

# **On-the-job management training and multicultural skills: The moderating effect of openness to experience**

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*This study examined the effects of on-the-job management training on the incumbent public administration managers' multicultural skills as a function of the managers' openness to experience. 284 public administration managers from the European Commission and 26 Member States participated in the study. The results indicate that on-the-job training (including the initial training, informal training, mentoring, coaching, and the availability of resources) improve the incumbent managers' multicultural skills, but only when the managers are moderate or high in openness to experience. The multicultural skills of the managers who are high in openness to experience benefit from on-the-job training the most, followed by the skills of the managers who are moderate in openness to experience. When the managers are low in openness to experience, the increased amounts of on-the-job training actually decrease their level of multicultural skills.*

**Keywords:** *management training, multicultural skills, openness to experience, public administration*

## **Introduction**

Multicultural skills (MCS) can be understood as a subset of *intergroup competencies* (Ramsey & Kantambu Latting, 2005) and *collaborative competencies* (Getha-Taylor, 2008), but focus specifically on working with people and issues originating from cultures other than one's own.

Pagon, Banutai, and Bizjak (*in press*) found multicultural skills to be significantly and positively correlated with openness to experience and on-the-job training. In this paper, however, we want to explore the interaction between openness to experience and on-the-job training in their relation to multicultural skills.

Openness to experience is one of the Big Five factors of personality. Traits commonly associated with this dimension include being imaginative, cultured, curious, original, broad-minded, and intelligent (Barrick & Mount, 1991).

In the previous research, openness to experience has been related to various aspects of multicultural skills and settings. Summarizing the research findings, Ang, Van Dyne and Koh (2006) conclude that working with people from different cultures can be difficult for individuals and for their organizations because cultural barriers can cause misunderstandings and interfere with efficient and effective interactions. The authors describe those individuals high on openness to experience as

“... curious and enjoy trying to figure out new things. In other words, they adopt metacognitive strategies when thinking about and interacting with those who have different cultural backgrounds. In addition, those who are high in openness should be more likely to question their own cultural assumptions, analyze the cultural preferences and norms of others (before and during interactions), and reexamine their mental models based on interactions with those from other cultures... They should be more knowledgeable about specific aspects of other cultures... They are also willing to experience and enjoy new and unfamiliar environments... [They] seek out, act on new experiences, and extend their repertoire of behaviors beyond the daily habits” (p. 108-109).

Their results showed that openness to experience was related to all four factors of CQ (cultural intelligence), namely metacognitive, cognitive, motivational, and behavioral CQ. The authors emphasize the importance of openness to experience, particularly in dynamic situations where curiosity, broad-mindedness, and imagination are important. Therefore, openness to experience is a crucial personality characteristic that is related to a person's capability to function effectively in diverse cultural settings (Ang, Van Dyne, & Koh, 2006).

Homan and colleagues (2008) found that there are differences in how teams experience their diversity. Diverse teams that score high on openness to experience perform better than diverse teams that score low on this characteristic. When differences within a team are salient, openness to experience helps teams to capitalize upon their differences.

But not only has openness to experience been linked to multicultural skills and dealing with diversity; this personality construct was found to be a valid predictor of training proficiency (Barrick & Mount, 1991; Salgado, 1997). According to Barrick and Mount (1991), measures of openness to experience may identify which individuals are most willing to engage in learning experiences and, consequently, are most likely to benefit from training programs.

At the same time, on-the-job training has been linked to improved cognitive and behavioral cultural intelligence (Grigorian, 2008) and higher level of multicultural skills (Pagon et al., *in press*). Therefore, since both openness to experience and on-the-job training are related to cultural skills, and since openness to experience was found to be a predictor of training proficiency, we hypothesize as follows.

***Hypothesis:*** *On-the-job-training and openness to experience interact to predict the level of multicultural skills: relative to managers with lower levels of openness to experience, managers with high levels of openness to experience benefit from higher levels of on-the-job training.*

## **Methods**

### *Sample*

284 public administration managers from the European Commission and 26 Member States participated in the study. 153 (54%) of the subjects were male and 130 (46%) were female. The

mean age of the subjects was 46.2 years. Sample included 41 (14.5%) subjects with a doctoral degree, 138 (49%) had a master's degree, 95 (33.7%) had a university degree, and 8 (2.8%) subjects had a high school degree or less. 172 (61.2%) subjects reported being in the rank of middle management, while 109 (38.8%) indicated the rank of top management. The average amount of work experience of the subjects was 21.4 years; the average amount of work experience in public administration was 16.5 years; and the average amount of work experience at the current institution was 10 years. The mean amount of work experience in the current position was 3.6 years.

### *Measures*

***Multicultural Skills.*** We developed a 7-item scale measuring multicultural skills. Sample items were: "I feel confident conducting a meeting in a foreign language," "I feel confident working with and/or supervising people from other cultures," and "I participate effectively in multicultural teams." The respondents indicated their answers on a 7-point Likert-type scale (1 – strongly disagree; 7 – strongly agree). Cronbach's alpha for this scale was .78.

***On-the-Job Training.*** We developed a 13-item scale measuring on-the-job training (including the initial training, informal training, mentoring, coaching, and the availability of resources). Sample items were: "I was formally trained in all aspects of work in my current position," "During my career, I received formal training in teamwork," and "In our PA institution, funds for development and innovation are readily available." The response format was the same as in the previous scale. Cronbach's alpha for this scale was .79.

***Openness to Experience.*** We used a 4-item Openness to Experience subscale from the Mini IPIP Scales (Donnellan, Oswald, Baird, & Lucas, 2006). Sample items were: "I have vivid imagination," and "I am not interested in abstract ideas (reverse-scored)." The response format was the same as in the previous scales. Cronbach's alpha for this scale was .61.

### *Procedure*

This study was a part of a broader study conducted for the Human Resource Working Group (HRWG) of the European Public Administration Network (EUPAN) under the Slovenian Presidency of the EU, and was financially supported by the Slovenian Ministry of Public Administration.

We used an on-line questionnaire, published at [www.surveymonkey.com](http://www.surveymonkey.com). The link to the questionnaire was distributed to public administration managers by the HRWG members in their respective countries. The rationale for the study was explained to the HRWG members at two meetings (in Brdo, Slovenia, and in Brussels, Belgium). Participation in the study was voluntary.

### **Results**

The means, standard deviations, and correlations for the variables of interest are reported in Table 1.

**Table 1 – Descriptive Statistics and Correlations**

Variables	Mean	s.d.	1	2
1 Multicultural skills	4.71	.95	-	
2 On-the-Job Training	4.14	.90	.22**	-
3 Openness to Experience	4.99	.95	.18*	-.09

\*  $p < .05$  \*\*  $p < .001$  \*\*\*  $p < .0001$

As reported previously (Pagon et al., *in press*), multicultural skills are significantly and positively correlated with openness to experience and on-the-job training. The amount of on-the-job training and openness to experience are not significantly correlated.

We then analyzed the results using hierarchical linear regression for multicultural skills as dependent variable. First, we entered on-the-job-training. In the second step, openness to experience was entered. Finally, we entered the interaction term (the product of openness to experience and on-the-job training). To reduce the threat of multicollinearity and in keeping with recommendations of Aiken and West (1991) and Jaccard, Turrissi and Wan (1990), the main effect variables were centered prior to forming the interaction term. Centered variables were computed by subtracting the mean from its respective raw score for each case. The results of hierarchical regression are shown in Table 2.

**Table 2 - Results of Hierarchical Regression Analysis for Dependent Variable Multicultural Skills<sup>a</sup>**

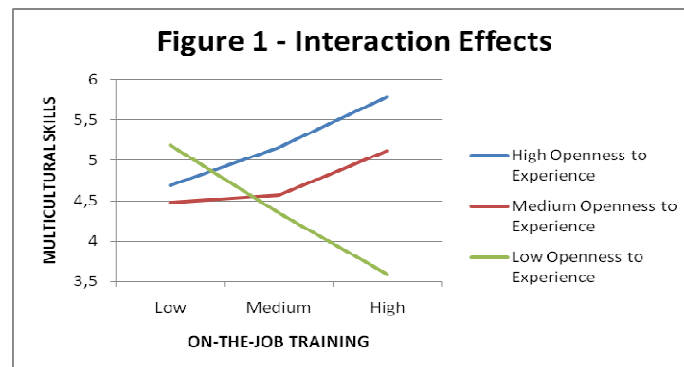
Variable	Step 1	Step 2	Step 3
<i>On-the-Job Training</i>	.22* <sup>b</sup>	.25*	.23*
<i>Openness to Experience</i>		.24*	.27*
<i>On-the Job Training × Openness to Experience</i>			.20*
Total R <sup>2</sup>	.05*	.11*	.15*
Δ R <sup>2</sup> Block		.06*	.04*

<sup>a</sup> n = 239    <sup>b</sup> Standardized β coefficients are shown.

\* p < .001

The results revealed a significant interaction between on-the-job training and openness to experience on multicultural skills (see step 3 in Table 2), which accounted for 4 percent of the incremental variance in multicultural skills beyond the main effects, lending support for our hypothesis.

To understand this interaction, we plotted the effect of the three levels of on-the-job training for each of the three levels of openness to experience. The three levels for on-the-job training and for openness to experience were created by splitting the respective scores in three groups (low – the scores more than one standard deviation below the mean; medium – the scores within +/- one standard deviation from the mean; high – the scores more than one standard deviation above the mean). The interaction of on-the-job training and openness to experience is depicted in Figure 1.



The results indicate that on-the-job training (including the initial training, informal training, mentoring, coaching, and the availability of resources) improve the incumbent managers' multicultural skills, but only when the managers are moderate or high in openness to experience. The multicultural skills of the managers who are high in openness to experience benefit from on-the-job training the most, followed by the skills of the managers who are moderate in openness to experience. When the managers are low in openness to experience, the increased amounts of on-the-job training decrease the level of their multicultural skills. It is interesting to note, however, that when the reported level of on-the-job training is low, the managers who are low in openness to experience report higher levels of multicultural skills than do other managers.

## Discussion

To understand this study's findings, one must consider the traits associated with openness to experience, namely, being imaginative, cultured, curious, original, broad-minded, and intelligent (Barrick & Mount, 1991); questioning their own cultural assumptions, being willing to experience and enjoy new and unfamiliar environments, seeking out, and acting on new experiences, and extending their repertoire of behaviors beyond the daily habits (Ang, Van Dyne, & Koh, 2006). It might as well be that when the levels of initial training, informal training, mentoring, coaching, and the availability of resources are low, individuals high in openness to experience get bored and do not put their abilities to the best use. On the other hand, those low in openness to experience might be much more comfortable under such circumstances, which is why they outperform their high-openness-to-experience counterparts in terms of their multicultural skills. As the levels of initial training, informal training, mentoring, coaching, and the availability of resources start to increase, the situation gets reversed. Individuals high in openness to experience become more comfortable with the situation and their willingness to engage in learning experiences results in their benefiting more from training programs, as found by Barrick and Mount (1991). Those low in openness to experience, on the other hand, might not respond well to the increased levels of on-the-job training, might be less able to deal with the newly created complexities, and might resent the burden placed upon their cognitive, conative, and behavioral resources.

The present study adds to the openness to experience and multicultural skills literature by showing that openness to experience interacts with on-the-job training in their relation to multicultural skills. Although it has been shown that multicultural skills (under different names) are related both to openness to experience (e.g., Ang, Van Dyne, & Koh, 2006; Pagon et al., *in press*) and to on-the-job training (e.g., Grigorian, 2008; Pagon et al., *in press*), and that openness to experience was found to be a valid predictor of training proficiency (Barrick & Mount, 1991; Salgado, 1997), little research has examined the interaction of these two variables.

In terms of practical implications, our findings suggest that selecting public sector managers who score high on openness to experience might help increasing the effectiveness of on-the-job training programs as well as the level of multicultural skills in public administration.

This study should be evaluated in light of its limitations. The major ones are a small sample size and exclusive reliance on self-report measures; no data from the managers' subordinates, superiors, or clients were collected. Future studies should address these limitations. Also, this study's findings obtained on a sample of public administration managers should be tested in other sectors/industries.

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