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Exploring the Relationship Between Big Five Personality Traits and Work Engagement Among Workers at International Balkan University

Hatidje Muchi-Ameti, Zumera Demiri

Abstract

The purpose of the study was to explore the relationship between Big Five Personality traits and work engagement among employees of International Balkan University in Skopje. The sample of the research consisted of 76 participants, both academic and administrative staff of the University. Participants completed an online survey, which included the Big Five Inventory and the Utrecht Work Engagement Scale. Pearson correlation analysis was conducted to examine the relationship between traits and work engagement. The results revealed a significant positive correlation between Extraversion, Agreeableness, Conscientiousness, and work engagement. Neuroticism showed a significant negative correlation, while Openness to Experience showed a positive but nonsignificant correlation with work engagement. These results indicate that individual differences have an important role in shaping employees' engagement in their work settings. The findings support the inclusion of personality evaluations in workplaces to foster productivity and work engagement.

Keywords: Big Five personality traits, work engagement, Big Five Inventory, Utrecht Work Engagement Scale

Introduction

In recent years, work engagement has become one of the important concepts of organizational psychology. It is a concept strongly associated with employee well-being, job performance, job satisfaction, and other positive work concepts. Especially, in the developing industries and sectors, work engagement or a dedicated, energized and absorbed workers are prerequisite for hiring, considering that these workers will have higher level of motivation and psychological involvement with less reliance on extrinsic force (motivation).

Among various factors, individual differences are one significant element that has a direct effect on work engagement. One of the individual differences, personality traits, represent relatively stable characteristics that shape how individuals perceive, interpret, and respond to their work environment. One of the most accepted measurement of personality traits is known as Big Five that can also be applied in organizational research. Considering that work engagement is one of the psychological connections to work, examining the relationship between personality traits and work engagement allows for a deeper understanding of why some workers are more engaged than others in similar organizational contexts.

Although previous study emphasized Big Five and work engagement as separated and independent concepts, there are several studies that analyzed their association. Empirical evidence is still limited in some sectors especially such as higher education institutions. Also, the evidence is very limited in the Balkan region where there are no sufficient studies show the relationship between these two concepts among Balkan cultures.

In response to these gaps, the present study aims to explore the relationship between the Big Five personality traits and work engagement among employees of International Balkan University in Skopje, North Macedonia. By including both academic and administrative staff of the university, the study provides a more comprehensive view of work engagement. Consistent with the main argument that personality traits play a decisive role in shaping work engagement, the findings of this study are expected to contribute both theoretically and practically by supporting the integration of personality traits and its relationship to work engagement into the organizational settings.

Big Five Personality Traits

One of the most influential models over the past 10 years in personality psychology has been the five-factor model of personality. Much research has contributed to verifying its validity and nowadays it stands as an orientation among models of personality. This model encompasses five dimensions: Extraversion, Openness to Experiences, Agreeableness, Conscientiousness, and Neuroticism (McCrae & Allik, 2002).

John and Srivastava (1999) provide information that in 1980, Costa and McCrae were working on developing the NEO Personality Inventory, which was later published in 1985. The inventory was just focused on three dimensions, more precisely on extraversion, neuroticism, and openness to experiences. Their work began as an analysis of Catell's work on the 16 Personality Factors. In 1983, their work included three dimensions, not including agreeableness and conscientiousness. To extend their work and complete it, they united these two other factors. Costa and McCrae (1992) launched the NEO Personality Inventory, revised (NEO PI-R), which consisted of 240 items that help to assess in a more detailed way the Big Five dimensions, for each factor, six facets. NEO PI-R was developed through the use of factor analysis and many other methods and procedures for its validity. It was first tested with samples of middle-aged and older adults. All the scales have presented strong reliability and validity in measuring Big Five dimensions.

Extraversion tends to describe individual differences in social situations, how we interact with others, how confident we are, and our levels of energy in social involvement. Highly extraverted people like to interact with others and enjoy socialization, they don't mind sharing their feelings and thoughts when they are in a group setting, and not only that, they often go through positive emotions such as passion, excitement, joy (Soto, 2016).

Agreeableness incorporates individual differences in acceptance and respect towards others, differences in respect and compassion. Highly agreeable people are concerned about other people's welfare, respect, and accept others' rights and choices. They always hold a positive mindset for other individuals. On the contrary, disagreeable people have less respect and acceptance for people and the social standards of humanity (Soto, 2016).

Conscientiousness is related to high order, neatness, responsibility, and productivity. Highly conscientious people love and take pleasure in maintaining organization;

they tend to keep everything ordered and well-structured. They are persistent and put in great effort to pursue and accomplish their ideals. They are very devoted to fulfilling their obligations and responsibilities. While conscientious individuals feel uncomfortable when things are not ordered, unconscientious people feel at ease or comfortable with chaos and messiness and are less inspired to accomplish their responsibilities or any other task (Soto, 2016).

Neuroticism tends to describe the individual difference in the degree and intensity of negative feelings. Those who appear to be highly neurotic are more prone to experience depression and anxiety, changes in mood, whereas emotionally stable people are characterized by calmness and resilience, even if they are faced with difficult or challenging situations (Soto, 2016).

Openness to experience, additionally referred to as Intellect, includes curiosity about things, aesthetic sensitivity, creativity, and imaginative thinking. Highly open people appreciate the process of learning and thinking; they are interested in art and beauty, providing authentic and unique ideas. Close-minded individuals are characterized by limited creative and intellectual preferences (Soto, 2016).

Work Engagement

In the 21. century, in order for companies to maintain their presence in the economy, they were compelled to hire workers who are creative, energetic, active, and those who use their full capacity which also shows positivity. All these characteristics could be collected under one concept which is known as “engagement” or “engaged workers” (Leiter & Bakker, 2010).

One of the pioneering researchers who explained work engagement was an ethnographic researcher, Kahn (1990), who claimed that it is “harnessing of organization members’ selves to their work roles, in engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performances” (p. 694). Stated differently, it means that workers work hard and put significant effort into their work since they identify with it (Kahn, 1990).

Another explanation of work engagement is that it is recognized as the positive opposite of burnout. Employees engaged in their work are often characterized by positive energy and active relations with their work, compared to employees who experience burnout, which relates to their work in a stressful and tough manner. According to this, engagement can be characterized with these three adjectives: vigor, enthusiastic

participation, and effectiveness, which are exact antitheses of the three burnout qualities: fatigue, skepticism, and decreased completion of work (Schaufeli, 2012).

Engaged workers use their full of skills, not only for productivity but also for problem-solving, developing creativity, interpersonal communication, and other strategies. One of the characteristics of engaged workers is their ability to deal with the challenging environment; however, they maintain their positivity with the influence of the management board. Thus, it is believed that managerial and human resources support play a significant role in engaging the workers because it is believed that engagement is highly correlated with social support, supervisor support, sufficient feedback which in return allows workers to become more productive (Leither & Bakker, 2010; Tomovska Misoska & Muchi, 2022).

Dimensions of Work Engagement

Engagement is not a state in a particular moment, but it is a long-lasting cognitive and emotional state that is not limited to a certain person, object, or behavior.

A high level of energy and emotional strength while the person is performing the job, the wish to put in effort and perseverance even in tough and challenging situations that one can be faced with in work, represent the dimension of vigor. This dimension is also known as the opposite of emotional exhaustion (Schaufeli & Bakker, 2003) and it is highly correlated with motivation, cognitive well-being, organizational effectiveness, and other positive concepts (Shirom, 2010).

The other dimension or the concept of work engagement is known as dedication and it is commonly seen as a profound commitment to work, which is marked by feelings of significance, passion, encouragement, dignity, enthusiasm, and challenge (Bakker & Demerouti, 2008). The dimension dedication is the opposite of cynicism (detachment, emotional coldness) and it is positively related to commitment, inspiration, feeling of being valued, and other related outcomes (Schaufeli & Bakker, 2003).

The last dimension of work engagement, absorption, signifies being totally engaged and attentive, enthusiastically involved in one's job, allowing time to pass away swiftly unnoticed and effortlessly making it difficult to disconnect from work, where workers are fully concentrated and happily engrossed (Schaufeli & Bakker, 2003; Bakker et al., 2014). Absorption is the opposite dimension of burnout's detachment dimension, and it allows workers to be feel more creative and valuable (Robinson, 2017).

Big Five Personality Traits and Work Engagement

Previous empirical research has increasingly examined the relationship between Big Five personality traits and work engagement, suggesting that personality characteristics play an important role in shaping workers' psychological involvement in their work. Theoretical perspectives indicate that personality traits have a significant role on shaping an individual's motivation, regulating emotions, interpersonal relationships, coping strategies which are all components of work engagement.

There are several empirical evidences that support this argument. For example, according to Zaidi et al. (2012), extraversion, agreeableness, conscientiousness, and openness to experience tend to be positively related to work engagement, while neuroticism is consistently negatively correlated to work engagement among university teachers. Moreover, a similar research conducted in organizational and banking contexts showed that conscientious and agreeable employees are more likely to experience higher levels of vigor, dedication and absorption, whereas workers higher in neuroticism tend to be less associated with work engagement because of emotional instability and increased stress levels (Bansal et al., 2020). Comparable findings were also reported in studies conducted among university staff, where higher levels of conscientiousness, extraversion, and openness to experience were positive predictors of work engagement, while neuroticism was a negative predictor of it (Karimi, 2019).

Research Hypothesis

In accordance with relevant research, the following hypotheses are proposed

- H1:** There is a positive correlation between Extraversion and work engagement.
- H2:** There is a positive correlation between Conscientiousness and work engagement.
- H3:** There is a positive correlation between Openness to Experience and work engagement.
- H4:** There is a positive correlation between Agreeableness and work engagement.
- H5:** There is a negative correlation between Neuroticism and work engagement.

Methodology

The study applied a quantitative, correlational study design since statistical correlation between levels of work engagement among staff in the university and Big Five personality traits was explored. A correlational study design was adopted since it is well-suited for determining and measuring the strength and direction of relationships between variables. The study was carried out in the natural setting, and it aimed to involve academic and administrative staff of International Balkan University. We were therefore able to collect naturalistic data in a working context.

Sample

The participants were collected by snowball method. The sample of this research involved 76 employees at International Balkan University in Skopje, both academic (67.1%) (lecturers, assistants, professors) and administrative (32.9%) (office, support, technical) personnel.

The age of participants ranged between 21 and 56 years, and the sample included both male (32.9%) and female (67.1%) employees. 24 (31.6%) of the participants have less than a year of work experience, while 21 (27.6%) of them have 1-3 years. Also, 13 (17.1%) participants have been working in this institution for 4 to 6 years, while 6 of them have been working in the same institution for 7-10 years. Finally, there were 12 (15.8%) participants with more than 10 years of working experience.

There were no specific inclusion or exclusion criteria, except that they must be currently working at the university. Everyone was kindly asked to participate, and responses were promised to remain anonymous and confidential. It was explained to them that the information would be utilized solely for academic purposes and that they could withdraw at any time without any consequence. The data was collected by using an online format survey via Google Forms, allowing increased participation and facilitating easier data collection.

Table 1

Demographic data

Gender	Male	25 (32.9%)
	Female	51 (67.1%)
Age	21-30	42 (55.3%)
	31-40	20 (26.3%)
	41-50	11 (14.5%)
	Over 50	3 (3.9%)
Current occupation	Academic staff	51 (67.1%)
	Administrative staff	25 (32.9%)
Work experience	Less than 1 year	24 (31.6%)
	1-3 years	21 (27.6%)
	4-6 years	13 (17.1%)
	7-10 years	6 (7.9%)
	More than 10 years	12 (15.8%)

Source: Prepared by authors.

Instruments

There were two standardized psychometric instruments that were used to measure variables of interest in this study: the Big Five Inventory (BFI) and the Utrecht Work Engagement Scale (UWES). Both were included in the online Google Form and designed in separate sections for ease and to reduce participant fatigue.

Big Five Inventory (BFI)

The Big Five Inventory is a self-report questionnaire that taps into five broad personality dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. The 44-item version was used in this study, with items scored on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

It has 8 reverse-scored items, which are interspersed to reduce the threat of response bias and improve measurement accuracy. In several studies, the Big Five

Inventory has been shown to have high internal consistency, construct validity, and test-retest reliability and is thus suitable for both academic and organizational applications.

Utrecht Work Engagement Scale (UWES)

Work engagement was assessed using the Utrecht Work Engagement Scale (UWES), developed by Schaufeli and Bakker (2004). The UWES contains 17 items, divided into three subscales: Vigor (6 items), which measures energy and resilience at work. Dedication (5 items), assesses involvement, enthusiasm, and pride in work. Absorption (6 items) assesses complete concentration and immersion in work tasks.

It is scored on a seven-point Likert scale, ranging from 0 (Never) to 6 (Always), portraying how frequently the respondent experiences each state. The UWES is internationally validated and broadly used in organizational psychology research for its outstanding psychometric properties and ease of use with heterogeneous professional groups.

Procedure

Data collection employed a structured and ethically sound approach to ensure the validity and reliability of research findings. The study was done online using Google Forms, which offered a user-friendly and accessible platform for respondents to participate in the survey anonymously and voluntarily.

The survey was reasonably separated into four sections for improving comprehension and logical organization. The first section of the survey included informed consent. First, participants were presented with a detailed explanation of the research purpose, procedures, confidentiality, and voluntary involvement. They had to click "I've read the information above and want to continue" only to access the next part of the survey. Two of the respondents chose the option "I do not want to continue"; for this reason, we did not include their responses in the processing of the results. The second part asked for little demographic data, like gender, age, work role (academic or administrative), and years of work experience. The third section added 44 items measuring five dimensions of personality, the Big Five Inventory. The Likert scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree), and the section included direct items and reverse-scored items. The final section consisted of 17 statements that assessed the participants' vigor, dedication, and absorption in their workplaces. Every statement was scored on a 7-point scale from 0 (Never) to 6 (Always).

The Google Form link was shared using institutional email and other communication channels, and the questionnaire was open for two weeks. The questionnaire was simple to access at any time, and respondents had the freedom to fill it out at whatever time they wanted. After data collection through Google Forms, we exported data to Microsoft Excel to clean the data that didn't want to continue with the questionnaires. After this, the data was imported into the PSPP statistical analysis software to operate and analyze the results. To test the research hypothesis, we used Pearson correlation analysis to explore the relationship between five personality traits and work engagement.

Results

Table 2

Correlation between Extraversion and Work Engagement

	Extraversion	Work Engagement
Extraversion	-	.27*
Work engagement	.27*	-

Note. N=76. * $p < .05$.

Source: Prepared by authors.

According to Table 2, there is a significant positive correlation between Extraversion and Work Engagement, $r(74) = .27, p = .019$.

Table 3

Correlation between Agreeableness and Work Engagement

	Agreeableness	Work Engagement
Agreeableness	-	.49***
Work engagement	.49***	-

Note. N=76. *** $p < .001$.

Source: Prepared by authors.

As illustrated in Table 3, there is a significant positive correlation between Agreeableness and Work Engagement, $r(74) = .49, p < .001$.

Table 4

Correlation between Conscientiousness and Work Engagement

	Conscientiousness	Work Engagement
Conscientiousness	-	.41***
Work engagement	.41***	-

Note. $N=76$. *** $p < .001$.

Source: Prepared by authors.

As is shown in Table 4, there is a significant positive correlation between Conscientiousness and Work Engagement, $r(74) = .41$, $p < .001$.

Table 5

Correlation between Neuroticism and Work Engagement

	Neuroticism	Work Engagement
Neuroticism	-	-.37**
Work engagement	-.37**	-

Note. $N=76$. ** $p < .01$.

Source: Prepared by authors.

According to Table 5, there is a significant negative correlation between Neuroticism and Work Engagement, $r(74) = -.37$, $p = .001$.

Table 6

Correlation between Openness to Experience and Work Engagement

	Openness to Experience	Work Engagement
Openness to experience	-	.21
Work engagement	.21	-

Note. $N=76$. $p = .067$.

Source: Prepared by authors.

Finally, as is illustrated in Table 6, there is positive but nonsignificant correlation between Openness to Experience and Work Engagement, $r(74) = .21$, $p = .071$.

Discussion

The main purpose of this project is to explore whether there is a correlation between Big Five personality traits, such as Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience, and work engagement. According to the results, most of the proposed hypotheses were supported, with the exception of the hypothesis regarding openness to experience. The results showed a significant positive correlation between Extraversion and work engagement ($r = .27, p < .05$). These results are in line and support the hypothesis that extraverted individuals who are enthusiastic, outgoing, adventurous, and sociable are more prone to higher engagement at work. Because extraverted individuals enjoy connecting and communicating with other people, this can contribute to higher connections with other employees in company, which leads to better engagement and enjoyment of work. The results also correspond with the relevant study by Karimi (2019) and Bansal et al. (2020), who found extraversion to be a good predictor of engagement in work. Based on the findings presented, the first hypothesis, "There is a positive correlation between Extraversion and work engagement," is accepted.

Agreeableness showed the most significant positive correlation among other personality traits, based on results ($r = .49, p < .001$). According to these results, people who score high in agreeableness tend to be more emotionally and positively connected to their work. Agreeable people can increase positive energy in their job since they are characterized by a forgiving, altruistic, and modest nature. These attributes can increase the readiness to go beyond minimum work requirements. The results support the hypothesis "There is a positive correlation between Agreeableness and work engagement".

Conscientiousness also demonstrated a significant positive correlation with work engagement ($r = .41, p < .001$). Because conscientious people tend to be organized and hard-working, are responsible for their duties, and have great self-discipline, these characteristics are associated with high levels of work engagement. When faced with challenges and difficulties at work, they tend to stay until their work is finished, which is very important for an employee. The results also support the research done at Lahore University that resulted in a significant positive correlation between Conscientiousness and work engagement (Zaidi et al., 2012). Based on these findings, the third hypothesis, "There is a positive correlation between Conscientiousness and work engagement," is also accepted.

Neuroticism (as expected) showed a significant negative correlation with work engagement ($r = -.37, p < .001$). Individuals who score high in Neuroticism tend to be tense or anxious in most cases, which can influence their performance at work. These results are in line with other psychological research, which suggests that negative emotions can undermine engagement in work. Thus, the results support the fifth hypothesis, “There is a negative correlation between Neuroticism and work engagement”.

Openness to Experience showed a positive but non-significant correlation with work engagement ($r = .21, p > .05$). People who score high in Openness to Experience are characterized by curiosity, fantasy, and excitement. These characteristics can influence individuals’ performance and engagement in work. However, based on results, the hypothesis “There is a positive correlation between Openness to Experience and work engagement” is rejected.

Overall, the results support the idea that work engagement has a relationship with personality traits. The significant positive correlation between four personality traits and work engagement demonstrates that personality psychology is very important for understanding workers’ attitudes. The results also show the importance and positive side of including personality evaluation tools in organizational practices, whether in the hiring process or to improve the work program to increase work engagement.

Practical Implications

The findings of this study provide several important practical implications, especially within higher education institutions. Since a significant positive relationship was found between work engagement and conscientiousness, agreeableness and extraversion and a significant negative relationship between work engagement and neuroticism, it is important to treat Big Five as a relevant factor in employee development, work design/redesign and organizational planning.

First of all, the results suggest that the Big Five Inventory can be used as an assessment tool during recruitment and selection processes. Identifying candidates who score higher on conscientiousness and agreeableness may increase the likelihood of hiring workers especially for the job positions that are more dynamic, persistent, collaborative, so workers can keep their engagement level higher. Even though it is not suggested this assessment to be a selection criterion, it might help to gain perspective in decision-making process.

Moreover, the negative correlation between work engagement and neuroticism shows that some workers might need more training on emotion regulation and stress management to be more engaged. Institutions might implement psychological support systems, and/or resilience training to help workers especially for those who are more anxious (in nature) and emotionally unstable.

Overall, the results indicate that work engagement is not only determined by organizational conditions, but it is highly influenced by individual differences. Therefore, effective strategies for enhancing engagement should be considered in the organizational as well as individual level.

Research Weaknesses and Suggestions for Further Research

One of the weaknesses that can be considered is the definition of the sample at 76 participants, a small number to generalize the idea of the influence of personality on work engagement. Also, the goal was to carry out this research within a university, but the suggestion is to include perhaps other universities or other larger organizations, which will automatically lead to a larger sample size.

Another suggestion would be to consider gender balance because in this research, most of the participants are women, and future research could show how gender, in interaction with personality, influences work engagement.

Conclusion

This research explored the relationship between Big Five personality traits and work engagement among employees of International Balkan University, from the results of which it became clear that there is a significant positive correlation between Extraversion, Agreeableness, and Conscientiousness and work engagement; on the other hand, Neuroticism showed a negative correlation with work engagement.

Although Openness to Experience from the results showed a positive but not significant relationship with work engagement, we should emphasize that its role is important. This research adds support that personality traits, or rather personality differences between individuals, influence the way they are engaged at work.

In addition, to fulfill the academic requirement, the topic was chosen with sincerity to contribute to the university community. By conducting this research within the International Balkan University, the aim was to provide insights into the

psychological factors that may influence the workspace of its staff as well as the setting of the organization.

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