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Design Parameters of Cross-Cultural Training (CCT) Programs in Information Technology (IT) Organizations

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Abstract

Objective: To identify key dimensions that are to be considered while designing Cross Cultural Training (CCT). **Methods :** The data is collected from 421 expatriate employees in the selected IT organizations (Engineers /Managers/ Team Leaders) using an instrument consisting 45 items of nine drivers. The current study adopted Exploratory Factor Analysis (EFA), followed by 2nd order CFA to reveal various input components of training programme that leads to the success of the expatriate training programme. **Findings:** The factors influencing expatriate training were identified as: Adjustment (AD) factor, Culture factor (CU) and Method (ME) factors which are predominately to be considered for the design of CCT. **Novelty:** The factors to be considered while designing the CCT has been identified a prior rather finding the effect of such factors during post training evaluation. The results are more authenticated and help IHRM professionals to design CCT which lead to success of expat's overseas assignment.

Keywords: IHRM; Cross Cultural Training (CCT); Adjustment (AD) factor; Culture factor (CU); Method (ME) factors 1

1 Introduction

The Multi-National Corporations (MNC) hire employees to foreign projects called expatriates to work all over the world on short and long-term assignments and work on global initiatives. The Cross-Cultural Training (CCT), an intervention intended to enhance expat's ability to modify their behavior to suit cultural-diverse milieus. The main concerns of expatriate's assignment are the capability handling new tasks and the adaptability to foreign environment. The CCT is a practice used to increase an individual's ability to cope up with new cultural environment and contributes to understand values and ethos of different country culture. The typical stages of the expatriation process include home country assignment, employment, selection, training/orientation, international task, debriefing, re-entry, and return.

With the amount of money organizations spend on training, leaders want to be sure they are providing the effective learning experience possible[1]. It may be noted that characteristics that determine an expatriate's success includes job specific skills, language, motivation, interrelationship and family situation. The structured process for a successful international assignment are: Pre-program assessment and exploration, Expat and family training program, Host manager and team cultural briefing, Project alignment meeting, In-country coaching and Knowledge management process. It is important to understand the process of expatriation of Indian MNCs more specifically IT organizations in detail with reference to onsite-offshore outsourcing. The IT MNC's incurs nearly 4-5 times more cost of managing expat jobs in comparison with host country expenses to execute the projects of overseas onsite location. It is very important task for any multinational organizations to examine the expatriate adjustment process.

The cross-culture training makes expats to work with different countries of culture, collaborate with project teams, work in divisions or departments of the company, outsource activities to other countries and alliances with parties from diversified cultures. The CCT is needed to prevent failure and incur financial losses to make expats more productive and help them adjust to the job in their new country and culture.

The important cross culture training is Didactic Training, Experiential Training, Attribution Training, and Language Training. Cultural Awareness Training, Interaction Training, Cognitive Behavior Modification Training and Sequential Training. The expatriate's spouse and their family have to receive proper preparation, support, and training. Investing a lot of effort and money in recruiting expats to specific countries, may lead to unnecessary expenditure if the organization provides the training which is of more generic in nature. Adapting to a new culture may be challenging for an individual who belong to another country.

The goal of cross-cultural training is to assist individuals from different cultures in adjusting to their new surroundings to their new positions from different cultures. The adjustment process is separated into many phases, in most cases, a U-shaped curve depicts the expatriate's initial enjoyment of new surroundings living in a new culture before recognizing how much adjustment is needed. The cross culture training should be customized for the duration for location specific expatriate assignment. The expatriate's prior experience is needed to be understood while designing the CCT to reduce cultural distance. The intercultural effectiveness, cultural judgement, decision-making, cultural adaption and task performance will contribute to the level of expatriate adjustment. The expat training is critical to MNCs' performance[2].

There is a strong need to carry out empirical research to understand IHRM function from Indian Perspective. It may be noted that when the cultural gap is narrower, expatriates began a new foreign assignment and experienced it less and hence the positive link exist between cultural intelligence and intercultural adaptation at work[3]. There is need to understand and recruit cross-cultural clever expatriates for overseas jobs, offering training before departure to enhance cultural intelligence and effectively distributing resources. Cultural intelligence helps in fostering 'trust and understanding' even among virtual teams. Post-pandemic workforce is likely to get split into three categories i.e. employees working physically from office spaces; employees working partially from office and partially from home; and employees working completely from home. This new ecosystem of work arrangement on continuous basis will require a fresh set of skill to achieve desired results. Knowledge and adoption of cultural intelligence (CI) within organizations will be a key imperative to help improve virtual cross-cultural interactions[4]. The existing literature have indicated that there is a strong need to study expatriate issues and perspectives of expatriate management, cross culture training and expat performance.

Chen[5] mentioned that there is a strong need for research on expatriate management and available existing theories and investigations are comparisons and analysis of foreign literature and there exists vacancies in this research field. Till recently, CCT has not gained momentum as there were less research attention paid but research momentum is now gained in preparing expatriates to ensure successful foreign assignments. In Europe and North American context some work is done, but noteworthy exclusions of a few exploratory studies[6].

The Deardof's Model of Intercultural Competence, comprised of three basic elements: (1) attitudes (2) knowledge and comprehension and (3) skills. Due to the fact that pandemic issues across the globe in the name of COVID-19/ Bio-Viral issues, cross-cultural encounters including ultra-nationalism, trade barriers, and regional discrimination have strengthened worldwide. In lieu of which, lot of challenges in managing the diversified workforce in organizational environment. The variant in cultural background and cross-cultural communication lead to highlight the strong need of CCT to manage employees in IT sector. IT engineers need both hard and soft skills to be job ready in global market. The substandard CCT may lead to ineffective performance of expatriates during their global assignment. Failure is detrimental to both employee and the organization. The proposed study focuses on addressing the above said gap and attempts to identify design parameters to be considered while designing Cross-Culture Training (CCT) programmes in selected Information Technology (IT) organizations.

2 Methodology

The present study attempts to recognize the design factors influencing expatriates training. The current research is a survey of Indian expats belong to IT organizations. The primary data is collected from the expatriate employees using an instrument consisting 45 items of nine drivers and credibility of the measurement is verified by content validity, reliability test, EFA, confirmatory factor analysis, convergent and discriminant validity tests. The predominant design factors/items were extracted and titled based on the relevance. The extracted factors and items were confirmed by Confirmatory Factor Analysis (CFA).

The CFA along with necessary model fit measures is carried out. The Structural Equation Modelling (SEM) is adopted to know the interrelationship among the factors using AMOS software. The composite reliability of the instrument is measured as 0.897, while the reliability of the various dimensions of expatriate training factors like Adjustment factors (AD), Culture factors (CU) and Method factors (ME) are 0.865, 0.783 and 0.812 respectively. Further, while designing the instrument care has been taken for the reliability for the dimensions of expatriate factors and performance factors which were noted as 0.853 and 0.910 respectively.

3 Results and Discussions

The HR interventions periodically and adequate CCT shall elevate cultural intelligence (CQ) of expats in global organizations[7]. The preceding studies on CCT have concentrated on HR interventions and the role of cross-cultural training on expat's performance. However, understanding the dimensions prior to design of the Cross-cultural training is most important than evaluating the effectiveness of the CCT. The expats of Japanese-affiliated companies in China has been studied by researchers and found that familiarity with Chinese language and culture contribute to enhancing their boundary-spanning behavior and[8]. It also evidenced from the research that CCT's influences on expatriate's different facets of adjustment in China and Malaysia. Further, the study resulted that cultural-diverse trainings expressively influence on distinctive features of foreigner's adjustment[9]. It may be noted that the influence of emotional intelligence (EI) on Cross Cultural Adjustment (CCA) among Japanese parent country nationals (PCNs) indicates a positive influence of EI on sub dimensions of CCA[10]. The same results also found with research made in Egyptians context, that is the Cross-Cultural Training (CCT) significantly influences students' CQ across nationalities- gender in Egyptians context.[11].

The present study emphasizes on establishing the factors to be considered while designing CCT unlike only establishing and highlighting the association between improved CQ and individual-level task performance. The sample adequacy test was conducted to proceed with EFA. The KMO of the present study has a value of 0.928, which is an indication of the adequate sample for carrying out EFA and other statistical investigation.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.928
Bartlett's Test of Sphericity	Approx. Chi-Square	8282.099
	df	190
	Sig.	.000

The EFA is conducted using varimax rotation mode using Principal Component Analysis (PCA). The extracted factors along with the total variance, expressed by each factor are represented in the Table 2.

Based on the Eigen value in EFA, three factors are extracted whose Eigen value is more than one. In the present research, 20 items were grouped based on the relevance and titled as adjustment, cultural and method. It is noted that items loading more than 0.5 shall be considered as the model under consideration is fit. For the present study, the item loading ranges from 0.596 to 0.846.

Table 2. Total Variance Explained

Component	Initial- Eigenvalues			Sums of Squared Loadings Extraction			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.69	53.487	53.487	10.697	53.487	53.487	6.344	31.721	31.721
2	2.961	14.805	68.292	2.961	14.805	68.292	4.496	22.480	54.201
3	1.467	7.334	75.625	1.467	7.334	75.625	4.285	21.424	75.625
4	.657	3.283	78.908						
5	.567	2.835	81.743						
6	.436	2.179	83.922						
7	.420	2.100	86.022						
8	.374	1.872	87.894						
9	.364	1.821	89.715						
10	.299	1.495	91.211						
11	.296	1.478	92.688						
12	.252	1.258	93.946						
13	.203	1.016	94.962						
14	.196	.981	95.943						
15	.184	.918	96.861						
16	.170	.850	97.711						
17	.141	.704	98.416						
18	.125	.626	99.042						
19	.107	.536	99.578						
20	.084	.422	100.000						

Extraction Method: Principal Component Analysis.

3.1 Confirmatory Factor Analysis (CFA)

To verify the extracted factors, CFA (confirmatory factor analysis) is performed using SPSS and AMOS software. In the CFA, three factors along with 20 items were confirmed. Followings are the three confirmed factors.

1. Adjustment (AD) factors
2. Culture (CU) factors
3. Method (ME) factors

Tahir[8] used an instrument that confined to factors that are associated with CCT frequently cited in literatures. In addition to the factors mentioned in the paper, an attempt has been made to explore the of significance design CCT parameters. The present study considers various other important factors while designing CCT.

The adequacy of model fitness is measured to explore proposed expatriate training model. It is noted that all the fit index should be nearer to unity, and error factors should be less than 0.08 and CMIN/DF should be less than 3 for the better model fitness.

The similar study made by Chen[4], resulted dimensions are cross-cultural adjustment, self-adjustment, other adjustments, cognitive feeling and cultural toughness (LISREL model). The model fitness of the study CMIN/ df is noted as 1.476, which is less than the standard value 3. In the presented study the same indicator is 1.19. It is noted that (GFI) = 0.968 and adjusted GFI (AGFI) = 0.915, which are higher than the standard value of 0.9 and hence model adopted has adequate fitness.

For the present study the ratio of CMIN/df is 1.920, other fit indexes are GFI= .900, IFI = 0.942, TLI=0.933, CFI= 0.941, AGFI=0.879, and RMSEA = 0.047. All the measured fit indexes indicate that good model fitness. The results of the present study reveals that factors that influences on the expatriates training were identified titled as: Adjustment (AD) factor, Culture factor (CU) and Method (ME) factors. The success of the expatriate training depends upon various input components of training programme which shall be taken care to be included during the design of programme. These components include: Increasing the adaptability of the trainees suitable to foreign culture and helping them to cope up with the foreign culture. The training should detail on the different conditions in the country and also to cover the topics related to flexibility with reference to challenges in the job. Further, the inputs to be provided in the training programme shall include team work and team building, living
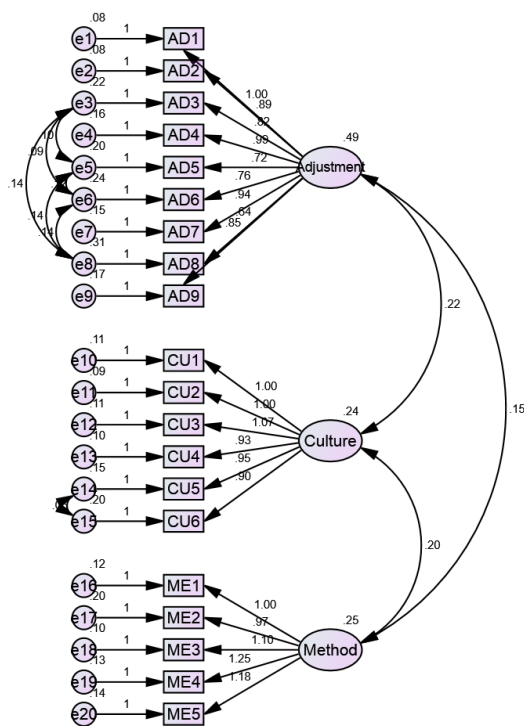
Fig 1. Measurement model for Expatriates training

conditions of the host country, adjusting with the new culture and changing conditions. The level of integration of training- job function -job effectiveness is to be aligned with the training specifications. These input components of training programme are tilted under the Adjustment factor (AD) in the expatriates training.

4 Conclusion

The expatriate managers need to engross in cross-cultural collaborations regularly to acquire cross-cultural abilities. The research on expatriate management and current theories and analysis of foreign literatures are still unexplored and there still exists vacancies in this area. The proposed study focuses to identify dimensions that are to be considered while designing CCT. The composite reliability of the instrument is 0.897, while the reliability of the various dimensions of expatriate training factors like Adjustment factors (AD), Culture factors (CU) and Method factors (ME) are 0.865, 0.783 and 0.812 respectively. The study results explored that a strong interaction between knowledge and cultural difference [12].

Further, while designing the instrument care has been taken for the reliability for the dimensions of expatriate factors and performance factors which were noted as 0.853 and 0.910 respectively. For the present study the ratio of CMIN/df is 1.920, other fit indexes are GFI= 0.900, IFI = 0.942, TLI=0.933, CFI= 0.941, AGFI=0.879, and RMSEA = 0.047. All the measured fit indexes indicate good model fitness.

The CCT and HR intervention programs will enhance expats cultural intelligence (CQ). While contemplating the present study with other studies on cross-cultural training, it is noted that there is a reinforcement of factors identified in the present study to be considered while designing the CCT to enhance the intercultural skills of expatriates. However, understanding the dimensions a prior to design of the Cross-cultural training is most important rather evaluating the effectiveness of the CCT. The importance of cultural competence is evident and more knowledge is needed about different models and approaches that aim to increase cultural competence [13].

The present study emphasise on establishing the factors to be considered while designing CCT unlike only establishing and highlighting the relationship between improved CQ and individual-level task performance in global teams. The factors that influences on the expatriates training were identified with the help of CFA (confirmatory factor analysis) and titled as: Adjustment (AD) factor, Culture factor (CU) and Method (ME) factors. The success of the expatriates training depends upon various input components of training programme which shall be taken care to be during the design of programme [14]. These components include: Increasing the adaptability of the trainees and helping them to cope up with the foreign culture. The training should detail on the different conditions in the country and also to cover the topics related to flexibility with reference to challenges in the job. Further, the inputs to be provided in the training programme shall include team work and team building, living conditions of the host country, adjusting with the new culture and changing conditions.

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