THE RELATIONSHIP BETWEEN THE VOCATIONAL TEACHERS’ PERSONALITY TRAITS AND THE WORK MOTIVATION

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Abstract. Background: Nowadays, as a means of supplying the market with a highly qualified workforce, vocational teachers play a significant role in Lithuania’s educational system. It is assumed that the most important factor determining the quality of education is the teacher. Undoubtedly, the vocational teacher’s personality traits and their work motivation are considered to be important components of a successful educational process. Aim: this study was carried out in order to detect the relationship between the vocational teachers’ personality traits and their work motivation. Method: The personality traits were evaluated using the Big Five Inventory (BFI; John et al., 1991, 2008) while the work motivation was assessed by employment of the Multidimensional Work Motivation Scale (MWMS; Gagne et al., 2015). 364 teachers from various Lithuania’s vocational schools participated in the research (243 of them were women, 93 men, while 10 did not specify their gender). Results: The study revealed that a greater expression of neuroticism correlated with an increase of the teachers’ motivation (p < .01), extrinsic (social and material) regulation (p < .01) and introjected regulation (p < .05), although the identified regulation (p < .05) and intrinsic motivation (p < .01) were observed to decrease. Meanwhile, with the increase of the teachers’ expression of extraversion, agreeableness and conscientiousness, intrinsic motivation (p < .01) and identified regulation (p < .01) heightened, and the extrinsic (material) motivation decreased (in case of extraversion and agreeableness – p < .01, in case of conscientiousness and openness to experience – p < .05). Moreover, the differences of work motivation noticed among various personality profiles were added to the results of the research. In comparison to the teachers with low levels of neuroticism, the teachers with higher neuroticism levels were more likely to experience extrinsic (material) regulation (p < .001) and amotivation (p < .001). While the teachers with
the lower level of neuroticism were noticed to be more prone to stronger and identified regulation (p < .001) and introjected regulation (p < .001) than the teachers with higher neuroticism levels. The results of the study could be useful in the professional counselling and guidance process and in order to effectively motivate vocational teachers with peculiar personality traits.

**Keywords:** vocational teacher; personality traits; work motivation; clusters.

**INTRODUCTION**

Recently the number of Lithuanians with a higher education is constantly increasing (Statistics Lithuania, 2017). However, to achieve faster economic development of various industry types in Lithuania, the system of initial and continuous vocational training capable of supplying workers proficient with innovative technologies should be of more importance (CEDEFOP, 2013). Further, the labour market is faced with the ever-growing problem of a lack of a highly qualified workforce, and in turn tries to compensate this demand with the graduates from institutions which specialize in vocational teaching. According to Statistics Lithuania (2017), today in Lithuania there are 74 vocational teaching institutions that train more than 74 thousand students. This makes up less than 10 percent off all the pupils of public and private educational institutions, while more than 50 percent of workers specialise in professions that require a qualification of a vocational level (Profesinio mokymo metodikos centras, 2006).

The importance of vocational training is also emphasized in the most important state and European Union’s documents (e.g. State development strategy “Lithuania’s Development Strategy „Lietuva 2030”; European Commission’s Communication “Europe 2020”) in which the development of a learning society with the members capable of independently creating their own prosperity as well as contributing to their country’s prosperity is underlined. It also has been noticed that vocational schools still are not fully realizing the potential, and are failing to respond to the demands of both the individual and the society (State Education strategy for 2013–2022). Moreover, it is aimed at increasing the appeal of vocational training across the European Union (The European Commission’s Communication “Europe 2020”). Thus, vocational teacher’s work is a significant professional activity valuable to both the
European Union on a larger scale, as well as the individual country in question.

According to Adamonienė (2000), vocational teachers must not only be masters of their trait, but also be able to competently organise the educational process to train qualified workers. In addition to the knowledge of their speciality, the expertise of a vocational teacher is linked to one’s personality traits. That is why in search of contributing factors useful in foreseeing the efficiency of the pedagogical work, the researchers emphasised the teacher’s personality as one of the most important elements in the education of young specialists, as personality traits are substantial to positive processes and results of any professional activity (Cirtautienė, 2016; Eryilmaz, 2014; Göncz, 2017; Juodkūnė, 2015; Fatemi et al., 2015; Paleksić et al., 2017; Rusbadrol et al., 2015). As stated by Göncz (2017), the efficiency of the educational process could be enhanced by researching the personality traits of teachers. However, in most cases the studies carried out in this area are aimed at estimating what type of people chose the teacher’s profession, while the relationship between the teacher’s personality traits and efficiency remains as of yet lacking in the literature (Arif et al., 2012).

One factor in particular, influencing the quality of pedagogical interaction, successful involvement in pedagogical activity, the creation of a friendly and supportive climate in the classroom, and the promotion of students’ confident steps into the world of work is the pedagogical worker’s motivation (Ngai et al., 2016). It is clear why the teachers’ work motivation is regarded as a significant factor in educational psychology, since the teachers’ work motivation directly influences the quality of their work: this aims of the activity that students take part in, the use of technologies in the study process, etc. (Efe & Baysal, 2017; Mintrop & Ordenes, 2017). Work motivation is also related to teachers’ satisfaction with their job and the obligations they have with the employing institution (Tentama & Pranungsari, 2016). However, research aimed at analysing the importance of teachers’ personality traits in pedagogical work motivation is not very common, while in Lithuania particularly, this question has not been adequately addressed (e.g. Juodkūnė, 2015). Thus, this paper focuses on trying to determine how vocational teacher’s personality traits are related to work motivation.
BACKGROUND

Vocational Teachers’ Personality Traits

In scientific literature personality traits are defined as important factors in various everyday situations and work-related activity, since they distinguish stable characteristics of a person and determine his or her casual and professional behaviour (Mount et al., 2005). Stable inner characteristics of a person could be used to predict the actions of a person. Personality traits influence the choice of role which in turn shape the direction of behaviour (Legkauskas, 2008). It has been determined that personality traits are associated with the carrier related decisions and the self-efficacy (Tomšik & Gatial, 2018; Üstüner, 2017), the involvement with the professional activity (Wang et al., 2006) and the leadership in the school environment (Marshall et al., 2012). Teachers’ personality traits are reflected in their satisfaction with the job (Paleksić el al., 2017), their performance at work (Rusbadrol et al., 2015; Pourghaz, Jenaabadi, & Ghaeninejad, 2016), efficiency of learning (Fatemi et al., 2015), subjective wellbeing, and the academic achievement of students (Eryilmaz, 2014).

The Big Five Model is proven to reflect the main personality traits as well as substantially affect human behaviour (Costa & McCrae, 1992). This theory is the result of a several-decade-long scientific research carried out in this thematical area (John et al., 2008; Zhang, 2002). The Big Five Model consists of empirical soundness, practical value of the model, the stability of individual differences, and intercultural validation. As a result, this model is widely employed all over the world. It is believed, that to this day, no better or more useful model has been developed (Kairys, 2008). The personality traits of the Big Five are: agreeableness, conscientiousness, openness to experience, extraversion, and neuroticism.

Conscientiousness and neuroticism are the personality traits that best characterise the person in a professional activity (Noftle & Robins, 2007; O’Connor & Paunonen, 2007). The character of conscientiousness incorporates planning, organizing, challenging oneself, and other processes, moreover, the desire to achieve is also considered as a characteristic feature of this trait (Costa & McCrae, 1992). It is also linked with the motivational drive to accomplish goals (Hart et al., 2007), and the targeted control of a person’s own action and self-regulation (Hoyle, 2006). It is
assumed, that a good teacher must possess these traits since qualities such as responsibility, the skills of planning, commitment, and competence are very important in the pedagogical environment (Göncz, 2017).

Neuroticism is the trait that reflects the tendency to experience negative emotions such as fear, sadness, anger, fault, dissatisfaction, etc. (Costa & McCrae, 1992). Neuroticism is negatively correlated with the teachers’ performance and sense of humor (Pourghaz et al., 2016). Such characteristic is regarded as the least favourable among the teachers in various pedagogical situations or while interacting with pupils or students (Göncz, 2017). The teacher with a strongly expressed neuroticism trait will experience hardships in establishing a connection with his or her students, and will also have to spend more time and effort in order to improve their social skills (Göncz, 2017).

Openness to experience is another personality trait with qualities such as creative imagination, attention to inner experiences, esthetical sensitivity, desire for intellectual knowledge, and display of increased interest in the inner and outer worlds (Costa & McCrae, 1992). Research has proven that teachers with strong openness to experience are more likely to participate in creative activities (Lee & Kemple, 2014).

Agreeableness is defined by qualities such as friendliness, empathy, forgiveness, honesty, and etc. (Costa & McCrae, 1992). Also, Izzati, Suhaariadi and Hadi (2015) found that agreeableness (together with conscientiousness in the mentioned study) significantly predicts the affective commitment of vocational teachers. It means that vocational teachers who have a high level of agreeableness have emotional attachment, identification, and full involvement with the organization. The personality trait of agreeableness is one of the most significant personality traits of a successful teacher, because this trait is associated with the activity orientated to the interpersonal services and altruistic types of motives (Tomšik & Gatial, 2018). A good professional should be able to cooperate, reach for agreement, and feel compassion (Göncz, 2017).

The trait of extraversion includes activeness, sociality, and optimism (Costa & McCrae, 1992). Extraverts draw energy from the external world, and the education system by its very nature promotes extraversion. With regard to the other aforementioned dimensions, moderate extraversion for teachers is desirable as it is associated with friendliness, self-confidence, and positive emotions. Also, it is assumed that extraversion
would be more pronounced in a good teacher than in the general population (Göncz, 2017). Extraversion is positively related to overall teaching performance (Scheepers, Lombarts, van Aken, Heineman, & Arah, 2014).

The Big Five Model is suitable not only for examining the different context of organisational behaviour but also for researching pedagogical work. The aforementioned personality traits have inflicted different consequences in the educational process (Göncz, 2017). Pandey and Kavitha (2015) have analysed the relationship between teachers’ personality traits and self-efficacy. The results have shown that extraversion, agreeableness, openness to experience, and fairness are positively related to the teachers’ self-efficacy. A notable negative relationship has been determined between the trait of neuroticism and self-efficacy. Rusbadrol and his colleagues (2015) have ascertained that the traits of openness to experience and agreeableness are positively associated with the carrying out of teachers’ duty while neuroticism has been proven to have a negative relation to it. Another analysis has discovered the relationship between the teacher’s emotional intelligence and the traits of agreeableness and extraversion (Iruloh & Ukaegbu, 2015). Moreover, it has been stated that teachers can have a different profile of personality traits form other professional groups (Göncz, 2017).

After summarising the results of scientific studies carried out in the field of teachers’ personality traits it can be stated that personality traits have a huge impact on the success of the professional activity. However, the results of the studies are not ambiguous. And, thus, the need to pursue the analysis in hopes of discerning further patterns in this topic arises.

**Teachers’ Work Motivation**

Motivation is defined as the process of stimulating behavior, actions, and activity and is caused by various motives (Psichologijos žodynas, 1993). The process of motivation starts with the arising need. It creates a certain inner tension, discontentment, and so encourages the person to act in order to satisfy the need. This way the realised needs become the motive. Motives are described as material or ideal, inner or outer characteristics that stimulate the activity and guide the direction of the individual’s activity. In addition, it is described as the reasons for actions and
deeds of the person that they themselves comprehend (Psichologijos žodynas, 1993). Latham and Pinder (2005) define work motivation as “a set of energetic forces that originate both within as well as beyond an individual’s being, to initiate work-related behavior and to determine its form, direction, intensity, and duration” (Latham & Pinder, 2005, p. 486).

Even though existing motivation theories are great in number, the one to overview most of the hypotheses that analyse the phenomenon of motivation is the new and world-renowned theory (Gagne et al., 2015) known as the Self-Determination theory (Deci & Ryan, 1985, 2000; Gagne et al., 2015). The Self-Determination theory introduces the multidimensional structure of motivation and discerns three main types of motivation: amotivation, extrinsic motivation, and intrinsic motivation.

Amotivation is complete lack of motivation. It is a state where the human has neither an intrinsic nor an extrinsic motivation, abandons all activities, and shows no interest in working (Gagne & Deci, 2005).

Intrinsic motivation reflects that the activity is carried out because of the enjoyment it brings (Gagne et al., 2015). Intrinsic motivation is also known as the ‘autonomous motivation’ (Wang & Hou, 2015) which encourages activity correlating with the individual’s self-realisation. Such activities bring pleasure and satisfaction to the individual (Levin et al., 2012). Intrinsic motivation relates with personality traits in a way that autonomous motivation is caused not by external factors or situations, but by inner factors which enable the individual to freely decide and choose (Felser, 2006).

Extrinsic motivation is associated with the activity performed in order to achieve the results important to the individual. In other words, the individual is motivated by an external source, whereby a clear profit is targeted (Gagne et al., 2015). Extrinsic motivation is a type of motivation identified when the individual strives for reward or tries to avoid punishment (Levin et al., 2012). This type of motivation is also acknowledged as ‘controlled motivation’ (Wang & Hou, 2015). According to the level of individual’s independence, the self-determination theory discerns four different types of extrinsic motivation (Ryan & Deci, 2000; Gagne et al., 2015): social regulation – expectations associated with other important people (e.g., activity is performed in other to gain the respect and acknowledging of others); material regulation – expectations regarding financial benefits (e.g., in order to earn a reward or more money);
introjected regulation – a certain pressure to carry out an activity caused by external reasons, e.g., guilt, shame, self-esteem, wish to avoid anxiety, desire to experience taking pride in oneself (the behaviour is regulated by socially internalised rules); identified regulation – activity is carried out because of personally important reasons (the behaviour is regulated by enforced external ways of thinking and acting; however, the individual consciously acknowledges their personal benefit, since this type of thinking or behaviour is useful, e.g., aids in achieving an aim). Identified regulation is characterised by higher levels of independence than other types of motivation and is similar to intrinsic motivation. Nonetheless, identified regulation is different from intrinsic motivation, since the activity is not carried out for inner satisfaction and has an instrumental value (Gagne et al., 2015).

In the self-determination theory intrinsic motivation is regarded as an undoubtful advantage for performing any activity since it is affected by psychological demands: the relationships with others, competence and the satisfaction of autonomous needs (Deci & Ryan, 2000). Chong and Low (2009) have determined that teachers who experience aptness or inclination to their profession while training to become a teacher, were later motivated to work on their profession by altruistic or inner factors. The motivation, thus, helps to form teacher’s professional identity (Nevin et al., 2009) or can be understood as one of the professional identity’s indicators (Canrinus et al., 2012). Thus, motivation, especially the intrinsic motivation, influences the successful involvement of an individual into their professional occupation (Ngai et al., 2016); therefore, teachers with high levels of motivation are capable of creating a friendly and supportive climate in the classroom and this reflects in the quality of education provided by them (Efe & Baysal, 2017; Mintrop & Ordenes, 2017).

Taking everything into consideration, it can be stated that teachers’ work motivation is an important factor of a quality of education process, a significant factor of the psychological wellbeing of teachers, the element affecting teachers’ work satisfaction, and a substantial safety factor since motivated employees are more likely to be committed to the educational establishment and less likely to leave the organization or to demonstrate disloyal behavior. On the one hand, personality traits, as a stable characteristic of an individual, can aid in predicting the behavior
of teachers. However, as it was already mentioned in the beginning of the paper, there is a lack of studies analysing the importance of teachers’ personality traits and the relationship this has with their work motivation. Moreover, after determining the personality trait profile of a teacher motivated by internal reasons, a higher quality educational process can be expected. Therefore, this research is aimed at answering the question of how vocational teacher’s personality traits are related to work motivation.

**METHOD**

**Participants**

346 teachers from various Lithuania’s vocational schools participated in the survey. 93 of them were men, 234 – women (10 participants did not specify their gender). The age of all the respondents varied from 18 to 60 years and more, while most of the participants are part of 50–59 age group (38.5%). Almost half of the respondents have 20 and more years of pedagogical work experience (50.9%). The bulk of the teachers indicated possession of a higher education (82.5%) and teacher’s qualification (65.2%). The majority of the research participants (57.3%) worked at vocational schools, in metropolitan areas (57.1%). 74.4% were employed as vocational teachers (and the rest of the respondents (25.6%) as general and vocational subject teachers). Almost half of the respondents represented engineering (48.6%), others – social sciences (23.7%), humanities (13%), physical sciences (6.8%) and agriculture (4.4%).

**Measures**

*The Big Five Inventory* (BFI; John et al., 1991, 2008; Benet-Martinez et al., 1998), otherwise known as the questionnaire of “The Big Five” personality traits, was used for the assessing the personality traits of the vocational teachers. The authors of the instrument have issued a permission to use the questionnaire for scientific purposes without any additional license. The Lithuanian questionnaire translation was prepared and customised (approbated) for the study by the scientists from the Department of Psychology at Vytautas Magnus University (Endriulaitienė & Ševelytė, 2009; Markšaitytė, 2010). The inventory consists of 44 short phrases
(e.g.: “I see myself as someone who...does a thorough job”; “is original, comes up with new ideas”; “is outgoing, sociable”). The participants were asked to evaluate every phrase in the five-point Likert scale (from 1 – “I strongly disagree” to 5 – “I strongly agree”). The questionnaire was meant to assess five personality traits: extraversion, agreeableness, consciousness, neuroticism, and openness to experience. The higher the evaluation in the scale, the stronger the expression of the personality trait is. The indicators of the questionnaire scales’ internal reliability and the short description of each scale are introduced in the Table 1.

**Table 1. The Big Five Inventory scale descriptions and reliability indicators**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Short descriptions</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extraversion</td>
<td>Inclination for socialising, activeness, talkativeness, optimism.</td>
<td>.692</td>
</tr>
<tr>
<td>2. Consciousness</td>
<td>Includes planning, organising task establishing, and other processes as well as need for achievements.</td>
<td>.704</td>
</tr>
<tr>
<td>3. Agreeableness</td>
<td>Associated with altruism, efforts in helping others, ability to understand, and sympathise.</td>
<td>.617</td>
</tr>
<tr>
<td>4. Neuroticism</td>
<td>Tendency to experience negative emotions: fear, sadness, anger, discontentment, shame, etc.</td>
<td>.686</td>
</tr>
<tr>
<td>5. Openness to experience</td>
<td>Creative imagination, attention to the inner experiences, esthetical sensitivity, earning for intellectual knowledge, display of interest in inner and outer world.</td>
<td>.816</td>
</tr>
</tbody>
</table>

The analysis of the composition of the factors in the Lithuanian version of this inventory in previous scientific studies showed the suitability of this questionnaire for assessing personality traits using group comparisons, but not for individual diagnosis (Šeibokaitė, & Endriulaitienė, 2012). The coefficients of the Cronbach alpha scales of the Lithuanian version of the questionnaire in this study and in the samples of other Lithuanian studies (Endriulaitienė, & Ševelytė, 2009; Markšaitytė, 2010; Šeibokaitė, & Endriulaitienė, 2012) are similar to the scales’ internal compatibility indicators established by the authors of the methodology in the sample of the respondents of intercultural research (Benet-Martinez, John, 1998). The scale reliability indices according to the data of this study are sufficient and indicate the suitability of scales for group analysis (Clark, Watson, 1995).
The Multidimensional Work Motivation Scale (MWMS; Gagne et al., 2015) was employed to evaluate the vocational teachers’ work motivation. The scale consists of 19 statements. The participants were asked to assess every phrase while extending the sentence: “I put effort into my current job”. Every sentence is evaluated with seven-point Likert scale from 1 (“I strongly disagree”) to 7 (“I strongly agree”). The questionnaire consists of 6 scales: amotivation (3 statements), for example: “… I don’t, because I really feel that I’m wasting my time at work”; extrinsic (social) motivation (3 statements), for example: “… to get others’ approval (e.g., supervisor, colleagues, pupils)”; extrinsic (material) motivation (3 statements), e.g.: “…because I risk losing my job if I don’t put enough effort in it”; introjected regulation (4 statements), e.g.: “…because I have to prove to myself that I can”; identified regulation (3 statements), e.g.: “…because I personally consider it important to put efforts in this job”; intrinsic motivation (3 statements), e.g.: “… because the work I do is interesting”. The scales’ descriptions and reliability indicators are presented in the Table 2.

Table 2. Multidimensional Work Motivation Scale reliability indicators and descriptions of scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>Short description</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Amotivation</td>
<td>Complete lack of motivation.</td>
<td>.873</td>
</tr>
<tr>
<td>2. Extrinsic (social)</td>
<td>Motivation is caused by external source, clear social benefit is desired: wishes are connected to other important factors (support, fame).</td>
<td>.874</td>
</tr>
<tr>
<td>3. Extrinsic (material)</td>
<td>Motivation is caused by external source; clear material benefit is desired: expectations of financial reward.</td>
<td>.824</td>
</tr>
<tr>
<td>4. Introjected regulation</td>
<td>A certain pressure to perform an activity is created by the individual himself, e.g. guilt, shame in front of other people (motivation is regulated by socially internalized rules).</td>
<td>.825</td>
</tr>
<tr>
<td>5. Identified regulation</td>
<td>Activity is carried out because of personally important reasons (the behaviour is regulated by enforced external ways of thinking and acting; however, the individual consciously acknowledges their personal benefit, since this type of thinking or behaviour is important and useful).</td>
<td>.904</td>
</tr>
<tr>
<td>6. Intrinsic motivation</td>
<td>Activity is performed because of the satisfaction it brings.</td>
<td>.910</td>
</tr>
</tbody>
</table>
The instrument is used all over the world, its validity (convergent, discriminant, and construct) is universally supported. Moreover, the intercultural validity of the instrument was also confirmed: the scale could be employed in various countries, can be adapted to various languages, and in different organisational contexts (Gagne et al., 2015; Johnson et al., 2015). The authors’ permission to translate and apply the scale for scientific purposes was issued to the authors of this paper. A double (English – Lithuanian, and Lithuanian – English) translation of the questionnaire was completed and coordinated with the original version of the instrument. The scale reliability of the Multidimensional work motivation scale (see Table 2) is good and fitting for a group analysis. In other cases, when this instrument was applied, the scale reliability indicators differ from .66 to .94 (Gagne et al., 2015; Olafsen et al., 2015).

**Processing of the Data**

The data of the survey was processed by using the SPSS 23.0 program. The variable distributions were tested for normality. The analysis has revealed that the variables’ distributions are statistically significantly digressed from the normality distribution. However, Shapiro-Wilk statistics’ values display a proximity to normal distribution (the closer the statistical value is to 1, the nearer the distribution to normal distribution is), the majority of the asymmetry and excess coefficients fall into the limits of appropriateness, as the amount of the respondents is substantial enough, the parametric statistical criterions were adopted for the further analysis (Vaitkevičius & Saudargienė, 2006). Even though the missing values were not a frequent occurrence, in order to avoid inaccuracy while processing the data of the research, the missing values were replaced by the most likely values by EM method. The statistical criterions used for the processing of the data were as follows: Student’s t criterion for assessing the differences of the means in groups, Pearson correlation coefficient to determine the relations among the values, two-step cluster analysis while employing the Schwarz’s Bayesian criterion. The chosen statistical significance materiality level is $\alpha = .05$.

**RESULTS**

The variables’ descriptive statistics of the vocational teachers’ work motivation and personality traits is presented in Table 3. In order to
evaluate the vocational teachers’ personality traits means with the arithmetical scale average (M = 3.00), a one-sample Student t criterion was employed. The analysis of the results revealed that the expression of extraversion (t (345) = 20.929, p < .001), agreeableness (t (345) = 33.905, p < .001), consciousness (t (345) = 29.695, p < .001), and openness to experience (t (345) = 21.442, p < .001) are statistically significantly greater than arithmetical mean of the scale. The only expression of a vocational teachers’ trait close to the mean of the scale is neuroticism (t (345) = -13.424, p < .001).

While analysing the comparison of work motivation components with the arithmetical scale mean (M = 4.00) it was determined that the surveyed teachers’ estimations of the introjected (t (345) = 9.506, p < .001) and identified (t (345) = 29.704, p < .001) regulation, and intrinsic motivation (t (345) = 42.286, p < .001) are statistically significantly greater than the mean of the scale, while the extrinsic material motivation (t (345) = -3.028, p < .01), and amotivation (t (345) = -26.971, p < .001) are statistically significantly lesser than the mean of the scale. Only the mean of the extrinsic social motivation scale is close to the arithmetical scale mean (p > .05).

Table 3. The research variables’ descriptive statistics (N = 346)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Minimal value</th>
<th>Maximal value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality traits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Extraversion</td>
<td>3.59</td>
<td>.52</td>
<td>2.25</td>
<td>5.00</td>
</tr>
<tr>
<td>2. Agreeableness</td>
<td>3.91</td>
<td>.50</td>
<td>2.33</td>
<td>5.00</td>
</tr>
<tr>
<td>3. Consciousness</td>
<td>3.90</td>
<td>.56</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>4. Neuroticism</td>
<td>2.56</td>
<td>.61</td>
<td>1.13</td>
<td>4.75</td>
</tr>
<tr>
<td>5. Openness to experience</td>
<td>3.51</td>
<td>.45</td>
<td>2.20</td>
<td>4.40</td>
</tr>
<tr>
<td>Work motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Amotivation</td>
<td>2.00</td>
<td>1.38</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>2. Extrinsic (social) motivation</td>
<td>4.07</td>
<td>1.68</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>3. Extrinsic (material) motivation</td>
<td>3.74</td>
<td>1.58</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>4. Introjected regulation</td>
<td>4.78</td>
<td>1.52</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>5. Identified regulation</td>
<td>5.78</td>
<td>1.12</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>6. Intrinsic motivation</td>
<td>5.75</td>
<td>1.11</td>
<td>1.33</td>
<td>7.00</td>
</tr>
</tbody>
</table>
The relationship between the teachers’ work motivation and personality traits is displayed in Table 4. The results of the study show that extrinsic-social (when motivation is caused by an external source, social benefits are clearly desired, e.g. the respect of other individuals) work motivation of the vocational teachers is positively linked to the trait of neuroticism. It means, that for an anxious, sadness and other negative emotions prone teacher the support of other important people is important, it motivates the teacher to work.

Extrinsic-material (when motivation is created by an external source and clear material benefit is coveted, e.g., income or reward) motivation is inherent to a teacher who is reserved, private, quiet (expression of extraversion is lesser), searching for someone to blame, fault-finding, overbearing, rough and indifferent (expression of agreeableness is lesser), careless, reckless, lazy and absent minded (expression of consciousness is lesser), is private and has an inclination to routine (expression of openness to experience is lesser) while also displaying affinity for negative emotions such as fear, sadness, discontentment, anger, shame, etc. (the expression of neuroticism is greater).

Table 4. The relationship between vocational teachers’ personality traits and work motivation

<table>
<thead>
<tr>
<th>Components of work motivation</th>
<th>Extraversion</th>
<th>Agreeableness</th>
<th>Consciousness</th>
<th>Neuroticism</th>
<th>Openness to experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic (social) motivation</td>
<td>-.038</td>
<td>-.085</td>
<td>-.057</td>
<td>.182**</td>
<td>.022</td>
</tr>
<tr>
<td>Extrinsic (material) motivation</td>
<td>-.164**</td>
<td>-.159**</td>
<td>-.124*</td>
<td>.269**</td>
<td>-.123*</td>
</tr>
<tr>
<td>Introjected regulation</td>
<td>.013</td>
<td>.062</td>
<td>.054</td>
<td>.168**</td>
<td>.085</td>
</tr>
<tr>
<td>Identified regulation</td>
<td>.220**</td>
<td>.273**</td>
<td>.274**</td>
<td>-.118*</td>
<td>.244**</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.402**</td>
<td>.337**</td>
<td>.345**</td>
<td>-.296**</td>
<td>.405**</td>
</tr>
<tr>
<td>Amotivation</td>
<td>-.242**</td>
<td>-.406**</td>
<td>-.360**</td>
<td>.282**</td>
<td>-.186**</td>
</tr>
</tbody>
</table>

Notes: **p < .01; *p < .05.

The vocational teachers’ introjected regulation (when the individual creates a certain pressure for himself to carry out an activity, e.g., guilt,
shame against the other people) is also related to the trait of neuroticism: with the increase of the introjected regulation, the expression of neuroticism also develops. In the case of identified regulation (even though it is discerned as a form of extrinsic motivation, introjected regulation is characterised by bigger autonomy than other forms of motivation) and intrinsic motivation positive relationship to extraversion, agreeableness, consciousness, openness to experience are noticed, while negative relations are identified with the trait of neuroticism. This reveals that the teachers who are distinguished by communality, activeness (extraversion), altruism, complaisance and empathy (agreeableness), commitment, organisation, diligence, self-discipline (consciousness), creative imagination, extensive interests (openness to experience) emotional stability, calmness and confidence (lesser expression of neuroticism) are motivated by the satisfaction felt after accomplishing an activity (intrinsic motivation) or the occupation is carried out by the standards of the environment but because of personally important reasons, for example, in order to reach certain aims (identified regulation). Whereas the teachers who experience a complete lack of motivation (amotivation) are characterised by utterly distinctive traits, i.e. such traits as extraversion, agreeableness, consciousness, openness to experience are expressed less than greatly emphasised neuroticism.

Again and again the researchers take notice of the fact that the evaluation of the relationship between personality traits and various psychological phenomena is not complete with only the assessment of separate traits and a certain factor links, as it is also important to determine the profile of the personality. In order to estimate how the vocational teachers’ work motivation differs while taking account of their personality traits’ set, a cluster analysis was carried out. To properly adapt the chosen statistical procedures and to correctly interpret the results, Z- Transform was used to carry out the standardization of personality traits’ subscales.

To begin with, it was aimed at estimating the number of personality trait clusters in the sample of study participants. To achieve this goal a two-step cluster analysis incorporating Euclidean distance measure and the chosen Schwarz’s Bayesian criterion was carried out. The following were included in the cluster analysis: the z scores of extraversion, openness to experience, consciousness, neuroticism, and agreeableness. A
two clusters decision was discovered. The first cluster consists of teachers defined by higher than the average of the sample neuroticism estimation. While the estimations of extraversion, agreeableness, consciousness, and openness to experience are lower than the averages of the sample. 63.3% of the surveyed teachers were assigned to this cluster. The second cluster consists of 36.7% vocational teachers of which the expression of neuroticism is lower than the mean of the sample, and the estimations of extraversion, agreeableness, consciousness, and openness to experience are higher than the mean of the sample. The comparison of means based on Student t criterion has revealed statistically significant differences between the high neuroticism and low neuroticism profile extraversion \(t(344) = -15.433, p < .01\), agreeableness \(t(344) = -9.582, p < .01\), consciousness \(t(344) = -12.535, p < .01\), neuroticism \(t(344) = -10.158, p < .01\), and agreeableness \(t(344) = -13.070, p < .01\) expression.

The results of the vocational teacher work motivation comparison in the personality trait profiles are introduced in Table 5. Certain work motivation differences in the distinctive profiles of personality traits were discerned in the results.

Figure 1. The profiles of the vocational teachers’ personality traits
<table>
<thead>
<tr>
<th>Work motivation components</th>
<th>Personality trait profile</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic (social) motivation</td>
<td>High level of neuroticism</td>
<td>219</td>
<td>4.11</td>
<td>1.57</td>
<td>.587</td>
<td>.557</td>
</tr>
<tr>
<td>Extrinsic (material) motivation</td>
<td>Low level of neuroticism</td>
<td>127</td>
<td>4.00</td>
<td>1.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introjected regulation</td>
<td>High level of neuroticism</td>
<td>219</td>
<td>4.00</td>
<td>1.43</td>
<td>4.117</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Identified regulation</td>
<td>Low level of neuroticism</td>
<td>127</td>
<td>3.29</td>
<td>1.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>High level of neuroticism</td>
<td>219</td>
<td>4.76</td>
<td>1.36</td>
<td>-.326</td>
<td>745</td>
</tr>
<tr>
<td>Low level of neuroticism</td>
<td>127</td>
<td>4.81</td>
<td>1.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic (social) motivation</td>
<td>High level of neuroticism</td>
<td>219</td>
<td>5.57</td>
<td>1.09</td>
<td>-4.701</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Extrinsic (material) motivation</td>
<td>Low level of neuroticism</td>
<td>127</td>
<td>6.14</td>
<td>1.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introjected regulation</td>
<td>High level of neuroticism</td>
<td>219</td>
<td>5.39</td>
<td>1.14</td>
<td>-8.512</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Identified regulation</td>
<td>Low level of neuroticism</td>
<td>127</td>
<td>6.36</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>High level of neuroticism</td>
<td>219</td>
<td>2.32</td>
<td>1.47</td>
<td>5.947</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Low level of neuroticism</td>
<td>127</td>
<td>144</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After the analysis of the results it has been determined that both the extrinsic (social) motivation (p > .05) and introjected regulation (p > .05) are similar in nature characteristic to vocational teachers with high and low profiles of neuroticism. However, if comparing this result with teachers who have a lower expression of neuroticism, the teachers with high levels of it have greater inherent extrinsic (material) motivation (p < .001), and amotivation (p < .001). Moreover, it was estimated that the identified regulation (p < .001) and intrinsic motivation (p < .001) of teachers with a low level of neuroticism are expressed in greater manner than that of the teachers with a higher level of neuroticism.
DISCUSSION AND CONCLUSIONS

The study was carried out to reveal the relationship between vocational teachers’ work motivation and personality traits. The empirical analysis suggested that extraversion, agreeableness, consciousness, and openness to experience are the most often expressed personality traits of vocational teachers. This fact confirms the results of other studies (e.g., Göncz, 2017; Pandey & Kavitha, 2015; Rusbadrol et al., 2015) that revealed the significance of previously mentioned traits among teachers. With regard to the motivational parameters, the intrinsic motivation to work and identified regulation as a form of motivation are the most expressed among teachers. In the first case, teachers gladly perform the tasks as the occupation brings delight to them, in the second case, the identified regulation is viewed as a type of extrinsic motivation which is regarded as the most autonomic since the individual performs the activity because of motives corresponding with his value system (Göncz, 2017; Pandey & Kavitha, 2015; Rusbadrol et al., 2015). Such results allow us to suggest that in order to increase the motivation of employees it is important to create a work atmosphere based on positivity and trust.

After the analysis of the results it was confirmed that in scrutinising the peculiarities of the teachers’ work motivation, neuroticism is considerably important in the context of other traits. The individuals with greatly expressed neuroticism often lack the motivation to perform an activity (amotivation) or they are motivated by material reward, privileges or other benefits received with the carrying out of the activity instead of the intrinsic motivation. Such teachers often do not acknowledge the external infliction of thinking and behaving since they do not see these behaviours and thoughts as useful or important for them. Such individuals also avoid taking part in different types of professional activity (Wang et al., 2006). As Göncz (2017) states in his introduction of a teacher’s personality snapshot: neuroticism is considered as a nonessential personality trait of a teacher in various institutions both in the pedagogical sense and in their interaction with students. It is believed that teachers with high levels of neuroticism are hardly capable of creating a cooperation-based relationship with the students. Further, any improvement of the social skills of such teachers’ is a time-consuming matter. This trait is also characterised as a part of the behaviour unfavourable to
the teacher’s health (Reichl et al., 2014). Furthermore, the trait of neuroticism was an extremely important criterion in the estimation of the vocational teachers’ personality trait profiles. The analysis of the results displayed two significant and qualitatively contrasting teacher personality profiles. One of them consists of teachers with higher neuroticism and lower extraversion, agreeableness, consciousness, and openness to experience. The other profile, on the contrary, includes the teachers who are identified by higher extraversion, agreeableness, consciousness, and openness to experience while neuroticism is not as strongly expressed. The teachers exhibiting this personality profile described themselves as more intrinsically motivated to work than the teachers with a high neuroticism profile. The results conform with Genc et al (2014) conclusions that students expect a good teacher to be characterised by low neuroticism and higher than the general population’s extraversion, consciousness, agreeableness, and openness to experience.

**Limitations.** However, a few limitations of the present research have to be mentioned. First of all, even though The Big Five personality trait theory is widely known, accepted, and is often applied in research, an instrument assessing five fundamental personality traits is not unquestionable. Moreover, regarding reliability of the Big Five questionnaire, some scales should be labelled as questionable. Thus, it is recommended to consider the use of other instruments, perhaps alongside the Big Five for future research.

Another limitation is connected to the strategy of the study. Although the sample is representative, the single cross-section study and the subjective employees’ motivation estimation could have been affected by external factors (i.e. changes in national educational system, job demands, leadership, etc). Inclusion of colleagues, supervisors or other relevant people could be used to significantly improve the teachers’ motivation estimation objectivity. Thus, further research in this area is very welcomed.

**REFERENCES**


PROFESIJOS PEDAGOGŲ ASMENYBĖS BRUOŽŲ IR DARBO MOTYVACIJOS RYŠYS

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Santrauka. Problema. Pastaruoju metu profesijos pedagogui tenka svarbus vaidmuo Lietuvos švietimo sistemoje siekiant patenkinti aukštos kvalifikacijos darbo jėgos trūkumą rinkoje. Todėl būtina ieškoti reikšmingų veiksnių, galinčių numatyti pedagoginio darbo efektyvumą. Tyrimo tikslas. Neabejotai pedagogo asmenybės bruožai ir darbo motyvacija yra svarbūs rodikliai sėkmingo ugdymo procese, todėl šiuo tyrimu siekta atskleisti profesijos pedagogų asmenybės bruožų ir darbo motyvacijos sąsajas. Tyrimo metodai. Tyrimo objektas 346 pedagogų (243 moterys ir 93 vyrai, 10 respondentų lyties nenurodė), dirbantys įvairiose Lietuvos profesinėse mokyklose. Asmenybės bruožams įvertinti naudotas Didžiojo penketo inventorius (BFI; John et al., 1991, 2008), darbo motyvacijai įvertinti naudotas Multidimensinis darbo motyvacijos klausimynas (MWMS; Gagne et al., 2015). Rezultatai. Tyrimo rezultatai parodė, kad kuo stipriau išreikštas neurotizmas, tuo stipresnė pedagogų demotyvacija (p < 0,01), išorinė (socialinė ir materialinė) motyvacija (p < 0,01) ir introjekcinis reguliavimas (p < 0,05), tačiau silpnesnis identifikuotas reguliavimas (p < 0,05) bei vidinė motyvacija (p < 0,01). Tuo tarpu stiprėjant pedagogų ekstraversijos, sutariantumo, sąmoningumo ir sutariantumo bruožų išreikštumui, stiprėja vidinė motyvacija (p < 0,01),
identifikuotas reguliavimas ($p < 0,01$) bei silpnėja išorinė (materiali) motyvacija (ekstraversijos ir sutariumumo atveju – $p < 0,01$, sąmoningumo ir atvirumo patyrimui – $p < 0,05$). Be to, rezultatus papildė gauti darbo motyvacijos skirtumai tarp skirtingų asmenybės profilių. Aukšto neurotizmo profilio pedagogams būdinga stipresnė išorinė (materiali) motyvacija ($p < 0,001$) ir demotyvacija ($p < 0,001$) palyginti su žemo neurotizmo bruožo pedagogais. O žemo neurotizmo profilio pedagogų identifikuotas reguliavimas ($p < 0,001$) ir vidinė motyvacija ($p < 0,001$) yra stipriaus išreikšta nei aukšto neurotizmo bruožo profilio pedagogų. Gauti tyrimo rezultatai gali pasitarnauti profesinio konsultavimo ar orientavimo procese bei siekiant efektyviai motyvuoti skirtingais asmenybės bruožais pasižymėti profesijos pedagogus.

**Reikšminiai žodžiai:** profesijos pedagogas, asmenybės bruožai, darbo motyvacija, klasteriai.

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