Abstract

This research study starts with the hypothesis that the personality traits of managers influence their leadership styles. Personality traits are taken from the model Big Five (McCrae and Costa) since it is one of the most dominant models of personality in modern psychology. Management styles (leadership) were investigated within the theories of transformational and transactional leadership, including laissez-faire style (Bruce Avolio & Bernard Bass). The research was conducted with 160 lower-level, middle-level and high-level managers in Serbia, employed in private and public sectors. From the questionnaire the NEO Personality Inventory (Serbian version, Kostić, P. 2002), and with the analysis of the main components, five dimensions of personality have been extracted: extraversion, neuroticism, conscientiousness, agreeableness and openness to experience. From the shorter version of Multifactor Leadership Questionnaire, three factors of leadership have been extracted: transformational, transactional and laissez-faire. The relationship between the received factors was checked by Pearson’s correlation coefficient and by multiple regression analysis. The received information showed that there is a statistically significant relationship between personality traits and leadership styles, and the most dominant relationship is between the transformational leadership style and extraversion (in a positive sense) and neuroticism (in a negative sense).

Keywords: the Big Five, Leadership styles
Introduction

This paper deals with leadership, as a process in which manager leaders have certain interactions with the employees in order to create conditions for a greater work productivity.

Leadership in the organization is the most important human resource, and the most important figure is the manager with leadership abilities. Leadership involves many processes that are created by the organization or adjusted to the circumstances that are constantly changing. Leadership is defined as a need how a future should look like, how to guide people towards the vision and the mission of the organization and how to achieve the goals despite many obstacles (Koter, 1999). Leadership is a process which directs the work of the employees towards the accomplishment of the tasks (Stoner & Gilligan 2002).

Dominant leadership styles

The study of the leadership was very popular in the middle of the 70s of the last century with the theory about transformational and transactional leadership, the study of the charismatic leadership in organizations and it became the most dominant research direction in this area.

Transformational leadership is a process among individuals, but also a process of establishing power and the reform of institutional systems. Transformational leadership (Burns J. M. 1978) raises consciousness of the followers by initiating their greater values such as freedom, justice, equality, peace and similar. Transformational leaders is possible to be used by anyone within the organization and at any level. Contrary to transformational leadership there is transactional leadership in which followers are initiated on their own interests. Transactional leadership also includes values, but those are values that are significant for the exchange process, such as honesty, responsibility and reciprocity (Yukl, Van Fleet, 1992). Bass’s (1985) conceptualization of transactional and transformational leadership included seven leadership factors, which he labelled as charisma, inspiration, intellectual stimulation, individual consideration, contingent reward, management by exception and laissez-faire leadership. Liberal (laissez-faire) type of leadership is a style in which a leader makes all the decisions together with all the employees. The leader trusts his employees, he knows their education, skills and characteristics, and they are free to discuss all issues. This leadership style is applied in all types of companies, regardless of their size, and and they are structured in teams and work groups. The companies are mostly sophisticated with high-educated employees that cannot bear limitations and patterns (Mandic et. al 2016).

In the study using 14 samples and nearly 4,000 leadership reports, Avolio et al. (1999) found that a six-factor model (inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception– active, and combined management by exception passive–laissez-faire) represented the
structure of the transformational and transactional leadership. However, when only transformational leadership behaviors are considered, a single transformational leadership factor appears to represent the data well (Carless, 1998; Judge & Bono, 2000). The results show that the higher end of transformational leadership can be distinguished from its lower-end connections to individualized consideration and transactional contingent reward leadership (Avolio, B. J., et.al 1999).

**Personality of the Big Five**

The Big-Five representation within sets of trait terms that are far more representative of the total English trait lexicon and are broad dimensions or domains of personality encompasses a variety of related traits, or facets, and a fully systematic approach to the investigation of stability and change in personality traits within each of these five domains. The five-factor model consists of Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C) (McCrae & Costa, 1987).

The first dimension is Extraversion, and traits frequently associated with it include being sociable, gregarious, assertive, talkative, and active. Hogan (1986) interprets this dimension as considering ambition and sociability. The second factor is emotional stability, or neuroticism (John 1987). It includes being anxious, depressed, angry, embarrassed, worried and insecure. Agreeableness or likability traits associated with this dimension include being courteous, flexible, trusting, good-natured, soft-hearted and tolerant. The fourth dimension, conscientiousness or conscience is associated with volition. It reflects being careful, thorough, responsible and organized. Openness to experience of culture is associated with imaginative, cultured, curious, original, broad-minded, intelligent and sensitive (Barrick, M. R., & Mount, M. K. 1991).

**Personality and Ratings of Leadership Behavior**

Several studies have linked the Big Five traits to leadership. Bono and Judge (2004) used the five-factor model to describe the relationship between the transactional leadership and the transformational leadership.

All personality measures can be categorized under the umbrella of a 5 factor model of personality which is called „Big Five” (Goledberg, 1990). The dimensions composing the 5 factors model are neuroticism, extraversion, and openness to experience, agreeableness and conscientiousness (Judge, T. A., et. al 1999). Extraversion appears to be the most relevant to leadership styles and leadership criteria (leader emergence and leadership effectiveness) (Grant & Bateman 2000).

Extraversion is a prominent factor in personality psychology as evidenced by its appearance in most personality measures. Extraversion is related to the experience of positive emotions, and extraverts are more likely to take on leadership roles and to have a greater number of close friends (Watson & Clark 1997).
Individuals high in neuroticism, according to Costa and McCrae (1992), tend to experience negative effects, such as fear, sadness, guilt, and anger. Individuals high in neuroticism should not lead (Bass, 1985, p. 173), and they should avoid leadership responsibilities. Furthermore, they are not likely to be seen as role models, are unlikely to have a positive view of the future, and may be too anxious to undertake transformational change efforts. They will exhibit transformational leadership behaviors.

Individuals high in this trait are emotionally responsive and intellectually curious (McCrae, 1996) and may also exhibit inspirational leadership behaviors. Because they are imaginative and insightful, they are likely to be able to see a vision for the organization’s future. Since agreeableness represents the tendency to be cooperative, trusting, gentle, and kind (Graziano & Eisenberg, 1997), individuals high in agreeableness value affiliation and avoid conflict, they may score high in idealized influence and may be seen as role models because of their trustworthiness and consideration for others. Finally, agreeable leaders are likely to be available when needed, leading to low scores on passive leadership.

Conscientious individuals are goal and detail oriented. They may more likely be engaged in management by exception-active, which involves both setting and monitoring goals. Also, because they are dependable and unlikely to shirk their work responsibilities, they are unlikely to exhibit passive leadership behaviors, which involve lack of self-discipline and the default of leadership responsibilities (Bass, 1998).

Research Methods

The aims of this research are the following:

To study the relationship between personality traits and managers` leadership styles, and to determine, based on the results, which personality traits can be predictors for a certain leadership style.

The hypothesis:

There is a statistically significant relationship between personality traits of the managers and their leadership styles.

Instrumenti:

MLQ short version - the questionnaire consists of 21 claims that describe leadership styles. The questionnaire is in the form of 5-point Likert scale. The summation scores of the answers are reduced to three sub-dimensions, three management styles: Transformational, Transactional and Laissez-faire.

NEO Personality Inventory - Dimensions of personality operationalized by NEO-PR personality inventory (Serbian version, P. Kostić, 2002). With the analysis of the main components, five dimensions of personality model have been extracted, 'The Big
Five’: Neuroticism, Extraversion, Agreeableness, Conscientiousness and Openness to experience.

**The sample:**
The research was conducted with 160 lower, middle and high managers in Serbia, employed in both private and public sectors. The sample included 45 women and 115 men. The respondents were from 31 to 65 years old. The average age of the respondents is 47.

**Data processing:**
The data received with this research were processed with SPSS. The statistical methods that were used were the main component analysis that extracted five dimensions of personality from the questionnaire NEO-PR, Pearson Correlation and Multiple Regression Analysis.

**Research results**
The relationship between personality traits of the managers and their leadership styles
With the aim to test the hypothesis about the existence of the relationship between personality traits of the managers and their leadership styles, we have correlated the leadership style variables and five dimensions of personality with Pearson Correlation Coefficient.

| Table1: Pearson Correlation Coefficient of personality traits of managers and leadership styles |
|---------------------------------|---------------------------------|---------------------------------|
| EXTRAVERSION                     | Transformatio nal style         | Transactiona l style            | Laissez-faire style |
| r                               | ,695                            | ,394                            | ,231                |
| p                               | ,000                            | ,000                            | ,000                |
| AGREEABLENESS                   | r                               | ,327                            | ,325                | ,341                |
| p                               | ,002                            | ,000                            | ,000                |
| CONSCIENTIOUSNESS               | r                               | ,344                            | ,357                | ,219                |
| p                               | ,001                            | ,000                            | ,000                |
| NEUROTICISM                     | r                               | ,602                            | ,159                | ,145                |
| p                               | ,000                            | ,017                            | ,033                |
| OPENNESS TO EXPERIENCE          | r                               | ,342                            | ,167                | ,288                |
| p                               | ,021                            | ,028                            | ,000                |

r- Pearson Correlation Coefficient, p- level of significance

The received results showed that there is a statistically significant connection between personality traits and leadership styles. All received correlation coefficients are statistically significant, and the correlations of transformational style and extraversion (in positive correlation) and neuroticism (in negative correlation) have the highest correlation coefficients. The other correlations are of moderate or low intensity. Transformational leadership style is statistically significantly correlated
with Agreeableness, Conscientiousness and Openness to experience. Transactional style has statistically significant correlation coefficients with Extraversion, Agreeableness and Conscientiousness, in positive correlation and of moderate intensity, while with Neuroticism and Openness to experience has negative correlation of very low intensity. Laissez-faire style most significantly correlates with Agreeableness, then with Openness, while it has the lowest correlation with Neuroticism.

Since one of the aims of the research was to determine which personality traits can be predictors for a certain leadership style three Multiple regression analyses have been done in which leadership styles were criterion variables, while the personality traits(Extraversion, Agreeableness, Conscientiousness, Openness to experience and Neuroticism) were predictor variables.

1) The first multiple regression analysis in which the criterion variable was Transformational leadership style. The regression model is statistically significant at the level p=0,000. Coefficient of multiple correlation is R=0,640, R²=0, 41.

| (CONSTANT)      | Beta  | t-test | p-level of significance |
|-----------------|-------|--------|-------------------------|
|                 | ,236  |        | ,814                    |
| EXTRAVERSION    | ,307  | 6,117  | ,000                    |
| AGREEABLENESS   | ,025  | ,444   | ,657                    |
| CONSCIENTIOUSNESS | ,053  | ,934   | ,351                    |
| NEUROTICISM     | -406  | -7,762 | ,000                    |
| OPENNESS TO EXPERIENCE | ,020  | ,387   | ,699                    |

Statistically significant beta coefficient with the criterion has Extraversion, positive and of low intensity, and Neuroticism, negative and of moderate intensity. Other predictors do not have statistically significant beta coefficients.

2) The second multiple regression analysis in which the criterion variable is Transactional leadership style. Regression model is statistically significant at the level p=0,000. Coefficient of multiple correlation is R=, 531, R²=0,282.

| (Constant)      | Beta  | t-test | p-level of significance |
|-----------------|-------|--------|-------------------------|
|                 | ,179  |        | ,858                    |
| EXTRAVERSION    | ,458  | 8,280  | ,000                    |
| AGREEABLENESS   | ,157  | 2,717  | ,007                    |
| CONSCIENTIOUSNESS | ,141  | 2,521  | ,012                    |
| NEUROTICISM     | -051  | -816   | ,415                    |
| OPENNESS TO EXPERIENCE | -035  | -568   | ,570                    |
Statistically significant partial contribution to the prediction of the criterion variable (Transactional style) primarily has Extraversion, while Agreeableness and Conscientiousness have statistically significant beta coefficients of low intensity, but positive. In this analysis Neuroticism and Openness are not statistically significant for the prediction of Transactional leadership style. Statistički značajan parcijalni doprinos predikciji kriterijumske varijable (Transakcion stil) ima prvenstveno Ekstravzija, dok Saradljivost i Savesnost, imaju statistički značajne beta koeficijente niskog intenziteta, ali takođe pozitivnog predeznaka. U ovoj analizi Neuroticizam i Otvorenost se nisu pokazali statistički značajnim za predikciju Transakcionog stila rukovođenja.

3) The third multiple regression analysis in which the criterion variable is laissez-faire leadership style. Regression model is statistically significant at the level $p=0.000$. The coefficient of multiple correlation is $R=0.601$, $R^2=0.361$.

Table 4: Partial contribution of predictors

|                        | Beta | t-test | p-level of significance |
|------------------------|------|--------|-------------------------|
| (Constant)             | .208 |        | .835                    |
| EXTRAVERSION           | .082 | 1.415  | .158                    |
| AGREEABLENESS          | .503 | 9.633  | .000                    |
| CONSCIENTIOUSNESS      | .073 | 1.234  | .218                    |
| NEUROTICISM            | .075 | 1.373  | .171                    |
| OPENNESS TO EXPERIENCE | .065 | 1.236  | .217                    |

Based on the received values of beta coefficients we may conclude that Agreeableness contributes to the prediction of criterion variable (Laissez-faire style), while the other personality traits are not significant predictors for this leadership style.

Discussion

Based on the received research results we may say that the hypothesis about the existence of the connection of the personality dimensions from the Big Five Model and managers’ leadership styles has been confirmed. The research showed that more pronounced Extraversion and less pronounced Neuroticism make managers tend towards Transformational leadership style. This leadership style is more frequently found with individuals who are more conscientious and open to new experience.

Transactional leadership style is also connected to Extraversion, Agreeableness and Conscientiousness, and with these traits more pronounced, managers tend towards this leadership style. Laissez-faire style is most significantly connected to Agreeableness.
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