television and other media, the association between “foreigner” and “bad” may become chronically activated over time.

For a number of reasons, the automatic processing mode has a major influence on deliberative processes and behavior. Automatic processing is constantly engaged and does not tax mental energy, while deliberative processing can be disengaged or disrupted and requires a considerable amount of mental energy (Strack & Deutsch, 2004). The deliberative system monitors the automatic system, but this monitoring is often lax

(Kahneman, 2003). Additionally, even when the deliberative mode is engaged, the associations to be evaluated are retrieved from the automatic system, meaning that associations activated in the automatic mode can bias deliberative processing (Strack & Deutsch, 2004). In short, the associations people hold between attitude objects and their “default” evaluation and/or behavioral response to that object can exert a powerful influence on behavior.

Much of the research on automatic processing has focused on the automatic positive vs. negative associations people hold about socially-derogated groups, such as minorities or the poor. The general thrust of findings in this area is that at the level of deliberative processing, many people hold positive attitudes toward derogated groups; however, they simultaneously hold negative automatic associations with those groups. For instance, a study by Fazio, Jackson, Dunton, and Williams (1995) demonstrated the use of an evaluative priming procedure for measuring implicit prejudice toward Blacks. They presented participants with a series of adjectives on a computer screen, one at a time, and asked the participants to rapidly categorize the adjectives as positive or negative (e.g. “wonderful” or “attractive” = positive, “annoying” or “offensive” = negative). For each adjective, their response latency was recorded. Just before each adjective was shown, a White or Black face was displayed for a split-second, ostensibly too quickly to be deliberately processed, but slowly enough to trigger automatic processing.

On trials in which adjectives were preceded by very briefly-presented Black faces, White participants in their study showed greater facilitation of response (i.e., more rapid response) for negative adjectives. Conversely, when White faces preceded the adjective,



their responses were more facilitated for positive adjectives. That is, it seems that the White participants had a harder time accessing positive associations when a Black face had been recently perceived. Furthermore, participants' differential response latency for Blacks vs. Whites was uncorrelated with their scores on an explicit measure of anti-Black prejudice, the Modern Racism Scale (McConahay, 1986). It's also worth noting that scores on that Modern Racism Scale in their study were considerably right-skewed, i.e., very few respondents reported explicit prejudicial attitudes. This is consistent with the findings of Raden (2003), who found that "classic" ethnocentrism is relatively rare among Americans, being most prevalent among those respondents with low education, rigid thinking, and social isolation. Thus while it may be increasingly rare to find people who explicitly endorse prejudicial attitudes, individuals may still have strong negative associations with derogated out-groups.

A study by Cunningham et al. (2004) found that the implicit attitude people have toward one derogated out-group ("prejudice") is highly correlated with their attitudes toward other such out-groups, suggesting there is a meaningful, coherent "implicit ethnocentrism" construct. Participants in their study completed explicit measures of attitudes towards five derogated groups – Blacks, gays, the poor, Jews, and foreigners in general – and also completed a series of Implicit Association Tests (IAT; Greenwald, McGhee, & Schwartz, 1998) contrasting each derogated group with its valued-group counterpart, e.g. straight vs. gay.<sup>2</sup> Self-reported conservative political ideology and measures relating to rigidity of thinking were also administered, as these variables were expected to relate to implicit and explicit ethnocentrism.

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<sup>2</sup> It is debatable whether "*ethnocentrism*" is the most appropriate term for the construct in question in Cunningham et al. (2004), as they included groups that are distinguished on characteristics other than ethnicity, e.g. rich vs. poor, straight vs. gay.

A series of confirmatory factor analyses supported a two-factor model of attitudes toward derogated groups, with “implicit ethnocentrism” and “explicit ethnocentrism” as the two factors and all measures loading according to their format, i.e., self-report scales loading on the explicit factor and IATs loading on the implicit factor. The two factors were significantly correlated,  $r = .47$ , suggesting that the factors are related but also distinct. Surprisingly, the correlations between error terms for each particular derogated group’s two measures – implicit and explicit – were not significant. This further suggests the predominance of the general factors and their relationship to one another, relative to any unique prejudices toward a particular derogated group or groups.

Including the other self-report measures of conservative vs. liberal ideology and rigidity of thinking, support was found for a simple “chain”-structure model: implicit and explicit ethnocentrism related as mentioned previously ( $r = .47$ ), explicit ethnocentrism related to conservative ideology ( $r = .73$ ), and conservative ideology related to rigid thinking ( $r = .29$ ). The authors suggest that causality in the above model likely flows in both directions, e.g., implicit biases can affect perception and increase the likelihood that explicit biases will develop, and conversely, chronic activation of explicit biases can strengthen the implicit associations underlying them. In summary, it appears that people’s implicit attitudes toward various derogated groups are fairly consistent within persons and are unique from explicit attitudes toward groups, making implicit ethnocentrism a potentially useful individual difference for explaining behavior in cross-cultural encounters.

Implicit ethnocentrism is likely to be particularly relevant in the cross-cultural encounters typically occurring during an expatriate assignment. One reason for this is

that expatriates face high levels of stressors, e.g., ambiguous interactions with locals, unfamiliar behavior-consequence contingencies, and social isolation. Depending on the nature of the expatriate assignment, these stressors are likely to be chronic over the course of months or years. Consistent with this, expatriates show considerable strain, as mentioned previously in the Anderzen and Arnetz's (1997) study. Their research compared expatriate managers vs. matched non-relocated participants and found significantly increased levels of serum prolactin (a stress indicator) as well as decreased mental well-being among expatriates one year into their assignment, compared to their baseline measures prior to the assignment.

Considering how stressful an assignment abroad is, expatriates' implicit associations are likely to be even more important in predicting behavior than they would be in a domestic context. As mentioned previously, deliberative mental processing requires use of limited cognitive resources which are likely to already be taxed by efforts to cope with stressors. The net effect of this is that the automatic processing mode is left "in the driver's seat". Indeed, when over-aroused, attempts to self-regulate one's thoughts and behaviors begin to fail, and people rely more and more on simple associative mental processing (Baumeister & Heatherton, 1996). Thus, a person experiencing cross-cultural strain may possess positive conscious attitudes toward foreigners, yet lack the mental energy to activate those attitudes, instead reverting to implicit attitudes (Wilson, Lindsey, & Schooler, 2000). If implicit attitudes toward foreigners are negative, this may lead to less engagement with the host culture, even among those who possess positive explicit attitudes toward foreigners.

I expect to replicate Cunningham et al.'s (2004) finding that attitudes toward ethnic groups load most strongly on two factors, reflecting implicit vs. explicit measurement. Explicit measures of ethnocentrism are likely of limited predictive use for Western expatriates abroad, given that such attitudes are generally considered socially undesirable in the Western world, the measures are subject to response distortion, and deliberative racist attitudes and behaviors seem to be on the decline in recent decades (e.g., the percentage of marriages in the United States that are interracial or interethnic has more than doubled between 1980 and 2008; Passel, Wang, & Taylor, 2008). Thus, little variance is expected in the explicit ethnocentrism scores, though it is expected that those few expatriates who do endorse more ethnocentric attitudes will emphasize maintenance of their home culture and avoid engaging the host culture. Implicit measures of ethnocentrism show more promise for predicting acculturation strategy choice, as automatic associations tend to drive behavior in such stressful situations, and implicit measures are less susceptible to socially-desirable responding.

*Hypothesis 4: Implicit and explicit attitudes towards particular ethnic groups will load on two distinct factors, reflecting implicit ethnocentrism and explicit ethnocentrism.*

*Hypothesis 5: Expatriate ethnocentrism will be positively related with maintenance of home culture and negatively related with engagement of the host culture.*

*Hypothesis 5.1: This relationship will be stronger for implicit vs. explicit measurement of ethnocentrism.*

## **Demographic variables**

The relationships between demographic variables such as age and gender and expatriates' use of acculturation strategies are likely to be quite complex, though past

research points to a few expected patterns. Generally, increasing age is associated with less receptivity to foreign cultures, though it is less clear whether this would be observed among expatriate professionals. For instance, among immigrants, children who immigrate at an early age experience less difficulty adjusting (e.g., Beiser et al., 1988), but those who immigrate during adolescence have considerable difficulties (e.g., Ghuman, 1991). Among the over 2.5 million adults who completed one or more of the online versions of the Implicit Association Test (IAT), older adults hold stronger implicit negative attitudes towards Blacks and Arab Muslims than young adults (Nosek et al., 2007). Furthermore, older adults are less able to regulate their automatic associations toward minorities (Gonsalkorale, Sherman, & Klauer, 2009). This greater propensity to hold and act upon negative associations with minorities may translate into less willingness to interact with host country nationals while abroad.

Looking more specifically at expatriates, Stahl and Caligiuri (2005) found that expatriates in senior management positions had less contact with host country nationals than lower- and middle-level managers, though it isn't clear how closely position in the organization correlated with age, nor whether the variance in contact was by choice or simply due to the nature of the different positions. The meta-analysis by Hechanova et al. (2003) found no relationship between age and any of the three facets of degree of adjustment, though as noted before, this does not preclude a significant relationship between age and acculturation strategy; for instance, older expatriates may perceive a similar degree of adjustment, but tend to achieve it more through maintenance of their home culture rather than engagement of the host culture.

While research suggests older adults may be less receptive to different cultures, it is less clear whether they will have greater commitment to their home culture. However, it seems likely that as people accumulate time and experiences in their home culture, this increases their personal investment in that culture.

*Hypothesis 6.1: Age will be negatively related to all facets of host-culture engagement.*

*Hypothesis 6.2: Age will be positively related to all facets of home-culture maintenance.*

The role of gender has received considerable attention in the expatriate management literature, often in response to the observation that women are drastically underrepresented in the expatriate population (e.g., Johnson et al., 2003, 10% female; Wang & Takeuchi, 2007, 12.6% female; etc.). Many rationales have been given as to why this occurs (Adler, 1987). Whatever the reasons, though, research suggests that in many ways women are actually better suited to expatriate assignments. A study by Sinangil and Ones (2003) of expatriates in Turkey found that host country coworkers rated female expatriates' performance higher than males, particularly on performance dimensions related to interpersonal effectiveness (e.g., "establishing and maintaining business contacts",  $d = -.14$ ; "communicating/persuading",  $d = -.20$ ; negative  $d$ -values indicate women are favored). However, on the dimension "adjustment to foreign business practices", no gender differences were found. Somewhat consistent with this, the Hechanova et al. (2003) meta-analysis found that women tend to report a greater degree of social interaction adjustment (corrected  $r = .15$ ), but only slightly greater work adjustment (corrected  $r = .09$ ), and slightly worse general adjustment (corrected  $r = -.09$ ).

As frequency of social interaction with host country nationals is so closely related to social interaction adjustment, the results above suggest that female expatriates are

more likely to interact with host country nationals, reflecting a tendency toward the engagement acculturation strategy (at least in the domain of social interaction). This may be due to a tendency among women to possess greater interpersonal skills (Holt, 1998) and to report greater ease in establishing interpersonal relationships abroad (Napier & Taylor, 1995). No gender effects are hypothesized for the maintenance facet of acculturation.

*Hypothesis 7: Gender will be associated with host-culture engagement in social interactions, with women showing higher host-culture engagement.*

## **Acculturation strategies and expatriate outcomes**

### **Degree of adjustment**

The relationship between acculturation strategies and degree of adjustment is likely quite complex, particularly for the engagement dimension. Variables related to acculturative engagement, such as breadth and depth of host country national social support, have sometimes shown positive relationships with degree of adjustment (e.g., Shaffer & Harrison, 2001; Caligiuri, 2000; Johnson et al., 2003). The idea that engaging the culture results in greater cultural adjustment makes some intuitive sense. However, other researchers have found that the individuals most willing to engage the host culture are also more susceptible to the stress of “culture shock”, particularly during the early stages of a foreign assignment (Ruben & Kealey, 1979), as they are in essence exposing themselves more fully to the stressors of the foreign environment. Indeed, those who deliberately separate themselves from the host culture may be very effectively reducing their exposure to stressors, thereby enhancing their sense of adjustment. Manifest ethnocentrism may be a highly adaptive behavior, from this perspective.

The effect of engagement vs. maintenance on degree of adjustment may depend on the elapsed length of one's current position abroad. Research suggests that perceived degree of adjustment varies widely throughout the course of an international sojourn and tends to follow a consistent pattern. Lysgaard's (1955) interview study of Fulbright grantees from Norway suggested a "U-curve of adjustment", with interviewees indicating initially high perceptions of adjustment, a subsequent period of low perceived adjustment, and finally a return to high perceived adjustment. In their meta-analysis, Bhaskar-Shrinivas et al. (2005) assessed the fit of the "U-curve" and other polynomial functions to the average adjustment of groups of expatriates at different time points in their assignments, using means from 20 studies. The best fit was found for a "sideways 'S'" curve of adjustment with significant quadratic, cubic, and quartic terms. This function differs from the hypothesized "U-curve" in that perceived adjustment begins at a moderate level and increases to a peak at around 12 months before decreasing to a trough at around 36 months; after this, adjustment increases up to an asymptote after 50 months.

These time periods correspond well to Oberg's (1960) four-phase model of adjustment. First, the individual experiences a "honeymoon" stage of highly positive emotions and cognitions, as experiences are generally novel and stimulating, and major frustrations have not set in. This stage is eventually followed by culture shock and strong negative reactions to the host country. After a time, the sojourner is said to enter a "recovery" stage where they gain competency functioning in the host country, finally reaching an "adjusted" plateau as their competency reaches a very high level.

It may be that among expatriates who have just arrived and are still in a "honeymoon" phase, initial progress in successfully engaging the host culture (e.g.,



learning basic greetings, navigating the immediate neighborhood) is fast and relatively easy, such that greater engagement is associated with higher perceived adjustment. As the “culture shock” phase sets in, progress engaging the host culture may stall as complexities of language and cultural differences become apparent; during this phase, while greater engagement may be best for eventual learning, it is likely to be associated with less perceived adjustment. Finally, for “seasoned” expatriates who have pushed through the difficulties of the culture-shocked phase and are successfully engaging the more difficult aspects of the host culture, greater engagement is again likely to be associated with greater perceived adjustment. Of course, there is likely to be some individual difference in how people progress through the aforementioned phases (Church, 1982); however, as the general trend has been evident from past studies, I expect it to apply to many expatriates in this study.

While the effect of engagement is complex, I expect that maintenance of the home culture is universally beneficial for expatriates’ perceived adjustment, by serving as an “anchor” of familiarity to which expatriates can turn in times of overwhelming stress.

*Hypothesis 8: Maintenance of home culture is associated with higher degree of adjustment.*

*Hypothesis 9: Among expatriates who have been on assignment between 12-36 months, greater engagement of the host culture is associated with lower degree of adjustment.*

*Hypothesis 10: Among expatriates on assignment less than 12 or greater than 36 months, greater engagement of the host culture is associated with higher degree of adjustment.*

## **Withdrawal cognitions**

The three dimensions of degree of adjustment relate as one would expect with withdrawal cognitions: greater adjustment is associated with less withdrawal cognitions (Bhaskar-Shrinivas et al., 2005; for general adjustment,  $\rho = -.28$ ; for social interaction and work adjustment,  $\rho = -.23$ ). As the relationships between degree of adjustment and acculturation strategies are unclear, it is also not clear how acculturation strategies will relate to withdrawal cognitions. However, as with adjustment, it seems reasonable that successful efforts to maintain one's home culture abroad act as a "buffer" for acculturative stress, making expatriates less susceptible to homesickness and thus less likely to consider returning prematurely to their home country. Also similar to the hypotheses for adjustment, greater engagement of the host culture should lead to less withdrawal cognitions during phases when such engagement is generally successful (i.e., the "honeymoon", "recovery", and "adjusted" phases), and to more withdrawal cognitions during the culture-shocked phase.

*Hypothesis 11: Maintenance of home culture is associated with less withdrawal cognitions.*

*Hypothesis 12: Among expatriates who have been on assignment between 12-36 months, greater engagement of the host culture is associated with more withdrawal cognitions.*

*Hypothesis 13: Among expatriates on assignment less than 12 or greater than 36 months, greater engagement of the host culture is associated with less withdrawal cognitions.*

## **Performance**

Expatriate research consistently finds positive correlations between the three dimensions of expatriate degree of adjustment (i.e., work, social interaction, and general adjustment) and both task performance and contextual performance (e.g., Caligiuri, 1997;

Shaffer et al., 2006). How the two dimensions of acculturation relate to expatriate performance has not yet been examined. I expect that, as suggested above, maintenance of one's home culture is mostly beneficial in mitigating acculturative stressors, and will not have significant relationships with task and contextual performance. Conversely, engagement of the host culture signals respectfulness to host country coworkers and increases the likelihood of cultural learning; this should facilitate performance.

Contextual performance in particular is expected to relate strongly to engagement, as it reflects pro-social aspects of performance, such as maintaining good relationships with host nationals (Borman & Motowidlo, 1993).

*Hypothesis 14: Engagement of the host culture is associated with higher task and contextual performance.*

## **Methods**

### ***Participants***

U.S. citizens currently working full-time outside the U.S. were sought for this study. Potential participants were identified via human resource managers and other international business professionals in contact with American expatriates, as well as by searching Internet biographies for self-identified expatriates (i.e., professor biographies on foreign university websites, LinkedIn profiles of individuals belonging to expatriate groups). To encourage participation, respondents were entered in a raffle to win one of two iPod Touch devices or, if preferred, a check for \$275. All recruiting procedures were carried out as approved by the Institutional Review Board of the University of South Florida.

Both of the central variables in this study – the expatriate acculturation index and the implicit ethnocentric association test – have not been previously studied, making power analysis somewhat challenging. Since the average absolute correlation among studied variables in the Bhaskar & Shrinivas et al. (2005) expatriate meta-analysis is  $r = 0.25$ , this value was selected as an effect size of theoretical and practical significance for the current study. Relationships not exceeding this effect size seem unlikely to have profound implications for the field of expatriate management research, though of course it is possible that a small but particularly unique relationship could still be deemed theoretically or practically significant. Planned analyses in this study consist primarily of bivariate correlations and univariate regression models with moderate numbers of

predictors. Thus, a target sample size of 100 was selected, in order to provide a power of 0.72 to detect a  $\rho$  of 0.25 and a power of .80 to detect a medium-small increase in prediction ( $f^2 = .10$ ) in a hierarchical regression with two variables in the first block (e.g., age and gender) and three in the second block (e.g., cultural distance, explicit ethnocentrism, and implicit ethnocentrism).

A total of 464 potential participants were identified and contacted via e-mail. Of these, 28 invitations were returned as undeliverable by mail servers. Sixty-two individuals indicated that they were ineligible to participate due to citizenship and/or work status, and 31 indicated that they did not have access to a computer able to run the study software successfully. Of the 342 remaining potential participants, 100 eligible participants (29.2%) returned complete surveys. Four participants who were no longer exclusively U.S. citizens were retained in the final data set, as they were born and raised in the United States and represent a valid possible outcome of time abroad, i.e., attaining local citizenship. Upon reaching 100 eligible participants, data recruitment efforts ceased.

The final sample of 100 participants included 33 females and 67 males, ranging in age from 22 to 70 years (median age = 40 years). Ninety-two participants were White, two participants were South Asian, and five participants individually identified as African-American, Middle Eastern, Eurasian, Caucasian, and Mediterranean, respectively. One participant identified themselves as belonging to multiple racial groups. Expatriate host countries varied widely, with 45 participants currently working in Europe, 32 in East Asia, 16 in the Middle East, 6 in South Asia, and 1 in North America (specifically Canada). The distribution of expatriates' elapsed number of years in their current host

country shows considerable right-skew, with a median length of 3.4 years and a maximum length of 38.1 years.

The majority of participants (57) worked as professors in non-U.S. universities with the remainder working in a variety of industries including consulting, manufacturing, health care, and software development. Though professional field was not a variable of primary interest in this study, in order to assess whether university professors and other expatriates could be reasonably combined for analyses, homogeneity of the two groups' covariance matrices was assessed using LISREL. The combined model yielded acceptable fit in spite of the small sample size ( $\chi^2 = 302.01$ , RMSEA = 0.076, 90% confidence interval = [0.04,0.10], CFI = 0.85), corresponding to "reasonable" fit according to the Browne & Cudeck (1993) guidelines. Additionally, the distribution of professors vs. non-professors across the three primary country clusters represented in this study – Europe, East Asia, and the Middle East – did not differ significantly,  $\chi^2 = 1.156$ ,  $p = .561$ . (Distribution of participants across the less-represented country clusters, e.g., South Asia, could not be tested due to expected cell counts lower than five participants, which can lead to unstable chi-square estimates.) Thus for the analyses that follow, expatriates are combined across professions.

Most participants (53) actively sought work abroad; 23 were recruited to move abroad, 17 moved to be with family, and 7 indicated other reasons for their move abroad. Sixty-five participants lived with a spouse or significant other in their host country, while only two reported a spouse or significant other living back in their home country. Thirty-nine participants had at least one dependent child living with them in their host country, while six reported a dependent child living back in their home country. Only two

participants reported living with and supporting an older family member in their host country, while eight reported having an older family member that depended on them for support living back in their home country. Twenty-five participants indicated having no family obligations, and four declined to state their family status.

## ***Measures***

### **Cultural distance**

Perceived cultural distance between the host country and the U.S. was measured using Black and Stephens' (1989) 8-item Cultural Novelty Scale (Appendix A). Each item refers to an aspect of life abroad (e.g., "available quality and types of foods", "general housing conditions"), and participants are asked to indicate how similar or dissimilar life abroad is to life in the U.S. for that aspect of life. Ratings are given on a 5-point scale, with "5" indicating that life abroad is very dissimilar to life in America. The eight items represent a composite index of cultural distance, i.e., dissimilarity in one life domain can be balanced by similarity in another; hence, scale reliability statistics such as coefficient alpha are not of primary interest. Nonetheless, the items showed high internal consistency in the present study (Cronbach's alpha = .84).

Since perceived cultural distance is subjective and likely to covary with individual characteristics such as ethnocentrism, Kogut & Singh's (1988) more objective index of cultural distance was also used. This index gives the discrepancy between two countries' typical values, based on Hofstede's (1980) country scores for four value dimensions: Power Distance, Uncertainty Avoidance, Individualism/Collectivism, and Masculinity. The index is computed as the average squared deviation between two countries along the

four value dimensions, with each deviance corrected by its dimension's variance, as follows:

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

where  $CD_j$  is the cultural distance of the  $j$ th country from the reference country,  $u$  (in this case, the United States);  $I_{ij}$  is the standing of the  $j$ th country on the  $i$ th cultural dimension;  $I_{iu}$  is the standing of the reference country on the  $i$ th cultural dimension; and  $V_i$  is the variance of the country scores for the  $i$ th cultural dimension. Since more up-to-date country scores are available (Hofstede, 2001), these scores were used to compute the index. Index scores for countries represented in this study are given in Table 1, along with their corresponding perceived cultural distance. Generally speaking, European countries tend to have the lowest index values, while Middle Eastern and East Asian countries have higher values.



Table 1

*Cultural Distance Scores by Country, Relative to the United States*

Country	Cultural distance index score	<u>Perceived cultural distance</u>		
		Mean	<i>SD</i>	<i>n</i>
United Kingdom	0.09	2.98	0.96	5
Canada	0.13	4.75	-	1
Switzerland	0.37	3.50	0.18	2
Germany	0.45	2.98	0.61	5
Italy	0.63	3.05	0.91	13
France	1.78	3.13	0.83	3
Netherlands	1.81	2.90	0.57	6
Monaco	1.81	2.88	-	1
India	1.90	2.38	0.57	4
Spain	1.97	3.42	0.78	9
Norway	2.43	3.38	-	1
Hong Kong	2.61	3.44	0.54	6
Egypt	2.70	2.62	-	1
Saudi Arabia	2.70	2.50	-	1
United Arab Emirates	2.70	3.05	0.86	14
Japan	2.84	3.38	1.77	2
Bangladesh	3.49	1.31	0.09	2
China	3.50	2.22	0.58	13
Korea	3.70	3.24	0.49	9
Singapore	3.87	2.75	-	2

### **Assignment purpose**

Five items adapted from Shay and Baack (2004) and one newly-written item were used to assess the purpose of each expatriate assignment. Three items reflect control of foreign subsidiaries, and two items reflect managerial development (Appendix B). In Shay & Baack's (2004) study, a factor analysis showed that items loaded as expected on two factors; however, scale reliabilities were somewhat low ( $\alpha = .54$  and  $.62$  for control and development purposes, respectively). In an effort to address this, items were reworded for clarity and an additional item was written for the managerial development dimension. However, upon sampling expatriates, it became apparent that few of them held traditional expatriate "assignments;" many had self-initiated their employment abroad, and in the case of university professors, no "assignment" was implied whatsoever. As such, the assignment purpose items were not included in the analyses that follow and Hypotheses 2 and 3 were not tested.

### **Explicit ethnocentrism**

A shortened version of the intergroup ethnocentrism subscales from Bizumic, Duckitt, Popadic, Dru, and Krauss (2009) was used to measure explicit ethnocentrism (Appendix C). The four subscales of their intergroup ethnocentrism scale are Preference, Superiority, Purity, and Exploitativeness; each reflects primarily cognitive evaluations of one's own cultural group's standing, relative to other cultural groups. The original 38 items were reduced to 8 items, with 2 items per subscale. Items were rated on a 5-point Likert scale, where higher values indicate more ethnocentric beliefs. An example item is "I prefer doing things with people from my own culture." Internal reliability for the

shortened scale was acceptable (Cronbach's alpha = .67), with no items showing large improvements in internal consistency if deleted.

### **Implicit Ethnocentric Association Test (IEAT)**

A version of the Implicit Association Test (IAT; Greenwald et al., 1998) was developed using the attitudinal stimuli of interest in this study, i.e., faces of White Americans vs. Other Peoples. It was correctly assumed that, consistent with past research involving Western expatriates, participants would be predominantly White European-Americans, hence the use of this group as the referent group.

The IAT is intended as a measure of the relative strength of association between attitude stimuli and evaluations of those stimuli. In this test, words or images are displayed to participants on a computer screen one at a time. Participants must rapidly assign each word or image displayed into one of two categories, using two keys on a computer keyboard. Each response option is mapped to one of the participant's hands, so that objects in one category require a keystroke with the left index finger, while the objects from the other category require a keystroke with the right index finger. The time in milliseconds is recorded for each categorization participants make. Correct categorizations allow the participant to continue through the test; incorrect categorizations are indicated to participants by a red "X" and required that participants choose the correct category before proceeding. For this study, the test is accessed over the Internet. However, the software used to run the test features client-side scripting, i.e., all code is temporarily downloaded and executed on each participant's local computer. In this way, variance in participants' speed or consistency of Internet access does not affect the reaction-time data.

For this study, participants were asked to make two broad distinctions: positive vs. negative adjectives (e.g., “joyful”, “pleasure” vs. “agony”, “nasty”) and faces of White Americans vs. Other Peoples. Six male White American faces were chosen to be representative of prototypical adult White American features. Four male faces were sampled equally from each of three broad culture clusters: sub-Saharan Africa, East Asia, and the Middle East. Faces were chosen to show neutral mood. It was not predicted that participants would necessarily be able to categorize foreign faces by their specific culture of origin, only that they would be able to recognize them all as non-White American. Indeed, out of the 48 practice trials in which participants were only required to sort faces, in spite of being encouraged to sort stimuli as fast as possible, participants made an average of only 1.66 errors, suggesting that they were able to categorize faces correctly.

The IEAT proceeded in seven stages (see Table 2), with the number of trials per stage chosen in line with recommendations for achieving desirable psychometric properties (Nosek, Greenwald, & Banaji, 2005). In each stage, exemplars of any categories represented in that stage appeared with equal frequency, so that participants would not learn a bias toward any particular category. In Stages 1 and 2, participants separately practiced White American vs. Other Peoples image categorization and positive vs. negative adjective categorization, respectively. Stages 3 and 4 were two similar blocks in which the computer displayed a mix of both adjectives and faces (still one at a time), requiring participants to apply the correct categorization rule for each. For these stages, foreign faces and positive adjectives required categorization to the left side of the screen, while domestic faces and negative adjectives required categorization to the right.

Table 2

*Stages of the Implicit Ethnocentric Association Test*

Stage	Left key assignment	Right key assignment	Number of trials
1	OTHER PEOPLES	WHITE AMERICAN	24
2	POSITIVE	NEGATIVE	20
3	OTHER PEOPLES + POSITIVE	WHITE AMERICAN + NEGATIVE	20
4	OTHER PEOPLES + POSITIVE	WHITE AMERICAN + NEGATIVE	48
5	WHITE AMERICAN	OTHER PEOPLES	24
6	WHITE AMERICAN + POSITIVE	OTHER PEOPLES + NEGATIVE	20
7	WHITE AMERICAN + POSITIVE	OTHER PEOPLES + NEGATIVE	48

Stage 3 trials drew randomly from the banks of faces and adjectives, alternating back and forth between faces and adjectives. This stage was intended to serve as a practice stage only, and participants' reaction times from this stage were not used for analyses. Stage 4 trials also alternated between faces and adjectives, but the order of each was fixed in order to avoid construct-irrelevant between-persons variance due to presentation order. The fixed order of faces was designed so that no category of either faces or adjectives tended to appear more near the beginning, middle, or end of the order, i.e., all stimuli were distributed in a quasi-random but balanced pattern.

In Stage 5, the face response mapping is inverted, so that domestic faces are mapped to the left hand and foreign faces are mapped to the right hand. During this stage, only faces are presented, to allow the participant to learn the new mapping. Finally, Stages 6 and 7 proceeded similarly to Stages 3 and 4, except that the inverted face mapping remained in effect. As before, Stage 6 is a practice stage with randomly-selected trials, while Stage 7 is a scored test stage with a fixed quasi-random trial order.

All participants completed the IEAT stages in this order, i.e., the order of stages was not counterbalanced. It is possible that the pairings learned in Stages 3 and 4 caused proactive interfere with performance on Stages 6 and 7; conversely, it is also possible that growing practice with the task enhanced performance in the later stages. These possible biases would be a concern if the primary intent of this study was precise estimation of the population average effect size of ethnocentric bias. However, since the primary interest is in capturing variance across individuals in terms of their relative response latencies for the two pairings, counterbalancing would add irrelevant between-subjects variance and attenuate correlations with criteria of interest (Lane, Banaji, Nosek, & Greenwald, 2007).

The degree to which each participant's response times to face images are longer in Stage 4, in which Other Peoples are paired with positive adjectives, are greater than those in Stage 7, in which Other Peoples are paired with negative adjectives, can be considered an indication of each participant's degree of implicit ethnocentric associative bias. To quantify this difference, guidelines from Greenwald, Nosek, and Banaji's (2003) scoring algorithm were used. First, the data were screened for trials with response latencies above 10,000 msec and for participants whose responses were unreasonably fast (i.e., 10% or more of their latencies being less than 300 msec); no such cases were found. Second, for trials in which participants made a face categorization error, their latency on that trial was imputed as that participant's mean latency on correct responses for that stage, plus a 600 msec penalty. In this way, difficulty associating a particular combination of faces and adjectives – which may manifest in either increased response time or a categorization error – is captured for both possible manifestations, with the latter being placed somewhat artificially on the metric of the former.<sup>3</sup> Finally, rather than evaluating each participant's difference between Stage 4 and Stage 7 reaction times as a simple mean difference, an overall effect size  $D$  is computed for those two stages by dividing the difference in average reaction times by each participant's pooled standard deviation across both stages. Put another way, the difference in Stage 4 vs. Stage 7 response times is scaled by each participants' average latency overall.

Internal consistency of the IEAT, treating the difference between reaction times for each face between Stage 4 and Stage 7 as “items,” was reasonably high (Cronbach's

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<sup>3</sup> Imputation of latencies for incorrect trials had a minimal effect on scores, such that the correlation between  $D$  scores under imputation vs.  $D$  scores using only correct trials' latencies was  $r = .962$ .

alpha = .67). The average reaction time for trials in Stage 4 was 917 msec ( $SD = 453$  msec); for Stage 7, average reaction time was 822 msec ( $SD = 423$  msec).

### **Acculturation strategies**

To assess the modes of adjustment used by expatriates, a reworded and expanded version of the Vancouver Index of Acculturation (Ryder et al., 2000) was used (Appendix D). Parallel to the Black & Stephens (1989) adjustment measure, there are three subscales reflecting work, social interaction, and general acculturation, with the work acculturation items being entirely new in this scale. For each life domain, respondents separately indicated the extent to which they exhibit typical home and/or host country national behaviors. Items are thus divided into “home country” vs. “host country,” each with 9 items; each of these sets of 9 items is further subdivided into 3 items for each life domain, for a total of 18 items across 6 subscales. For each item, participants indicated the extent to which they engage in a behavior relative to other American expatriates on a Likert-type scale from 1 to 5, where 1 is “much less often than (other American expatriates)” and 5 is “much more often than (other American expatriates).” For example, participants completed the sentence, “I observe American cultural traditions (e.g., holidays) \_\_\_\_ other American expatriates do” as well as the corresponding sentence, “I observe cultural traditions of my host country (e.g., holidays) \_\_\_\_ other American expatriates do.”

Each acculturation subscale is a composite construct, i.e., one’s tendency to engage the host culture in interpersonal interactions is a summative construct arising from particular behaviors which may be compensatory, as opposed to those behaviors being considered equivalent indicators arising from a latent construct. The subscales are thus



formative rather than reflective measures (Edwards & Bagozzi, 2000), for which internal consistency is not necessarily implied. For descriptive purposes, Cronbach's alpha for each subscale are given in Table 3, with values ranging from .51 for maintenance of general home culture to .71 for engagement of social interactions in the host culture.

### **Degree of adjustment**

The expatriate adjustment measure from Black and Stephens (1989) was used as a measure of expatriate degree of adjustment (Appendix E). Their 14-item scale asks respondents to indicate on a scale of 1-5 how adjusted they are to various aspects of life abroad, e.g. "living conditions in general", "speaking with host nationals", etc. The 14 items have generally been found to load on three factors, with seven items reflecting general adjustment, four items reflecting work adjustment, and three items reflecting social interaction adjustment (however, studies occasionally fail to replicate this factor structure, e.g., Wang & Takeuchi, 2007). Internal consistency of the subscales, shown in Table 3, is generally high, ranging from .79 for work adjustment to .91 for social interaction adjustment.

### **Withdrawal cognitions**

Two items adapted from Hom, Griffeth, & Sellaro (1984), one item from Shaffer & Harrison (1998), and two items from Caliguiri (1997) were used to assess withdrawal cognitions (Appendix F). Respondents indicated their agreement or disagreement with each item on a scale from 1 to 5, where 1 indicated "strongly disagree" and 5 indicates "strongly agree." Slightly different wording was used for professor vs. non-professor subsamples (e.g., "I think often about leaving my position" vs. "I think often about quitting my assignment early"). Cronbach's alpha for the 5-item scale was .88.

## Performance

Expatriates' task and contextual performance were measured using seven items adapted from Caligiuri (1997; Appendix G). Two items reflect task performance, e.g. "(your/their) technical performance on this expatriate assignment". Five items assess contextual performance, e.g. "(your/their) effectiveness at maintaining good relationships with host nationals". Ratings were given on a 5-point scale, where "1" is "well below average" compared to other American expatriates and 5 is "well above average". Both task and contextual performance subscales showed high internal consistency (Cronbach's  $\alpha = .85$  and  $.87$ , respectively).

Professors' task and contextual performance were measured using a modified scale, as the general expatriate performance items were often not applicable and did not capture the unique job responsibilities of professors. Participants rated their performance relative to other U.S. expatriate professors on two items pertaining to teaching responsibilities ("Preparing and delivering lectures and class materials" and "Advising students"), research responsibilities ("Keeping current on research in your field" and "Publishing research, writing for professional audiences, etc."), and two items reflecting contextual performance ("Maintaining good working relationships with host national colleagues at your university" and "Representing the university positively to others"). Internal consistency of the two contextual performance items was acceptable, given the low number of items ( $\alpha = .62$ ); however, internal consistency was low for the task performance items ( $\alpha = .49$ ), suggesting professors considered themselves to have particular strengths or weakness on individual task performance facets which were not consistent across individuals. As such, the four task performance items are analyzed separately in the analyses that follow.

***Procedure***

All measures were administered over the Internet via unique hyperlinks sent to each participant in their invitation to participate. Prior to completing study measures, all participants were asked to verify their understanding of the Informed Consent document which had accompanied their invitation. Instructions on the initial screen of the study website reiterated the qualification criteria and encouraged participants to complete the study in a quiet environment free of distractions.

To mitigate any possible undue rumination about one's attitudes toward people from other cultures during the IEAT, that test was administered first, followed by the remaining survey items.

## **Results**

Descriptive statistics for study variables are given in Table 3 and correlations among studied variables are given in Table 4.

Table 3

*Descriptive Statistics for Study Variables*

Variable	Mean	SD	n	Skew	Min.	Max.	$\alpha$
Gender	1.67	0.47	100	-0.73	1.00	2.00	-
Age	42.10	11.60	100	0.54	22.00	70.00	-
Years in current position/country	7.18	8.12	100	1.76	0.08	38.08	-
Previous years abroad	6.73	9.14	100	2.18	0.00	50.00	-
Perceived cultural distance	3.04	0.83	100	-0.03	1.25	4.75	.84
Cultural distance index	2.15	1.19	100	-0.32	0.09	3.87	-
Explicit ethnocentrism	1.97	0.46	100	-0.02	1.00	3.00	.67
Implicit ethnocentrism	0.35	0.55	92	0.06	-1.09	1.51	.67
Purpose of assignment: Control	3.43	0.73	43	0.12	2.00	4.67	.30
Purpose of assignment: Develop	3.27	0.92	43	-0.31	1.00	5.00	.64
Language ability	3.33	1.53	100	-0.23	1.00	5.00	-
Language effort	3.40	1.16	100	-0.27	1.00	5.00	-
Acculturation: maintain home, general	2.39	0.54	100	-0.22	1.00	3.67	.51
Acculturation: engage host, general	3.39	0.58	100	-0.11	1.00	4.67	.61
Acculturation: maintain * engage, general	7.99	1.80	100	-0.46	3.33	12.00	-
Acculturation: maintain home, social interaction	2.34	0.64	100	0.17	1.00	4.00	.65
Acculturation: engage host, social interaction	3.46	0.78	100	-0.13	1.67	5.00	.71
Acculturation: maintain * engage, social interaction	7.77	1.69	100	-0.05	3.89	12.00	-

Table 3

*Descriptive Statistics for Study Variables (continued)*

Variable	Mean	SD	n	Skew	Min.	Max.	$\alpha$
Acculturation: maintain home, work	2.85	0.57	100	0.36	1.00	4.67	.64
Acculturation: engage host, work	3.13	0.61	100	-0.51	1.00	5.00	.58
Acculturation: maintain * engage, work	8.71	1.60	100	-0.13	3.67	13.33	-
Adjustment, general	4.19	0.68	100	-1.34	1.14	5.00	.85
Adjustment, social interaction	4.01	0.92	100	-0.92	1.00	5.00	.91
Adjustment, work	4.40	0.62	100	-1.03	2.33	5.00	.88
Professor task performance: Lectures	4.35	0.77	57	-1.69	1.00	5.00	-
Professor task performance: Advising	4.09	0.88	57	-1.01	1.00	5.00	-
Professor task performance: Maintaining expertise	3.63	0.94	57	0.01	2.00	5.00	-
Professor task performance: Publication/writing	3.23	1.11	56	-0.15	1.00	5.00	-
Professor contextual performance	3.94	0.75	57	-0.67	1.50	5.00	.62
Expatriate task performance	4.03	0.65	43	0.00	3.00	5.00	.85
Expatriate contextual performance	3.94	0.63	43	0.33	3.00	5.00	.87
Withdrawal cognitions	1.75	0.82	100	1.09	1.00	4.20	.88

Table 4

*Correlations among Study Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Gender																
2 Age	.15															
3 Years in current position/country	.01	.68 <sup>†</sup>														
4 Previous years abroad	-.12	.40 <sup>†</sup>	.44 <sup>†</sup>													
5 Perceived cultural distance	-.06	-.07	-.11	.00												
6 Cultural distance index	.16	-.10	-.15	-.08	.20 <sup>*</sup>											
7 Explicit ethnocentrism	.17	-.09	-.24 <sup>*</sup>	-.18	-.03	.13										
8 Implicit ethnocentrism	.17	-.03	.03	-.08	-.07	-.17	.14									
9 Purpose of assignment: Control	.43 <sup>†</sup>	-.04	-.29	-.21	.37 <sup>*</sup>	.26	.32 <sup>*</sup>	-.06								
10 Purpose of assignment: Develop	-.07	-.27	-.43 <sup>†</sup>	-.49 <sup>†</sup>	-.07	-.11	.45 <sup>†</sup>	.24	.14							
11 Language ability	-.23 <sup>*</sup>	.03	.31 <sup>†</sup>	.17	.02	-.29 <sup>†</sup>	.00	-.06	.08	.15						
12 Language effort	-.07	-.09	.03	-.06	-.04	.05	.07	.05	.22	.30	.43 <sup>†</sup>					
13 Acculturation: maintain home, general	.16	-.13	-.19	-.17	.01	-.19	.39 <sup>†</sup>	.12	.31 <sup>*</sup>	.25	-.18	-.24 <sup>*</sup>				
14 Acculturation: engage host, general	-.22 <sup>*</sup>	.07	.19	.23 <sup>*</sup>	.08	.01	-.15	-.20	-.16	-.30	.30 <sup>†</sup>	.50 <sup>†</sup>	-.37 <sup>†</sup>			
15 Acculturation: maintain * engage, general	-.01	-.11	-.07	-.02	.06	-.18	.27 <sup>†</sup>	-.02	.22	.04	.04	.13	.74 <sup>†</sup>	.32 <sup>†</sup>		
16 Acculturation: maintain home, social interaction	.28 <sup>†</sup>	-.06	-.31 <sup>†</sup>	-.28 <sup>†</sup>	-.07	-.06	.36 <sup>†</sup>	.15	.36 <sup>†</sup>	.34 <sup>*</sup>	-.32 <sup>†</sup>	-.50 <sup>†</sup>	.43 <sup>†</sup>	-.50 <sup>†</sup>	.07	

\* $p < .05$ ; <sup>†</sup> $p < .01$ . For correlations with Purpose of Assignment: Control, Purpose of Assignment: Develop, and both expatriate performance measures,  $n = 41-43$ . For correlations with professor performance measures,  $n = 50-57$ . For correlations with implicit ethnocentrism,  $n = 92$ . For all other correlations,  $n = 100$ .

Table 4

*Correlations among Study Variables (continued)*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17 Acculturation: engage host, social interaction	-.31 <sup>†</sup>	.06	.28 <sup>†</sup>	.22 <sup>*</sup>	.02	.00	-.21 <sup>*</sup>	-.15	-.11	-.19	.49 <sup>†</sup>	.57 <sup>†</sup>	-.33 <sup>†</sup>	.64 <sup>†</sup>	.13	-.68 <sup>†</sup>
18 Acculturation: maintain * engage, social interaction	.05	-.01	-.12	-.17	-.03	-.05	.22 <sup>*</sup>	.01	.30 <sup>*</sup>	.21	.08	-.04	.17	.06	.22 <sup>*</sup>	.18
19 Acculturation: maintain home, work	.20 <sup>*</sup>	-.15	-.25 <sup>*</sup>	-.21 <sup>*</sup>	-.05	-.07	.31 <sup>†</sup>	.24 <sup>*</sup>	.54 <sup>†</sup>	.23	-.16	-.19	.38 <sup>†</sup>	-.40 <sup>†</sup>	.11	.48 <sup>†</sup>
20 Acculturation: engage host, work	-.06	.12	.29 <sup>†</sup>	.18	.16	.04	-.18	-.21 <sup>*</sup>	-.27	-.17	.20 <sup>*</sup>	.24 <sup>*</sup>	-.26 <sup>†</sup>	.56 <sup>†</sup>	.13	-.35 <sup>†</sup>
21 Acculturation: maintain * engage, work	.18	-.05	.02	-.08	.17	-.04	.16	.06	.46 <sup>†</sup>	.18	.04	.10	.16	.18	.30 <sup>†</sup>	.11
22 Adjustment, general	.01	.19	.26 <sup>†</sup>	.13	-.26 <sup>†</sup>	.05	-.10	.01	-.27	-.33 <sup>*</sup>	-.04	-.04	-.25 <sup>*</sup>	.05	-.23 <sup>*</sup>	-.07
23 Adjustment, social interaction	-.18	.16	.36 <sup>†</sup>	.18	-.12	-.09	-.18	-.12	.04	-.32 <sup>*</sup>	.43 <sup>†</sup>	.24 <sup>*</sup>	-.21 <sup>*</sup>	.39 <sup>†</sup>	.08	-.38 <sup>†</sup>
24 Adjustment, work	.01	.12	.26 <sup>†</sup>	.18	-.13	-.10	-.25 <sup>*</sup>	-.02	-.03	-.30	.02	.07	-.06	.01	-.04	-.18
25 Professor task performance: Lectures	-.15	.07	.02	.01	-.02	-.19	.04	-.12	--	--	-.11	.14	.07	.02	.06	.15
26 Professor task performance: Advising	-.07	.14	.18	-.08	.01	-.11	-.29 <sup>*</sup>	-.31 <sup>*</sup>	--	--	-.13	-.09	.19	.05	.25	-.05
27 Professor task performance: Maintaining expertise	.03	-.12	.06	-.01	.11	.10	-.02	.20	--	--	-.18	-.10	.01	-.16	-.14	.10
28 Professor task performance: Publication/writing	.03	-.14	.08	-.40 <sup>†</sup>	-.07	.17	-.14	.27	--	--	-.16	-.04	-.04	-.13	-.14	.10
29 Professor contextual performance	.13	.13	.23	.26 <sup>*</sup>	.08	-.30 <sup>*</sup>	-.19	-.03	--	--	.23	.20	.00	.21	.12	-.17
30 Expatriate task performance	.19	-.02	.16	.00	.23	.11	.00	.12	.30 <sup>*</sup>	-.02	.19	-.07	-.13	-.02	-.16	.04
31 Expatriate contextual performance	.16	.30	.34 <sup>*</sup>	.24	.05	.02	.11	-.07	.29	-.02	.32 <sup>*</sup>	-.03	-.10	.30 <sup>*</sup>	.13	.21
32 Withdrawal cognitions	-.06	.04	-.12	-.05	.08	.29 <sup>†</sup>	.14	-.13	.19	-.04	-.15	-.08	.19	-.09	.13	.15

\* $p < .05$ ; <sup>†</sup> $p < .01$ . For correlations with Purpose of Assignment: Control, Purpose of Assignment: Develop, and both expatriate performance measures,  $n = 41-43$ . For correlations with professor performance measures,  $n = 50-57$ . For correlations with implicit ethnocentrism,  $n = 92$ . For all other correlations,  $n = 100$ .



Table 4

*Correlations among Study Variables (continued)*

Variable	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
17 Acculturation: engage host, social interaction																
18 Acculturation: maintain * engage, social interaction	.18															
19 Acculturation: maintain home, work	-.46 <sup>†</sup>	.04														
20 Acculturation: engage host, work	.51 <sup>†</sup>	.14	-.65 <sup>†</sup>													
21 Acculturation: maintain * engage, work	.09	.25*	.37 <sup>†</sup>	.41 <sup>†</sup>												
22 Adjustment, general	.08	-.04	-.10	-.01	-.16											
23 Adjustment, social interaction	.53 <sup>†</sup>	.06	-.26 <sup>†</sup>	.35 <sup>†</sup>	.11	.33 <sup>†</sup>										
24 Adjustment, work	.20	-.04	-.18	.12	-.01	.32 <sup>†</sup>	.41 <sup>†</sup>									
25 Professor task performance: Lectures	.05	.16	.25	-.14	-.01	-.09	-.20	-.17								
26 Professor task performance: Advising	.05	-.06	-.03	.20	.22	-.02	.08	.02	.22							
27 Professor task performance: Maintaining expertise	-.20	-.18	.13	-.12	-.10	.15	-.13	.06	.01	-.13						
28 Professor task performance: Publication/writing	-.08	.05	.02	.05	.10	-.07	-.02	-.02	.22	.17	.45 <sup>†</sup>					
29 Professor contextual performance	.30*	.02	-.23	.28*	.15	.16	.36 <sup>†</sup>	.42 <sup>†</sup>	-.06	.06	.20	.00				
30 Expatriate task performance	.08	.11	.03	.16	.06	.07	.07	.04	--	--	--	--	--			
31 Expatriate contextual performance	.28	.49 <sup>†</sup>	.07	.21	.16	.08	.28	.01	--	--	--	--	--	.53 <sup>†</sup>		
32 Withdrawal cognitions	-.06	.09	.13	-.19	-.11	-.17	-.21*	-.31*	.14	.14	.11	.25	-.21	-.19	-.14	

\* $p < .05$ ; <sup>†</sup> $p < .01$ . For correlations with Purpose of Assignment: Control, Purpose of Assignment: Develop, and both expatriate performance measures,  $n=41-43$ . For correlations with professor performance measures,  $n=50-57$ . For correlations with implicit ethnocentrism,  $n=92$ . For all other correlations,  $n = 100$ .

### ***Structure of acculturation strategies***

Examination of the correlations among the six acculturation facets in Table 4 (i.e., home culture maintenance and host cultural engagement, across general, social interaction, and work domains) shows that within each domain, home culture maintenance and host culture engagement are negatively correlated, quite strongly so for social interaction and work domains ( $r_{\text{home-host, general}} = -.37$ ;  $r_{\text{home-host, social interaction}} = -.68$ ;  $r_{\text{home-host, work}} = -.65$ ; all  $p < .01$ ). For home culture maintenance items, correlations across the three domains are moderately positive ( $r_{\text{general-social interaction, home}} = .43$ ;  $r_{\text{general-work, home}} = .38$ ;  $r_{\text{social interaction-work, home}} = .48$ ; all  $p < .01$ ). Among host culture engagement items, correlations between domains are again positive ( $r_{\text{general-social interaction, host}} = .64$ ;  $r_{\text{general-work, host}} = .56$ ;  $r_{\text{social interaction-work, host}} = .51$ ; all  $p < .01$ ). Thus home culture maintenance and host culture engagement appear to be related but distinct phenomena, with one generally coming at the expense of the other and with differences evident across life domains.

### ***Cultural distance and acculturation strategies***

Hypothesis 1 predicted that cultural distance would be negatively related to host culture engagement. Examination of the correlations in Table 4 shows that no bivariate relationships with host culture engagement facets are significant for either perceived cultural distance or the cultural distance index. For perceived cultural distance, the estimated correlations with engagement facets range from  $-.16$  to  $-.02$ ; for the cultural distance index, estimates range from  $.00$  to  $.04$ .

As omnibus tests of Hypotheses 1, 5, and 6 (with the latter hypotheses discussed in their own sections below), separate multivariate linear models were analyzed for each of the three domains of acculturation, given in Tables 5, 7, and 9 for general, social

interaction, and work domains respectively. For each domain, maintenance, engagement, and the maintenance-by-engagement interaction term are predicted by perceived cultural distance, cultural distance index scores, explicit ethnocentrism, implicit ethnocentrism, age, and years elapsed in the current position. (The effect of gender is analyzed separately, as the unequal distribution of males and females threatens to violate assumptions of the multivariate linear models.) Follow-up univariate tests for each domain are given in Tables 6, 8, and 10 respectively.

As shown in Table 5, the cultural distance index is a significant predictor of the multivariate set of general-domain maintenance, engagement, and their interaction (Wilk's  $\Lambda = .886, p < .01$ ). Univariate follow-up tests for general-domain acculturation (Table 6) show that the cultural distance index predicts maintenance and the maintenance-by-engagement interaction term but not engagement. The correlations of the cultural distance index with each of those facets, controlling for all other terms, is actually negative ( $r_{\text{maintenance}} = -.33, r_{\text{interaction term}} = -.29, \text{both } p < .01$ ), such that expatriates in more culturally-distant countries maintain their home culture less. Neither perceived cultural distance nor the cultural distance index scores predicted the multivariate set of social interaction acculturation facets or work acculturation facets.

Perceived cultural distance and the cultural distance index were related to one another, but somewhat modestly,  $r = .20, p < .05$ . One possible explanation for this finding is that attraction, selection, and/or attrition effects could result in individuals with different perceptual frames seeking or accepting employment in low vs. high cultural distance countries. That is, individuals who tend to perceive cultural differences more acutely may gravitate toward less culturally distant countries. If true, such an effect

might result in similar reported degrees of host culture engagement across low vs. high cultural distance countries. In this case, it would be practically impossible to estimate the “true” effect of cultural distance on acculturation, i.e., the effect expected if expatriates were assigned at random to countries.

Table 5

*Multivariate Linear Modeling of Cultural Distance, Ethnocentrism, and Demographics  
on Acculturation Facets, General Domain*

Effect	Wilk's Lambda	<i>F</i>	<i>p</i> -value
Cultural distance index	.886	3.555	.018
Perceived cultural distance	.976	.688	.562
Explicit ethnocentrism	.770	8.285	.000
Implicit ethnocentrism	.956	1.273	.289
Age	.972	.783	.507
Years in current position	.956	1.288	.284

*Note.* Dependent variables include home culture maintenance, host culture engagement, and their interaction term (general domain only).

Table 6

*Univariate Tests of Effects of Cultural Distance, Ethnocentrism, and Demographics on  
Acculturation Facets, General Domain*

Source	Dependent variable	<i>F</i>	<i>p</i> -value
Cultural distance index	Maintenance	10.375	.002
	Engagement	.226	.635
	Interaction term	7.651	.007
Perceived cultural distance	Maintenance	.565	.454
	Engagement	.725	.397
	Interaction term	1.590	.211
Explicit ethnocentrism	Maintenance	24.555	.000
	Engagement	1.231	.270
	Interaction term	15.529	.000
Implicit ethnocentrism	Maintenance	.020	.887
	Engagement	2.854	.095
	Interaction term	1.462	.230
Age	Maintenance	.043	.837
	Engagement	1.012	.317
	Interaction term	.514	.475
Years in current position	Maintenance	1.270	.263
	Engagement	3.722	.057
	Interaction term	.065	.799

Table 7

*Multivariate Linear Modeling of Cultural Distance, Ethnocentrism, and Demographics  
on Acculturation Facets, Social Interaction Domain*

Effect	Wilk's Lambda	<i>F</i>	<i>p</i> -value
Cultural distance index	.972	.800	.497
Perceived cultural distance	.986	.383	.765
Explicit ethnocentrism	.898	3.150	.029
Implicit ethnocentrism	.975	.712	.548
Age	.929	2.121	.104
Years in current position	.849	4.923	.003

*Note.* Dependent variables include home culture maintenance, host culture engagement, and their interaction term (social interaction domain only).

Table 8

*Univariate Tests of Effects of Cultural Distance, Ethnocentrism, and Demographics on Acculturation Facets, Social Interaction Domain*

Source	Dependent variable	<i>F</i>	<i>p</i> -value
Cultural distance index	Maintenance	2.031	.158
	Engagement	.535	.467
	Interaction term	.555	.459
Perceived cultural distance	Maintenance	.467	.496
	Engagement	.006	.937
	Interaction term	.238	.627
Explicit ethnocentrism	Maintenance	7.776	.007
	Engagement	.686	.410
	Interaction term	5.225	.025
Implicit ethnocentrism	Maintenance	1.145	.288
	Engagement	1.930	.168
	Interaction term	.080	.778
Age	Maintenance	6.256	.014
	Engagement	4.004	.049
	Interaction term	.892	.348
Years in current position	Maintenance	13.068	.001
	Engagement	11.636	.001
	Interaction term	.898	.346



Table 9

*Multivariate Linear Modeling of Cultural Distance, Ethnocentrism, and Demographics  
on Acculturation Facets, Work Domain*

Effect	Wilk's Lambda	<i>F</i>	<i>p</i> -value
Cultural distance index	.977	.645	.589
Perceived cultural distance	.925	2.255	.088
Explicit ethnocentrism	.944	1.631	.188
Implicit ethnocentrism	.945	1.624	.190
Age	.977	.637	.593
Years in current position	.890	3.407	.021

*Note.* Dependent variables = home culture maintenance, host culture engagement, and their interaction term (work domain only).

Table 10

*Univariate Tests of Effects of Cultural Distance, Ethnocentrism, and Demographics on  
Acculturation Facets, Work Domain*

Source	Dependent variable	<i>F</i>	<i>p</i> -value
Cultural distance index	Maintenance	1.668	.200
	Engagement	.874	.352
	Interaction term	.420	.519
Perceived cultural distance	Maintenance	.002	.963
	Engagement	3.386	.069
	Interaction term	5.215	.025
Explicit ethnocentrism	Maintenance	2.626	.109
	Engagement	.001	.970
	Interaction term	4.432	.038
Implicit ethnocentrism	Maintenance	3.688	.058
	Engagement	3.984	.049
	Interaction term	.051	.821
Age	Maintenance	.121	.729
	Engagement	1.691	.197
	Interaction term	.764	.385
Years in current position	Maintenance	3.175	.078
	Engagement	10.332	.002
	Interaction term	1.243	.268

### ***Structure of explicit & implicit ethnocentrism***

Hypothesis 4 stated that explicit and implicit ethnocentrism items would on separate factors. To test this, three models were estimated using confirmatory factor analysis: a single-factor model (Model 1) with all ethnocentrism items loading on a common factor, a two-factor model (Model 2) with items loading on separate, correlated explicit and implicit ethnocentrism factors, and a five-factor model (Model 3), where the implicit ethnocentrism factor in Model 2 is subdivided into four factors according to the target race of items (i.e., Middle Eastern, East Asian, African, and American). Here, as in subsequent analyses involving the IEAT, analyses are conducted for White participants only ( $n = 92$ ), the group for which the IEAT's White American category corresponds. Table 11 shows fit indices for each model, which suggest that Model 2 shows superior fit to Model 1, and the addition of factors in Model 3 does not improve fit. Thus, Model 2 is retained as the most parsimonious model of the data, supporting Hypothesis 4. The correlation between the explicit and implicit ethnocentrism factors in Model 2 is .24, suggesting that the two factors are related but also non-redundant with one another.

Table 11

*Ethnocentrism Factor Model Comparison*

Model	Number of factors	Chi-square	RMSEA	90% CI for RMSEA	CFI
1	1	814.09	.085	0.074, 0.095	.33
2	2	716.28	.063	0.050, 0.075	.51
3	5	720.88	.069	0.057, 0.081	.49

*Note.* RMSEA = root mean square error of approximation. CI = confidence interval. CFI = comparative fit index.

### ***Ethnocentrism and acculturation***

Hypothesis 5 posited that ethnocentric attitudes would be associated with greater home culture maintenance and less host culture engagement, particularly for implicit ethnocentrism. As shown in Table 4, explicit ethnocentrism scores correlated moderately with home culture maintenance across all three life domains ( $r_{\text{general}} = .39$ ,  $r_{\text{interaction}} = .36$ ,  $r_{\text{work}} = .31$ , all  $p < .01$ ). Correlations between explicit ethnocentrism and host culture engagement were consistently negative but relatively small ( $r_{\text{general}} = -.15$ , *ns*;  $r_{\text{social interaction}} = -.21$ ,  $p < .05$ ;  $r_{\text{work}} = -.18$ , *ns*). For implicit ethnocentrism, the direction of correlations followed the same pattern of positive correlation with home culture maintenance and negative correlation with host culture engagement; however, only correlations with the work domain facets were statistically significant ( $r_{\text{home, work}} = .24$ ,  $r_{\text{host, work}} = -.21$ , both  $p < .05$ ).

Explicit ethnocentrism was significantly related to the multivariate set of maintenance, engagement, and the maintenance-by-engagement interaction term for both the general domain and the social interaction domain (Tables 5 & 7). Follow-up univariate tests (Tables 6 & 8) show that, in both the general and social interaction domains, explicit ethnocentrism is significantly associated with home culture maintenance and the maintenance-by-engagement interaction term but was not associated with host culture engagement. Implicit ethnocentrism was not a significant predictor of acculturation facets across the three domains. Thus Hypothesis 5 was supported for home culture maintenance in all domains except work, while Hypothesis 5.1 – the proposed predictive dominance of implicit vs. explicit ethnocentrism – was not supported.

## ***Demographics and acculturation***

Hypothesis 6 stated that age would be associated with greater home culture maintenance and less host culture engagement. Correlations in Table 4 show that no bivariate correlations between age and acculturation facets are significant. In fact, the direction of correlations is negative for home culture maintenance and positive for host culture engagement. However, as with Hypothesis 1, it is likely that a more complex relationship exists. Specifically, the correlation between age and years in the current position is strongly positive ( $r = .68, p < .01$ ), as is the correlation between age and previous number of years abroad ( $r = .40, p < .01$ ). Each of those variables is in turn related to less home culture maintenance and greater host culture engagement, as might be expected due to attrition effects, increased cross-cultural knowledge and ability over time, etc. To control for this, a series of partial correlations were estimated between age and acculturation facets, controlling for years in the current position and previous years abroad (Table 12). Partial correlations for the social interaction domain are significant in the expected directions ( $r_{\text{home, social interaction}} = .25, r_{\text{host, social interaction}} = -.20, \text{both } p < .05$ ), while correlations for other domains are not significant. Thus a more nuanced version of Hypothesis 6 has partial support.

Table 12

*Partial Correlations between Age and Acculturation Facets, Controlling for Years in Current Position and Prior Years Abroad*

Domain	Facet	$r_{\text{age}}$
General	Maintenance	.01
	Engagement	-.11
	Interaction term	-.09
Social Interaction	Maintenance	.25*
	Engagement	-.20*
	Interaction term	.11
Work	Maintenance	.05
	Engagement	-.12
	Interaction term	-.07

\*  $p < .05$ .

Hypothesis 7 predicted greater host culture engagement in the social interaction domain for women vs. men. Given the considerable difference in sample size between men and women (67 vs. 33), a series of nonparametric tests were used to compare the distributions across gender, in order to avoid violation of assumptions in parametric tests. (For this reason, gender is not included in the multivariate models described previously.) Independent-samples Mann-Whitney U tests for differences in the distributions of each acculturation facet by gender are given in Table 13, along with the means and standard deviations of each facet by gender. Significant differences were found for the social interaction domain, with women reporting lower home culture maintenance and higher host culture engagement than men, supporting Hypothesis 7. As anticipated, no significant differences were found for acculturation in the general or work domains.



Table 13

*Differences in Acculturation by Gender*

Domain	Facet	<i>p</i> -value, Mann- Whitney U	Females		Males	
			Mean	<i>SD</i>	Mean	<i>SD</i>
General	Maintenance	.13	2.27	.53	2.45	.54
	Engagement	.07	3.57	.54	3.30	.57
	Interaction term	.86	8.01	1.78	7.98	1.82
Social Interaction	Maintenance	.01	2.09	.55	2.47	.65
	Engagement	.00	3.80	.76	3.29	.73
	Interaction term	.72	7.65	1.49	7.82	1.79
Work	Maintenance	.30	2.69	.51	2.93	.58
	Engagement	.95	3.18	.62	3.11	.61
	Interaction term	.12	8.31	1.26	8.90	1.71

## ***Acculturation and adjustment***

Hypothesis 8 predicted a positive, buffering effect of home culture maintenance on adjustment. Hypotheses 9 and 10 predicted effects of host culture engagement on adjustment that were contingent upon the elapsed time in a position abroad, such that during a “culture shocked” period, greater efforts to engage the host culture may be associated with lower adjustment, while during earlier and later stages, host culture engagement would be associated with higher adjustment.

Prior to conducting these analyses, the distributions of adjustment scores across elapsed years in a position (shown in Figures 1-3) were examined, given the positive correlation between years elapsed and each adjustment facet ( $r = .26-.36$ , all  $p < .01$ ). These distributions show a narrowing of range towards the upper pole of the scale as years in current position increases. Likely this reflects a general trend toward greater adjustment as expatriates accumulate experience abroad and/or an attrition effect whereby expatriates who do not adjust tend not to remain abroad. Furthermore, these distributions do not suggest that there was a particular stage during which participants exhibited lower adjustment scores due to culture shock, a central assumption of Hypotheses 9 and 10. While longer-term expatriates consistently show high adjustment, there is no clear interval of time for which early-term expatriates consistently exhibit lower adjustment.

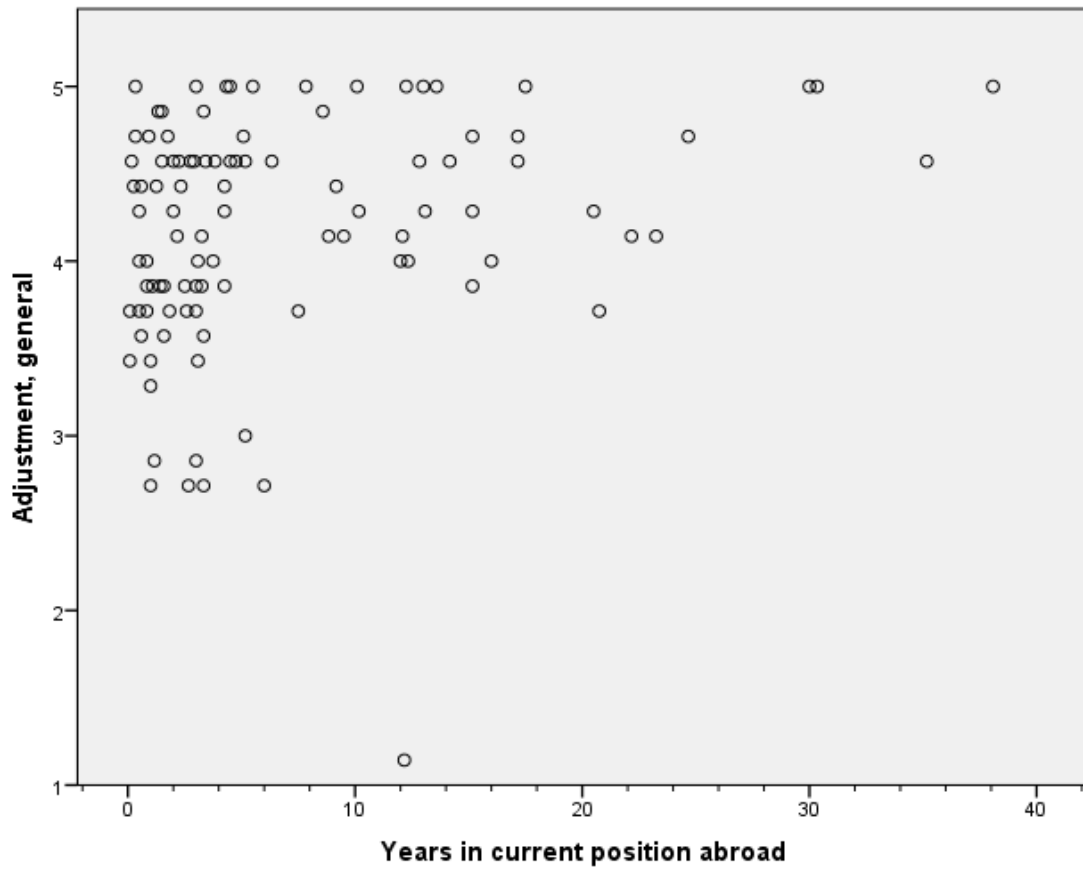


Figure 1

*General Adjustment by Years in Current Position Abroad*

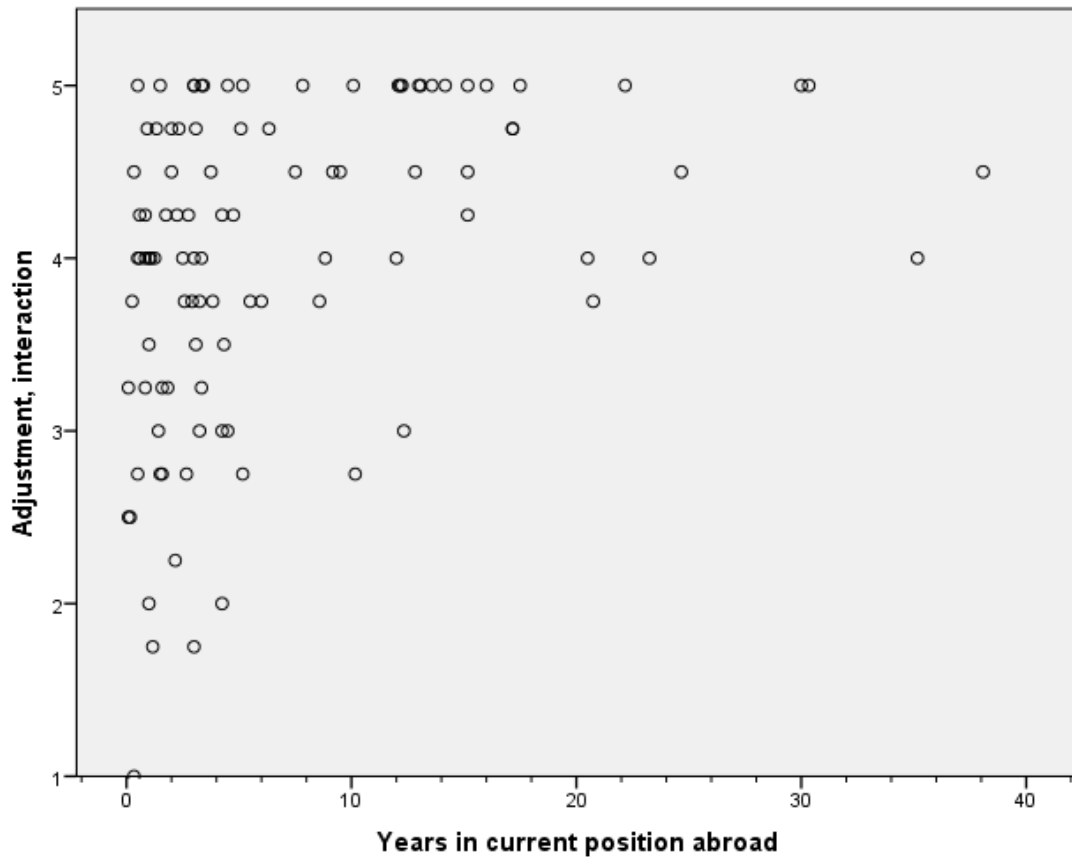


Figure 2

*Social Interaction Adjustment by Years in Current Position Abroad*

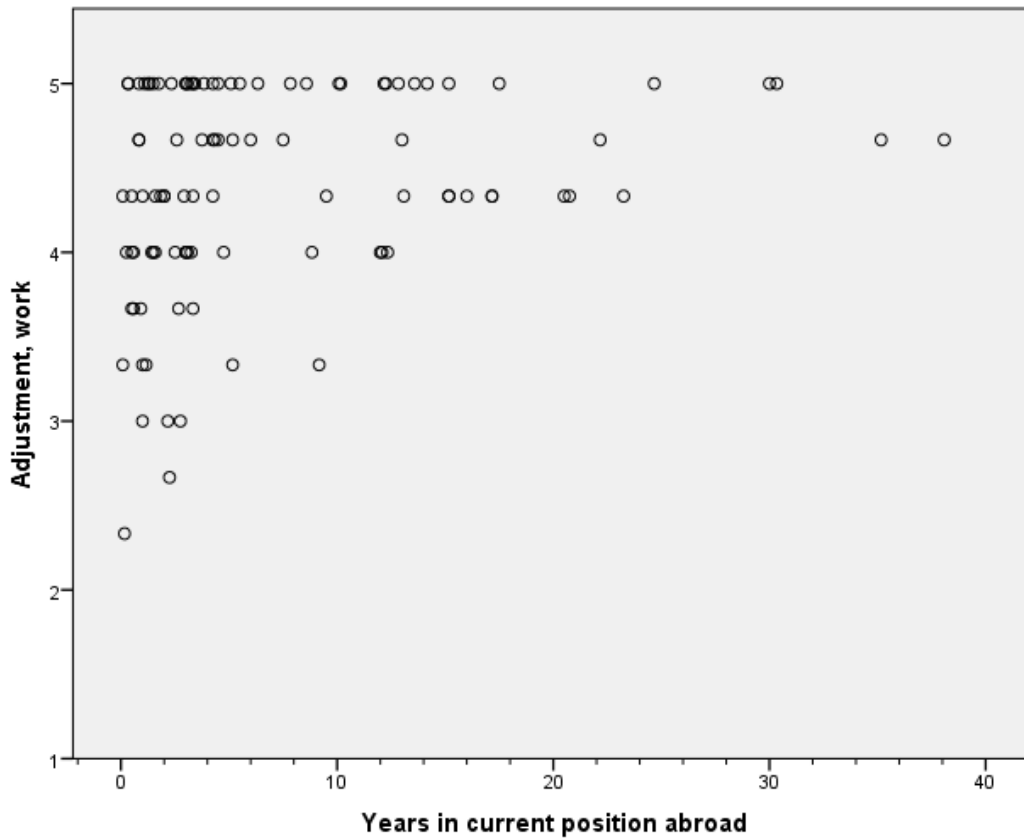


Figure 3

*Work Adjustment by Years in Current Position Abroad*

Given the restriction of range in adjustment scores for longer-term expatriates and lack of evidence for a consistent culture shocked phase, correlations between acculturation facets and adjustment scores were computed, excluding participants who had been in their position 15 years or longer (the approximate point at which adjustment scores appears to reach a steady state of range restriction;  $n=84$ ). Correlations are given in Table 14.

Rather than providing a buffering effect, home culture maintenance facet scores showed negative or non-significant correlations with adjustment facets. Home culture maintenance along the general domain was associated with less general adjustment ( $r = -.24, p < .05$ ), while home culture maintenance in the social interaction domain was significantly associated with lower social interaction adjustment ( $r = -.38, p < .01$ ). Home culture maintenance in the work domain was not significantly associated with lower adjustment, though as in the other domains, all estimated relationships were negative. Thus Hypothesis 8 was not supported and was in fact contradicted.

Across all domains of acculturation, host culture engagement is associated with higher social interaction adjustment, ranging from  $r = .30-.54$ . No relationships are significant for general adjustment or work adjustment. Thus hypotheses 9 and 10 were not able to be tested as proposed, and exploratory analysis suggests that host culture engagement relates to social interaction adjustment but not to other adjustment domains.

Table 14

*Correlations between Acculturation Facets and Adjustment**for Years in Current Position < 15*

	Adjustment, general	Adjustment, social interaction	Adjustment, work
Home culture maintenance: General	-.24*	-.17	-.05
Host culture engagement: General	.06	.42 <sup>†</sup>	.03
Home culture maintenance: Social interaction	-.04	-.38 <sup>†</sup>	-.20
Host culture engagement: Social interaction	.05	.54 <sup>†</sup>	.21
Home culture maintenance: Work	-.08	-.20	-.15
Host culture engagement: Work	-.06	.30 <sup>†</sup>	.12

\* $p < .05$ ; <sup>†</sup> $p < .01$ .  $n = 84$  for all correlations.

### ***Acculturation and withdrawal cognitions***

Hypothesis 11 predicted that home culture maintenance would be associated with less withdrawal cognitions, while hypotheses 12 and 13 predicted host culture engagement to be associated with greater withdrawal cognitions during the culture shocked phase and less withdrawal cognitions before and after that phase. As with adjustment scores, withdrawal cognitions are restricted in range among long-term expatriates and show no evidence of a culture shock phase (see Figure 4). Therefore correlations were again computed using only expatriates with less than 15 years elapsed in their current position (Table 15). None of the correlations between acculturation facets and withdrawal cognitions were significant, thus failing to support Hypotheses 11-13.



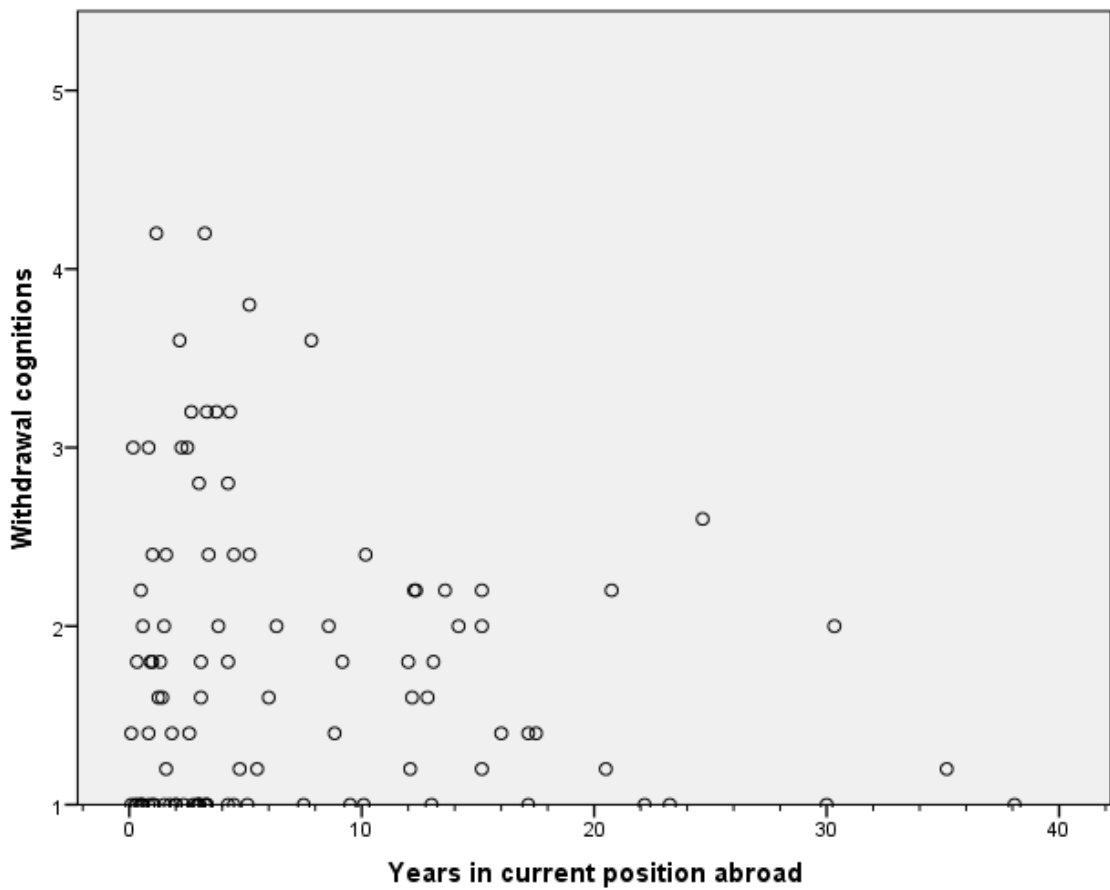


Figure 4

*Withdrawal Cognitions by Years in Current Position Abroad*

Table 15

*Correlations between Acculturation Facets and Withdrawal Cognitions for Years in*

*Current Position < 15*

Acculturation facet	Withdrawal cognitions
Home culture maintenance: General	.14
Host culture engagement: General	-.06
Home culture maintenance: Social interaction	.10
Host culture engagement: Social interaction	-.03
Home culture maintenance: Work	.07
Host culture engagement: Work	-.15

### ***Acculturation and performance***

Hypothesis 14 predicted that host culture engagement would relate to higher task and contextual performance. Correlations in Table 4 show that engagement of the host culture in the general domain is associated with higher contextual performance among the non-professor subsample ( $r = .30, p < .05$ ), while engagement in social interaction and work domains are associated with higher contextual performance among the professor subsample ( $r_{\text{social interaction}} = .30, r_{\text{work}} = .28, \text{both } p < .05$ ). No other acculturation facets and performance dimensions were significantly correlated; thus Hypothesis 14 is only partially supported.

## **Discussion**

This study provides new insight into how expatriates manage their lives abroad, borrowing from research on immigrant populations to develop and investigate a measure of expatriates' acculturation strategies. Specifically, this measure characterizes the extent to which expatriates seek to maintain their home culture and/or engage their host culture across general life, social interaction, and work domains. Results suggest that expatriates differ considerably in their use of either strategy and largely rely on one strategy or the other, with particularly large negative correlations found between maintenance vs. engagement in the social interaction and work domains.

While the variance in expatriates' usage of each strategy did relate somewhat to those expatriates' degree of adjustment, acculturation and adjustment were not redundant with one another. As such, it is now apparent that expatriates who report being adjusted to life abroad can have achieved that adjustment using quite different strategies. Expatriates using these varied strategies are presumably using different referents when responding to items assessing their perceived degree of adjustment to life abroad. While current measurement practices around degree of adjustment may be sufficient for assessing certain aspects of expatriates' lives, they do not reflect acculturation and should not be interpreted as such. When engagement and/or maintenance facets of acculturation are of theoretical or practical interest in research, acculturation measures should be incorporated in addition to degree of adjustment measures.

While it was anticipated that expatriates in more culturally-distant countries would be less likely to engage the host culture, results suggest this is not the case, and that cultural distance is paradoxically associated with less home culture maintenance. This finding may be due to the differential attraction, selection, and attrition processes at play in the distribution of expatriates among different countries. That is, individuals more likely to engage new cultures may be particularly attracted to culturally unique countries, may be more likely to gain employment in such countries, and may be more likely to persist abroad. Such a phenomena would tend to attenuate or reverse the effect of cultural distance on acculturation that would be expected if expatriates were assigned to countries randomly. As an alternate possibility, it may be that more culturally-distant countries simply afford fewer resources for maintenance of one's home culture, e.g., fewer Western-style businesses, fewer compatriots, or strong norms against adherence to certain American cultural practices.

As expected, explicit ethnocentric attitudes were associated with more maintenance of one's home culture and less engagement of the host culture in social life. However, an implicit measure of ethnocentrism did not relate to acculturation facets. Even so, it would be premature to dismiss implicitly-measured ethnocentrism in expatriate research. Automatic and deliberative cognitive processes are generally understood to relate to different types of cognitions and behaviors, with automatic processes generally relating to thoughts and behaviors outside of awareness (Strack & Deutsch, 2004). It may be that expatriates' self-reported acculturation strategies are subject to the same limitations in self-knowledge we all share. If so, other measures of acculturation – e.g., ratings of expatriates' acculturative behaviors by host country

nationals – may reveal implicit effects on behavior that occur outside of expatriates' awareness. Furthermore, expatriates in this study did vary considerably on the implicit association measure, such that if the measure does assess implicit ethnocentrism – an assertion that would require further study – it is not the case that expatriates all have uniformly low implicit ethnocentrism.

Expatriate demographics also related to acculturation strategies in this study. After controlling for previous time abroad, increasing age was found to be associated with more maintenance of home culture social life and less engagement of host culture social life. This finding corresponds well to research showing that, with increasing age, we have greater difficulty inhibiting ethnocentric tendencies (Gonsalkorale et al., 2009). At the same time, the fact that age tends to covary so closely with time abroad suggests that the possible young person's advantage in cognitive flexibility may be offset by their lack of accumulated international experience. Gender differences were also found for the domain of social life, with women reporting less maintenance and more engagement. As noted previously, it would appear that women have particular strengths for expatriate life (Hechanova et al., 2003), though they remain underrepresented in positions abroad.

It was hypothesized that home culture maintenance would have a buffering effect against the stressors of life abroad. In the current sample, the opposite appears to be true, with maintenance being associated with lower adjustment. Meanwhile, engaging the host culture in social life is associated with greater social adjustment abroad. These findings mirror those of Shaffer and Harrison (2001), who found that relationships with home country compatriots were not as beneficial for adjustment as relationships with host country nationals. Particular acculturation strategies were not associated with differences

in withdrawal cognitions among expatriates in this sample. Finally, engagement of the host culture appears to be related to greater contextual performance, though these relationships are somewhat inconsistent across life domains.

### ***Limitations***

The cross-sectional nature of this research limits us from drawing any causal inferences about relationships, e.g., that acculturation strategies cause changes in adjustment. This limitation is common, as are exhortations to conduct longitudinal research in order to support stronger causal inferences, though it is generally understood that such longitudinal data collection can be prohibitively difficult. Beyond the desire to make causal inferences, however, there are additional reasons why longitudinal research would be particularly beneficial in this area. Results from this study suggested that there may be non-random processes influencing potential expatriates' attraction to international destinations, their selection to work in those countries, and/or their persistence in living abroad. By tracking expatriates before, during, and after their international sojourns, it would be possible to investigate how individual differences relate to decisions to accept positions, to see how acculturation strategies change within persons over time abroad, etc. A longitudinal data collection would also allow more precise tests of hypotheses related to the supposed "S-curve" of adjustment during international assignments. No such curve was evident in this study; however, this cross-sectional examination of multiple individuals' adjustment may not accurately characterize within-persons adjustment curves over time.

As mentioned in the discussion regarding implicit ethnocentrism, the sole use of self-report data results in a somewhat limited perspective, particularly as concerns

expatriates' behaviors abroad. Just as members of derogated groups are sensitive to implicit racism that individuals do not realize they are exhibiting (e.g., Penner, Dovidio, West, Gaertner, Albrecht, Dailey, & Markova, 2010), it may be that host country nationals' ratings of expatriates' respect, friendliness, etc. would relate to those expatriates' implicit ethnocentrism scores. More objective measures of expatriates' acculturative behaviors in other domains may also be informative, such as tests of their improvement in the host country language, counts of the number of host country nationals who consider them a friend, time spent in "expat enclaves," etc.; however, such measures are of course more obtrusive and time-consuming.

One unmeasured variable in this study is the extent to which expatriates were free to maintain their home culture and/or engage the host culture. While no participants indicated restrictions on their personal freedoms, it is possible though unlikely that some participants may not have been able to freely associate with host country nationals.

### ***Future directions***

As suggested above, longitudinal study of acculturation strategies and their correlates would promise to answer a number of theoretically and practically interesting questions. Assuming the "S-curve" of cultural adjustment holds true for most individuals, one might investigate whether particular choices of acculturation strategies toward the beginning of an expatriate sojourn relate to faster progress through the "culture-shocked" stage and/or different severities of culture shock.

Different choices of acculturation strategies may also be expected to relate to the longitudinal trajectories of expatriates' ethnocentric attitudes. Explicit attitudes could change relatively quickly as expatriates learn about and interact positively with people



from other cultures. Implicit attitudes are learned quite slowly, as stimulus-evaluation pairings become chronic in memory, and may therefore be considered relatively stable; however, such attitudes can be slowly replaced if different stimulus-evaluation pairings begin to predominate in perception, as they might in a long-term assignment abroad where positive experiences with people from other cultures accumulate. While greater contact with people from different cultures during expatriate assignments may reduce ethnocentrism (Allport, 1954), results from this study suggest that expatriates' ethnocentrism may also reduce the amount of contact they engage in, thereby moderating the effect of international assignments on ethnocentric attitudes. Thus perhaps only those expatriates who strive to engage the host culture accumulate enough positive experiences with foreigners to eventually develop less ethnocentric implicit associations. Indeed, recent research suggests that while contact reduces prejudice, prejudice also reduces contact (Binder, Zagefka, Brown, Funke, Kessler, Mummendey, Maquil, Demoulin, & Leyens, 2009). Ideally, future research would examine this by following both an expatriate sample and a non-expatriate sample over time, with the latter sample matched to the former on key variables.

Consistent with past research, the present study suggests that home culture maintenance has few benefits and often is associated with negative outcomes. It is possible, then, that it would be beneficial to train expatriates not only to engage the host culture but also to avoid maintaining their home culture (e.g., avoiding relationships with home country compatriots). However, this is not necessarily supported by the present study and requires further research to evaluate. That is, it is one thing to suggest that individuals who maintain their home cultures tend to have poorer outcomes; it is another

to suggest that those individuals would have better outcomes if they did not engage in home culture maintenance. On a related note, research on the effectiveness of cross-cultural training and preparation efforts may benefit from considering eventual acculturation strategies as an outcome of interest. That is, expatriate training might be considered effective if it encourages expatriates to pursue more host-culture engagement than would be expected without training.

### ***Summary***

Societies are becoming increasingly connected, and those who cross national and cultural boundaries represent an important driver of those connections. However, despite the increasing globalization of societies, such culture crossing remains difficult. The ways that expatriates tackle the challenges of life abroad are varied, and this variety must be understood if we are to understand and improve the experience of expatriate life.

## References

- Adler, N. J. (1987). Pacific Basin managers: A gaijin, not a woman. *Human Resource Management, 26*, 169-191.
- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. M. (1950). *The authoritarian personality*. New York: Harper.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*, 888-918.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Anderzen, I., & Arnetz, B. B. (1997). Psychophysiological reactions during the first year of foreign assignment: Results from a controlled longitudinal study. *Work & Stress, 11*, 304-318.
- Arends-Toth, J., & Van der Vijver, F. J. R. (2007). Acculturation attitudes: A comparison of measurement methods. *Journal of Applied Social Psychology, 37*, 1462-1488.
- Aycan, Z. (1997a). Acculturation of expatriate managers: A process model of adjustment and performance. In Z. Aycan (Ed.), *New approaches to employee management, Vol. 4: Expatriate management: Theory and research* (pp. 1-40). US: Elsevier Science/JAI Press.

- Aycan, Z. (1997b). Expatriate adjustment as a multifaceted phenomenon: Individual and organizational level predictors. *International Journal of Human Resource Management*, 8, 434-456.
- Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist*, 54(7), 462-479.
- Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7(1), 1-15.
- Beiser, M. Barwick, C., Berry, J. W., da Costa, G., Fantino, A., Ganesan, S., Lee, C., Milne, W., Naidoo, J., Prince, R., Tousignant, M., & Vela, E. (1988). *Mental health issues affecting immigrants and refugees*. Ottawa: Health and Welfare Canada.
- Bennett, R., Aston, A., & Colquhoun, T. (2000). Cross-cultural training: A critical step in ensuring the success of international assignments. *Human Resource Management*, 39, 239-250.
- Benson, G. S., & Pattie, M. (2008). Is expatriation good for my career? The impact of expatriate assignments on perceived and actual career outcomes. *The International Journal of Human Resource Management*, 19, 1636-1653.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46, 5-68.
- Berry, J. W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology: An International Review*, 38, 185-206.

- Bhaskar-Shrinivas, P., Harrison, D., Shaffer, M.A., & Luk, D. M. (2005). Input-based and time-based models of international adjustment: Meta-analytic evidence and theoretical extensions. *Academy of Management Journal*, 48, 257-281.
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., Maquil, A., Demoulin, S., & Leyens, J. P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, 96, 843-856.
- Bizumic, B., Duckitt, J., Popadic, D., Dru, V., & Krauss, S. (2009). A cross-cultural investigation into a reconceptualization of ethnocentrism. *European Journal of Social Psychology*, 39, 871-899.
- Black, J. (1988). Work role transitions: A study of American expatriate managers in Japan. *Journal of International Business Studies*, 19, 277-294.
- Black, J. (1990). The relationship of personal characteristics with the adjustment of Japanese expatriate managers. *Management International Review*, 30, 119-134.
- Black, J. (1992). Socializing American expatriate managers overseas: Tactics, tenure, and role innovation. *Group & Organization Management*, 17, 171-192.
- Black, J., Mendenhall, M., & Oddou, G. (1991). Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *Academy of Management Review*, 16, 291-317.
- Black, J., & Stephens, G. K. (1989). The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management*, 15, 529-544.

- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criteria domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, & associates (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.
- Brett, J. M. (1980). Technical supplement to “The effect of job transfer on employees and their families.” Evanston, IL: Kellogg Graduate School of Management, Northwestern University.
- “Brookfield” (2009). Global Relocation Trends: 2009 Survey Report. Retrieved December 7, 2009 from [http://www.brookfieldgrs.com/insights\\_ideas/grts/](http://www.brookfieldgrs.com/insights_ideas/grts/).
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.
- Caligiuri, P. M. (1997). Assessing expatriate success: Beyond just “being there”. In Z. Aycan (Ed.), *New approaches to employee management, Vol. 4: Expatriate management: Theory and research* (pp. 117-140). US: Elsevier Science/JAI Press.
- Caligiuri, P. M. (2000). Selecting expatriates for personality characteristics: A moderating effect of personality on the relationship between host national contact and cross-cultural adjustment. *Management International Review*, 40, 61-80.
- Chaiken, S., & Trope, Y. (1999). *Dual-process theories in social psychology*. New York, NY, US: Guilford Press.

- Chen, G. M., & Starosta, W. J. (2000). The development and validation of the intercultural sensitivity scale. Paper presented at the Annual Meeting of the National Communication Association, Seattle, WA.
- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin, 91*, 540-572.
- Cunningham, W. A., Nezlek, J. B., & Banaji, M. R. (2004). Implicit and explicit ethnocentrism: Revisiting the ideologies of prejudice. *Personality and Social Psychology Bulletin, 30*, 1332-1346.
- Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: an individual-differences model and its applications*. Minneapolis: U of Minnesota Press.
- Del Pilar, J. A., & Udasco, J. O. (2004). Deculturation: Its lack of validity. *Cultural Diversity and Ethnic Minority Psychology, 10*, 169-176.
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review and methodological critique. *International Review of Industrial/Organizational Psychology* (Vol. 6, pp. 283-357). London: Wiley.
- Edwards, J. R., & Bagozzi, R. P. (2000). On the nature and direction of relationships between constructs and measures. *Psychological Methods, 5*, 155-174.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology, 69*, 1013-1027.
- Galchenko, I., & van der Vijver, F. J. R. (2007). The role of perceived cultural distance in the acculturation of exchange students in Russia. *International Journal of Intercultural Relations, 31*, 181-197.

- Gelfand, M. J., Erez, M., & Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology, 58*, 479-514.
- Ghuman, P. A. S. (1991). Best or worst of two worlds? A study of Asian adolescents. *Educational Review, 33*, 121-132.
- Glasze, G. (2006). Segregation and seclusion: The case of compounds for western expatriates in Saudi Arabia. *GeoJournal, 66*, 83-88.
- Gonsalkorale, K., Sherman, J. W., & Klauer, K. C. (2009). Aging and prejudice: Diminished regulation of automatic race bias among older adults. *Journal of Experimental Social Psychology, 45*, 410-414.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology, 74*, 1464-1480.
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*, 197-216.
- Hall, D. T., & Schneider, B. (1973). *Organizational climates and careers: The work lives of priests*. New York: Seminar Press.
- Harzing, A. W. (1995). The persistent myth of high expatriate failure rates. *The International Journal of Human Resource Management, 6*, 457-475.
- Harzing, A. W. (2002). Are our referencing errors undermining our scholarship and credibility? The case of expatriate failure rates. *Journal of Organizational Behavior, 23*, 127-148.



- Hechanova, R., Beehr, T. A., & Christiansen, N. D. (2003). Antecedents and consequences of employee's adjustment to overseas assignment: A meta-analytic review. *Applied Psychology: An International Review*, 52, 213-236.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Holt, D. H. (1998). *International management: Text and cases*. Orlando, FL: Harcourt Brace & Company.
- Hom, P. W., Griffeth, R. W., & Sellaro, C. L. (1984). The validity of Mobley's (1977) model of employee turnover. *Organizational Behavior and Human Performance*, 34, 141-174.
- Hough, L. M., Eaton, N. K., Dunnette, M. D., Kamp, J. D., & McCloy, R. A. (1990). Criterion-related validities of personality constructs and the effect of response distortion on those validities. *Journal of Applied Psychology*, 75, 581-595.
- Johnson, E. C., Kristof-Brown, A., Van Vianen, A. E. M., De Pater, I. E., & Klein, M. R. (2003). Expatriate social ties: Personality antecedents and consequences for adjustment. *International Journal of Selection and Assessment*, 11, 277-288.
- Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58(9), 697-720.
- Kang, S. (2006). Measurement of acculturation, scale formats, and language competence: Their implications for adjustment. *Journal of Cross-Cultural Psychology*, 37, 669-693.

- Kealey, D. J. (1989). A study of cross-cultural effectiveness. *International Journal of Intercultural Relations, 13*, 387-428.
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies, 34*, 516-529.
- Kraimer, M. L., Wayne, S. J., & Jaworski, R. A. (2001). Sources of support and expatriate performance: The mediating role of expatriate adjustment. *Personnel Psychology, 54*, 71-99.
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology, 49*, 1-49.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individual's fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58*, 281-342.
- Lane, K. A., Banaji, M. R., Nosek, B. A., & Greenwald, A. G. (2007). Understanding and using the Implicit Association Test: IV. What we know (so far) about the method. In B. Wittenbrink & N. S. Schwarz (Eds.), *Implicit measures of attitudes: Procedures and controversies* (pp. 59-102). New York: Guilford Press.
- Lee, Y., & Larwood, L. (1983). The socialization of expatriate managers in multinational firms. *Academy of Management Journal, 26*, 657-665.
- Lysgaard, S. (1955). Adjustment in a foreign society: Norwegian Fulbright grantees visiting the United States. *Acta Psychologica, 11*, 189-190.

- McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91-125). Orlando, FL: Academic Press.
- Mendenhall, M.E., & Oddou, G. R. (1985). The dimensions of expatriate acculturation: A review. *Academy of Management Review, 10*, 39-48.
- Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K., & Schmitt, N. (2007). Reconsidering the use of personality tests in personnel selection contexts. *Personnel Psychology, 60*, 683-729.
- Napier, N. K., & Taylor, S. (1995). *Western women working in Japan*. Westport, CT: Quorum Books.
- Nicholson, N. (1984). A theory of work role transitions. *Administrative Science Quarterly, 29*, 172-191.
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the Implicit Association Test II: Method variables and construct validity. *Personality and Social Psychology Bulletin, 31*, 166-180.
- Oberg, K. (1960). Culture shock: Adjustment to new cultural environments. *Practical Anthropology, 7*, 177-182.
- Passel, J. S., Wang, W., & Taylor, P. (2008). Marrying out: One-in-seven new U.S. marriages is interracial or interethnic. Retrieved June 29, 2010. (<http://pewresearch.org/pubs/1616/american-marriage-interracial-interethnic>)
- Penner, L. A., Dovidio, J. F., West, T. V., Gaertner, S. L., Albrecht, T. L., Dailey, R. K., & Markova, T. (2010). Aversive racism and medical interactions with Black patients: A field study. *Journal of Experimental Social Psychology, 46*, 436-440.

- Raden, D. (2003). Ingroup bias, classic ethnocentrism, and non-ethnocentrism among American Whites. *Political Psychology, 24*, 803-828.
- Rosse, J. G., Stecher, M. D., Miller, J. L., & Levin, R. A. (1998). The impact of response distortion on preemployment personality testing and hiring decisions. *Journal of Applied Psychology, 83*, 634-644.
- Ruben, B. D., & Kealey, D. J. (1979). Behavioral assessment of communication competency and the prediction of cross-cultural adaptation. *International Journal of Intercultural Relations, 3*, 15-47.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*, 49-65.
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist, 65*, 237-251.
- Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. *Cultural Diversity and Ethnic Minority Psychology, 14*, 275-285.
- Searle, W., & Ward, C. (1990). The prediction of psychological and socio-cultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations, 14*, 449-464.

- Shaffer, M. A., & Harrison, D. A. (1998). Expatriates' psychological withdrawal from international assignments: Work, nonwork, and family influences. *Personnel Psychology, 51*, 87-118.
- Shaffer, M. A., & Harrison, D. A. (2001). Forgotten partners of international assignments: Development and test of a model of spouse adjustment. *Journal of Applied Psychology, 86*, 238-254.
- Shaffer, M. A., Harrison, D. A., Gregersen, H., Black, J. S., & Ferzandi, L. A. (2006). You can take it with you: Individual differences and expatriate effectiveness. *Journal of Applied Psychology, 91*, 109-125.
- Shay, J. P., & Baack, S. (2004). Expatriate assignment, adjustment and effectiveness: An empirical examination of the big picture. *Journal of International Business Studies, 35*, 216-232.
- Shay, J. P., & Baack, S. (2006). An empirical investigation of the relationships between modes and degree of expatriate adjustment and multiple measures of performance. *International Journal of Cross Cultural Management, 6*, 275-294.
- Sinangil, H. K., & Ones, D. S. (2003). Gender differences in expatriate job performance. *Applied Psychology: An International Review, 52*, 461-475.
- Smith, E. R., & DeCoster, J. (2000). Dual-process models in social and cognitive psychology: Conceptual integration and links to underlying memory systems. *Personality and Social Psychology Review, 4*(2), 108-131.
- Stahl, G. K., & Caliguiri, P. (2005). The effectiveness of expatriate coping strategies: The moderating role of cultural distance, position level, and time on the international assignment. *Journal of Applied Psychology, 90*, 603-615.

- Stark, S., Chernyshenko, O. S., Chan, K., Lee, W. C., & Drasgow, F. (2001). Effects of the testing situation on item responding: Cause for concern. *Journal of Applied Psychology, 86*, 943-953.
- Stening, B. W. (1979). Problems in cross-cultural contact: A literature review. *International Journal of Intercultural Relations, 3*, 269-313.
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review, 8*(3), 220-247.
- Suanet, I., & van de Vijver, F. J. R. (2009). Perceived cultural distance and acculturation among exchange students in Russia. *Journal of Community and Applied Social Psychology, 19*, 182-197.
- Suutari, V., & Brewster, C. (2000). Making their own way: International experience through self-initiated foreign assignments. *Journal of World Business, 35*, 417-436.
- Torbiorn, I. (1982). *Living abroad*. New York: Wiley.
- Wang, M., & Takeuchi, R. (2007). The role of goal orientation during expatriation: A cross-sectional and longitudinal investigation. *Journal of Applied Psychology, 92*, 1437-1445.
- Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review, 107*, 101-126.

## **Appendices**

## Appendix A

### Perceived Cultural Distance Items \*

1. Everyday customs
  2. General living conditions
  3. Health care facilities and service
  4. Transportation systems
  5. General living costs
  6. Available quality and types of foods
  7. Climate
  8. General housing conditions
- from Black & Stephens (1989)



## Appendix B

### Purpose of Assignment Items \*

#### *Control of foreign subsidiary*

1. I was given this assignment because I have skills, knowledge, and/or abilities that most host country nationals do not have.
2. Expatriates in my company are used to influence or control our foreign offices.
3. My assignment is to develop host country nationals so they can meet my company's global standards.

#### *Managerial development*

4. I was given this assignment so I can gain international experience.
5. A key objective that my company has for my assignment is that I learn about my host country.
6. I was sent to this country to help me develop my ability to manage global business affairs.

\* adapted and expanded from Shay & Baack (2004)

## Appendix C

### Explicit Ethnocentrism Scale Items \*

#### *Preference*

1. I prefer doing things with people from my own culture.
2. I don't have any preference for my own cultural or ethnic group over others. †

#### *Superiority*

3. The world would be better if other cultures and ethnic groups modeled themselves on my culture.
4. I don't believe that my cultural or ethnic group is better than any other. †

#### *Purity*

5. It is better for people from different ethnic and cultural groups not to marry.
6. It's perfectly acceptable to me for a member of my family to marry a person from a different cultural or ethnic group. †

#### *Exploitativeness*

7. It would upset me if my cultural group were becoming wealthier at the expense of other cultures. †
8. We need to do what's best for our own people, not worry about what the effect might be on other peoples.

\* adapted from Bizumic et al. (2009)

† Reverse scoring is used on this item.

## Appendix D

### Expatriate Acculturation Index Scale Items\*

#### *General acculturation*

1. I enjoy American music, TV, magazines, etc. \_\_\_\_ other American expatriates do.
2. I enjoy the music, TV, magazines, etc. of my host country \_\_\_\_ other American expatriates do.
3. I eat American food \_\_\_\_ other American expatriates do.
4. I eat the food that local, host-country nationals eat \_\_\_\_ other American expatriates do.
5. I observe American cultural traditions (e.g., holidays) \_\_\_\_ other American expatriates do.
6. I observe cultural traditions of my host country (e.g., holidays) \_\_\_\_ other American expatriates do.

#### *Social interaction acculturation*

7. I socialize with other Americans \_\_\_\_ other American expatriates do.
8. I socialize with local host country nationals \_\_\_\_ other American expatriates do.
9. When talking with local host country nationals, I use English \_\_\_\_ other American expatriates do.
10. When talking with local host country nationals, I try to use the local language \_\_\_\_ other American expatriates do.
11. The number of American friends I have here is \_\_\_\_ other American expatriates have.

Appendix D (continued)

12. The number of friends I have who are from my host country is \_\_\_\_ other American expatriates have.

*Work acculturation*

13. At work, I follow American norms for how to behave toward superiors and subordinates \_\_\_\_ other American expatriates do.
14. At work, I follow my host country's norms for how to behave toward superiors and subordinates \_\_\_\_ other American expatriates do.
15. At work, I follow American norms regarding promptness and meeting deadlines \_\_\_\_ other American expatriates do.
16. At work, I follow my host country's norms regarding promptness and meeting deadlines \_\_\_\_ other American expatriates do.
17. At work, I behave in a typically 'American' way \_\_\_\_ other American expatriates do.
18. At work, I behave like host country national employees do \_\_\_\_ other American expatriates do.

\* adapted from Ryder, Alden, & Paulhus (2000)

## Appendix E

### Expatriate Adjustment Scale Items\*

1. Living conditions in general
2. Housing conditions
3. Food
4. Shopping
5. Cost of living
6. Entertainment/recreation facilities and opportunities
7. Health care facilities
8. Socializing with host nationals
9. Interacting with host nationals on a day-to-day basis
10. Interacting with host nationals outside of work
11. Speaking with host nationals
12. Specific job responsibilities
13. Performance standards and expectations
14. Supervisory responsibilities

\* adapted from Black & Stephens (1989)

## Appendix F

### Withdrawal Cognition Scale Items

#### *Non-professor subsample items*

1. I plan to leave this assignment before the expected date of completion.<sup>1</sup>
2. I think often about quitting my assignment early.<sup>2</sup>
3. I intend to look for an alternative assignment back in my home country (or I already am looking for one) so I can leave this assignment early.<sup>2</sup>
4. If it had no impact on my career, I would like to leave this assignment early.<sup>3</sup>
5. If I could do it all over again, I would still accept this assignment.<sup>3, †</sup>

#### *Professor subsample items*

1. I plan to leave my position here soon.<sup>1</sup>
2. I think often about leaving this position.<sup>2</sup>
3. I intend to look for an alternative position back in my home country, or I already am looking for one.<sup>2</sup>
4. If it had no impact on my career, I would like to leave this position early.<sup>3</sup>
5. If I could do it all over again, I would still accept this position.<sup>3, †</sup>

<sup>1</sup> adapted from Shaffer & Harrison (1998)

<sup>2</sup> adapted from Hom, Griffeth, & Sellaro (1984)

<sup>3</sup> adapted from Caligiuri (1997)

† reverse-scored

## Appendix G

### Performance Scale Items

#### *Non-professor subsample: Task performance \**

1. Performing your technical work on this expatriate assignment (e.g., managing sales accounts, improving production processes, etc.)
2. Fulfilling the requirements of your position

#### *Non-professor subsample: Contextual performance \**

3. Encouraging host country nationals to be committed to the company
4. Representing the company to host national customers and the host community in general
5. Maintaining good working relationships with host nationals
6. Communicating and keeping others in your work unit informed
7. Supervising and developing host national subordinates

#### *Professor subsample: Task performance*

1. Preparing and delivering lectures and class materials
2. Advising students
3. Keeping current on research in your field
4. Publishing research, writing for professional audiences, etc.

#### *Professor subsample: Contextual performance*

5. Maintaining good working relationships with host national colleagues at your university
6. Representing the university positively to others

\* Adapted from Caligiuri (1997).

Appendix H

Demographic Questions

1. Sex:                    \_\_\_\_\_ Female \_\_\_\_\_ Male
  
2. Age, in years:                    \_\_\_\_\_
  
3. Ethnicity:  
      \_\_\_\_\_ Hispanic or Latino                    \_\_\_\_\_ Not Hispanic or Latino  
      \_\_\_\_\_ Unknown                    \_\_\_\_\_ Both
  
4. Race (choose all that apply):  
      \_\_\_\_\_ Caucasian/White  
      \_\_\_\_\_ African-American/Black  
      \_\_\_\_\_ South Asian  
      \_\_\_\_\_ East Asian  
      \_\_\_\_\_ American Indian/Alaskan Native  
      \_\_\_\_\_ Native Hawaiian or other Pacific Islander  
      \_\_\_\_\_ Other
  
5. Country of primary citizenship:                    \_\_\_\_\_
  
6. Country where you spent most of your childhood (up to age 18): \_\_\_\_\_
  
7. How many years of your childhood – up to 18 – did you live in that country? \_\_\_\_\_
  
8. Country where you are currently working: \_\_\_\_\_
  
9. Principal industry of your organization/company:  
      \_\_\_\_\_ Agriculture                    \_\_\_\_\_ Government



Appendix H (continued)

- |                      |                      |
|----------------------|----------------------|
| _____ Mining         | _____ Health Care    |
| _____ Communications | _____ Internet       |
| _____ Utilities      | _____ Manufacturing  |
| _____ Construction   | _____ Nonprofit      |
| _____ Education      | _____ Retail         |
| _____ Finance        | _____ Wholesale      |
| _____ Insurance      | _____ Services       |
| _____ Real Estate    | _____ Transportation |
| _____ Other          |                      |

10. Please describe your organization's specific industry, e.g., "Management consulting" or "Software development" or etc.: \_\_\_\_\_
11. Please state your primary field of expertise (e.g., clinical psychology, international marketing, comparative literature): \_\_\_\_\_
12. How many years and months have you COMPLETED on your assignment? (e.g., "2 years and 6 months")  
\_\_\_\_\_ years, \_\_\_\_\_ months
13. When you started you assignment, how long was it planned to last? (e.g., "5 years and 0 months")  
NOTE: If the length of your position was indefinite, please enter '99 years and 0 months."  
\_\_\_\_\_ years, \_\_\_\_\_ months
14. How long have you been a professor in your current host country?  
\_\_\_\_\_ years, \_\_\_\_\_ months

Appendix H (continued)

15. When you first entered your position, how long was it planned to last? (e.g., “5 years and 0 months”)

NOTE: If the length of your position was indefinite, please enter “99 years and 0 months.”

\_\_\_\_\_ years, \_\_\_\_\_ months

16. NOT INCLUDING your current position, how many years have you ever lived in a foreign country?

\_\_\_\_\_ years, \_\_\_\_\_ months

17. What is the primary language spoken by host country nationals in your host city?

\_\_\_\_\_

18. Compared to other American expatriates, how much effort are you making to improve your ability to use the language you listed above?

- a. Much less effort
- b. Less effort
- c. The same amount of effort
- d. More effort
- e. Much more effort

19. Which statement below best describes your ability to use that language?

- a. I can't use the language at all.
- b. I can communicate on very simple topics.
- c. I can communicate about daily life and some work-related topics.
- d. I can communicate on many topics.
- e. I communicate fluently and accurately for all professional needs.

Appendix H (continued)

20. Please describe your **family obligations** by checking all of the boxes below that apply:

- a. I have a spouse or significant other who lives with me in my host country.
- b. I have a spouse or significant other who lives back in my home country.
- c. I have one or more children (age 0-18) who live with me in my host country.
- d. I have one or more children (age 0-18) who live back in my home country.
- e. I have an older family member (e.g., parent) who depends on me for support living with me in my host country.
- f. I have an older family member (e.g., parent) who depends on me for support living back in my home country.
- g. I do not have a spouse, significant other, or any dependents.
- h. I prefer not to respond.

21. Which statement below best describes the way in which you happened to begin working abroad?

- a. I actively sought out a position abroad.
- b. I was recruited for a position abroad.
- c. I had to move abroad to be with a family member, significant other, etc.
- d. Other \_\_\_\_\_

*Note.* Items 9, 10, 12, and 13 were asked only for non-professor expatriates. Items 11, 14, and 15 were asked only for professors.