Predicting effectiveness in global leadership activities

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ABSTRACT

Given the importance of effective global leadership, both academics and practitioners alike have become increasingly interested in ways to develop successful global business leaders. This study of over two hundred global leaders found that high contact cross-cultural leadership development experiences and the leaders' personality characteristics were predictors of effectiveness in global leadership activities. Testing hypotheses based on social learning theory and the contact hypothesis, extroversion is found to moderate the relationship between high contact cross-cultural leadership development experiences and effectiveness on global leadership activities: Highly extroverted leaders with a greater number of high contact cross-cultural leadership development experiences are the most effective on global leadership activities.

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1. Introduction

Today's global economy has created a more complex and dynamic environment in which most firms must learn to compete effectively to achieve sustainable growth. With the inception of Internet-based business, cross-border trade agreements, the ease of international travel, and the like, domestic firms with solely domestic operations serving exclusively domestic client bases are becoming increasingly rarer. The global environment has not only changed the way business is conducted, it has also changed the criteria of effectiveness for the firms' leaders in the way business is conducted. Leaders who can effectively manage through this complex, changing, and often ambiguous global environment are critical for firms' future effectiveness. Given the importance of effective global leadership, it is not surprising that both academics and practitioners alike have become increasingly interested in ways to develop successful global business leaders (Caligiuri, 2006; Mendenhall, 2006).

1.1. Developing global leaders

Suutari (2002) suggests that the term 'global leader' must be clearly defined. According to him, “It seems that the literature uses this concept with very different meanings although the focus should be on managers with global integration responsibilities within global organizations.” (Suutari, 2002: 229). Consistent with this definition, we define global leaders as high level professionals such as executives, vice presidents, directors, and managers who are in jobs with some global leadership activities such as global integration responsibilities. Global leaders play an important role in developing and sustaining a competitive advantage (cf. Bartlett and Ghoshal, 2003; Caligiuri & Di Santo, 2001). As a result, MNCs increasingly use global leaders for a variety of purposes such as to expand overseas businesses, to conceive strategies on a global basis, to deal effectively with a complex set of constituencies, to manage and motivate geographically dispersed and diverse teams, and to identify potential business opportunities. For these reasons, research examining ways to develop individuals...
for global leadership roles has received much attention in the recent past (e.g., Barrett & Beeson, 2002; Morrison, 2000).

Effectiveness in global leadership activities can be facilitated if the individual has transnational competencies (e.g., broad groupings of cross-cultural knowledge, skills, attitudes, and personality traits) or a global mindset (e.g., Beechler & Javidan, 2007) to confront the above-mentioned challenges or any other cross-cultural challenges that may inhibit his/her ability to work effectively. For example, knowledge about the general dimensions on which most cultures differ and the impact of these differences on individuals (e.g., House, Javidan, Hanges, & Dorfman, 2002; Hofstede, 2001) provides the individual with awareness regarding the expected norms and behaviors in the new culture (Black & Mendenhall, 1990). This awareness leads to less anxiety, culture shock, and realistic expectations about living and working in the new culture—and hence facilitates work effectiveness. Cross-cultural leadership development experiences are critical to the development of transnational competencies or global mindsets (e.g., Beechler & Javidan, 2007; Gupta & Govindarajan, 2002; Evans, Pucik, & Barsouk, 2002).

Organizations recognize the importance of cross-cultural leadership development experiences and increasingly use them to prepare individual for the challenges and opportunities associated with global leadership activities. Many studies have demonstrated that there has been a positive trajectory of growth with respect to the number of organizations offering cross-cultural leadership development experiences (e.g., Csoka & Hackett, 1998; Gregersen, Morrison & Black, 1998; Kramer, 2005; Stroh & Caligiuri, 1998). For instance, in the early 1990s, Adler and Bartholomew (1992) surveyed organizations headquartered in the United States and Canada and found that most organizations had taken a global approach to overall business strategy, financial systems, production operations, and marketing but lacked globally component managers. Gregersen et al. (1998) found that among U.S. Fortune 500 firms, 8% of companies reported already having comprehensive systems for developing global leaders, 16% had some established programs, 44% used an ad hoc approach, and 32% were just beginning. Similarly, Stroh and Caligiuri (1998) found a positive relationship between a MNC’s ability to develop international executives and the MNCs return on assets. More recently, The 2005 Global Leadership Trends Survey Report indicated that majority of the organizations (62 out 81 companies) surveyed by the Conference Board actively seek a variety of approaches to improve their global talent development (Kramer, 2005).

Several studies have examined issues related to developing global leaders (for reviews see Beechler & Javidan, 2007; Morrison, 2000; Suutari, 2002). A few studies have described the main trends and cross-country differences in the field (e.g., House et al., 2002). Others have analyzed issues related to the process of developing global competencies. Substantive issues include early identification of leadership potential (e.g., Spreitzer, McCall, & Mahoney, 1997), competencies needed to work effectively in a global environment (e.g., Dalton, Ernst, Deal, & Leslie, 2002) and methods/techniques used to develop global competencies (e.g., Caligiuri & Di Santo, 2001). A few studies have proposed competency frameworks and models that identify and describe competencies associated with successful global leaders (e.g., Beechler & Javidan, 2007; Collins, Scullion, & Marley, 2007; Morrison, 2000; Suutari, 2002).

Morrison (2000) conducted one of the first literature reviews of the seminal studies that had been undertaken to examine issues related to global leadership development. Based on a narrative review of 12 studies, Morrison (2000) found that most of the existing research was limited to descriptive essays, based on small scale samples of convenience, and on the author’s consulting experience or work in one or two countries. Morrison (2000) concluded that for researchers much more work needs to be done on essentially every aspect of global leadership development. In a related literature review, Suutari (2002) provided further support to Morrison’s (2000) findings. Suutari reported that research on global leadership development is in its infancy and future research opportunities abound in a variety of areas including developing global leaders. In a more recent review of the literature, Beechler and Javidan (2007) suggest that the available literature is more normative than empirical, discussing issues and problems rather than tackling theoretical or empirical challenges. Clearly, more empirical research is needed in this area.

Organizations increasingly use cross-cultural leadership development experiences to prepare global leaders for the challenges and opportunities associated with global work. However, despite the plethora of research advocating the use of cross-cultural leadership development experiences, the current research has generally assumed that everyone benefits equally from these experiences. Given the extraordinary high costs (e.g., financial and emotional) of developing global managers, it is important to understand who will benefit the most from cross-cultural leadership development experiences. Suutari (2002) suggests that it would be useful to examine the fit between individuals and the type of training. Caligiuri (2006) points out that organizations should identify those individuals with the requisite individual characteristics (e.g., personality), and then offer developmental experiences to those identified. Cross-cultural leadership development experiences may only be effective when individuals are predisposed to success in the first place (Caligiuri, 2006). This paper adds to the global leadership development by examining how certain cross-cultural leadership development experiences are related to effectiveness in global leadership activities. In addition, this paper examines two personality traits that prior research suggests are linked to conditions under which cross-cultural leadership development experiences lead to greater effectiveness in global leadership activities. More specifically, the moderating effect of openness to experience and extroversion on the relationship between the extent of participation in cross-cultural leadership development experiences and effectiveness in global activities is examined.
1.2. Social learning theory and the contact hypothesis applied to cross-cultural leadership development experiences

Social learning theory (Bandura, 1997, 1977) is used in this paper to provide the conceptual basis for understanding how the extent of participation in cross-cultural leadership development experiences relates to effectiveness in global leadership activities. Social learning theory proposes that individuals develop through learning from their surroundings, either from interacting with people or observing other people’s behaviors. Events and consequences in the environment are cognitively processed before they are learned or before they influence behavior. The social learning process includes three components: attention, retention, and reproduction. Attention occurs when a person observes new behaviors from another person or self-observes his or her own behavior and the results they produce in a new context. In the cross-culturally context, this is the point when a person becomes aware that his or her behaviors are different (or should be different) from the norms within the given cultural context. Retention is the processes by which the modeled behavior becomes encoded as a memory by the participant and occurs when the individual stores and remembers the behavior that he or she acquires (Black & Mendenhall, 1990). Finally, reproduction leads to changes in behavior. Reproduction allows the individual to directly experience the consequences of using the new skills and behaviors, and understand which behaviors and skills to execute or suppress in given situations (Black & Mendenhall, 1990). The individual is more likely to adapt a particular skill or behavior if it results in positive outcome, that is, behaviors that are reinforced are stored in the individual’s long-term memory for use in similar situations. In addition, reproduction of appropriate behaviors solidifies the retention process. In the cross-culturally context, the person internalizes the appropriate behavior to elicit a given outcome (retention) in the cultural context and is able to imitate appropriately at the correct time (reproduction).

Over the past several years, a number of scholars have used social learning theory to examine a variety of issues in the area of employee development (Black & Mendenhall, 1990; Frayne & Latham, 1987). In a study most relevant to global leadership development, Black and Mendenhall (1990) applied social learning theory towards explaining and evaluating the effectiveness of cross-cultural training. Black and Mendenhall suggest that the three elements of the social learning theory—attention, retention, and reproduction could be used to model cross-cultural training and predict its impact on an individual’s cross-cultural adjustment and work performance. The process of individual learning explained by Black and Mendenhall (1990) lends itself to the study of how cross-cultural leadership development experiences can enhance effectiveness with global leadership activities. In other words, the three elements of the social learning process could be used to model any type of cross-cultural leadership development experience and predict its impact on global leadership activities. Since we focus on developmental experiences that have occurred in the past, retention and reproduction components of social learning theory can be used to describe the process through which extent of participation in cross-cultural leadership development experiences can influence effectiveness in global leadership activities.

1.3. High contact and low-contact cross-cultural leadership development experiences

Prior research suggests that it is important to take a systematic approach to fully understand the impact of professional development experiences on job related activities such as work performance (e.g., Birdi, Allan, & Warr, 1997; Ready, Vicere, & White, 1994). Training and development researchers have long had an interest in examining the impact of specific developmental experiences on learning and performance outcomes (e.g., Suutari, 2002). Given that there are many types of developmental experiences with varying attributes such as costs and learning goals, it cannot be simply assumed that what is true of one type of developmental experience will also hold for other types. It is possible to use the modeling process (e.g., how individuals learn new behaviors) of social learning theory to organize cross-cultural leadership development experiences into systems or bundles of interrelated activities. Most cross-cultural leadership development experiences generally exhibit the participative modeling process (e.g., learners participate in modeling the behavior), which can either use a verbal approach (e.g., learners cognitively rehearse the modeled behavior and there is very little interpersonal contact) or a behavioral approach (e.g., learners physically model the behaviors being learned and there is considerable amount of interpersonal contact) (cf. Black & Mendenhall, 1989).

Using this participative modeling processes, cross-cultural leadership development experiences can be best understood on a continuum ranging from high contact experiences (e.g., verbal approach) to low contact experiences (e.g., behavioral approach).

Both types of cross-cultural leadership development experiences are important, however, from a social learning perspective, the behavioral approach (vs. verbal approach) involves the learner practicing and reproducing appropriate skills and behaviors. Therefore, greater participation in high contact cross-cultural leadership development experiences may allow individuals to improve their ability to reproduce the culturally appropriate skills and behaviors. The more exposure an individual has with high contact cross-cultural leadership development experiences, the more opportunity he or she has to practice the modeled behavior and to refine the ability to reproduce the modeled behavior at a later time in the appropriate situation. To further describe the importance of contact in the context of ‘cultural understanding’ it is important to consider the contact hypothesis (Allport, 1954; Pettigrew, 1998). The contact hypothesis was originally posited to address race relations in the United States in the 1950s and 1960s. This hypothesis posits that inter-group contact reduces prejudice and promotes better inter-group relations (see Connolly, 2000; Pettigrew, 1998; Tredoux & Finchilescu, 2007 for more information on the contact
hypothesis). The more interaction (i.e., contact) a person has with people from a given cultural group, the more positive his or her attitudes will be toward the people from that cultural group.

Several studies have used the basic principle of contact hypothesis to examine the relationships and interactions between individuals from different cultures (e.g., Caligiuri, 2000b; Church, 1982). Church (1982) suggested that the principles of the contact hypothesis could be applied to interpersonal interactions between expatriates and host nationals. Caligiuri (2000a) attempted to better understand how contact with host nationals affects an expatriate's cross-cultural adjustment. Based on the contact hypothesis, Caligiuri suggested that expatriates often learn cultural appropriate norms and behaviors through cross-cultural interactions and the more expatriates interact with host nationals, the more likely they are to become cross-culturally adjusted.

Applying the basic principle of contact hypothesis, it can be argued that the more exposure an individual has with high contact cross-cultural leadership development experiences relative to participation in low-contact cross-cultural leadership experiences, the more opportunity he or she will have to interact with people from multiple cultures, and thus the more likely he or she will be able to identify, learn, and apply diverse culturally appropriate business behaviors needed for effective global leadership. Thus, Hypothesis 1 suggests:

**Hypothesis 1.** High contact cross-cultural leadership development experiences will be more effective than low-contact cross-cultural leadership development experiences.

### 1.4. Personality, high contact cross-cultural leadership development experiences and effectiveness in global leadership activities

Several scholars have examined how individual differences relate to various criteria of training and development effectiveness (e.g., Quinones, 1997; Salas & Cannon-Bowers, 2001). This stream of research has shown that individual attributes, such as motivation to learn (e.g., Bowers, 2001). This stream of research has shown that leadership activities cross-cultural leadership development experiences. The need to seek out new experiences should help those with extensive participation in high contact cross-cultural leadership development experiences and effectiveness in global leadership activities. The need to seek out new experiences should help those with extensive participation in high contact cross-cultural leadership development experiences extend their repertoire of behaviors needed for effective global leadership. Thus, the second hypothesis is as follows:

**Hypothesis 2.** The effect of the number of high contact cross-cultural leadership development experiences will be stronger (more positive) among leaders who are higher on openness than for those lower on openness.

### 1.5. Openness to experience

Individuals high on openness are more likely to engage in new settings with strong level of curiosity and a willingness to assess what is required to adapt to new and novel situations (Caligiuri, 2000b), and are more likely to be accepting of diverse cultures (e.g., Abe & Wiseman, 1983; Black, 1990). These individuals possess few if any negative predisposing attitudes that may impair their ability to seek out and participates in interpersonal interactions. Individuals with greater openness are more likely to establish interpersonal relationships with people from different cultures than those low in this trait (Caligiuri, 2000a, 2000b; Ones & Viswesvaran, 1997. Thus, consistent with the contact hypothesis, it can be argued that openness to experience will moderate the relationship between high contact cross-cultural leadership development experiences and effectiveness in global leadership activities. The need to seek out new experiences should help those with extensive participation in high contact cross-cultural leadership development experiences extend their repertoire of behaviors needed for effective global leadership. Thus, the second hypothesis is as follows:

**Hypothesis 2.** The effect of the number of high contact cross-cultural leadership development experiences will be stronger (more positive) among leaders who are higher on openness than for those lower on openness.

### 1.6. Extroversion

Extroverts are more likely to seek social activities to develop interpersonal relationships (Caligiuri, 2000a). These individuals have a greater natural ease with social demands and may be more willing to put forth the effort necessary to interact effectively with people from different countries. In general, prior research has shown that extroversion positively affects an individual's social interactions (i.e., sociability) and may help facilitate
interactions, acquaintanceships, and friendships with people from different cultures (e.g., Mendenhall & Oddou, 1985). Being an extrovert should improve the likelihood of interacting and people, which in turn will affect the extent to which an individual is able to learn, retain and reproduce appropriate skills and behaviors. Those high in extroversion are more likely to learn from cross-national interpersonal interactions than those who are more introverted (Caligiuri, 2000a).

In the training and development literature extroversion tends to be associated with a learning goal orientation (Zweig & Webster, 2004). The strong learning goal orientation aspect of extroversion might affect an individual’s motivational process so that he or she maintains or even increase levels of effort (Colquitt & Simmering, 1998; Cron, Slocum, Vandewalle, & Fu, 2005) to learn and to maintain new skills and behaviors. Consistent with the contact hypothesis, it can be argued that extroversion will moderate the relationship between high contact cross-cultural leadership development experiences and effectiveness in global leadership activities. The need to engage in social activities and the strong learning orientation should help extroverts extend their repertoire of skills and behaviors needed for effective global leadership (for those with extensive participation in high contact cross-cultural leadership professional development experiences). This suggests Hypothesis 3:

**Hypothesis 3.** The effect of the number of high contact cross-cultural leadership development experiences will be stronger (more positive) among leaders who are higher on extroversion than for those lower on extroversion.

The three aforementioned hypotheses will be tested on participants who are currently leaders in a large multinational organization.

2. Methods

2.1. Data collection

Participants in this study were all of the leaders at a specified pay grade or higher from a large UK-based diversified firm (largely in the chemical industry). This firm had a clearly identifiable group of 313 leaders who were labeled global leaders and resided at a certain job level and above. A link to confidential web-based e-survey was sent to all of these possible participants via their company email accounts (highest possible N = 313). The questionnaire included a cover letter that explained the goal of the study, emphasized that participation was voluntary, that their individual responses would be kept strictly confidential, and that their firm would receive a summary of the findings. Each participant was given three weeks to complete the online questionnaire. The questionnaire assessed each participant’s personality characteristics, cross-cultural leadership development experiences, effectiveness in global leadership activities, and personal demographics.

2.1.1. Sample

Two hundred and fifty-six questionnaires were returned for a response rate of 82%. These participants were from 17 different countries, including the UK (42.5%), USA (19.7%), South Africa (18.9%), New Zealand (2.1%), Australia (7.3%), France (1.3%), Singapore (0.9%), Thailand (0.9%), Bangladesh (1.7%), Italy (0.4%), Netherlands (0.4%), Colombia (0.9%), Korea (0.4%), Japan (0.9%), Philippines (0.4%), India (0.9%), and Spain (0.4%). Eighty-five percent of the participants had a bachelor’s degree or higher. The average tenure with the current organization was 13 years. A majority of the global leaders were carrying titles of Director (33.6%), Vice President (26%), Top Executive (12.3%), and Manager (22%). Ninety-one percent were male and 20% of the sample was fluent in a second language. On average, about 12% of the participants’ work days were spent outside of their home countries.

It is important to note that all of the participants were engaged in global activities. The participating organization was asked to identify those who they deemed to be global business leaders. In addition, the participants provided self-assessments of their effectiveness on a 10-item scale reflecting global leadership activities as described below. To ensure that the participants did participate in global leadership activities, they were given the option to respond “not applicable” to each of the activities. To be included in the study, the participants needed to participate in more than 5 of the 10 activities. No one was removed from the study using this criterion suggesting that they all engaged in a significant number of leadership activities.

2.2. Measures

2.2.1. Openness to experience

Openness to experience was measured by the 12-item subscales of the revised NEO Personality Inventory NEO – FFI (Costa & McCrae, 1992). Each item was scored on a 5-point Likert-type scale ranging from strongly disagree to strongly agree. The items were totaled, whereas, a high score denoted greater openness experience. Sample items include: “I often try new and foreign foods” and “Once I find the right way to do something, I stick to it.” The mean for this scale was 28.40 (S.D. = 5.45). The openness to experience scale had an alpha coefficient of .87. The published coefficient alphas range from .76 to .90 (Costa & McCrae, 1992).

2.2.2. Extroversion

Extroversion was assessed using the 12-item subscale of the revised NEO Personality Inventory NEO – FFI (Costa & McCrae, 1992). Each item was scored on a 5-point Likert-type scale ranging from strongly disagree to strongly agree. The items were totaled, whereas, a high score denoted greater extroversion. Sample items include: “I like to have a lot of people around me” and “I like to be where the action is.” The mean of this scale was 35.26 (S.D. = 4.97). The extroversion scale had an alpha coefficient of .89. The published coefficient alpha ranges from .76 to .90 (Costa & McCrae, 1992).

2.2.3. High contact cross-cultural leadership development experiences

Six single-item indicators assessed high contact cross-cultural leadership development experiences. Participants were asked whether they had participated in each
experience, coded 1 if “yes” and 0 if “no”. High contact cross-cultural leadership development experiences included structured (rotational) leadership development program, short-term expatriate assignment(s), long-term (one or more years) expatriate assignments, global meetings in various international locations, member on a global team, and mentored by a person (or people) from another culture. The result was an index with a range from 0 to 6 (0 if the person had none of the experiences to 6 if they had all of the experiences). The mean for was 2.89 (S.D. = 1.37).

2.2.4. Low-contact cross-cultural leadership development experiences

Six single-item indicators assessed low-contact cross-cultural development experiences. Participants were asked whether or not they had participated in each experience. Participants were asked whether they had participated in each experience, coded 1 if “yes” and 0 if “no”. Low-contact cross-cultural leadership development experiences included formal university coursework, cross-cultural training program(s), psychological assessments, assessment centres for leadership development, diversity training programs, and language training program(s). The result was an index with a range from 0 to 6 (0 if the person had none of the experiences to 6 if they had all of the experiences). The mean was 2.83 (S.D. = 1.34).

The development process of cross-cultural leadership development experiences involved several phases. The first phase involved creating a list of experiences that multinational organizations (MNCs), in general, use to develop global leaders. To generate an initial set of experience, we had several hours of discussions with experienced international human resource (IHR) corporate executives from a group of MNCs. These discussions contained rich, comprehensive descriptions of the kind of activities or experiences specially designed for the development of global executives. From this descriptions and an extensive review of the domestic/international workplace training and development literature (e.g., Birdi et al., 1997; Gupta & Govindarajan, 2002; Kealey & Protheroe, 1996; Mendenhall et al., 2004; Noe, Wilk, Mullen, and Wanek, 1997), a generic list of possible experiences was written down in a language used by the executives. During phase two, each IHR corporate executive was given the generic list and asked to add or take experiences off, depending if each experience was used to develop global leaders in his/her organization. After completing this process, a final set of 12 separate experiences was developed. The final phase involved creating items to assess the total number of experiences each respondent had participated in throughout his/her career (maximum of 12). For analysis purposes, we categorized these 12 experiences into high contact and low-contact experiences.

2.2.5. Effectiveness in global leadership activities

The global leadership activities were identified through a two-phase process. The first phase consisted of a three-hour group discussion with the 12 international human resource (IHR) subject matter experts. These discussions provided an understanding of the scope of international work activities. Using the discussions as a guideline, we systematically searched both the global leadership development literature (e.g., Bartlett & Ghoshal, 2003; Conner, 2000; Morrison, 2000; Suutari, 2002; Spreitzer et al., 1997) and the expatriate performance management literature (e.g., Caligiuri & Day, 2000; Gregersen, Hite, and Black, 1996) to develop a generic list of global activities. During the second phase, each participating IHR expert was provided with this list and asked to add activities or take activities off, depending if each global activity was prevalent in his or her organization. On the basis of these responses a final set of 10 global leadership activities was developed. The final phase involved creating items to assess the extent to which each respondent was effective in each of the 10 separate global work activities that were found to be common among – and unique to – those in global leadership positions.

1. Global leaders work with colleagues from other countries.
2. Global leaders interact with external clients from other countries.
3. Global leaders interact with internal clients from other countries.
4. Global leaders will often speak another language (other than their mother tongue) at work.
5. Global leaders supervise employees who are of different nationalities.
6. Global leaders develop a strategic business plan on a worldwide basis.
7. Global leaders manage a budget on a worldwide basis.
8. Global leaders negotiate in other countries or with people from other countries.
9. Global leaders manage foreign suppliers or vendors.
10. Global leaders manage risk on a worldwide basis for your unit.

Participants provided a self-assessment of their effectiveness on a 10-item scale measuring global leadership activities. The scale scores ranged from 1 = “not at all effective” to 5 = “very effective”. The items were totaled to create an effectiveness score, whereas, a high score denoted greater effectiveness. The mean for this scale was 2.3 (S.D. = .96) and an alpha of .77.

2.2.6. Control variables

To account for alternative explanations, three control variables were included: tenure, family diversity, and educational diversity. Tenure was measured in terms of the number of years with the current organization. Family diversity was measured by an item which asked participants to report their country of birth with respect to the national backgrounds of their parents. Participants indicated their country of birth on a four-point scale: (a) born in the same country in which both your parents were born; (b) born in the same country in which your father was born, but not mother; (c) born in the same country in which your mother was born, but not father; and (d) born in a country in which neither of your parents was born. For analyses, family diversity was coded 1 if a participant indicated choice (b), (c), or (d) and was coded 0 if the participant indicated choice (a). Educational diversity was
a sum of two items which asked participants to indicate if they studied abroad for a bachelor’s degree (coded 1 if attended college in another country, and coded 0 if not) and if they studied abroad for a graduate degree (coded “1” if attended graduate school in another country, and coded “0” if not).

We selected these control variables because they may be associated with work performance. In general, longer tenure may allow cross-cultural leadership development experiences to have more lasting impact on effectiveness in global leadership activities. Similarly, individuals with greater family diversity and greater educational diversity are more likely to have developed comprehensive prior knowledge structures or sets of cognitive maps about people, roles, or events that govern social behavior. These cognitive maps should facilitate the retention and reproduction of learned behaviors needed for effective global leadership.

2.2.7. Analysis strategy

Descriptive analyses and correlation analyses were used to describe the sample and study variables. All variables were standardized to reduce the potential for multicollinearity (e.g., Cohen & Cohen, 1983). Hierarchical moderated multiple regression analysis was used to test the proposed hypotheses.

3. Results

The measure of effectiveness in global leadership activities was self-reported. Self-reported measures of effectiveness raise an important concern that the relationships between the dependent and independent variables may be attributed to common method variance. However, attention was paid to reduce potential biases that may result from a self-reported criterion. The demographic and control variables were assessed at the front end of the survey, and the self-rated criterion measure was placed at the end of the survey. This placement was an effort to reduce self-generated validity (Feldman and Lynch, 1988). In addition, a statistical remedy was also used (Podsakoff & Organ, 1986) to check for common method variance. We conducted Harman’s one-factor test in which all variables revealed in the questionnaire were entered into a factor analysis. No single factor emerged nor was there a general factor that could account for the majority of covariance in these variables. This result further indicated the absence of severe common method variance. Finally, the pattern of regression findings reported in Table 2 shows that only certain predictor and control variables predict the effectiveness measure. If the measure of the effectiveness in global leadership activities was totally biased, one would expect more of the predictors to be significant.

Table 1 presents the descriptive statistics and correlations for all variables in this study. There is a stronger correlation between high contact cross-cultural leadership development experiences and effectiveness in global leadership activities \((r = .35, p < .01)\) than between low-contact cross-cultural leadership development experiences and effectiveness in global leadership activities \((r = .20, p < .01)\). This result provides preliminary support for Hypothesis 1.

Moderated regression analysis was conducted to test whether the variables, as a group, predict effectiveness in global leadership activities (see Table 2). Predictors were entered in four blocks. Block 1 included the control variables: tenure, family diversity, and educational diversity. Block 2 included high contact cross-cultural leadership development experiences and low-contact cross-cultural leadership development experiences. Block 3 included openness to experience, and extroversion. Finally, Block 4 included the two interaction terms: openness to experience \(\times\) high contact cross-cultural leadership development experiences, and, extroversion \(\times\) high contact cross-cultural leadership development experiences.

For the moderating hypotheses, the last block for the regression indicated that the incremental variance accounted for by the interaction terms was significant; the interaction terms explained 2% of additional variance over and above that accounted for by the variables in previous blocks \((\Delta F = 2.85, p < .05)\). Because one interaction term was significant in Block 4, Model 4 was the appropriate model for examining individual coefficients (Cohen & Cohen, 1983).

Hypothesis 1 proposed a positive relationship between the number of high contact-cross-cultural leadership development experiences and effectiveness in global leadership activities. The coefficient for the number of high

| Table 1 Means, standard deviations, reliabilities, and intercorrelations for all variables used in this study. |
|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| M        | S.D.  | (1)   | (2)   | (3)   | (4)   | (5)   | (6)   | (7)   | (8)   |
| 1. Family diversity | .27 | .44 | .01 | .01 | .01 | .01 | .01 | .01 | .01 |
| 2. Educational diversity | .13 | .47 | .06 | .06 | .06 | .06 | .06 | .06 | .06 |
| 3. Tenure | 12.98 | 7.78 | .03 | -.15 | -.15 | -.15 | -.15 | -.15 | -.15 |
| 4. High contact cross-cultural leadership development experiences | 2.89 | 1.37 | .04 | .08 | -.13 | -.13 | -.13 | -.13 | -.13 |
| 5. Low-contact cross-cultural leadership development experiences | 2.30 | 1.34 | .03 | .06 | -.11 | -.11 | -.11 | -.11 | -.11 |
| 6. Openness to experience | 28.40 | 5.45 | -.03 | -.02 | -.02 | .11 | .11 | .11 | .11 |
| 7. Extroversion | 35.27 | 4.98 | -.03 | -.06 | -.06 | .02 | .02 | .02 | .02 |
| 8. Effectiveness in global leadership activities | 27.89 | 10.61 | .17 | .03 | -.06 | .35 | .35 | .35 | .35 |

\(n = 256, \) Values are standardized estimates (z-score transformation). Reliabilities are noted on the diagonal.

\(p < .05, \) \(p < .01\) (two-tailed tests).
contact cross-cultural leadership development experiences is positive and significant in Block 3 ($\beta = .31, p < .01$). This finding coupled with the positive correlation between the number of high contact cross-cultural development experiences and effectiveness in global leadership activities provides support to Hypothesis 1.

The second hypothesis was not supported in that the interaction term was not significant in the fourth block. The moderated regression analysis, however, does demonstrate support for Hypothesis 3 predicting a moderating effect of extroversion on effectiveness in global leadership activities; the interaction term was significant ($\beta = .13, p < .05$). To further examine the effects of the significant moderator, we plotted significant interactions at ±1 S.D.s. from the mean following the procedures specified by Aiken and West (1991). Effectiveness in global leadership activities was regressed on the number of high contact cross-cultural leadership development experiences for two different levels of extroversion (above the mean and below the mean). As shown in Fig. 1 the slope was steeper as extroversion increased. This suggests the number of high contact cross-cultural leadership development experiences predicted higher global leadership effectiveness when leaders had greater extroversion.

4. Discussion

This study found that high contact cross-cultural leadership development experiences affected the effectiveness of global leaders’ activities. This finding contributes to the global leadership development research in several ways. First, the results may help explain the process through which high contact cross-cultural leadership development experiences influence effectiveness in global leadership activities. As social learning theory suggests, greater participation in high contact cross-cultural leadership development experiences may allow individuals greater opportunity for participative modeling and hence improve their ability to reproduce the modeled behavior in appropriate situations. More studies are needed to really understand the processes here. Second, the result emphasizes the need to take a systems approach to fully understand the impact of several high contact cross-cultural leadership development experiences on performance outcomes.

Finally, the result shows that high contact cross-cultural leadership development experiences are more effective than low-contact cross-cultural leadership development experiences. This is consistent with research suggesting that experiential developmental activities (similar to high contact experiences) are more effective and relevant than didactic developmental experiences (similar to low-contact experiences) in influencing behavioral changes (e.g., Gannon & Poon, 1998; Harrison, 1992; Kealey & Protheroe, 1996).

A surprising nonfinding was that Hypothesis 2 was not supported. One potential explanation for the nonsignificant finding is that the type of openness assessed on the NEO tended to be more of a cognitive, as opposed to intellectual openness. Another possibility is that different facets of openness, for example, openness to people or openness to experience are important for interacting with other people. Attempts to quantify empirically the different facets of openness offer a fruitful avenue for future research.

Offering support for Hypothesis 3, the number of high contact cross-cultural leadership development experiences predicted higher global leadership effectiveness.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
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<tr>
<td>Block 1: Control variables</td>
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<tr>
<td>Family diversity</td>
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<td>.16*</td>
<td>.16*</td>
<td>.16*</td>
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<td>-.01</td>
<td>-.01</td>
<td>-.03</td>
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<tr>
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<td>.31**</td>
<td>.31**</td>
<td>.31**</td>
</tr>
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<td>.10</td>
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<td>Block 3: Personality</td>
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<td>Block 4: Interactions</td>
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<td>High contact cross-cultural leadership experiences $\times$ extroversion</td>
<td></td>
<td></td>
<td>.13*</td>
<td></td>
</tr>
</tbody>
</table>

Overall $F$                                    | 2.85*    | 9.30**   | 6.82**   | 6.01**   |
$R^2$                                          | .03      | .16      | .16      | .18      |
Change in $F$                                  | 2.85*    | 18.39**  | .66      | 2.85*    |
Change in $R^2$                                | .03      | .12      | .01      | .02      |
Adjusted $R^2$                                 | .02      | .14      | .14      | .15      |

* $n = 256$. Values are standardized estimates.
** All standardized variables (z-score transformation).
$^a p < .05$.
$^b p < .01$ (two-tailed tests).

Table 2
Results of regression analysis predicting effectiveness on global leadership activities.
when individuals had greater extroversion. First, this finding highlights the importance of congruence between extroversion and extent of participation in high contact cross-cultural leadership development experiences. Individuals differentially benefit from cross-cultural leadership development experiences depending on their level of extroversion. Second, this finding provides support to the contact theory as a viable theory for explaining how interpersonal interactions may influence the retention and reproduction component of social learning process. For example, the results indicate that extroversion plays an important role in the facilitation of retention and reproduction of learned skills/behaviors. Based on contact theory, it may be the case that the two aspects of extroversion (need to engage in social activities and the strong learning orientation) affect interpersonal interactions in ways that are important to retain and reproduce learned skills and behaviors needed for effective global leadership. Third, prior literature has shown that dispositional differences influence training outcomes (e.g., Colquitt et al., 2000; Herold, Davis, Fedora, & Parsons, 2002) but very little is known about how dispositional differences impact developmental outcomes. These findings provide much-needed insight into aspects of personality that affect developmental outcomes such as effectiveness in global leadership activities. Finally, our data supports the ‘aptitude x treatment interaction’ perspective (e.g., Snow, 1991) which suggests that individual attributes will interact with instructional methods or developmental interventions differently. Based on the level an individual has of a given attribute such as extroversion, he or she will respond differentially to the instructional method, treatment, or intervention (Snow, 1991).

An interesting finding was that family diversity was the only control variable that predicted the global leadership effectiveness. It is possible that significant intercultural experiences that help prepare people to be effective future global leaders may not necessarily need to happen in the workplace—they may have occurred in childhood or young adulthood, as a result of being a member of a multicultural household. Whether in our personal or professional lives, significant intercultural experiences enable us to learn the nuances of behavior that are expected in another culture compared to our own—helping us to understand our own cultural values and assumptions. When we become sensitive to these characteristics of ourselves, as well as to the norms of behavior in another culture, we begin to develop the intercultural competence important for success in global leadership activities. Future research is needed to explore this further.

As with all studies, there are limitations to this study. The operationalization of high contact and low-contact cross-cultural leadership development experiences was limited to six items for each variable respectively. While these indices provide a rough indicator of the magnitude of experience, this method of operationalization did not delineate between effective and ineffective experiences, between full or limited experiences and between positive or negative experiences. In all likelihood, the range of these experiences would likely be present in the sample and thus not skewing the results in any way. Future studies, however, should examine the nature of these experiences as, high-quality and positive experiences may help global leaders learn cross-cultural behaviors and methods for being effective in intercultural environments.

Closely related, another limitation of the study was the lack of understanding of the underlying process for how learning occurred through high contact experiences. This study makes the theoretical assertion that contact helps leaders in the process of learning cultural norms, but examines directly the experience and not where in the process of development the learning occurred. To partially account for the developmental process, this study controlled for tenure (development as a function of time in the organization) and international education and family diversity (development as a function of early life experiences). A deeper understanding of the process of social learning and global leadership development across each of the high contact experiences would be interesting to examine in future research.

As mentioned earlier in the paper, the measure of the effectiveness in global leadership activities was self-reported. The issue of common method bias may arise. Although attention was paid to reduce potential biases that may result from a self-reported criterion, future studies should include multiple raters (e.g., self, peers, direct reports, supervisors, direct reports from different countries). This is important because a direct report from a different culture might view a leader’s intercultural effectiveness differently than a direct report who shared nationality with the leader. Two direct reports, in this case, would view the leader’s effectiveness in potentially different ways.

This study assessed the relationship between high contact cross-cultural leadership development experiences on one type of effectiveness (individual work performance). There are many types of criteria such as global mindset (see Beechler & Javidan, 2007; Levy, Beechler, Taylor & Boyacigiller, 2006 for a review), organizational commitment, interpersonal effectiveness,
communication and decision-making, self-development, positive attitude towards members of other cultures, problem-solving ability, and the ability to deal with cross-cultural misunderstandings. Therefore, to avoid overgeneralized conclusions about effectiveness of high contact cross-cultural leadership development experiences, future research could examine the impact of high contact cross-cultural leadership development experiences on various measures of effectiveness. This is important because it cannot be simply assumed that what is true of one kind of relationship between high contact cross-cultural leadership development experiences and a criterion of effectiveness is true for all.

The sample was limited primarily to Anglo leaders (UK, U.S. and Australian leaders comprise most of the sample). Given that Anglo cultures are more individualistic, personality may be especially important for those from Anglo cultures who are generally accustomed to doing things “their own way.” People from more collectivist countries may have a tendency to learn culturally appropriate norms and behaviors more readily than Anglos. While this study was culturally diverse, the findings were driven by participants from Anglo cultures. Therefore, future studies should test these hypotheses from different cultural contexts.

Finally, future research can examine how extroversion influences the learning processes or the attentional component of social learning theory. One way scholars can explore this issue is to use the learning styles literature (e.g., Kolb, 1984) as a guiding framework. Research has shown that individuals can have a variety of learning styles (e.g., Kolb, 1984) such as diverger, assimilator, converger, and accommodator (see Kolb, 1984 for more information learning styles). Knowledge of learning styles may help theorists and practitioners understand how individuals with different levels of extroversion extensive receive, process, store, and retrieve information.

5. Practical implications

While many MNCs today advocate the use of global leadership developmental activities as mechanisms for increasing the intercultural competence of the leadership team, the prevailing logic has, up to this point, largely assumed that everyone benefits equally from the leadership development activities. The findings in this study begin to refine the practice if global leadership development by suggesting that certain practices are better than others (i.e., those that are high contact) and that certain people benefit more from those experiences (i.e., those with affiliating personalities).

Given the extraordinary high costs (e.g., financial and emotional) of developing global leaders, it is important to understand who will benefit the most from high contact cross-cultural leadership development experiences. This study suggests that there is a dynamic interplay between individual differences (i.e., extroversion) and high contact cross-cultural leadership development experiences for improving effectiveness with global leadership activities. Global leadership development programs should identify those individuals with the requisite individual characteristics (e.g., personality) and, perhaps, early life experiences, and then offer high contact cross-cultural leadership development experiences to those identified. High contact cross-cultural leadership development experiences may only be effective when individuals are predisposed to be effective in the first place.

Selection systems for global leadership development programs should include an assessment of personality. After selecting potential global leaders who will benefit most from the high contact experiences, multinational organizations should promote positive, rich and effective contacts between people from many cultures and in multicultural contexts. Thus, multinational organizations are encouraged to (1) assess their potential global leaders for personality characteristics (and potentially early life experiences) and, having selected carefully; (2) promote high contact culturally oriented experiences. These practices combined could improve the MNCs’ chances for having global leaders who understand the cultural norms across a variety of cultural contexts. In turn, the improved cross-cultural acumen of leaders should lead to better performance in the global arena—for both leaders and their organizations.

References


