Does It Really Work? Re-Assessing the Impact of Pre-Departure Cross-Cultural Training on Expatriate Adjustment

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Abstract

Cultural adjustment is considered to be a prerequisite for expatriate success abroad. One way to enhance adjustment is to provide employees with knowledge and awareness of appropriate norms and behaviors of the host country through cross-cultural training (CCT). This article analyzes the impact of pre-departure CCT on expatriate adjustment and focuses on variations in participation, length and the comprehensiveness of training. Unlike previous research, the study focuses on the effectiveness of pre-departure CCT for non-US employees expatriated to a broad range of host country settings. Employing data from 339 expatriates from 20 German Multinational Corporations (MNCs) the study finds CCT has little if any effect on general, interactional or work setting expatriate adjustment. However, a significant impact of foreign language competence was found for all three dimensions of expatriate adjustment. We used interviews with 20 expatriates to supplement our discussion and provide further implications for practice.

Keywords

Expatriates, Adjustment, Cross-Cultural Training, Language

Introduction

The internationalization of business within the last fifty years has led to the growing importance of international human resource management (IHRM) (Dowling *et al.*, 1994; Desatnick and Bennet, 1977; Evans *et al.*, 2002; Harzing and van Ruysseveldt, 2004). In particular, the role of international assignments – mainly with the aim of controlling and coordinating international activities – has increased significantly (Tharenou and Harvey, 2006). While international assignments are seen as an efficient mechanism to manage multinational corporations and control foreign subsidiaries (see, for example, Harzing, 2001;), their use is not without costs (Bonache Pérez and Pla-Barber, 2005). It has been estimated that the first-year costs of sending expatriates on foreign assignments are at least three times the base salaries of their domestic counterparts (Shaffer *et al.*, 1999). In addition, expatriate failure is associated with significant direct and indirect costs (Takeuchi *et al.*, 2002). These include not only high direct costs, but also possible indirect costs such as employee loss of personal self-esteem, self-confidence or reduced motivation. At the company level, expatriate failure may impede the performance of foreign subsidiaries, and contribute to lost opportunities in creating or penetrating new markets.

Given that expatriates are on the one hand a key resource to create and manage a company's competitive advantage, and on the other a major cost driver, researchers have devoted significant attention to the topic of expatriation with an extensive range of empirical studies conducted on various aspects of international delegation (see, for example, Bonache *et al.*, 2001 or Scullion and Brewster, 2001 for reviews). A major component of these studies focuses on the process of *expatriate adjustment*. Expatriate adjustment can be defined as the degree of psychological adjustment experienced by the individual within a new society or the degree of psychological comfort and familiarity perceived within a new environment (Black, 1988; Black 1990a; Black and Mendenhall, 1991; Feldman and Tompson 1993; Sappinen

1993; Schneider and Asakawa, 1995; Selmer, 2002), and is argued to be '*the* vital construct underlying the rewards and costs of expatriate experiences to individuals, their families, and their firms' (Bhaskar-Shrinivas *et al.*, 2005: 257). In their study of 213 expatriate-supervisor dyads, Kraimer *et al.* (2001) also found strong support for the mediating role of adjustment between stressors and performance, thus strengthening the role of adjustment for an expatriate's success.

There is a long debate in the academic literature regarding the degree to which adjustment is a unitary or multi-faceted phenomenon. Lysgaard (1955), Oberg (1960), Ruben and Kealey (1979), Torbiorn (1982) and Tung (1987) consider adjustment to be a unitary phenomenon and focus mainly on an individual's adjustment to the general environment or culture. However, in more recent studies (Black, 1988; Black and Gregersen, 1991a, Black et al., 1991; McEvoy and Parker, 1995; Mendenhall and Oddou, 1985), adjustment is seen as a multi-faceted phenomenon with three major dimensions that are addressed and empirically tested: adjustment to the general environment, referring to the general psychological comfort involving aspects like living conditions, weather or food; adjustment to the work situation, referring to the psychological comfort with culture specific work values and standards; and adjustment to interacting with host nationals, focusing on the comfort with different communication styles in the host setting. Given the multidimensional conceptualization of culture (see, for example, Hofstede 2001) and strong empirical support (Shaffer et al., 1999), this multidimensional conception of adjustment seems logical. Following this multi-faceted approach it appears that some expatriates may be well adjusted to one dimension but at the same time poorly adjusted to another. For example they may adapt themselves to their new work situation in a foreign country but feel uncomfortable in interacting with locals.

According to Lievens *et al.* (2003: 476) two major streams of research have evolved on ways to improve expatriate adjustment. The first has focused on selection methods, the second

on cross-cultural training (CCT) which has been identified as a 'major technique for improving managers' cross-cultural effectiveness and for reducing failure rates'. Many MNCs now offer CCT to better prepare their expatriates for their future host country settings. Predeparture CCT aims to enhance the adjustment of expatriates by developing individuals' awareness of differences in appropriate norms and behaviors between their home and their host country (Black and Mendenhall 1990). A distinction between traditional training and CCT can be addressed by the acceptance of differences between cultures, whereas the objective of traditional training can be found in the 'acquisition of information, rather than on change in attitudes' (Bhagat and Prien, 1996: 223). Thus, CCT does not aim at 'training how to behave', but aims to enhance the awareness of differences and similarities between cultures to allow faster learning processes.

However, despite the significant emphasis on pre-departure CCT within many MNCs, there is a lack of clear empirical evidence demonstrating the efficacy of such training. While some studies have found positive influences of pre-departure CCT on expatriate adjustment (see, for example, the reviews of Black and Mendenhall, 1990; Deshpande and Viswesvaran, 1992; Mendenhall *et al.*, 2004) other researchers observed no influence, or indeed a negative impact of CCT on adjustment (see, for example, Black and Gregersen, 1991b; Gregersen and Black, 1992; Kealey and Protheroe, 1996). With regard to these contradictory findings, Kealey and Protheroe (1997: 162) concluded: '[t]he field of cross-cultural research and training is therefore in the uncomfortable position of having a product which is acutely needed but still of unproven efficacy'.

One reason for these inconsistent findings may be that existing studies have focused on the existence or the length of pre-departure CCT, but rarely accounted for training content or method. Exceptions are the studies of Earley (1987), Hammer and Martin (1992) and Waxin and Panaccio (2005). While Earley (1987) and Hammer and Martin (1992) analyzed the effects of training-types as differentiated by Tung (1981) on the adjustment of expatriates, Waxin and Panaccio (2005) applied the typology developed by Gudykunst and Hammer (1983). Each study showed that different content and methods of CCT can influence the effects on adjustment. However, all three studies focused on expatriates in just one hostcountry. While Earley (1987) as well as Hammer and Martin (1992) additionally only included one home-country and focused on American expatriates in Korea and Japan, respectively, Waxin and Panaccio (2005) focused on expatriates from six different home countries in India. Overall however, there is a lack of research on the effects in non-Asian host countries and on non-US expatriates. In this study we test for the influences of CCT participation and length as well as influences of CCT content and method on the adjustment of German managers expatriated to countries all over the world.

The paper proceeds as follows. In the next section we develop hypotheses on the impact of participation in pre-departure CCT, CCT length and the CCT-comprehensiveness on expatriate adjustment based on previous adjustment literature. Following this section, the method and sample are described and the results of our empirical analysis are presented and discussed. The paper concludes by reviewing key findings and highlighting their implications for future research.

Cultural Training and Adjustment

Few organizations systematically evaluate or validate the effectiveness of their training programs and fewer still are available to the public (Morris and Robie, 2001). As a consequence, empirical support on different training methods remains scarce. Furthermore, there is no simple definition of training for foreign assignments. Many studies emphasize the issue of culture when focusing on the preparation of expatriates for foreign assignments. Consequently, this study focuses on preparation for adjusting to cultural differences.

According to Levy (1995: 1) we define pre-departure CCT as 'a cohesive series of events or activities designed to develop cultural self-awareness, culturally appropriate behavioural responses or skills, and a positive orientation toward other cultures'. In a business context, cultural training is mainly developed and provided for employees who are in frequent contact with members of other cultures (e.g. international salespeople or members of multicultural teams) or who are going to work in other cultural contexts (e.g. expatriates). Other types of preparation for international assignments that are frequently applied are, for example, language courses or country briefings that provide brief geographical, political, social and economical facts about a country,.

In order to successfully work beyond one's own cultural borders, it does not appear sufficient to be provided with knowledge on specific challenges of the foreign country. Adjustment seems to require more than that. Therefore, pre-departure CCT seems to be an appropriate option to better adjust employees to a foreign environment. For instance, Brewster and Pickard (1994) found that expatriates and their partners were positively oriented towards CCT procedures as they believed that training enabled them to better cope with the challenges of the foreign environment and the local culture. However, even more important from a business perspective is whether training actually supports the expatriates' adjustment. A number of previous studies have aimed to explore the impact of pre-departure CCT. However, results remain mixed. An overview by Morris and Robie (2001) who conducted a metaanalysis with the purpose to explore the relationship between CCT and the performance and adjustment constructs, found that CCT assisted adjustment, however the impact was weaker than expected. The ambiguous relationship between pre-departure CCT and expatriate adjustment has also been highlighted in recent studies by Selmer (2005) and Waxin and Panaccio (2005). In the same issue of Personnel Review, Waxin and Panaccio (2005) found that CCT accelerates expatriates' adjustment, whereas Selmer (2005) concluded that training

had only a weak positive association with work adjustment for expatriates in joint ventures, but no relationship with work adjustment for Western managers in other types of operations. However, a number of authors, (for instance, Deshpande and Viswesvaran, 1992), argue that expatriate adjustment in MNCs can be improved significantly by CCT, and Romero (2002) proposed that there will be a positive relationship between CCT and work-related effectiveness of expatriates which would, in turn, also indicate better expatriate adjustment. Thus, we derive the following first hypothesis:

Hypothesis 1: If expatriates participate in pre-departure CCT, they will be better adjusted to the new international environment (cp.).

Duration and intensity are seen as influencing factors of training outcome. However, previous research does not provide a clear conclusion as to whether intensity or duration has a higher impact on training outcome (see for example, Kanaya *et al.*, 2005). For this reason, we introduce the term CCT-length. With intensity of training, measured by hours per week, and the duration of training, measured by number of weeks (Altonji and Spletzer, 1991) the total CCT-length can be considered the product of duration and intensity. The total CCT length can vary between some hours and several days (Brislin, 1989; Mendenhall *et al.*, 1995). It can be argued that longer training has stronger influences on expatriate adjustment since it is hardly possible to impart founded knowledge within shorter training. There may be, as Gertsen (1990) argues, even negative effects on adjustment and the strengthening of stereotypes since knowledge can only be transferred in a simplified and global way. We thus derive the following hypothesis.

Hypothesis 2: The longer expatriates participate in pre-departure CCT, the better they will be able to adjust to the new international environment (cp.).

To achieve better adjustment, different types of CCT can be applied. Both Tung (1981) and Gudykunst and Hammer (1983) developed typologies of CCT. Tung (1981) identified five different programs which she placed on a continuum from didactic training to field experiences. According to Gudykunst and Hammer (1983) CCT can be differentiated by two dimensions (see also Triandis, 1977): (a) *content* and (b) *method* (see Illustration 1). Since Tung's (1981) typology does not include information about the specific content of training and is not mutually exclusive (e.g., culture assimilator and sensitivity training) we apply the typology of Gudykunst and Hammer (1983) in our study.

With regard to the *content* dimension in this typology, culturally specific, as opposed to culturally generalized, training can be distinguished. While culturally specific CCT aims at preparing employees for a specific national or regional culture, culturally generalized CCT seeks to reach a sensitization of the individual for cultural differences in general, 'exposing the trainee to a variety of cultural habits, norms, roles, values, and circumstances to provide the trainee with a "sample of experiences" which reflect the variations that exist anywhere on earth!' (Triandis, 1977: 21). With regard to *method*, CCT can be differentiated in terms of intellectual learning as opposed to experiential learning. While intellectual training seeks to impart knowledge by didactical methods such as lectures, books, or movies, the experiential training methods are experience-based involving cases or hypothetical exercises. Summarizing such experiential learning, Gudykunst and Hammer (1983: 124) note: 'In general, experiential learning used structured activities that are designed to confront the trainees with situations that may be encountered in a foreign culture. Trainees then react to the

situation intellectually, emotionally, and behaviourally. At the conclusion of the activity, the trainees, along with the trainer-facilitator discuss the experience.'

Four different types of training can therefore be differentiated from the two dimensions of content and method: intellectual-culture general, intellectual-culture specific, experientialculture specific and experiential-culture general trainings. Each of the four training types has its advantages and disadvantages (see for an overview, Landis et al., 2004). While, for example, intellectual-culture general training is in most cases cheaper and faster than other approaches and provides a general understanding of cultural issues, trainees often criticize the abstract level of knowledge imparted and the lack of an emotional component. Intellectualculture specific training enhances the cognitive knowledge about culture specific issues, but has only limited direct impact on the behavior of individuals in interactions with persons from other cultures. Experiential-culture specific training provides semi-authentic experiences, but is difficult to manage for larger groups and may contribute to stereotypes of other cultures. Experiential-culture general training allows for a holistic learning approach, but observers claim may be judged by participants as 'funny games' and may not be taken seriously (Brislin and Pedersen, 1976; Fowler and Blohm, 2004; Triandis, 1977). In practice, most training programs combine aspects of different methods and content in an effort to prepare expatriates (Mendenhall et al., 2004), as it is believed the effect of CCT will be stronger the more methods and content are employed (Fowler and Blohm, 2004; Harrison, 1994). Overall, we thus derive the following hypotheses:

Hypothesis 3: The more comprehensive a pre-departure CCT program is, i.e. the more methods and content are employed, the stronger is the positive effect on an expatriate's adjustment in the host country.

Method

Research Design and Sample

To empirically test the three hypotheses, a large-scale empirical study was conducted. Human resource departments of 70 German MNCs were contacted and asked to cooperate and to send surveys to their expatriates. Twenty of these firms agreed to participate in the project. Participating companies represented a wide range of industries including insurance companies, car manufacturers, media companies and service industries. During the winter of 2003/2004, surveys were sent to the human resource departments (HRDs) of the participating companies who distributed them to their expatriates with a cover letter by the researchers explaining the purpose of the study, an endorsement letter from the HRD to encourage participation in the research, and a declaration that all answers would be handled confidentially. Two weeks after the survey, a reminder was sent out by the HRD to those expatriates who had not responded. Overall, 339 usable surveys (response rate: 22%) were returned to the researchers. In the sample, expatriates were located on all continents, most of them in Europe (33%), North America (24%) and Asia (22%). Most of the expatriates worked in management positions (32.1%) and in R&D departments (21.8%). Eighty-three per cent of the expatriates were male, their average age was 36, 55 per cent were married, and they had been in their respective host-country for an average of 22 months (range: one to 204 months). Forty-four per cent of the expatriates in the survey participated in a cultural training program. Variance analyses revealed that industry did not significantly influence the adjustment of an expatriate. Overall, the demographics of this sample are comparable to those of previous studies (e.g. Black 1988; Gregersen and Black 1992; Shaffer and Harrison 1998; Takeuchi et al. 2002).

After evaluation of the data, 20 expatriates were randomly selected for semi-structured telephone interviews to gain more insight into the results of the survey and to provide some additional indication regarding best practices for CCT. The selected expatriates were presented with the results of our analysis and asked for their interpretations. The interviews were recorded, transcribed, and coded using the data analysis software *QSR NVivo* (Fraser 1999; Gibbs 2003).

Measures

Dependent variables. We measured international adjustment using the concept and measures of Black (1988) on 7-point-Likert scales with response formats labeled from 1 = absolutely disagree to 7 = absolutely agree. Thus, we distinguish, as outlined in the Introduction above, between three types of adjustment: general, interactional, and work adjustment. Internal reliability as measured by Cronbachs α for all three measures of adjustment was good (General Adjustment: .81; Interactional Adjustment: .85; Work Adjustment: .75).

Independent variables. Our first question was whether the participants had attended a pre-departure CCT. Therefore, the dichotomous variable 'participation in a pre-departure CCT' was measured with a single yes/no question. 'CCT-length' as the product of intensity and duration was measured in days using a single direct question. To measure 'training comprehensiveness' participants in the study were asked to answer 17 yes/no questions that asked for several aspects of the training they participated in. Among them were questions such as 'Was role play a part of the training?', 'Did the training contain lecture-based elements?'. The authors of the study then used the answers to these questions to categorize the training using the typology of Gudykunst and Hammer (1983). Thus, 'training comprehensiveness' ranged from 0 for 'No Training' to 4 for fully comprehensive trainings with 'Both contents and both methods of training'.

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Control Variables: To control for demographic and other biases we included several control variables in our analysis. Gender and age of the participants were measured with direct questions. Since adjustment is influenced by the time already spent in the host country (Black, 1990b; Gregersen and Black, 1992; Selmer, 2002) it was included in our analysis and measured in months. As communication and language skills are supposed to be an important factor in cross-cultural adjustment, we controlled for it using the three-item measure of Takeuchi *et al.* (2002). In addition, we included the cultural distance as measured by Kogut and Singh (1988) and the geographical distance (in miles) from Germany to the host country as recommended by Takeuchi *et al.* (2002) and Waxin and Panaccio (2005).

Results and Discussion

Results

Data was analyzed using the SPSS 14.0 package. Analogous to previous studies we employed four regression models for each facet of adjustment. The first one included only the control variables. The second regression included training participation, the third training length, and the fourth training comprehensiveness. To check for multicollinearity, Table 1 provides the means, standard deviations and bivariate Pearson correlations for the variables used. Although there are some significant inter-variable correlations among the independent variables, none of the coefficients exceeds .30. Due to these low levels of inter-variable correlation, multicollinearity does not appear to be a serious problem.

The results of the regression analyses in Table 2, 3, and 4 show that all three hypotheses failed to be supported by the data. Moreover, the assumptions that participation at a pre-

departure CCT, or the length of a pre-departure CCT have an impact on an expatriate's adjustment were not supported significantly for any of the three adjustment dimensions. In terms of the comprehensiveness of the training, significant support at a low level was found for general adjustment. Changes in adjusted R^2 were low for all three facets of adjustment. The strongest effect on all dimensions of expatriate adjustment was found for language skills.

Discussion

It is perhaps not that surprising that the impact of pre-departure CCT on expatriate adjustment does not find empirical support. As mentioned above, previous empirical studies lead to heterogeneous results and the meta-analysis by Morris and Robie (2001) emphasized that the impact of CCT on expatriate adjustment might well be overestimated. However, it is surprising that significance was found for none of the three dimensions of adjustment. Also the assumed impact of the comprehensiveness of CCT was not convincingly supported by the data. The inconsistencies with our hypotheses were also reflected in our follow-up interviews. For example, reflecting the view of many we interviewed, a German Chief Operating Officer in the United States mentioned that 'the challenges here are way too extensive to be covered in intercultural training. In my experience most things are working best when you are learning by doing. I did not get an advantage out of my intercultural training.' However, a German IT consultant based in the United States presented a contrasting view: 'I received intercultural training for the United States and I think the training really helped me to deal with the challenges in the new environment. I learned how to interact with my new colleagues as well as the training provided helpful tips for everyday life.'

One possible explanation for such variability of perceptions of CCT could be that many training procedures are not sufficiently elaborated. As Cavusgil *et al.* (1992, p. 54) suggest;

only 'well-planned training and orientation programmes can ease the adjustment of an expatriate.' This also includes a focus on the awareness of differences in CCTs rather than a sole focus on appropriate behaviors. This is supported by some of our interviews. For example, a quality manager in India stated that 'some good books on the issue would have generated better results than my CCT'. As a consequence, more sophisticated forms of CCT may be needed to improve expatriate adjustment. According to Caligiuri *et al.* (2001) analyses suggest that the more tailored the CCT is, the more expectations are met and in turn, the higher the degree of expatriate adjustment.

One way in which CCT could be improved may be to focus on the assignment as a whole instead of relying on pre-departure training alone. For instance, Harrison (1994) proposes a sequential form of CCT: '[t]hrough the sequential process described, expatriate managers and their families can enhance their cross-cultural aptitude and awareness, gain substantive knowledge, and develop appropriate skills for functioning effectively in other cultures.' Similarly, Selmer *et al.* (1998: 832) also propose sequential CCT arguing that 'effective training occurs when the cross-cultural content coincides in time with the psychological predispositions occurring during the various phases of the adjustment process.' This line of argument is supported by the U-curve thesis which – although criticized – provides a practical and simple way to structure CCT (Black and Mendenhall, 1991; Lysgaard, 1955). In addition, one of our interviewees suggested the need for training in the host country: 'a mentor or training in the host country would probably be more helpful than my pre-departure CCT since it would allow me discuss real problems that I have rather than possible problems that I might have.'

Given our intention to test for the impact of training participation, length and comprehensiveness, a number of control variables were also employed in the data analysis. Research suggests that there are a number of moderating effects which could distort the results on the role of training. Nevertheless, only a few control variables were found to significantly impact adjustment. For instance, Caligiuri et al. (2001) when refining the context of CCT-research stressed the impact of the divergence between home and host cultures and the type of cross-cultural adjustment. Surprisingly however, no significant impact on expatriate adjustment was found for either cultural or for geographical distance. In the case of cultural distance one explanation for insignificance may result from the measure and data applied to calculate cultural distance. Even though the index is frequently applied, Hofstede's claim that differences in national culture can be represented in terms of five dimensions has been subject to criticism. For example, it has been argued that his data was confined to one company, his questions focused exclusively on work values, he analysed nations instead of cultures and his research framework has been considered to be biased by Western standards (see for example, Erez and Early 1993 or Javidan et al. 2006 for a summary). In addition, one could argue that geographical distance is not able to capture the perceived psychological differences between cultures. For example, from a German perspective, Afghanistan is geographically closer than the United States, which would imply a better adjustment process for German expatriates in Afghanistan than in the US, which is unlikely to receive empirical support.

The time spent in the host country was found to marginally influence general adjustment and interactional adjustment on a low level of significance. This is in line with the findings of Shaffer *et al.* (1999) and Parker and McEvoy (1993). Finally, age was found to influence work adjustment on a moderate level of significance. This may be explained by the findings of Feldmann and Tompson (1993) who found that greater knowledge of international business positively influences work adjustment. Hence, older employees may have developed a greater knowledge of international business which assisted their work adjustment in foreign settings. No significant results were found for gender in our analysis which concurs with previous studies which failed to find any or found only very low significant influences for gender also (e.g. Selmer and Leung 2003 or Sinangil and Ones 2003).

More importantly however, the results from the control variables point to the central role of language as a prerequisite for intercultural adjustment to take place. This is in line with Caligiuri et al. (2001) who argue, that 'both cross-cultural training and the language spoken in the host country affect the accuracy of expatriates' expectations prior to the assignment - and that having accurate expectations, in turn, positively affects cross-cultural adjustment.' From a business perspective, this result emphasizes the need for an adequate consideration of language abilities when sending employees abroad (for the important role of language for MNCs see, for instance, Luo & Shenkar, 2006). According to Penley et al. (1991: 57) managing is fundamentally tied to communication - and therefore tied to language skills. For instance, Zander (2005, p. 83) points out that 'communication is an essential component of leadership and a vital managerial competence' and that internationally mobile managers are aware of the important role of language for expatriation. Or, as Buckley et al. (2005: 48) put it: '[l]anguage is associated with knowledge, which, in the context of international business, has long been identified as a key part of the firm's comparative advantages in doing business in foreign markets.' A study of expatriate selection conducted by Graf (2004) confirms this result. In particular, language barriers are considered one of the major problems when assigning employees to Asian countries, where communication between local staff and Western expatriates often occurs via interpreters. Such language barriers are a major impediment to expatriate adjustment. Although many MNCs already offer language courses for managers, they often neglect the importance of language skills when selecting expatriates for foreign assignments. As Lievens et. al. (2003: 476) show, 'the selection process of international managers is still intuitive and unsystematic' and 'the selection of people for foreign assignments is often based solely on job knowledge and technical competence'.

Language skills, however, remain widely ignored. Even if language skills are taken into consideration when staffing beyond borders, English as the *lingua franca* of international business is frequently and carelessly used as a substitute for host-country language skills. Whereas this custom obviously appears practical for English speaking countries, it is not appropriate for Asian or Eastern European countries. As a consequence of the outcome of our study, expatriates' language skills should be particularly monitored and ensured when assigning employees abroad and continuously improved in order to enhance the adjustment of expatriates abroad.

Conclusion, implications and limitations

This study sought to test the impact of CCT participation and comprehensiveness on expatriate adjustment. The assumed relationship that CCT participation and comprehensiveness would increase expatriate adjustment was not supported by our data. In accordance with other studies (Black and Gregersen, 1991b; Gregersen and Black, 1992; Selmer *et al.*, 1998) no empirical support was found to support the contention that predeparture training helps international managers to adjust to foreign environments.

However, this study has highlighted the importance of language when sending employees abroad and clearly points to the role of the expatriate's language competence as a competitive advantage in international business. As Feely and Harzing (2003: 50) emphasize: '[i]t is difficult to see how any firm can contemplate going multinational without going multilingual at the same time'. As an implication for theory, we thus suggest further research into the relationship between language skills and adjustment as well as into best practices to develop language skills. For practice, this finding highlights the relevance for both language training and a language skill based selection of expatriates. In addition, our findings regarding the effects of CCT have strong implications for theory as well as practice. As our study shows, the comprehensiveness of methods and content as measured here is not a significantly more valid predictor of CCT-efficiency for expatriate adjustment than training length or simple participation. Only if the critical elements of CCT, those that really do improve the preparation of an expatriate, are identified, can the overall quality of CCT be raised. To achieve this, training institutes need to collaborate with researchers to intensively evaluate their training programs. In addition, research needs to focus on this issue from a theoretical perspective, and should also systematically include the process of expatriate selection. Despite the importance of identifying the right potential for foreign assignments 'there is apparently little research on designing selection systems which might be effective predictors of success in overseas assignments' (Arvey *et al.*, 1991: 378).

As our analysis focused on the effectiveness of pre-departure CCT a possible implication for practice is that future expatriates may receive sequential training as recommended by Selmer *et al.* (1998). In-country training may enhance the efficiency of CCT since it allows for fast feedback in critical situations. Future studies should thus analyze the effectiveness of sequential CCT. As an additional implication for practice, MNCs may need to develop additional tools to help their managers to adjust to foreign environments. Possible developments include MNC-wide management information systems that support managers not only in new work situations, but in new environments as well. Managers returning to the home country might also write down their experiences in both work- and life-situations. HR departments should collect this information, process it and prepare it for future expatriates in the respective host country. Alternatively Selmer (2005) suggests that individuals should be selected with recent positive experiences of the host country: '[s]uch experience could be regarded as a perfect substitute for cross-cultural training'.

Several limitations have to be borne in mind when interpreting the results of our study. First, the data stems from a single questionnaire. To reduce the danger of a common method bias, we employed the strategies suggested by Podsakoff *et al.* (2003). In particular, we separated items measuring the same construct in the questionnaire, protected and assured respondent anonymity and reduced the danger of evaluation apprehension by explaining in the cover letter that there are neither 'right' nor 'wrong' answers. In addition, common method bias can be assumed to be relatively low given that all of our dependent variables are objective questions and do not require subjective evaluations on a multi-point scale. Nevertheless, there might still be a small common method bias in our study. Second, our study is limited to German expatriate managers. Future studies must show whether the findings can be transferred to managers from other countries. Third, our findings are based on a relatively small sample. Moreover, additional predictors of expatriate adjustment could be combined to analyze adjustment. This would offer a possibility to investigate some other potentially important moderators in a more systematic and comprehensive way.

Beyond its limitations, this study indicates that pre-departure CCT cannot generally be considered to improve expatriate managers' adjustment in foreign countries. This might be the result of the heterogeneous fields of training and a vast number of different - effective and non-effective – CCT programs. Furthermore, the impact of training on adjustment might depend on the expatriates' personal characteristics (Caligiuri, 2000). MNCs therefore should first select expatriate candidates on the basis of their capacity to successfully master the challenges of a foreign environment - paying particular attention to host-country language skills - and then offer tailored CCT to those who are predisposed to succeed abroad.

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References

- Altonji, J.G., and Spletzer, J.R. (1991) 'Worker Characteristics, Job Characteristics, and the Receipt of On-the-job Training', *Industrial & Labor Relations Review*, 45: 58-79.
- Arvey, R.D., Bhagat, R.S. and Salas, E. (1991) 'Cross-cultural and Cross-national Issues in Personnel and Human Resources Management: Where Do We Go From Here?' In Ferris, G.R. and Rowland, K.M. (eds) *Research in Personnel and Human Resources Management*, Vol. 9. Greenwich, CT: JAI Press.
- Bhagat, R.S. and Prien, K.O. (1996) 'Cross-cultural Training in Organizational Contexts'. In Landis, D. and Bhagat, R.S. (eds) *Handbook of Intercultural Training*, Vol. 2. Thousand Oaks, CA: Sage.
- Bhaskar-Shrinivas, P., Harrison, D.A., Shaffer, M.A. and Luk, D.M. (2005) Input-Based and Time-Based Models of International Adjustment: Meta-Analytical Evidence and Theoretical Extensions', *Academy of Management Journal*, 48: 257-281
- Black, J.S. (1988) 'Work Role Transitions: A Study of American Expatriate Managers in Japan', *Journal of International Business Studies*, 19: 277-294.
- Black, J.S. (1990a) 'The Relationship of Personal Characteristics with the Adjustment of Japanese Expatriate Managers', *Management International Review*, 30: 119-134.
- Black, J.S. (1990b) 'Factors Related to the Adjustment of Japanese Expatriate Managers in America', *Research in Personnel and Human Resource Management*, Suppl. 2: 109-125.
- Black, J.S. and Gregersen, H.B. (1991a) 'The Other Half of the Picture: Antecedents of Spouse Cross-Cultural Adjustment', *Journal of International Business Studies*, 22: 461-477.
- Black, J.S. and Gregersen, H.B. (1991b) 'Antecedents to Cross-Cultural Adjustment for Expatriates in Pacific Rim Assignments', *Human Relations*, 44: 497-515.

- Black, J.S. and Mendenhall, M.E. (1990) 'Cross-Cultural Training Effectiveness: A Review and Theoretical Framework', *Academy of Management Review*, 15: 113-136.
- Black, J.S. and Mendenhall, M.E. (1991) 'The U-Curve Hypothesis Revisited: A Review and Theoretical Framework', *Journal of International Business Studies*, 22: 225-248.
- Black, J.S., Mendenhall, M.E. and Oddou, G. (1991) 'Toward a Comprehensive Model of International Adjustment: an Integration of Multiple Theoretical Perspectives', *Academy of Management Review*, 16: 291-317.
- Bonache, J., Brewster, C. and Suutari, V. (2001) 'Expatriation: A Developing Research Agenda', *Thunderbird International Business Review*, 43: 3-20.
- Bonache Pérez, J., and Pla-Barber, J. (2005) 'When Are International Managers A Cost Effective Solution? The Rationale of Transaction Cost Economics Applied to Staffing Decisions in MNCs', *Journal of Business Research*, 58: 1320-1329.
- Brewster, C., and Pickard, J. (1994) 'Evaluating Expatriate Training', *International Studies of Management & Organization*, 24: 18-35.
- Brislin, R.W. (1989) 'Intercultural Communication Training'. In: Asante, M.K. and Gudykunst, W.B. and Newmark, E. (eds): *Handbook of International and Intercultural Communication*. Newbury Park: Sage.
- Brislin, R.W. and Pedersen, P. (1976) Cross-cultural Orientation Programs. New York: Gardner.
- Buckley, P. J., Carter, M. J., Clegg, J., & Hut, T. (2005). Language and Social Knowledge in Foreign-Knowledge Transfer to China. *International Studies of Management & Organization*, 35(1), 47-65.
- Caligiuri, P.M. (2000) 'The Big Five Personality Characteristics as Predictors of Expatriates' Desire to Terminate the Assignment and Supervisor-rated Performance', *Personnel Psychology*, 53: 67-88.

- Caligiuri, P., Phillips, J., Lazarova, M., Tarique, I., and Bürgi, P. (2001) 'The Theory of Met Expectations Applied to Expatriate Adjustment: The Role of Crosscultural Training', *International Journal of Human Resource Management*, 12: 357-372.
- Cavusgil, T., Yavas, U. and Bykowicz, S. (1992) 'Preparing Executives for Overseas Assignments', Management Decision, 30: 54-58.
- Desatnick, R.L. and Bennet, M.L. (1977) *Human Resource Management in the Multinational Company*. New York: Nichols.
- Deshpande, S.P. and Viswesvaran, C. (1992) 'Is Cross-cultural Training of Expatriate Managers Effective? A Meta-analysis', *International Journal of Intercultural Relations*, 16: 295–310.
- Dowling, P.J., Schuler, R.S. and Welch, D.E. (1994) International Dimensions of Human Resource Management, 2nd Edition. Belmond: Wadsworth.
- Earley, P.C. (1987) 'Intercultural Training for Managers: A Comparison of Documentary and Interpersonal Methods', *Academy of Management Journal*, 30: 685-698.
- Erez, M. and Earley, P. C. (1993) *Culture, Self-identity and Work*. New York: Oxford University Press.
- Evans, P., Pucik, V. and Barsoux, J.-L. (2002) *The Global Challenge. Frameworks for International Human Resource Management.* Boston: McGraw-Hill.
- Feely, A.J. and Harzing, A.-W. (2003) 'Language Management in Multinational Companies', Cross Cultural Management: An International Journal, 10(2): 37-52.
- Feldman, D.C. and Tompson, H.B. (1993) 'Expatriation, Repatriation and Domestic Geographical Relocation: An Empirical Investigation of Adjustment to New Job Assignment', *Journal of International Business Studies*, 24: 507-529.
- Fowler, S.M. and Blohm, J. (2004) 'An Analysis of Methods for Intercultural Training'. In: Landis, D., Bennett, J.M. and Bennett, M.J. (eds) *Handbook of Intercultural Training, 3. ed.*, Thousand Oaks, CA: Sage Publications.

- Fraser, D. (1999) *QSR NUD*IST Vivo: Reference Guide*. Melbourne: Qualitative Solutions and Research.
- Gertsen, M.C. (1990) 'Intercultural Competence and Expatriates', *International Journal of Human Resources*, 1: 341-362.
- Gibbs, G.R. (2003) *Qualitative Data Analysis: Explorations with NVivo*. Buckingham: Open University Press.
- Graf, A. (2004) 'Expatriate Selection. An Empirical Study Identifying Significant Skill Profiles', *Thunderbird International Business Review*, 46: 667-685.
- Gregersen, H.B. and Black, J.S. (1992) 'Antecedents to Commitment to a Parent Company and a Foreign Operation', *Academy of Management Journal*, 35: 65-90.
- Gudykunst, W.B. and Hammer, M.R. (1983) 'Basic Training Design: Approaches to Intercultural Training'. In: Landis, D. and Brislin, R.W. (eds) Handbook of Intercultural Training: Issues in Theory and Design. New York: Pergamon.
- Hammer, M.R. and Martin, J.N. (1992) 'The Effects of Cross-cultural Training on American Managers in a Japanese-American Joint Venture', *Journal of Applied Communication Research*, 20: 161-182.
- Harzing, A.W. (2001) 'Of Bears, Bumble-bees and Spiders: The Role of Expatriates in Controlling Foreign Subsidiaries', *Journal of World Business*, 36: 366-379
- Harzing, A.-W. and Van Ruysseveldt, J. (2004): International Human Resource Management. An Integrated Approach. London: Sage.
- Harrison, J.K. (1994) 'Developing Successful Expatriate Managers: A Framework for the Structural Design and Strategic Alignment of Cross-Cultural Training Programs', *Human Resource Planning*, 17: 17-35.
- Hofstede, G. (2001) Cultures Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations, 2nd Edition. Thousand Oaks CA: Sage.
- Javidan, M., House, R.J., Dorfman, P.W., Hanges, P.J. and de Luque, M.S. (2006) 'Conceptualizing and Measuring Cultures and Their Consequences: A Comparative

Review of GLOBE's and Hofstede's Approaches', *Journal of International Business* Studies, 37: 897-914.

- Kanaya, T., Light, D. and Culp, K.M. (2005) 'Factors Influencing Outcomes From A Technology-Focused Professional Development Program', *Journal of Research on Technology in Education*, 37: 313-329.
- Kealey, D.J. and Protheroe, D.R. (1996) 'The Effectiveness of Cross-Cultural Training for Expatriates: An Assessment of the Literature on the Issue', *International Journal of Intercultural Relations*, 20: 141-165.
- Kogut B. and Singh H. (1988) 'The Effect of National Culture on the Choice of Entry Mode', Journal of International Business Studies, 19: 411-432.
- Kraimer, M.L., Wayne, S.J. and Jaworski, R.A. (2001) 'Sources of Support and Expatriate Performance: The Mediating Role of Adjustment', *Personnel Psychology*, 54: 71-99
- Landis, D., Bennett, J.M. and Bennett, M.J. (2004.) *Handbook of Intercultural Training*, 3. ed., Thousand Oaks CA: Sage Publications
- Levy, J. (1995) 'Intercultural training design'. In: Fowler, S.M. and Mumford, M.G. (eds) *Intercultural Sourcebook: Cross-cultural Training Methods*. Yarmouth: Intercultural Press.
- Lievens, F., Harris, M.M., Keer, E.V. and Bisqueret, C. (2003) 'Predicting Cross-Cultural Training Performance: The Validity of Personality, Cognitive Ability, and Dimensions Measured by an Assessment Center and a Behavior Description Interview', *Journal of Applied Psychology*, 88: 476-489.
- Luo, Y., & Shenkar, O. (2006). The Multinational Corporation as a Multilingual Community: Language and Organization in a Global Context. *Journal of International Business Studies*, 37, 321-339.
- Lysgaard, S. (1955) 'Adjustment in a Foreign Society: Norwegian Fullbright Grantees Visiting the U.S', *International Social Science Bulletin*; 7: 45-51.

- McEvoy, G.M. and Parker, B. (1995) 'Expatriate Adjustment: Causes and Consequences'. In: Selmer, J. (ed) *Expatriate Management: New Ideas for International Business*. Westport: Quorum Books.
- Mendenhall, M. and Oddou, G. (1985) 'The Dimensions of Expatriate Adjustment: A Review', Academy of Management Review, 10: 39-47.
- Mendenhall, M.E., Punnett, B.J. and Ricks, D.A. (1995) *Global Management*. Cambridge: Blackwell.
- Mendenhall, M.E., Stahl, G.K., Ehnert, I., Oddou, G., Osland, J. S. and Kühlmann, T.M. (2004) 'Evaluation Studies of Cross-Cultural Training Programs. A Review of the Literature from 1988 to 2000'. In: Landis, D., Bennett, J.M. and Bennett, M.J. (eds): *Handbook of Intercultural Training*, 3. ed., Thousand Oaks CA: Sage Publications.
- .Morris, M.A., and Robie, C. (2001) 'A Meta-analysis of the Effects of Cross-cultural Training on Expatriate Performance and Adjustment', *International Journal of Training & Development*, 5: 112.
- Oberg, K. (1960) 'Culture Shock: Adjustment to New Cultural Environment', *Practical Anthropologist*, 7: 177-182.
- Parker, B. and McEvoy G.M. (1993) 'Initial Examination of a Model of Intercultural Adjustment', *International Journal of Intercultural Relations*, 17: 355-379.
- Penley, L. E., Alexander, E. R., Jernigan, I. E., & Henwood, C. I. (1991). Communication Abilities of Managers: The Relationship to Performance. *Journal of Management*, 17(1), 57-76.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003) 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, 88: 879-903.
- Romero, E.J. (2002) 'The Effect of Expatriate Training on Expatriate Effectiveness', *Journal of Management Research*, 2: 73.

- Ruben, I. and Kealey, D.J. (1979) 'Behavioral Assessment of Communication Competency and the Prediction of Cross-Cultural Adaption', *International Journal of Intercultural Relations*, 3: 15-47.
- Sappinen, J. (1993) 'Expatriate Adjustment on Foreign Assignment', European Business Review, 93: 3-11.
- Schneider, S.C. and Asakawa, K. (1995) 'American and Japanese Expatriate Adjustment: A Psychoanalytical Perspective', *Human Relations*, 48: 1109-1127.
- Scullion, H. and Brewster, C. (2001) 'The Management of Expatriates: Messages from Europe?', *Journal of World Business*, 36: 346-365.
- Selmer, J. (2002) 'Practice Makes Perfect? International Experience and Expatriate Adjustment', *Management International Review*, 42: 71-87.
- Selmer, J. (2005) 'Cross-cultural Training and Expatriate Adjustment in China: Western Joint Venture Managers', *Personnel Review*, 34: 68-84.
- Selmer, J. and Leung, A.S.M. (2003) 'International Adjustment of Female vs Male Business Expatriates', *International Journal of Human Resource Management*, 14: 1117-1131.
- Selmer, J., Torbiörn, I. and de Leon, C.T. (1998) 'Sequential Cross-cultural Training for Expatriate Business Managers: Predeparture and Post-arrival', *International Journal of Human Resource Management*, 9: 831-840.
- Shaffer, M.A. and 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. and Gilley, K.M. (1999) 'Dimension, Determinants, and Differences in the Expatriate Adjustment Process', *Journal of International Business Studies*, 30: 557-581.
- Sinangil, H.K. and Ones, D.S. (2003) 'Gender Differences in Expatriate Job Performance', *Applied Psychology*, 52: 461-475.

- Takeuchi, R., Yun, S. and Russel, J.E. (2002) 'Antecedents and Consequences of the Perceived Adjustment of Japanese Expatriates in the USA', *International Journal of Human Resource Management*, 13: 1224-1244.
- Tharenou, P. and Harvey, M. (2006) 'Examining the Overseas Staffing Options Utilized by Australian Headquartered Multinational Corporations', *International Journal of Human Resource Management*, 17: 1095-1114

Torbiorn, I. (1982) Living Abroad. New York: Wiley.

- Triandis, H.C. (1977) 'Theoretical Framework for Evaluation of Cross-Cultural Training Effectiveness', *International Journal of Intercultural Relations*, 1: 19-45.
- Tung, R.L. (1981) 'Selection and Training of Personnel for Overseas Assignments', Columbia Journal of World Business, 16: 68-78.
- Tung, R.L. (1987) 'Expatriate Assignments: Enhancing Success and Minimizing Failure', Academy of Management Executive, 1: 117-126.
- Waxin, M.-F., and Panaccio, A. (2005) 'Cross-cultural Training to Facilitate Expatriate Adjustment: It Works!', *Personnel Review*, 34: 51-67.
- Zander, L. (2005). Communication and Country Clusters. International Studies of Management & Organization, 35(1), 83-103.

Table 1: Descriptive Statistics and Pearsons Correlates

| | Mean | SD | Min | Max | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------------------------|---------|---------|------|-------|--------|--------|--------|--------|-------|-------|---------|--------|-------|--------|---------|----|
| 1. Adjustment to General Environment | 5,11 | 1,04 | 1 | 7 | - | | | | | | | | | | | |
| 2. Adjustment to Interact with HCNs | 4,83 | 1,28 | 1 | 7 | ,599** | - | | | | | | | | | | |
| 3. Adjustment to the Work Situation | 5,34 | 1,06 | 1 | 7 | ,505** | ,525** | - | | | | | | | | | |
| 4. Training Yes/No | ,44 | ,47 | 0 | 1 | ,026 | -,015 | -,056 | - | | | | | | | | |
| 5. Training Length | 1,46 | ,84 | 0 | 9 | ,095 | 0,65 | -,008 | ,533** | - | | | | | | | |
| 6. Training Comprehensiveness | 1,21 | 1,41 | 0 | 4 | ,119* | ,039 | -,047 | ,541** | ,012 | - | | | | | | |
| 7. Language Skills | 4,42 | 2,03 | 1 | 7 | ,376** | ,469** | ,157** | -,036 | ,072 | -,026 | - | | | | | |
| 8. Cultural Distance | 1,62 | 1,05 | 0,04 | 3,87 | -,118* | -,092 | -,054 | -,025 | ,051 | -,038 | -,281** | - | | | | |
| 9. Geographical Distance | 3346,85 | 2343,12 | 175 | 11266 | ,014 | -,014 | -,019 | ,145** | -,049 | ,083 | ,019 | ,203** | - | | | |
| 10. Time in HC | 22,0 | 45,1 | 0 | 204 | ,135* | ,211** | ,116* | -,058 | ,121* | -,068 | ,157** | ,051 | -,007 | - | | |
| 11. Age | 36,5 | 10,07 | 22 | 69 | -,031 | ,034 | ,151* | -,098 | ,091 | -,100 | -,070 | ,198** | -,009 | ,212** | - | |
| 12. Gender | 0,17 | ,38 | 0 | 1 | ,-001 | ,064 | -,030 | ,085 | ,038 | ,023 | ,152** | -,064 | ,033 | -,065 | -,200** | - |

| Independent Variables | Model 1 | Model 2 | Model 3 | Model 4 |
|--|-------------------------------|-------------------|-------------------|-------------------|
| Training Participation | | ,043 | | |
| Training Length | | | ,100 | |
| Training Comprehensiveness | | | | ,109* |
| | | | | |
| Control Variables | | | | |
| Language Skills | ,357*** | ,360*** | ,379*** | ,362*** |
| Cultural Distance | -,010 | -,008 | ,-010 | -,005 |
| Geographical Distance | ,026 | ,019 | ,021 | ,015 |
| Time in Host Country | ,103 [†] | ,102 [†] | ,110 [†] | ,103 [†] |
| Age | -,075 | -,071 | -,129 | -,064 |
| Gender | -,063 | -,066 | -,059 | -,063 |
| | | | | |
| R^2 | ,150 | ,152 | ,158 | ,162 |
| Adjusted R ² | ,133 | ,134 | ,139 | ,143 |
| Change in Adjusted R ² | | + ,002 | + ,006 | +,010 |
| F | 8,956*** | 7,755*** | 7,686*** | 8,361*** |
| Durbin-Watson | 1,477 | 1,710 | 1,719 | 1,655 |
| | | | | |
| Notes Level of significance $\leq ,1$; $* \leq ,05$; Change in Adjusted R ² compared to Standardised Coefficients shown | **≤,01;***≤,001, n Model 1 | =339 | | |

| ndependent Variables | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|-----------|-------------------|-----------|
| Training Participation | | ,018 | | |
| Training Length | | | -,011 | |
| Training Comprehensiveness | | | | ,073 |
| | | | | |
| Control Variables | | | | |
| Language Skills | ,462*** | ,463*** | ,509*** | ,466*** |
| Cultural Distance | ,038 | ,039 | ,041 | ,041 |
| Geographical Distance | -,023 | -,026 | -,19 | -,031 |
| Time in Host Country | ,133* | ,133* | ,097 [†] | ,133* |
| Age | -,012 | ,010 | -,009 | -,004 |
| Gender | ,018 | ,017 | ,020 | ,017 |
| | | | | |
| 2 | ,242 | ,243 | ,246 | ,248 |
| Adjusted R ² | ,227 | ,225 | ,227 | ,230 |
| Change in Adjusted R ² | | -,002 | +/-,000 | +,003 |
| | 16,105*** | 13,782*** | 14,644*** | 14,149*** |
| Durbin-Watson | 1,811 | 1,833 | 1,841 | 1,911 |
| | | | | |
| Notes Level of significance $\leq ,1; * \leq ,05$ Change in Adjusted R ² compared to | $; ** \le .01; *** \le .001, n^{-1}$ Model 1 | =339 | | |

| ndependent Variables | Model 1 | Model 2 | | |
|-----------------------------------|---------|---------|---------|---------|
| raining Participation | Model 1 | Model 2 | | |
| <u> </u> | | | Model 3 | Model 4 |
| | | -,039 | | |
| Training Length | | | -,033 | |
| Training Comprehensiveness | | | | -,034 |
| | | | | |
| Control Variables | | | | |
| Language Skills | ,156* | ,153* | 1,54* | ,155* |
| Cultural Distance | -,046 | -,049 | -,046 | -,048 |
| Geographical Distance | -,010 | -,003 | -,002 | -,007 |
| Time in Host Country | ,000 | ,002 | ,001 | ,001 |
| Age | ,161* | ,158* | ,159* | ,158* |
| Gender | -,028 | -,026 | -,022 | -,028 |
| | | | | |
| 2 | ,052 | ,053 | ,050 | ,053 |
| Adjusted R ² | ,032 | ,030 | ,029 | ,030 |
| Change in Adjusted R ² | | -,002 | -,003 | -,002 |
| , | 2,581* | 2,269* | 2,251* | 2,254* |
| Durbin-Watson | 1,511 | 1,601 | 1,610 | 1,561 |
| | | | | |

