

# The paradox role of extraversion in the cross-cultural adjustment process of Asian expatriates

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Asia Rafiq<sup>1</sup>  
Sharjeel Saleem<sup>1</sup>  
Mohsin Bashir<sup>1</sup>  
Arfan Ali<sup>2</sup>

<sup>1</sup>Lyallpur Business School (Division of Management), Government College University, Faisalabad, Pakistan;

<sup>2</sup>Department of Public Administration, Government College University, Faisalabad, Pakistan

**Background:** The purpose of this study is to present a broad-brush picture based on empirical evidence on the role of hindrance stressors, motivation, and cultural novelty in expatriate adjustment. Drawing on trait activation theory, this study examines the moderating role of extraversion in enhancing cultural adjustment to achieve positive work engagement and organizational citizenship behavior (OCB) by expatriates.

**Methods:** We gathered data using a sample of 458 eastern expatriates with current international assignments in different countries around the world. They completed questionnaires sent to them using online platforms for expatriates.

**Results:** The results reveal that hindrance stressors and intrapersonal motivation significantly predict adjustment. Adjustment plays a partially mediating role in achieving OCB and expatriate work engagement. However, this work engagement is stronger when adjustment is used as a mediating factor. Surprisingly, our results provided paradox role of extraversion in predicting adjustment which was somewhat in contradiction to our hypothesized direction of moderating effect.

**Conclusion:** Our research puts forward strategies for international business organizations when assigning business expatriates, especially in novel cultures. Our research provides valuable information about expatriates' context for international organizations planning for the accomplishment of their assignments in distant cultures.

**Keywords:** expatriates, work engagement, cultural novelty, extraversion, adjustment, trait activation theory

## Introduction

The rapid growth of the world toward globalization and the ultimate significance of international marketplaces for multinational enterprises (MNEs) have resulted in a dynamic in which many employees work in foreign cultures. Many MNEs employ expatriates in their international subsidiaries to investigate and seize business opportunities abroad.

Past studies have shown that expatriates encounter several problems in their work assignments, including the difficulty of working and living in novel environments in countries that are geographically and socially different from their country of origin.<sup>1</sup> The difficulties arising from such an assignment include, but are not limited to, adjustment issues relating to these novel environments and a consequent deterioration in employees' engagement with their work.

Correspondence: Asia Rafiq  
House no 21 Alnoor Homes Colony,  
Qabristan Mor Jaranwala Road,  
Faisalabad, Pakistan  
Tel +92 310 157 7998  
Email ayesh\_111@hotmail.com

Work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption”.<sup>2</sup> Schaufeli, Martinez, Pinto, Salanova, Bakker<sup>2</sup> unearthed no substantial association between adjustment and work engagement. Selmer,<sup>3</sup> however, showed that cultural novelty was negatively correlated with work engagement. Zhou, Wang, Wu, Li, Du<sup>4</sup> stated that hindrance stressors negatively affect work engagement. Hindrance stressors are work challenges likely to frustrate and curb personal attainment and growth.<sup>5,6</sup> Hindrance stressors may carry on draining regulatory resources and constraint subsequent goal pursuit<sup>5,7</sup> by distracting effort away from behaviors that enable enhanced adjustment.<sup>8</sup> Hindrance stressors manifest work conditions that stipulate strain for personal growth and achievement such as high levels of workloads and accountability, or “stretch” assignments that function as backward stones for advancement.<sup>6</sup> Such hindrances escort expatriates to become less engaged and entrenched in their work and are ultimately likely to result in poor endings.<sup>7</sup> In this paper, we integrate work engagement into our model as the final outcome of expatriate adjustment and hypothesize that poor adjustment will negatively influence work engagement.

Intrapersonal motivation is a demonstration of high motivation, if not the same phenomenon. This is particularly interesting since, in the circumplex model of affect, it is at the opposite end of the spectrum as depression, which assumes a negative relationship of hindrance stressors with adjustment.<sup>9</sup>

The organizational citizenship behavior notion (OCB) may be expressed as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization.”<sup>10</sup> OCB has been investigated at both an entrepreneurial level and at an educational level.<sup>11</sup>

Cultural novelty directly associates with expatriation, and the conventional assumption is that the more the culture is novel compared with a worker’s home location, the greater is the difficulty faced by the expatriate in adjustment.<sup>12</sup> The complexities and uncertainties involved in culturally novel foreign assignments can promote resistance from workers, and more time is required for proficiency.<sup>3,13</sup>

This paper contributes to the organizational behavior and HR literature in general and to the expatriate literature in particular in several avenues.

First, building on trait activation theory,<sup>14</sup> we examine the moderating role of extraversion to predict the general

adjustment path and timeframe of Asian expatriates posted in foreign countries. We believe that very few studies have attempted to examine the buffering role of a specific trait relating to adjustment in predicting work engagement and OCB in expatriates’ studies.

Second, we respond to Bhaskar-Shrinivas, Harrison, Shaffer, Luk<sup>15</sup> call for including differences at the individual level in this area of research, especially with regard to how expatriates’ personalities could influence adjustment and, eventually, performance (work engagement, etc.). We also examine hindrance stressors faced by expatriates from the prevalent stressor–stress–strain conception for this area of research.<sup>12</sup>

Third, the main potential contribution of this research to the academic literature is the exploration of the traditional and presumed negative relationship between cultural novelty and expatriate adjustment. The uncertainties and complexities involved in assignments in which cultural distance is great can foster resistance and require time to reach proficiency.<sup>3</sup> Although the theoretical association between adjustment and work engagement and OCB is conceptually uncertain, it has been shown that unadjusted expatriates are likely to engage in their assignments with poor results.<sup>16</sup> There is very little research on OCB in an expatriation context. Therefore, this study focuses on OCB as the main topic in this context by conducting a field study using the sample of expatriates on foreign work assignments.

## Theory and hypotheses

### The relationship between hindrance stressors and expatriate adjustment

Cavanaugh, Boswell, Roehling, Boudreau<sup>6</sup> presented two facets of work challenges: hindrance-stressors and challenge stressors. Challenge stressors may be seen in work conditions in which employees strive for personal growth and achievement, for example, through accountability, heavy workloads, and difficult tasks at which they must succeed in order to advance.<sup>6</sup> Hindrance stressors inversely and negatively influence work performance (eg, work engagement and OCB);<sup>17</sup> through their negative relationship with adjustment.<sup>7</sup> Such outcomes suggest that the existence of initial hindrance stressors in foreign work assignments likely adds to already intensified levels of mental stress.<sup>18</sup> Therefore, as expatriates remain engaged in control procedures, we assume that they might be capable of alleviating the stress linked with hindrance

stressors by using personality trait approaches and gain related benefits by using stress control strategies. There are no positive benefits of hindrance stressors, though there are positive aspects to challenge stressors.<sup>5</sup>

Expatriates' adjustment is defined to include the extent of comfort or complexity expatriates face with respect to different problems associated with work and life in a foreign country.<sup>12,19</sup> Adjustment, as a process, includes a reduction in uncertainty and a gradual change in which people start feeling relaxed and at ease with the foreign culture and start feeling at home within it.

Thus, we propose that:

*Hypothesis 1. Hindrance stressors are negatively related to expatriate adjustment.*

### The relationship between intrapersonal motivation and expatriate adjustment

An expat's intrapersonal motivation for relating to different cultural backgrounds may have a significant role in his or her cultural adjustment and successful execution of the work assignment. Motivation entails the psychosomatic procedures that regulate concentration, focus, and persistence in completing an assignment,<sup>20</sup> and it encompasses the processes by which one assembles personal resources (such as time, attention and skills) to select and complete professional goals.

For instance, expatriates with high intrapersonal motivation are highly likely to marshal the required personal competencies to conquer problems likely to be experienced during their foreign assignments and accomplish their tasks. It is likely that cultural adjustment also reciprocally inspires subsequent expatriate intrinsic motivation,<sup>5,18</sup> however, given that intrapersonal motivation is not restricted to a specific foreign work task or any specific cultural context, there are few chances for it to be affected by a single foreign task. Moreover, empirical evidence reveals that internal motivation is directly related to expatriates' cultural adjustment.<sup>21</sup>

Beyond the initial evidence that intrapersonal motivation is directly associated with cultural adjustment, Ang, Van Dyne, Koh, Ng, Templer, Tay, Chandrasekar<sup>21</sup> also stated that intrapersonal motivation relates directly to work performance. On the other hand, studies have yet to empirically investigate the mediating phenomenon through which expatriate intrapersonal motivation may increase expatriate work outcome (work engagement and OCB). Thus, we predict the following:

*Hypothesis 2. Intrapersonal motivation is positively related to expatriate adjustment.*

### The relationship between cultural novelty and expatriate adjustment

Much of the emphasis of Bhaskar-Shrinivas, Harrison, Shaffer, Luk<sup>15</sup> and more empirical studies on the model of Black, Gregersen<sup>12</sup> have been on non-work aspects, specifically those studies that concentrated on cultural adjustment. In this study, we examine cultural novelty at an international subsidiary-level and survey the combined consensus of expats that the new location in which their subsidiary firm is located is culturally dissimilar to their own origin location. There is common agreement about subsidiary-level firms that cultural novelty can appear through two mechanisms.

The first explains that the distinctive cultural aspects of a host location might mark it very unique from the rest of the locations on the globe, making expats from an incongruent set of home locations all observe that the host location is culturally diverse from their origin. Such as, the dominance of —guanxi culture in China<sup>22</sup> may be so distinctive that most expatriates (regardless of their culture of origin) perhaps agree that China has a novel culture compared with their surrounding home countries. Second, the arrangement of expatriate workers in the host nation may be organized with the end goal that the majority are from home nations that are culturally different from the host culture, prompting a mutual feeling of high cultural separation among the expatriates in that subsidiary.

Various studies have shown that cultural factors inspire all aspects of the life of an expatriate, including business and management practices. Scholars have stated that Asian cultures (eg, Chinese culture) have had a significant influence on management practices in Asia over the last few decades.<sup>23</sup> Thus, we formulate the following hypothesis:

*Hypothesis 3. Cultural novelty is negatively related to expatriate adjustment.*

### The relationship between expatriate adjustment and work engagement

Expatriates who are deeply involved in their work assignments focus on the achievement of work-associated objectives and are emotionally and cognitively linked to the work and their work fellows.<sup>24</sup> In other words, expatriates who are culturally adjusted in their work can be

anticipated to put more effort into their work engagement in the new location, and they might be more comfortable moving outside the confines of their general work routines and participating in new living styles.<sup>25,26</sup>

Finally, adjustment may influence the work engagement of expatriates, as perseverance will make them ready to achieve top notch work outcomes despite the hardship of managing a remote setting. Expatriates who are adjusted have more attachment to their work assignments and concern about the execution of tasks.<sup>26,27</sup> Zhang, Harzing, Fan<sup>26</sup> stated that highly adjusted employees obtained higher evaluations of their work assignments compared to their workmates on extra-role and in-role performance, showing that more adjusted employees are better engaged in their work and are ready to go the extra mile.

Another motivation behind why adjusted expatriates may connect better and more quickly to their work setting might be their capacity to draw upon their own particular emotional assets, like self-adequacy, optimism, and association-based self-esteem in the organization.<sup>2,27</sup> These emotional resources could smooth and accelerate the adjustment of expatriates to the necessities of work in the host nation because the individual will be all the more emotionally hearty when faced with new cultural circumstances.

*Hypothesis 4. Expatriate adjustment is positively related to work engagement.*

## The relationship between expatriate adjustment and OCB

Expatriates' degree of success in the adjustment process has an effect on their task performance<sup>26,27</sup> and their intention to complete their assignment. In parallel to these findings, we expect a positive relationship between expatriate adjustment and the OCB. This is because expatriates who are not successful in their adjustment processes need to put more cognitive and emotional efforts into carrying out their assignments in an unfamiliar work environment. Parker, Ohly, Kanfer, Chen, Pritchard<sup>8</sup> explained that, from a resource allocation perspective, for example, unfamiliar cues in work and non-work environments (eg, cues signaling host country coworkers' expectations and help requests, cues indicating the acceptability of a certain behavior in a host culture) may require more intellectual resources from unadjusted expatriates. As expatriates allocate some of their intellectual resources to process

these unfamiliar cues, fewer resources are left available for them to allocate between their task and OCB performance.

Adjusted workers do not just encourage positive feelings in themselves; adjusted employees encourage an optimistic atmosphere around them by being approachable and accommodating to others.<sup>25,26</sup> The expanded contact among expatriates and local people that can come about because of inspirational dispositions should prompt better commitment to new types of collaborations.<sup>27</sup>

Unadjusted expatriates, after allocating some of their cognitive and psychological resources to process negative emotions due to low adjustment, will be left with reduced resources to allocate again between their task and OCB performance.<sup>28,29</sup> Therefore, unadjusted expatriates' OCB performance will suffer. This is the other reason for expecting a positive relationship between expatriate adjustment and OCB.

*Hypothesis 5. Expatriate adjustment is positively related to OCB.*

## Mediating role of expatriate adjustment

According to Black, Mendenhall, Oddou,<sup>1</sup> expatriates practice better adjustment when they have reasonable knowledge of their work task and are able to perceive a relationship among the flexible challenges of their foreign assignments. That is, with respect to expatriates with low levels of adjustment, expatriates with higher levels of adjustment have accepted business-related necessities set by their international assignments and are more certain of how to complete their errands all the more productively and viably. Further, well-adjusted expatriates gain a broader perspective to act all the more proficiently, as they are more relaxed with diverse aspects of their international assignment<sup>3</sup> and, in this manner, are less exhausted and have more individual assets accessible to commit to accomplishing work undertakings.<sup>30</sup> Consequently, work adjustment is probably going to be a crucial motivation behind why expatriates with higher intrapersonal motivation complete their tasks more successfully.

Hindrance stressors might constrain subsequent goal pursuit and drain regulatory resources.<sup>5,7</sup> These stressors distract from those work behaviors that enable increased adjustment.<sup>20</sup> We anticipate that higher hindrance stressors will direct concentration away from the main work assignments and, as a result, adjustment will be negatively influenced.

From a trait activation theory perspective, there are two categories of motivation: intrapersonal motivation and controlled motivation. The former describes a person who behaves with a full sense of volition and adoption; whereas the latter describes a person who engages in activities related to work and non-work under pressure or to assert control.<sup>25</sup>

Very few studies have investigated the mediating behavior of adjustment between intrapersonal motivation and expatriate work engagement and OCB. Ang, Van Dyne, Koh, Ng, Templer, Tay, Chandrasekar<sup>21</sup> found that adjustment was more strongly connected to performance than was intrapersonal motivation. What's more, a meta-analysis by Bhaskar-Shrinivas, Harrison, Shaffer, Luk<sup>15</sup> argued that adjustment is among the most proximal factors of general expatriates' achievement ( $\rho=0.49$ ). Likewise, the investigation of expatriates in China by Wang, Takeuchi<sup>31</sup> gives indirect support to our thesis that adjustment mediates between intrapersonal motivation and work performance in that they demonstrate that work adjustment mediated between more extensive motivational traits (ie, target orientation) and expatriates' work performance.

Moreover, no identified research has empirically linked work engagement and adjustment, nor were we able to identify studies that used mediation from the perspective of expatriates of eastern origin. This article examines the influence of mediation of adjustment on work engagement, something that has not yet been studied to our knowledge.

*Hypothesis 6a. Expatriate adjustment mediates the relationship between a) hindrance stressors, b) intrapersonal motivation, and c) cultural novelty and work engagement.*

Hypothesis 6b. Expatriate adjustment mediates the relationship between a) hindrance stressors, b) intrapersonal motivation, and c) cultural novelty and OCB.

## Moderating role of extraversion

In line with trait activation theory, a situation-relevant trait such as extraversion is most likely to be triggered in trait-relevant conditions, which indicates that activating the extraversion is equally significant.<sup>14</sup> Therefore, a specific trait is most likely to be translated into the desired achievements in work outcomes and work performance in those circumstances most suitable to the articulation of the relevant attribute. Even though trait activation theory primarily emphasizes personality attributes, Tett, Burnett<sup>14</sup> suggested that this theory is equally appropriate to apply to motivational characteristics.

Taking extraversion into consideration, various authors have investigated expatriate adjustment more methodically via the context of the Big Five personality traits.<sup>30,32</sup> A meta-analysis with diverse means of expatriate data reveals that conscientiousness is directly linked to general adjustment and that extraversion is also positively related to expatriate adjustment.<sup>33</sup> Extrovert expatriates are successful in building social capital that helps them to get support in altogether a new environment. This social support fosters their adjustment.<sup>34</sup> Taking into consideration the above cited literature, we formulate the following hypotheses:

*Hypothesis 7a. Extraversion moderates the relationship between hindrance stressors and expatriate adjustment. The effect is stronger for those having low extraversion rather than high extraversion.*

*Hypothesis 7b. Extraversion moderates the relationship between intrapersonal motivation and expatriate adjustment. The effect is stronger for those having high extraversion rather than low extraversion.*

*Hypothesis 7c. Extraversion moderates the relationship between cultural novelty and expatriate adjustment. The effect is stronger for those having low extraversion rather than high extraversion.*

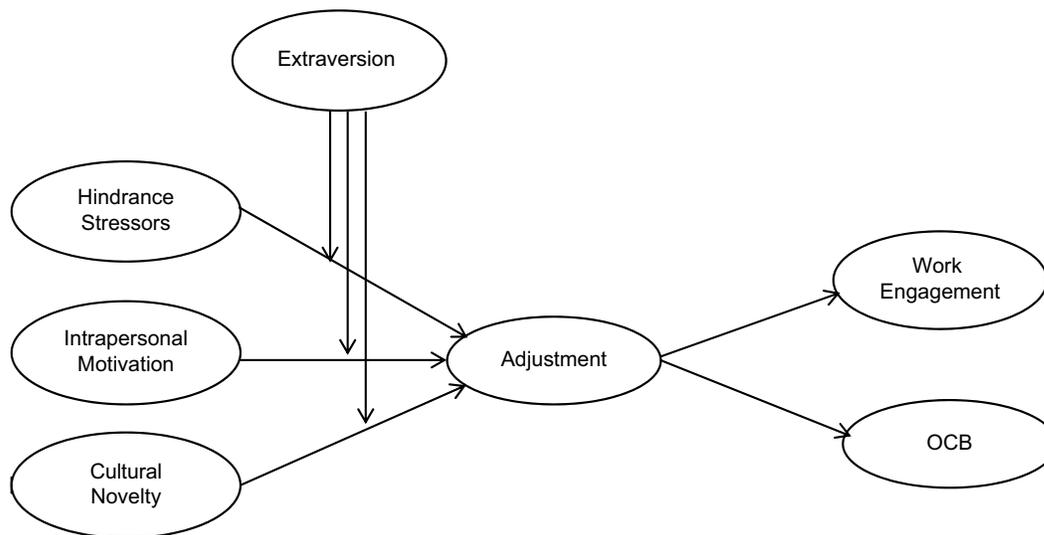
The conceptual framework of the study is depicted in Figure 1.

## Methods

### Sample and procedure

We gathered data using a sample of 458 eastern expatriates with current international assignments in different countries around the world. These expatriates were of Asian origin with less trajectory environment. The protocol was approved by the ethics committee of Government College University Faisalabad, Pakistan. A thorough explanation of the purpose and procedure of the study was offered to the participants. It was explained that participation was voluntary and that they could withdraw their participation or refuse to participate at any time without any penalty. Anonymity of the subjects was ensured. Written informed consent was obtained from the participants before participation in the survey.

As there is no directory offering the contact data of expatriates currently on international assignment, we struggled to individually identify contact details. We classified potential senior-level expatriates by amassing names and researching



**Figure 1** Conceptual framework.

contact details based on information given by the expatriates on online platforms. We also attached a personalized letter of invitation, briefly defining the aim of the study and inviting them to participate. From the 2,085 questionnaires sent out, with two reminders after two and four weeks, we received 458 usable datasets in response, which is a response rate of 21.9%. This response rate is favorable compared to other mail surveys targeting senior respondents.<sup>34</sup>

A total of 2,085 questionnaires were distributed to test the hypothesized model (see Figure 1). Our questionnaire contained 70 items. We received back 513 questionnaires. Some of the respondents (55) did not complete the full questionnaire, so we did not include those. Our final sample consisted of 458 expatriate responses. These 458 respondents consisted of 275 men (60%) and 183 women (40%) between the ages of 20 and above 50 ( $M=32.61$ ,  $SD=1.80$ ). A total of 42.8% (196) of the respondents were in the 20–30 year old age group; 26.2% (120) of the expatriates were 31–40 years old; 16.8% (77) expatriates belonged to the 41–50 age group; and 14.2% (65) of expatriates were above 50 years of age. These expatriates were hosted by 36 different countries (USA, UK, Canada, Germany, Australia etc.) and came from 26 different countries (Pakistan, India, China, Sri Lanka etc.). Most of them (204 expatriates) had lived and worked abroad for more than 15 years. Almost 46% held a master’s degree.

## Measures

All of the variables were measured on a 5-point Likert scale. The details of the items and Likert scale are provided below.

### Hindrance stressors

We assessed hindrance stressors via 5-item scale developed by Cavanaugh, Boswell, Roehling, Boudreau<sup>6</sup> measured on a 5-point Likert scale ranging from “1=produces no stress” to “5=produces a great deal of stress”. This scale was further used and validated by Firth, Chen, Kirkman, Kim<sup>17</sup> Sample items include “The lack of job security I have” and “The amount of red tape I need to go through to get my job done.”

### Intrapersonal motivation

We assessed intrapersonal motivation via a sixteen-item scale developed by Dishman, Ickes<sup>35</sup> Expatriates were asked to rate their responses on a five-point Likert scale ranging from “1=extremely uncharacteristic of me” to “5=extremely characteristic of me.” The example items for this measure are “I’m good at making decisions and standing by them” and “I’m good at keeping promises, especially the ones I make to myself.”

### Cultural novelty

This was measured with an eight-item scale developed by Torbiörn<sup>36</sup> Expatriates were asked to indicate on a 5-point Likert scale how similar or different the host country was compared to their home country (“1=highly similar”, “5=not at all similar”). This was further used and validated by Black, Stephens<sup>37</sup> The sample items for this measure are “Everyday customs that must be followed” and “General living conditions that I face daily.”

### Expatriate adjustment

We used Black, Stephens<sup>37</sup> 11-item scale, further used by Peltokorpi, Froese<sup>38</sup> and validated by many authors (eg,<sup>39,40</sup>). Respondents were requested to indicate how adjusted or unadjusted they were to the different conditions on a five-point Likert scale, ranging from “1=not adjusted at all” to “5=very well adjusted.” The sample items from this scale are “How adjusted are you to interacting with locals outside of work” and “How adjusted are you to supervising subordinate workers in this company.”

### Work engagement

Expatriate work engagement was measured with 9 items identified by Schaufeli, Bakker, Salanova,<sup>41</sup> which have been validated by Lanaj, Johnson, Barnes<sup>42</sup> The participants were invited to rate the degree to which they agreed with the statements on a 5-point Likert scale ranging from “1=strongly disagree” to “5=strongly agree.” The sample items for this scale are “When I am working, I feel full of energy” and “When I wake up in the morning, I look forward to start working.”

### Organizational citizenship behavior

OCB was measured with a sixteen-item scale developed by Podsakoff, MacKenzie<sup>43</sup> This is a modified version of the scale used and validated by Podsakoff, MacKenzie, Moorman, Fetter<sup>44</sup> The psychometric attributes of the previous version of this scale were exhibited by Podsakoff, MacKenzie, Moorman, Fetter<sup>44</sup> This was further validated by other researchers.<sup>45,46</sup> Here are some sample items for this scale “I willingly give of my time to help others out who have work-related problems” and “I do not take extra breaks.”

### Extraversion

Expatriates' extraversion was measured using five items from Goldberg<sup>47</sup> Big Five Inventory measured on a five-point Likert scale ranging from (“1=not at all descriptive of me” to “5=very descriptive of me”). This scale was further used by Rubin, Munz, Bommer<sup>48</sup> The sample items include “I start conversations” and “I talk to a lot of different people at parties.”

## Results

### Data analysis technique

In order to test the hypotheses presented in our conceptual framework we used a two-staged analytical approach.<sup>49</sup> First, we established reliability and validity of the constructs by

analyzing a measurement model consisting of all the constructs and their respective indicators. Second, a structural model was analyzed to test the proposed hypotheses.

Owing to the cross-sectional nature of our study, we undertook different procedural remedies in order to reduce the potential problem of common method variance (CMV). Respondents were instructed to answer the questions as honestly as possible. Moreover, it was explained to the respondents that anonymity will be maintained at all levels. These steps served to reduce the social desirability bias.<sup>50</sup> Some of the items were reverse coded. Dependent and independent variables were positioned at different places in the questionnaire. These steps further reduced the risk of CMV.<sup>50,51</sup> Furthermore, to rule out the presence of CMV, we used Harman single-factor test. The single factor explained only 14% of the total variance in our data, which is within acceptable range.<sup>50</sup>

### Confirmatory factor analysis

In the first step of data analysis, confirmatory factor analysis (CFA) was performed to establish convergent and discriminant validity of the proposed model using Amos 23 software. Owing to large number of indicators per construct, we used item parceling approach to simplify our model.<sup>52</sup> Item parceling offers both psychometric and modeling benefits. It requires only a few number of parameters to be estimated which results in relatively stable estimates,<sup>52</sup> smaller standard errors<sup>53</sup> and a better model fit.<sup>54</sup> Item parceling is recommended by previous studies, as it will not change the content domain of the construct and can achieve a more parsimonious SEM model.<sup>53,55</sup> Unidimensionality, is an imperative requirement for item parceling.<sup>53</sup> Whereas, all our scales were adapted from previous studies and their unidimensionality has been well established so potential biasness in estimates was not an issue. Following the random algorithm, each item was randomly assigned to a parcel.<sup>52</sup> Items assigned to each parcel were summed and averaged. In this way, two parcels were created for hindrance stressors and three parcels were created each for cultural novelty, intrapersonal motivation, adjustment, work engagement and OCB. Extraversion was not parceled, as it had only 5 items; so, it was measured with individual items. The results of CFA showed that measurement model achieved a good fit to data ( $\chi^2$  (114)=201.76,  $p<0.01$ ;  $\chi^2/DF=1.77$ ; RMSEA=0.041; SRMR=0.037; TLI=0.97; CFI=0.98). Inspection of factor loadings of all the constructs indicated that majority of the standardized factor loadings were significant and greater than 0.70. A few factor loadings were not significant and were removed (one parcel was removed each for intrapersonal motivation

and work engagement and two items from extraversion). Further, alpha reliabilities (0.74–0.95) and construct reliabilities (0.70–0.92) were above 0.70, and average variances extracted (0.53–0.79) were above 0.50. These results provided evidence that the measurement model achieved convergent validity. Reliability is also established as Cronbach's alpha values and CR values were greater than 0.70. These results are reported in Table 1.

Discriminant validity was assessed by comparing the original seven-factor model with various alternative models that were created by combining different constructs. Original seven-factor measurement model showed a superior fit to data as compared to five-factor model (created by combining cultural novelty with hindrance stressor and work engagement with OCB) as well as to three-factor model (created by combining cultural novelty with hindrance stressor, intrapersonal motivation with adjustment and extraversion, and work engagement with OCB). Superiority of model fit of original seven factor model was established by the fact that chi-square difference test showed a significant difference. Furthermore, fit indices of seven-factor model showed an excellent fit;

while, those of alternative models were not in acceptable range (see Table 2). Moreover, Fornell, Larcker<sup>56</sup> criterion was used as a more conservative criterion to establish discriminant validity. This criterion compares the square root of AVE with inter-construct correlations. Square root of AVE for a construct should be greater than its correlation with all the other constructs. Square roots of AVE for all the constructs are reported on diagonals in Table 3. Upon careful examination, it can be evidenced that square root of AVE for each construct is greater than correlations of that specific construct with all other constructs. Thus, discriminant validity was established.

## Descriptive statistics and correlations

Table 3 presents means, SD, and correlations among study constructs. Hindrance stressors was negatively correlated with adjustment ( $-0.34, p < 0.01$ ) and OCB ( $-0.03, NS$ ); and was positively correlated with work engagement ( $0.36, p < 0.05$ ). Cultural novelty did not have significant correlation with adjustment, work engagement and OCB. Intrapersonal motivation was found to be positively

**Table 1** Factor loadings, cronbach's alpha ( $\alpha$ ), composite reliability, and AVE

Variables	Items (Parcels)	Loading	Cronbach's $\alpha^*$	Composite Reliability	AVE
Hindrance Stressors	5 (2)	0.70–0.98	0.84 (0.81)	0.84	0.73
Intrapersonal Motivation	16 (3)	0.73–0.74	0.75 (0.70)	0.70	0.53
Cultural Novelty	8 (3)	0.78–0.94	0.90 (0.88)	0.89	0.72
Adjustment	10 (3)	0.83–0.88	0.91 (0.89)	0.89	0.74
Work Engagement	9 (3)	0.67–0.90	0.74 (0.76)	0.77	0.63
Organizational Citizenship Behavior	16 (3)	0.88–0.91	0.95 (0.92)	0.92	0.79
Extraversion	5 (–)	0.81–0.83	0.84 (0.86)	0.86	0.68

**Note:** \*Cronbach's  $\alpha$  for scale parcels are provided in parentheses.

**Abbreviation:** AVE, average variance extracted.

**Table 2** Comparison of alternative measurement models for main constructs

Models	Factors	$\chi^2$	df	$\chi^2/df$	$\Delta\chi^2$	RMSEA	SRMR	TLI	CFI
Hypothesized seven-factor solution	Hindrance stressors, intrapersonal motivation, cultural novelty, adjustment, work engagement, Organizational Citizenship Behavior, extraversion	201.76	114	1.77		0.04	0.04	0.97	0.98
Five-factor solution	Hindrance stressors + cultural novelty, intrapersonal motivation, adjustment, work engagement + Organizational Citizenship Behavior, extraversion	377.55	121	3.12	175.79***	0.07	0.11	0.93	0.94
Three-factor solution	Hindrance stressors + cultural novelty, intrapersonal motivation + adjustment + extraversion, work engagement + Organizational Citizenship Behavior	816.74	126	6.48	439.19***	0.11	0.13	0.82	0.85

**Note:** \*\*\* $p < 0.01$ .

**Abbreviations:** df, degrees of freedom; RMSEA, root mean square error of approximation; SRMR, standardized root mean square residual; TLI, Tucker-Lewis index; CFI, comparative fit index.

**Table 3** Validation of the measurement model - discriminant validity

	Constructs	M	SD	1	2	3	4	5	6	7
1	OCB	3.40	0.80	<b>0.89</b>						
2	Hindrance stressors	3.39	1.01	-0.03	<b>0.85</b>					
3	Intrapersonal motivation	3.74	0.62	-0.08	0.43**	<b>0.73</b>				
4	Adjustment	3.59	0.85	0.06	-0.34**	0.01	<b>0.86</b>			
5	Work engagement	3.78	0.71	0.01	0.36*	0.63**	0.09	<b>0.80</b>		
6	Extraversion	3.99	0.91	-0.02	0.49**	0.53**	-0.10	0.80**	<b>0.82</b>	
7	Cultural novelty	3.51	1.00	0.00	-0.07	0.02	-0.01	-0.03	-0.04	<b>0.85</b>

**Notes:** N=458. Diagonal represents the square root of average variance extracted (AVE); while below the diagonal the estimated correlations are represented. \* $p < 0.05$ , \*\* $p < 0.01$ .

**Abbreviation:** OCB, organizational citizenship behavior.

correlated with work engagement (0.63,  $p < 0.01$ ) whereas it had non-significant correlation with adjustment and OCB. Adjustment had positive correlation with work engagement and OCB (0.09 and 0.06 respectively, NS).

## Structural model

Next, structural model was analyzed to find the support for our hypotheses using latent variable structural equation modeling (LV-SEM). A fully mediated model was run including paths from IVs to MV and from MV to DVs. No direct paths from IVs to DVs were included. The model exhibited an acceptable fit to the data ( $\chi^2(82) = 279.14$ ,  $p < 0.01$ ;  $\chi^2/DF = 3.40$ ; RMSEA = 0.07, SRMR = 0.09, CFI = 0.95, TLI = 0.93). Table 4 presents the results of hypotheses testing. Hypothesis 1 proposed a negative relationship between hindrance stressors and adjustment. Results showed that the effect of hindrance stressors on adjustment was negative and significant ( $\beta = -0.39$ ,  $p < 0.01$ ), thus lending support to Hypothesis 1. In Hypothesis 2, it was proposed that intrapersonal motivation would affect adjustment positively. This was found significant ( $\beta = 0.22$ ,  $p < 0.01$ ); thus, hypothesis 2 was also supported. Hypothesis 3 stated that cultural novelty was negatively associated with adjustment. This effect, however, was not found significant ( $\beta = -0.04$ , NS). Hypothesis 3 was not supported. Further, hypotheses 4 and 5 indicated the positive association of adjustment with

work engagement and OCB respectively. The results supported hypothesis 4 showing the significant effect of adjustment on work engagement ( $\beta = 0.26$ ,  $p < 0.01$ ) but hypothesis 5 was not supported ( $\beta = 0.05$ , NS). These results are reported in Table 4.

## Mediation analysis

We used bootstrapping procedures supplied in Amos 23.0 to test the mediation hypotheses. Hypotheses 6a and 6b predicted that adjustment mediates the relationships of hindrance stressors, intrapersonal motivation, and cultural novelty with work engagement and OCB respectively.

Path estimate of an indirect effect can be obtained by multiplying path a (path from IV to MV) and path b (path from MV to DV). Path values for indirect effects are provided in Table 5 along with bootstrap standard errors and bias corrected 90% confidence intervals (CI) estimates using bootstrap procedures. Bias corrected 90% CI excluding zero indicate that indirect effect is significant at 0.10 level. The results of mediation analyses showed that adjustment significantly mediated the relationship between hindrance stressors and work engagement ( $\beta = -0.10$ ,  $p < 0.05$ ). The indirect effect between intrapersonal motivation and work engagement was significant at 0.10 level (0.06,  $p < 0.10$ ). Adjustment, however, did not significantly mediate the relationship between cultural novelty and

**Table 4** Structural model – hypotheses test results

Hypothesis	Path	Estimate	SE	t	p
H1	Hindrance Stressors → Adjustment	-0.39**	0.06	-6.93	<0.001
H2	Intrapersonal Motivation → Adjustment	0.22**	0.08	2.87	0.004
H3	Cultural Novelty → Adjustment	-0.04	0.04	-0.87	0.385
H4	Adjustment → Work Engagement	0.26**	0.06	4.36	<0.001
H5	Adjustment → OCB	0.05	0.05	1.07	0.285

**Notes:** N=458. Unstandardized beta coefficients are reported. \*\* $p < 0.01$ .

**Table 5** Bootstrap estimates of the mediation effect of adjustment

	Path: IV → MV → DV	Product of coefficients		BC 90% CI <sup>a</sup>		p
		Indirect effect	Bootstrap SE	Lower	Upper	
H 6a	HS → adj → WE	-0.39×0.26=-0.101**	0.027	-0.147	-0.061	0.021
	IM → adj → WE	0.22×0.26=0.057*	0.033	0.005	0.102	0.056
	CN → adj → WE	-0.04×0.26=-0.010	0.011	-0.030	0.010	0.453
H 6b	HS → adj → OCB	-0.39×0.05=-0.020	0.019	-0.051	0.014	0.308
	IM → adj → OCB	0.22×0.05=0.011	0.013	-0.008	0.037	0.275
	CN → adj → OCB	-0.04×0.05=-0.002	0.003	-0.013	0.001	0.229

Notes: N=458. \*p<0.10, \*\*p<0.05

<sup>a</sup>This 90% confidence interval does not include zero; therefore, the mediating effect is significant at p<0.10. Unstandardized estimates are reported.

Abbreviations: IV, independent variable; MV, mediating variable; DV, dependent variable; SE, standard error; BC, bias corrected; CI, confidence interval; HS, hindrance stressors; CN, cultural novelty; WE, work engagement; IM, intrapersonal motivation; OCB, organizational citizenship behavior; adj, adjustment.

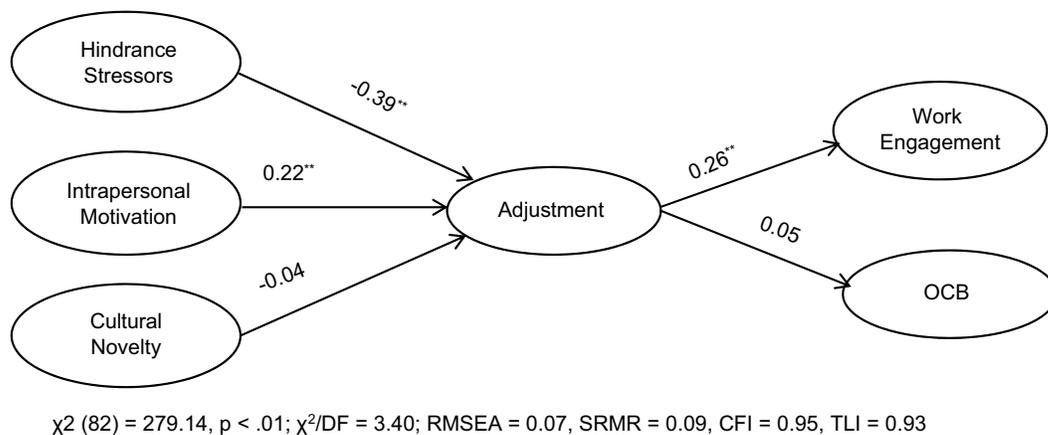
work engagement as this bias corrected CI included zero. These results lend partial support to hypotheses 6a. Hypotheses 6b was not supported as the results indicated that adjustment did not significantly mediate the relationship between all three IVs and OCB. Overall results of structural model are also depicted in Figure 2.

### Moderation analysis: extraversion as a moderator

In our model, personality characteristic “extraversion” was theorized to act as a moderator that moderates the relationship between all three antecedents (hindrance stressors, intrapersonal motivation and cultural novelty) and adjustment. To test the moderating effect, we used The PROCESS macro for SPSS.<sup>57</sup> Hypotheses 7a, 7b, and 7c predicted that extraversion moderates the relationship between hindrance stressors and adjustment; between intrapersonal motivation and adjustment, and between cultural novelty and adjustment respectively. The

results showed that moderation was significant for hindrance stressors (-0.111, p<0.05). The moderating effect was significant for intrapersonal motivation at 0.10 level (-0.114, p<0.10). The results were, however, contradictory to our hypotheses as the direction of moderating effect was opposite to the hypothesized direction. The interaction term was non-significant for cultural novelty; hypothesis 7c, thus, was not supported. These results are reported in Tables 6 and 7.

Following the steps suggested by Aiken, West, Reno,<sup>58</sup> we further plotted the significant interacting effects by computing slopes 1 SD above and below the mean of extraversion. These are shown in Figures 3 and 4. Contradictory to as proposed in hypothesis 7a, hindrance stressors had a stronger negative relationship with adjustment when the degree of extraversion was high. Interestingly, hypothesis 7b results were also in contradiction to the hypothesis; intrapersonal motivation had a weaker positive relationship with adjustment when the degree of extraversion was high.



**Figure 2** Path estimates.

$\chi^2 (82)=279.14, p<0.01; \chi^2/DF=3.40; RMSEA=0.07, SRMR=0.09, CFI=0.95, TLI=0.93$

\*p<0.05, \*\*p<0.01.

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**Table 6** Summary of hierarchical regression analyses (interaction of hindrance stressors and extraversion)

Variables	Dependent Variable							
	Adjustment							
	Model 1				Model 2			
Main Effects	B	SE	beta	t	B	SE	beta	t
Hindrance Stressors	-0.27***	0.04	-0.32	-6.77	0.16	0.18	0.19	0.89
Extraversion	0.13***	0.04	0.13	2.81	0.50***	0.16	0.52	3.12
Interactions								
Hindrance Stressor *Extraversion					-0.11**	0.05	-0.73	-2.43
Overall R	0.31				0.32			
Overall R <sup>2</sup>	0.09				0.10			
Overall Model F	23.30***				17.67***			
ΔR <sup>2</sup>	0.01							

Notes: \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Table 7** Summary of hierarchical regression analyses (interaction of intrapersonal motivation and extraversion)

Variables	Dependent Variable							
	Adjustment							
	Model 1				Model 2			
Main Effects	B	SE	beta	t	B	SE	beta	t
Intrapersonal Motivation	0.42***	0.07	0.30	6.45	0.88***	0.29	0.64	3.03
Extraversion	-0.05	0.05	-0.05	-1.14	0.37	0.26	0.38	1.41
Interactions								
Intrapersonal Motivation *Extraversion					-0.11*	0.07	-0.63	-1.63
Overall R	0.29				0.30			
Overall R <sup>2</sup>	0.08				0.09			
Overall Model F	21.18***				15.06***			
ΔR <sup>2</sup>	0.01							

Notes: \* $p < 0.10$ , \*\* $p < 0.01$ .

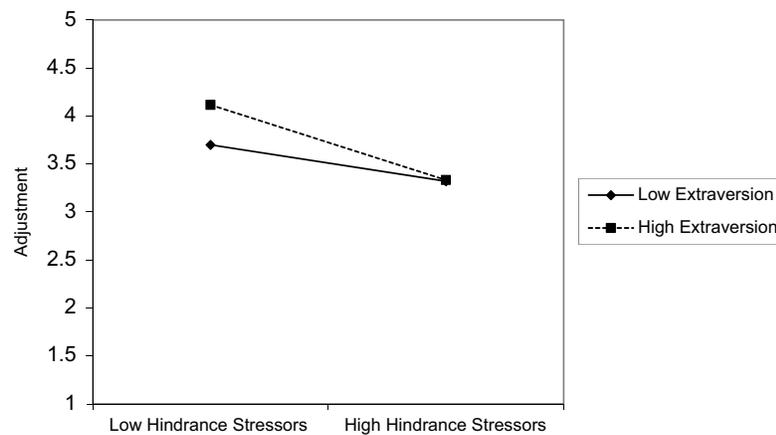
## Discussion

Our findings support the first hypothesis that hindrance stressors play a negative role and create hurdles in achieving adjustment. The same results were obtained by Min, Kim, Lee<sup>5</sup> in a different context of goal achievement. On the contrary, LePine, Podsakoff, LePine<sup>7</sup> found in their meta-analysis that with the passage of time, these stressors become less effective at playing a negative role in adjustment. This provides the solution to our research problem of investigating the role of hindrance stressors in maladjustment. Thus, our results provide us with clear understandings about the nature of hindrance stressors as they relate to adjustment.

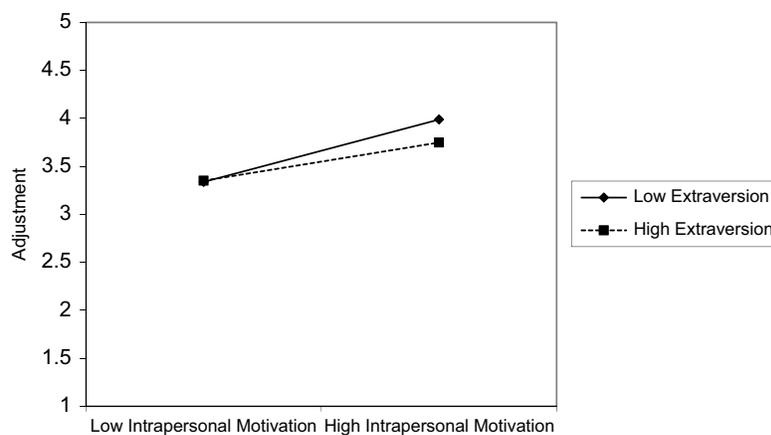
Our second hypothesis relates to the positive association of intrapersonal motivation with expatriate adjustment. The

findings provide significant support for this hypothesis. Our results are not very different from past studies by Min, Kim, Lee<sup>5</sup> and Harrison, Shaffer, Bhaskar-Shrinivas<sup>18</sup> We found that more intrapersonally motivated employees are needed for international assignments, as they take less time for adjustment to be effective in their assignment completion.

The results of our study showed the negative association of cultural novelty with adjustment; however this negative association was not significant and did not support our third hypothesis. This is somewhat contradictory with past findings of Bauer, Bodner, Erdogan, Truxillo, Tucker<sup>59</sup> and Selmer<sup>60</sup> However, this is consistent to the work of Ang, Van Dyne, Koh, Ng, Templer, Tay, Chandrasekar<sup>21</sup> They stated that culturally distinct employees work harder and



**Figure 3** Moderating effect of extraversion on the relationship between hindrance stressors and adjustment.



**Figure 4** Moderating effect of extraversion on the relationship between intrapersonal motivation and adjustment.

are more likely to achieve adjustment. Thus, these non-significant results may be due to overwhelming effects of other aspects besides cultural novelty.

One of our research objectives was to explore the mediating role of adjustment between predictors (hindrance stressors, intrapersonal motivation, and cultural novelty) and criterion variables (work engagement and OCB). Data analysis depicted partially fruitful results in achieving these objectives. The results show that adjustment plays a significant mediating role in bridging the negative association of hindrance stressors and promoting the positive influence of intrapersonal motivation on work engagement but adjustment did not play significant mediating role for cultural novelty to attain work engagement. On the contrary the adjustment did not provide significant mediation to reach OCB of expatriates. All these results provided partial support for hypothesis 6a and did not provide significant support for hypothesis 6b. This may be due to the non-significant association of adjustment with OCB. There are very sparse

studies on expatriates OCB<sup>61,62</sup> and these studies also depict somewhat same results for OCB.

A main objective of the research was to uncover the role of the personality of the expatriates in achieving their work behaviors such as work engagement and OCB. Trait activation theory talks about the activation of the trait relevant to the situation. We took extraversion as a personality trait and investigated whether extroverted expatriates constitute the talent pool and successfully achieve their desired work behaviors (work engagement and OCB).

These findings provide a paradox role of extraversion for expatriates in their international assignments. According to trait activation theory, when fighting with a novel culture and hindrance stressors, extroverted employees do not need to exert a lot of effort to adjust; and they can, thus, more easily achieve their work behavior and engage in their assignment than non-extroverted employees.

The role of personality traits cannot be ignored in the success of international scenarios in which employees gain

more advantage from their traits than from their knowledge. Our results provided contradictory support for hypotheses 7a and 7b regarding the moderating role of the extraversion trait. One of our moderation hypotheses 7c was not supported. This may be due to non-significant relationship of cultural novelty with adjustment. Our results are inconsistent with past studies<sup>33</sup> investigating the role of expatriate personality in the context of a distinct working environment.

Our findings also provide contradictory results in relation to past investigations<sup>63,64</sup> that found that the extraversion trait for expatriates is of crucial importance for successful work behavior. Surprisingly, we found the relationship between intrapersonal motivation and adjustment to be weaker for more extroverted expatriates. This may be because of the sociable and gregarious nature of extroverted people; as in a unique and novel culture, extroverted expatriates are unable to find familiar social settings. Hence, they are deprived of external social cues and being extrovert their internal resources are not enough to get adjusted in a different environment. In contrast, less extroverted expatriates do not derive their motivation from external social environment and, thus, they can adjust in response to their intrapersonal motivation. Similarly, in case of hindrance stressors we found its relationship with adjustment to be more negative for more extroverted expatriates. As these highly extroverted expatriates are residing in a socially and culturally distant setting, they cannot accumulate social resources necessary to cope with hindrance stressors; hence, maladjustment would be induced for them easily in response to hindrance stressors. For less extroverted (or introvert) expatriates, this negative relationship would be weaker as they mightily depend on their inner-self and hindrance stressors would affect them only to a limited extent.

The reason may be that the expatriates belonged to the less trajectory environment. They had developed their traits according to the norms of that culture and context. When they face extra trajectory environment they might not practice their trait effectively relevant to the context. That could result in less negative effect of hindrance stressors and more positive effect of intrapersonal motivation when extraversion is low.

## Theoretical implications

Our study extends earlier empirical research in several important ways.

First, with this study, we contribute to the expatriation literature by theorizing about the mechanisms by which activating a trait can help expatriates in their task performance.<sup>14</sup> Our results also showed a weaker negative relationship

between hindrance stressors and adjustment for the expatriates low in extraversion using a “trait-relevant” situation.<sup>14</sup>

Second, this research improved the knowledge of the function of expatriate intrapersonal motivation in a foreign cultural context. We demarcated moderating and mediating phenomena that elucidate when and how intrapersonal motivation is more and less likely to increase work engagement. Though past studies have evoked only one dimension of adjustment—work adjustment playing the role of mediator between expatriate motivation and work performance<sup>15,31</sup>—our study design helped us to demonstrate more clearly that intrapersonal motivation envisages work engagement through adjustment.

Our results provide inconsistent role of extraversion as identified by the trait activation theory in a motivational framework as indicated by Tett, Burnett<sup>14</sup> Intrapersonal motivation showed a significant relationship with trait “extraversion” and adjustment in the contextual framework of expatriation. Our results in this regard are not similar to those of Chen, Kirkman, Kim, Farh, Tangirala<sup>65</sup> They stated in their research that trait activation theory is applicable in a motivational framework and also considered intrinsic motivation for this.<sup>65</sup> Thus, our research is opening an endorsing avenue for the application of this theory in a motivational framework.

Third, responding to the calls for investigating the function of context in expatriate effectiveness models,<sup>18</sup> the study results showed that cultural novelty did not serve as a significant contextual boundary condition for foreign-cultural adjustment consequences. This is inconsistent with trait activation theory.<sup>14</sup> These study results opened new avenue to our existing theory that greater levels of trait activation (extraversion) both support and capture more of the expatriates’ role in adjusting the situation to get better engaged in the work. These results are thought provoking when talk about “situation relevant” context.

We also offer personality-level research on the well-being of expatriates<sup>18</sup> with regard to wider considerations of how situational and personal factors combine to promote expatriates’ performance.

## Managerial implications

This research also offers insights relating to mechanisms that can lead to enhanced expatriate effectiveness.

First, the results suggest that extraversion might play a significant part in increasing adjustment and work engagement when they are trained by a mentor keeping in mind the context for practicing the suitable trait. This

study provides insights that the same trait cannot be practiced equally in different context where the same word has different meanings, the same indicators have different direction and the same norms have different backgrounds. So the same trait cannot be practiced in the same way in different context. This is important because extraversion is a dynamic yet somewhat malleable competency that leads to success in cross-cultural situations.<sup>21</sup> Managers may consider activating this relevant trait in expatriates in novel cultural contexts provided by international assignments (ie, by focusing on advantages related to foreign projects and universal practices), along with appointing more suitable and trait-relevant expatriates for international assignments.

Second, this research recommends that when expatriates are sent to new situations, this trait is likely to become more valuable. Our findings suggest that activating this trait might shield against low expatriate engagement. One tactic through which firms can promote this trait is by employing high-performance personality test systems.

In general this study provides more insights for managers to understand about expatriation. Moreover this study is useful specifically for human resource managers to develop effective expatriation programs in order to avoid failure cases. They can assign a mentor to train expatriates keeping in mind the personality traits. It can also provide help in selection process of expatriates as identified in the meta-analysis.<sup>33</sup>

## Limitations and future research

In addition to its diverse strengths, this research has a few limitations that open productive avenues for further studies. Primarily, along with our cross-sectional research design, we practiced an observational (eg, survey) study design that prohibited any implication of significant causality. Indeed, Peltokorpi, Yamao<sup>66</sup> identified a deficiency in longitudinal research in the context of expatriates. Using a longitudinal study design to measure expatriate adjustment over various time periods might significantly extend the study findings by placing more importance on potential influences of expatriate intrapersonal motivation and skills along with the cultural and social contexts on adjustment procedures that likely change over time.

Furthermore, despite the effort to increase the sample size our study yielded a low response rate like many other studies targeting expatriates as respondents. The future studies may generalize the results with getting a larger sample size.

Beyond this, our theoretical lens for this study (trait activation theory) led our analysis to focus on external factors. This new understanding as to how and why expatriate situation relevant context (cultural novelty) did not support the theory is likely to be developed in future research.

Another limitation is that, despite our assumption that expatriate intrapersonal motivation supports the allocation of more resources to adaptation and performance, self-regulation of effort was not actually measured in this research. However, in proportion to more basic studies on self-regulation and intrapersonal motivation,<sup>67</sup> the results did not support our hypothesized contextual effects (cultural novelty) on expatriate endeavors.

Furthermore, our study only focused on the individual level. This may be one side of the picture. Using a multilevel approach in future research may broaden our understanding regarding expatriate managers. This future research may involve host country and home country support to examine expatriates' performance.

Finally, though our study results relating to contextual impacts show potential, further powerful contextual effects on expatriate effectiveness might well present at different levels of investigation, for example, group climate, direct relations with leaders, or the degree to which expatriates perform with teams belonging to diverse cultures. Along with our hypothesized approach, it might be significant to identify more contextual factors that can increase expatriate performance, either directly or through interactions with specific personality traits.

## Conclusion

Beginning with the dominant paradigm of research on expatriates in which stress and a focus on the individual have always been the main foci, we endeavored to add to the expatriate literature by identifying issues in the expatriate context that influence the degree to which cultural novelty, hindrance stressors, and intrapersonal motivation affect adjustment as a mediator, with work engagement and OCB as target variables. Surprisingly, we found paradox role of extraversion in context of trait activation theory and we invite future researchers to explore it further. We hope that our unique theoretical contributions will inspire further multi-level, longitudinally oriented study designs to help better elucidate the myriad of impacts on expatriate adjustment.

## Disclosure

The authors report no conflicts of interest in this work.

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