

# The Mediating Role of Cultural Intelligence in the Relationship between the Openness to Experience Personality Trait and Job Satisfaction among Expatriates

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## Abstract

This study has explored the role of cultural intelligence as a mediator in the relationship between the openness to experience personality trait and job satisfaction among expatriates. Expatriates were required to fill up online questionnaires to measure all the three variables. This study used a regression and bootstrapping analysis to test the hypothesis in a sample of 265 expatriates. The result indicates that the variance in job satisfaction accountable to the openness to experience personality trait is fully mediated through cultural intelligence. This finding provides evidence that possessing cultural intelligence acts as a mechanism in which an open expatriate could feel satisfied with his or her job. Moreover, this study discusses the practical implications especially for multinational companies and suggests some future research directions.

## Peran Kecerdasan Budaya sebagai Mediator dalam Hubungan antara Kepribadian *Openness to Experience* terhadap Kepuasan Kerja Ekspatriat

### Abstrak

Penelitian ini meneliti dampak dari peran kecerdasan budaya sebagai mediator dalam hubungan antara kepribadian *openness to experience* terhadap kepuasan kerja ekspatriat. Ekspatriat mengisi kuesioner secara *online* untuk mengukur ketiga variabel. Penelitian ini menggunakan analisis regresi dan *bootstrapping* untuk menguji hipotesis dari 265 ekspatriat. Hasil penelitian menunjukkan bahwa kecerdasan budaya dapat memediasi dalam hubungan antara kepribadian *openness to experience* terhadap kepuasan kerja secara penuh. Hal itu berarti bahwa kecerdasan budaya adalah suatu mekanisme yang berperan pada ekspatriat yang memiliki kepribadian *openness to experience* untuk merasakan puas dengan pekerjaannya. Selain itu, penelitian ini membahas implikasi praktis terutama untuk perusahaan multinasional dan menyarankan beberapa penelitian selanjutnya.

*Keywords: cultural intelligence, expatriates, job satisfaction, mediation, openness to experience personality trait*

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## 1. Introduction

Foreign Direct Investment is one of the impacts of globalization that drives multinational companies to invest abroad so that they can develop their international business network (Indriastuti, 2005). In order to conduct this smoothly, multinational companies hire expatriates as employees to transfer their knowledge and skills so that they can manage and build new international companies (Froese & Peltokorpi, 2011; Huang, Chi &

Lawler, 2005; Wang, Tong, Chen, & Kim, 2009). Expatriates are defined as individuals who leave their country of origin to live and work in another country for one up to several years as part of their duties within an organization (Albrecht, Dilchert, Deller, & Paulus, 2014).

The importance of expatriates for organizations can be seen from the increasing number of expatriates deployed for a global duty (Napolitano, 2015). According to Napolitano (2015), the number of expatriates throughout

the world reached around 50.5 million in 2013 and is expected to reach around 60 million by 2017. Therefore, it can be said that expatriates are crucial to multinational companies.

Given the large number of expatriates deployed for a global duty, job satisfaction (how much an individual feels satisfied with his or her job, Spector, 1997) among expatriates is a matter of concern. Job satisfaction is very important as it is related to company productivity (Black & Mendenhall, 1990), the expatriates' own performance (Black & Gregersen, 1999), declining desire to quit their jobs (Goh, Lee, Chan, & Chan, 2015), declining stress levels (Cheng, Liau, Tsai, & Chang, 2015), and declining emotional fatigue (Hayes, Douglas, & Bonner, 2015).

One of the factors that influence job satisfaction is personality (Cleare, 2013). Personality is the dimension of differences within an individual in showing thought patterns, feelings, and behaviors that are consistent (stable from time to time; McCrae, 2002). Personality is highly important in relation to job satisfaction as it affects the values and attitude of individuals toward their work which influences their job satisfaction (Olver & Mooradian, 2003). Personality can be categorized into five dimensions called the Big Five (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism; Goldberg, 1990; McCrae & John, 1992). Research on personality shows that the personality traits of conscientiousness, extraversion, agreeableness, and neuroticism can clearly predict job satisfaction (Judge, Heller, & Mount, 2002). Among the five dimensions of personality, openness to experience is the most controversial as this trait remains vague and requires further research (Hough & Ones, 2001, in Albrecht *et al.*, 2014). The vagueness is reflected in the differences in results between research conducted by Cohrs, Abele and Dette (2006), and Judge *et al.* (2002) on job satisfaction. Cohrs *et al.* (2006) discovers that openness to experience is an excellent predictor of job satisfaction, while the result of meta-analysis conducted by Judge *et al.* (2002) indicates the opposite.

To solve this problem, the researcher proposes the role of a mediator in the relationship between the openness to experience personality trait and job satisfaction. The role of a mediator is based on the opinions of several researchers (Barrick & Mount, 1991; Bing & Lounsbury, 2000; Oakes, Ferris, Martocchio, Buckley, & Broach, 2001) that openness to experience will have a positive implication in work aspects or results if it exists in certain conditions or criteria (such as in skills acquisition). Therefore, cultural intelligence can play a mediating role in the relationship. Cultural intelligence is defined as an individual's ability to effectively adapt to a new cultural context (Ang, Dyne, Koh, Ng, Templer, Tay, & Chandrasekar, 2007). Cultural intelligence is commonly

viewed as a construct involving the four dimensions of (i) motivation, (ii) cognitive, (iii) metacognitive and (iv) behavior (Ang *et al.*, 2007).

Apart from the opinions of Barrick & Mount (1991), Bing & Lounsbury (2000), and Oakes *et al.* (2001), the idea of cultural intelligence as a mediator is based on three lines of reasoning that (i) openness to experience predicts cultural intelligence (Ang, Dyne, & Koh, 2006); (ii) cultural intelligence can predict job satisfaction (Bucker, Furrer, Poutsma, & Buyens, 2014; Livermore, 2011; Sims, 2011); and (iii) cultural intelligence has previously been researched as a mediator (Oolders, Chernyshenko, & Stark, 2008). The following further explains the three lines of reasoning:

Firstly, openness to experience can predict cultural intelligence. Ang *et al.* (2006) studied the relationship between the Big Five personality traits and the dimensions of cultural intelligence among college students in Singapore. The research using the regression analysis reveals that openness to experience is the only personality trait that can predict the four dimensions of cultural intelligence. Secondly, cultural intelligence can predict job satisfaction. Cultural intelligence can influence individuals in addressing cross-cultural issues so that they are not fatigued when dealing with interactions and can experience higher job satisfaction (Livermore, 2011). This explanation is aligned with research conducted by Bucker *et al.* (2014) and Sims (2011) which proves that cultural intelligence can affect job satisfaction. Thirdly, cultural intelligence has previously been researched as a mediator. Oolders *et al.* (2008) studied the mediating role of cultural intelligence in the relationship between openness to experience and adaptive performance (an individual's ability to alter behaviors in adapting to the demands of a new environment, event or situation; Pulakos, Arad, Donovan, & Plamondon, 2000). The result of the research using the regression analysis supports the idea that cultural intelligence can play a mediating role in the relationship between openness to experience and adaptive performance.

Information regarding the mediating role of cultural intelligence in the relationship between openness to experience and job satisfaction is quite comprehensive. Furthermore, Rose, Ramalu, Uli, and Kumar (2010) asserts that the effectiveness of expatriate workers can be measured through the variable of job satisfaction. Hence, this research aims to discover the impact of cultural intelligence as a mediator in the relationship between the openness to experience personality trait and job satisfaction among expatriates.

**The role of the openness to experience personality trait in explaining cultural intelligence.** McCrae (2002) formulated that personality is the dimension of differences within an individual in showing thought

patterns, feelings, and behaviors that are consistent (stable from time to time). Researchers agree that nearly all personalities can be categorized based on the model of “Big Five” personality factors (Goldberg, 1990; Hogan, Higan, & Roberts, 1996). The five dimensions of personality are highly relevant across different cultures (McCrae & Costa, 1997). The five personality factors are conscientiousness, extraversion, agreeableness, neuroticism, and openness to experience.

Individuals who are open to experience have a vivid imagination, pay attention to feelings, prefer to do many things or tasks, are willing to question authority, are able to accept unconventional ideas and values, and have high curiosity (Ang *et al.*, 2006; Judge *et al.*, 2002). Individuals with low scores on openness to experience tend to have more conventional behavior and conservative appearance. These individuals prefer the old rather than the new. In addition, studies have shown a connection between openness to experience and success in consultations (Hamilton, 1988) and trainings (Barrick & Mount, 1991). McCrae and Costa (1997) as well as Raja, Johns, and Ntalianis (2004) describe that the openness to experience personality trait is highly ambiguous. This can be seen from the differences in results between research conducted by Cohrs *et al.* (2006) and Judge *et al.* (2002). Cohrs *et al.* (2006) discover that openness to experience can predict work satisfaction. However, Judge *et al.* (2002) discover that the personality trait cannot predict job satisfaction. Therefore, Raja *et al.* (2004) explain openness to experience still requires further research in order to study the impact of the personality traits on organizational performance.

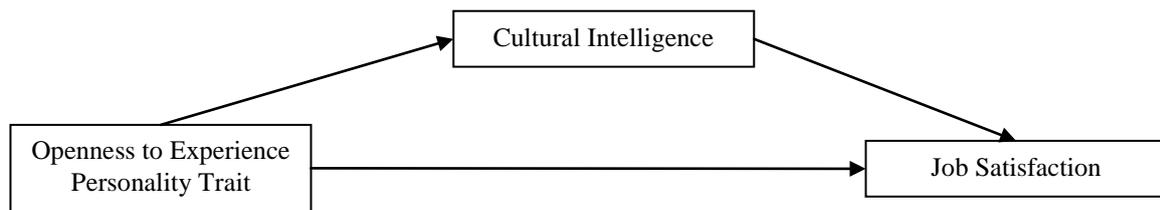
Cultural intelligence is defined by Earley and Ang (2003, in Ang *et al.*, 2007) as an individual’s ability to effectively adapt to a new cultural context. This refers to the individual’s ability to effectively interact with other people from different cultural backgrounds and in different cultural contexts (Brislin, Worthley, & MacNab, 2006). It is the ability to adapt and adjust oneself to one’s environment and to function effectively in culturally diverse situations (Ang, Dyne, Koh, Ng, Templer, Tay, & Chandrasekar, 2007). Cultural intelligence consists of four dimensions: (i) metacognitive; (ii) cognitive; (iii) motivational; and (iv) behavioral (Ang, Dyne, & Tan, 2010; Ang *et al.*, 2007). The first dimension is metacognitive, which refers to an individual’s awareness level during cross-cultural interaction. Metacognitive dimension involves a higher cognitive strategy which enables an individual to develop new rules and heuristics to interact in a new cultural environment by promoting information processing at a deeper level (Ang *et al.*, 2010). The second dimension is cognitive. While metacognitive dimension focuses on higher cognitive processes, cognitive dimension reflects knowledge, norms, and traditions in different cultures gained from personal knowledge and experience. Cognitive dimension

includes universal cultural knowledge and knowledge on cultural differences (Ang *et al.*, 2010). The third dimension is motivational, which reflects the ability to direct attention and energy toward learning about functions in culturally diverse situations. Kanfer and Heggsted (1997, in Ang *et al.*, 2010) state that motivational capacity is the ability to give control in order to influence cognition and behavior in facilitating the attainment of goals. Motivation can be defined as a driving force so that the directed effort and energy can function within a new cultural order (Ang *et al.*, 2010). The fourth dimension is behavioral. Behavior reflects an individual’s ability to perform the proper verbal and nonverbal acts when interacting with individuals from different cultures. The behavioral factor includes flexibility in verbal and nonverbal acts and words used when communicating. An individual cannot possibly master all proper ethics within all cultures. Therefore, flexibility is of utmost importance when interacting within a foreign culture, and behavior can improve that flexibility (Ang *et al.*, 2010).

Individuals who are open to experience tend to be intelligent, broadly knowledgeable, and cultured, so these individuals will (i) possess a wide knowledge of the similarities and differences in cultural backgrounds (cognitive dimension), and (ii) alter their verbal and nonverbal behavior to adapt in a new environment (behavioral dimension; Ang *et al.*, 2006). Individuals who are open to experience generally have a high curiosity, causing them to (i) have a very high drive and interest to interact with other individuals from different cultures (motivational dimension), and (ii) often question their own cultural assumptions and analyze the cultures and norms of other individuals before and during interaction (metacognitive dimension; Ang *et al.*, 2006). Therefore, it can be concluded that:

H<sub>1</sub>: The openness to experience personality trait can predict cultural intelligence. The higher an individual’s tendency to be open to experience, the higher his or her level of cultural intelligence becomes.

**The role of the openness to experience personality trait in explaining job satisfaction.** According to Spector (1997), job satisfaction is defined as how much an individual feels satisfied with his or her job. Meanwhile, Robbins and Judge (2013) define job satisfaction as positive feelings about one’s job which result from an evaluation of its characteristics. Cooper, Sloan, and Williams (1988, in McKenna, 2001) affirm that factors, such as (i) challenging work, (ii) fair compensation, (iii) supportive work conditions, and (iv) co-workers are significant contributors to job satisfaction. Based on those definitions, it can be concluded that job satisfaction is an individual’s feelings about an aspect of his or her job (compensation, relationship with one’s



**Figure 1. Frame of References: The Mediating Role of Cultural Intelligence in the Relationship between the Openness to Experience Personality Trait and Job Satisfaction**

supervisor). These are the results of the individual's evaluation of the job. If the evaluation result is positive, then the individual feels satisfied with his or her job; if the evaluation result is negative, it means the individual is not satisfied with his or her job (Armstrong & Taylor, 2014).

The relationship between openness to experience and job satisfaction can be explained using a theory in evolutionary personality psychology developed by Buss (1991). This theory explains that personality is an adaptive mechanism enabling an individual to adapt, adjust, and fulfill demands in a new environment. In addition, this theory asserts that each individual has different levels of Big Five personality traits, so each individual's adjustment to a new environment will also be different. This means that an individual possessing a personality trait suitable with the given role in an environment will perform better. Finney and Von Glinow (1988) explain that individuals who are open to experience tend to be intelligent, so they can accurately understand new cultures and adapt themselves in new environments. Black and Mendehall (1990) show that job satisfaction among expatriates can be defined as how those expatriates can adjust themselves in a new environment. Hence, it can be concluded that:

H<sub>2</sub>: The openness to experience personality trait can predict job satisfaction. The higher an individual's tendency to be open to experience, the higher his or her level of job satisfaction becomes.

**The mediating role of cultural intelligence in the relationship between the openness to experience personality trait and job satisfaction.** The relationship between cultural intelligence and job satisfaction can be explained using the anxiety/uncertainty management theory developed by Gudykunst (1998). The theory asserts that if an expatriate can cope with anxiety during adaptation in a new environment, then the expatriate can feel comfortable and improve his or her adjustment (can feel satisfied with his or her job). Osman-Gani and Rockstuhl (2009) state that improving coping ability can help in dealing with anxiety during adaptation in a new environment. Ang and Dyne (2008) define cultural intelligence as one of an individual's coping abilities. Therefore, it can be concluded that:

H<sub>3A</sub>: Cultural intelligence can predict job satisfaction. The higher an individual's level of cultural intelligence, the higher his or her level of job satisfaction becomes.

Cultural intelligence as a mediator in the relationship between openness to experience and job satisfaction can be explained using the theory of individual differences in job performance introduced by Motowidlo, Borman, and Schmit (1997). The theory asserts that personality is very closely related to performance through mediators, such as skills or knowledge. Ang and Dyne (2008) identify that cultural intelligence is a type of cross-cultural skills or knowledge. Therefore, expatriates who are open to experience tend to be highly knowledgeable, have high curiosity, and are intelligent (Ang *et al.*, 2006). This drives them to keep on learning to acquire and understand knowledge about cultural differences and as a result improving their cultural intelligence. Cultural intelligence can help these expatriates at their workplace, enabling them to help their organizations achieve targets. This gives them a sense of achievement and satisfaction (Armstrong & Taylor, 2014). Hence, it can be concluded that:

H<sub>3B</sub>: Cultural intelligence can play a mediating role in the relationship between the openness to experience personality trait and job satisfaction.

Based on the above information, this research has been designed to examine the mediating role of cultural intelligence in the relationship between the openness to experience personality trait and job satisfaction. The frame of references for this research is shown in Figure 1.

## 2. Method

**Participants.** This study managed to gather 554 participants. However, 289 of the participants could not be included in the research samples as their questionnaires were not filled in completely. Therefore, the total sample size of this research is 265 people. All of them meet the definition of expatriates as determined by Albrecht *et al.* (2014), which is individuals who leave their country of origin to live and work in another country for one up to several years.

The participants consist of 168 males (63.40%;  $M = 40.38$  years;  $SD = 7.82$  years), 153 people (57.73%) with Bachelor's Degree as their latest education and 124 (46.79%) who are unmarried. The majority of the participants, or 131 people (49.43%), are expatriates from Asia sent to six continents across the world (Africa, South America, North America, Asia, Europe, and Oceania). A total of 166 participants (62.65%) have lived in a foreign country for 1 to 5 years. In addition, 192 participants (72.45%) have worked in a foreign country for 1 to 5 years, and the majority of the participants (110 people; 41.51%) hold the position of manager. Lastly, 153 participants (57.74%) have never taken part in cultural trainings.

The sampling technique used in this study is snowball sampling, in which individuals who have become participants were asked to find other expatriates to take part in the study.

**Research Measurement Scales.** There were three scales used in this study to measure each variable, namely (i) job satisfaction, (ii) the openness to experience personality trait, and (iii) cultural intelligence. All of the statement items in the questionnaire were stated in English.

**Job Satisfaction.** The job satisfaction measurement used the alternative method concepts developed by Suyasa (2007). The concepts consist of: (i) job satisfaction formed by various aspects/multi-facets and (ii) job satisfaction formed through the process of perception between the importance of a certain need and the fulfillment of that need. Therefore, the statement items in the Short-Form Minnesota Satisfaction Questionnaire (MSQ) developed by Weiss, Dawis, England, & Lofquist (1967) were adapted to meet the two concepts in the alternative method and called MSQ-Revised (MSQ-R). MSQ-R consists of 40 statement items, with 20 items for each concept. An example of a statement on the aspect of variety for the first concept is "the chance to do different tasks from time to time", while for the second concept it is "I have the chance to do different tasks from time to time". The MSQ-R uses the Likert scale of 5 responses. For the first concept, 1 refers to "not important to me" and 5 refers to "very important to me", while for the second concept, 1 refers to "very inappropriate to me" and 5 refers to "very appropriate to me". Based on the alternative method (Suyasa, 2007), the participants' responses in MSQ-R were converted into scores used to measure job satisfaction. A response of 1 in MSQ-R was converted into a score of -2, 2 was converted into a score of -1, 3 was converted into a score of 0, 4 was converted into a score of +1, and 5 was converted into a score of +2. Job satisfaction in each aspect was measured using the score for each concept in that aspect and calculated using the following formula: [Job satisfaction =  $\Sigma$  (score for the first concept x score for the second aspect)]. Therefore, if the job

satisfaction score is positive, it means the individual is satisfied with his or her job.

**The Openness to Experience Personality Trait.** This research used the Big Five Inventory (BFI) developed by John, Donahue, and Kentle (1990). The statements measuring openness to experience consist of 10 items, 5 of which are negative and 5 are positive. An example of a negative statement is 'I see myself as someone who is not original and does not come up with new ideas'. Meanwhile, an example of a positive statement is 'I see myself as someone who is curious about many different things'. The BFI uses the Likert scale of 5 responses, in which 1 refers to strongly disagree and 5 refers to agree. Therefore, if the score for every statement is high, it means the individual has a high level of openness to experience.

**Cultural Intelligence.** This research used the cultural intelligence scale developed by Ang *et al.* (2007). The scale consists of 20 statement items (4 items [2 positive] for metacognitive dimension, 6 items [3 positive] for cognitive dimension, 5 items [3 positive] for motivational dimension, and 5 items [3 positive] for behavioral dimension). An example of a statement for metacognitive dimension is "I check the accuracy of my cultural knowledge as I interact with people from different cultures" and "I am not conscious of the cultural knowledge that I apply to cross-cultural interactions". For cognitive dimension the examples are "I know the legal and economic systems of other cultures" and "I do not know the rules for expressing nonverbal behaviors on other cultures". For motivational dimension the examples are "I enjoy interacting with people from different cultures" and "I do not enjoy living in cultures that are unfamiliar to me". For behavioral dimension the examples are "I use pause and silence differently to suit different cross-cultural situations" and "I do not alter my facial expression when a cross-cultural interaction requires it." The scale uses the Likert scale of 7 responses, in which 1 refers to strongly disagree and 7 refers to strongly agree. Therefore, if the score for every dimension is high, it means the individual (i) possesses a higher mental process to understand cultures (metacognitive), (ii) possesses a broad knowledge of norms and practices in cultures (cognitive), (iii) feels more confident that he or she can interact with individuals from different cultures (motivation), and (iv) has a very high ability to perform the proper verbal and nonverbal acts when interacting with people from different cultures (behavior).

**Research Procedure.** After creating the questionnaire using Qualtrics (an online survey software), the researcher sent the questionnaire URL to expatriates across the world. When expatriates accessed the URL, they were directed to a home page containing information about: (i) research purposes, (ii) requirements for participants,

(iii) research description and risks, (iv) confidentiality of participants' responses and personal information, and (v) contact details of the researcher. After reading and agreeing to take part in the study, participants clicked the 'Next' button at the bottom right of the home page. Afterwards, all participants filled in the questionnaire on openness to experience, cultural intelligence, and job satisfaction. After filling in the questionnaire, participants were asked to provide their personal details and forward the questionnaire URL to other expatriates they know. Overall, participants completed the entire questionnaire within an average time of 30 minutes. Data sampling took 42 days.

### 3. Results and Discussion

Table 1 shows the mean, standard deviation (SD), and correlation between variables. In order to examine mediation, the data were analyzed using the regression analysis (Baron & Kenny, 1986) and Table 2 shows the results of the mediation. The results on Table 2 especially in step 3 of the test reveal a significant relationship between cultural intelligence and job satisfaction. Furthermore, the relationship between openness to experience and job satisfaction is not significant. The results of examination on the two relationships are starkly different from the result of examination in step 2 of the test ( $\beta$  - value gained in step 3 of the test is lower [no significant relationship] than that in step 2 of the test [significant relationship]).

The effects of the indirect relationship between openness to experience and job satisfaction through the role of cultural intelligence were tested using the bootstrap

estimation approach with 5,000 samples (Hayes, 2009; Zhao, Lynch, & Chen, 2010). The result shows that the indirect coefficient is significant (B [unstandardized coefficient] = 0.4078; Standard Error = 0.1014; 95% Confidence Interval 0.2157, 0.6108). This explains that cultural intelligence plays a mediating role in the relationship between openness to experience and job satisfaction among expatriates.

This study aims to examine the mediating role of cultural intelligence in the relationship between the openness to experience personality trait and job satisfaction among expatriates. In this study, cultural intelligence has been found to fully mediate the relationship between openness to experience and job satisfaction. This study has provided three contributions. Firstly, the research result clarifies the difference in results between studies conducted by Cohrs *et al.* (2006) and Judge *et al.* (2002) on job satisfaction. Cohrs *et al.* (2006) identify that openness to experience is an excellent predictor of job satisfaction. However, the result of meta-analysis conducted by Judge *et al.* (2002) reveals openness to experience does not significantly predict job satisfaction. The result of this study at the moment shows that cultural intelligence plays a mediating role in the relationship between openness to experience and job satisfaction. Both of the earlier studies above did not measure the level of cultural intelligence among its participants; therefore, it is possible that the cultural intelligence factor influences the different results of the two studies.

Secondly, the result of this study supports the theory of individual differences in job performance (Motowidlo *et al.*, 1997). According to the theory, knowledge or skills

**Table 1. Mean, Standard Deviation (SD), and Correlation between Variables**

Variable	Mean (SD)	1	2	3	4	5	6	7
1 Openness to Experience Personality Trait	3.449 (0.577)	<b>0.743</b>						
2 Cultural Intelligence	4.815 (0.857)	0.662	<b>0.686</b>					
3 Metacognitive	4.870 (1.016)	0.639	0.878	<b>0.600</b>				
4 Cognitive	4.564 (0.898)	0.471	0.776	0.568	<b>0.632</b>			
5 Motivation	5.061 (1.081)	0.590	0.887	0.737	0.588	<b>0.769</b>		
6 Behavior	4.763 (1.047)	0.534	0.842	0.655	0.525	0.650	<b>0.741</b>	
7 Job Satisfaction	0.969 (0.929)	0.373	0.462	0.431	0.265	0.460	0.393	<b>0.932</b>

Note: The numbers in bold forming a diagonal line are the coefficient of internal consistency reliability (Cronbach's Alpha) for each variable. All of the correlations between variables are significant ( $p < 0.01$ ).

Table 2. Mediation Test Results

Mediation Test Examination	t – value	β – value	p – value
<b>Step 1 Test</b>			
Outcome: Cultural Intelligence			
Predictor: Openness to Experience Personality Trait	14.317	0.662	0.000
<b>Step 2 Test</b>			
Outcome: Job Satisfaction			
Predictor: Openness to Experience Personality Trait	6.519	0.373	0.000
<b>Step 3 Test</b>			
Outcome: Job Satisfaction			
Mediator: Cultural Intelligence	5.269	0.383	0.000
Predictor: Openness to Experience Personality Trait	1.642	0.119	0.102

mediate the relationship between personality and job performance. In conclusion, the expatriates taking part in this research possess a strong trait of openness to experience. Those who have that personality trait tend to have high curiosity and are intelligent. This drives them to keep on learning to acquire and understand new knowledge about their new work environment. This knowledge can be defined as cultural intelligence. The continuous learning process can improve their cultural intelligence, helping them to adapt in a new work environment and perform well at their jobs to achieve satisfying results, thus improving the achievements of the organizations where they work. This success in adapting and achieving organizational targets gives the expatriates a sense of satisfaction with their jobs.

Although the result of this study is consistent with the theory of individual differences in job performance (Motowidlo *et al.*, 1997), it is less consistent with the evolutionary personality psychology theory (Buss, 1991), which identifies personality as an adaptive mechanism enabling an individual to adapt and fulfill the demands of a socio-cultural environment, thus allowing the individual to be satisfied with his or her work. This means that personality is the main mechanism affecting satisfaction. However, this study shows that the mediating role of cultural intelligence is crucial in the relationship between openness to experience and job satisfaction among expatriates. Consequently, the result of this study is not in accordance with the evolutionary personality psychology theory which does not consider cultural intelligence (knowledge or skills) in explaining the role of personality traits in job satisfaction. Furthermore, the researcher considers that this study can complement the shortcomings of the evolutionary personality psychology theory.

The result of this study can be used as a reference that cultural intelligence can play a mediating role, as it is quite consistent with a study conducted by Oolders *et al.* (2008). Oolders *et al.* (2008) discover that cultural intelligence partially mediates the relationship between openness to experience and adaptive performance (partial mediation).

In contrast, the result of this study identifies that cultural intelligence fully mediates the relationship between openness to experience and job satisfaction. There are two reasons that may explain the difference, although both adaptive performance and job satisfaction are factors to measure the effectiveness of expatriate workers (Rose *et al.*, 2010).

The first reason is that the relationship between adaptive performance and job satisfaction only measures 0.3 (Judge, Theoresen, Bono, & Patton, 2001). This means that while the relationship between the two variables is positive (the higher an individual's adaptive performance, the higher his or her job satisfaction becomes), it is very weak. Hence, it can be concluded that the two variables cannot be considered the same, although they are both very important in measuring the effectiveness of expatriate workers. The second reason is that the type of participants in this research is different from those in the study conducted by Oolders *et al.* (2008). Oolders *et al.* (2008) used international students, while this research used expatriate workers as participants. Cox (1988) states that the stresses experienced by international students and expatriate workers while adapting in a foreign environment are different. Expatriates are mostly married and have children. Apart from adjusting themselves to a new environment, they must also consider the wellbeing of their spouses and children in the country of origin if they do not move abroad with them, or how their spouses and children will fare in a new environment if they move to the destination country with them. On the other hand, most international students do not often have to worry much about their family (parents) living in their home country.

Thirdly, the result of this study contributes to views on the debate of nature versus nurture. This debate is one of the old controversies in the history of psychology on the influence of genetic factors (nature) or the environment (nurture) on human behavior (Coleman & Hong, 2008; Strathearn, 2009). Some psychologists are of the opinion that this debate is asking the wrong question of either

genetics or environment. This is similar to questioning whether the area of a rectangle is caused by height or width (Kimble, 1993). Previous studies have resulted in researchers agreeing to end the nature versus nurture debate and conclude that human behavior is influenced by the interaction of both genetic and environmental factors (McGue & Bouchard, Jr., 1998). Consistent with this conclusion, the result of this study indicates that the openness to experience personality trait (nature) and cross-cultural knowledge/cultural intelligence (nurture) are important factors for expatriates in order to be able to work better in a new environment and to allow them to be satisfied with their jobs. Therefore, the biological factors that have been formed can be managed through a process of learning to obtain optimal results.

Although the result of this study is consistent with its hypotheses, this study has several limitations. The first is the uncontrolled category of the expatriates. Lasaree (2003) states there are two categories of expatriates, namely parent country nationals (people whose nationality is the same as their company, but different from the country in which they work) and third country nationals (citizens of a country who work in a second country, and employed by an organization headquartered in a third country). Addangadi (n.d.) describes that the two expatriate categories spend different amounts of time in adapting to a new environment, which may affect their job satisfaction. Consequently, other researchers are recommended to first approach a multinational corporation in a certain country before using expatriates as research participants. Second, the researcher is also aware of subjectivity because of the measurement of data collected through a questionnaire filled in by the participants themselves, without any confirmation from other people (Woszczynski & Whitman, 2004). This may affect the result of the study if the participants are not honest in filling in the questionnaire (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Therefore, the researcher recommends other researchers to consider using multiple sources of data. For example, openness to experience or cultural intelligence can be measured based on data collected by co-workers, managers, or supervisors, as the result can appear more objective than if all data are collected by the participants themselves.

Considering the essential role of cultural intelligence in the relationship between openness to experience and job satisfaction, the researcher suggests future studies to adapt the cultural intelligence scale into the Indonesian language. Currently, the cultural intelligence scale has been adapted into three languages: English (Ang *et al.*, 2007), Turkish (Sahin, Gurbuz, Koksall, & Ercan, 2013), and Spanish (Moyano, Tabernero, Melero, & Trujillo, 2015). The idea is based on Muniz, Elosua, and Hambleton (2013, in Moyano *et al.*, 2015) who recommend other researchers to adapt testing tools into various languages so that the construct can be evaluated in a reliable manner,

hence prompting researchers or practitioners who use that language in particular to use the scale. Secondly, job satisfaction is one of the factors to measure the effectiveness of expatriates (Rose *et al.*, 2010). Rose *et al.* (2010) discover that there are several other factors that can measure the effectiveness of expatriates, such as turnover intensity and organizational commitment. Therefore, the researcher suggests a study to examine the impact of cultural intelligence as a mediator in the relationship between openness to experience and one of those factors to measure the effectiveness of expatriates as described by Rose *et al.* (2010) for further research.

In addition to suggestions for future studies, the researcher also advises multinational companies, especially their human resources divisions tasked with recruitment, to select expatriates with a high level of openness to experience for assignments in a foreign country. Openness to experience is crucial, because based on the result of the study this personality trait can influence learning about cultural intelligence, which in turn affects job satisfaction. Employees tasked with recruitment are recommended to use personality measurement tools such as the BFI when selecting suitable candidates for foreign deployment. Secondly, the researcher suggests human resources divisions, especially its staff tasked with organizing trainings, to conduct culture training for expatriates chosen by the company for foreign assignment. The purpose of culture training is to improve cultural intelligence. This sort of training is very important because based on the result of this study, cultural intelligence plays a vital role in job satisfaction. Another suggestion is for expatriates who have been selected to work in a foreign environment to learn more about cultural differences between their origin and destination countries by accessing the Internet or reading books as needed.

#### 4. Conclusions

Cultural intelligence fully mediates the relationship between the openness to experience personality trait and job satisfaction. The role of openness to experience in job satisfaction can only be explained without disregarding the variable of cultural intelligence (nurture factors). This study identifies that job satisfaction is not only a consequence of nature factors (in this case the openness to experience personality trait), but it is also an accumulation of the role of nurture factors (in this case cultural intelligence). Optimizing cultural intelligence can be done through a process of learning or improving knowledge/skills, especially with regard to the local culture where the expatriates work.

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