

CAN MOTIVATION FOR CHOOSING TEACHING AS A PROFESSION PREDICT ACADEMIC ACHIEVEMENT? THE ROLE OF GENDER, SECONDARY SCHOOL TYPE AND STUDY PROGRAMME

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Abstract: The paper deals with the relationship between motivation for choosing teaching as a profession and academic achievement among Slovak teacher trainee students. The aim of the research is to identify the role of a gender, secondary school type and a chosen study programme as intermediary factors between motivation for choosing teaching as a profession and academic achievement. Motivation for choosing teaching as a profession was examined by using the SMVUP-4-S scale and academic achievement was measured as a GPA on a sample of 402 teacher trainee students. For measuring the statistical prediction Multivariate regression model analysis was used. The results showed that motivation for choosing teaching as a profession is a significant predictor of academic achievement ($F(1, 325) = 2.307, p < .01$), while gender ($F(1, 325) = 2.658, p < .01$) and a secondary school type ($F(1, 325) = 2.087, p < .001$) play a significant role as an intermediary factor. The model consists of motives for choosing teaching as a profession, academic achievement and a study programme is not statistically significant in terms of the statistical prediction ($F(1, 325) = .539, p > .05$).

Keywords: motivation, profession choices, teacher development, STEM, academic success, gender differences, teacher trainees

1.1 Motivation for choosing teaching as a profession

Students have different reasons that lead them to choose teaching as a profession. It is particularly important to understand and establish the type of motivation for choosing teaching as a profession, because the type of motivation is likely to affect professional engagement and teaching style (Watt, Richardson & Devos, 2013). The most commonly identified motivational types of teaching in teacher training literature are: intrinsic, extrinsic and altruistic motives (Brookhart & Freeman, 1992), which is in concordance with the expected "values" - categories that are further divided into specific components. The intrinsic motivation is more durable and effective than the other types of motivation (Klein, 2006). The intrinsic motives are the most frequent when choosing teaching as a profession. They are considered the most important because they are directly related to the content of profession (Watt, Richardson & Devos, 2013), and they are predominately good professional engagement in this field (Fresko, Kfir & Nasser, 1997). The motives that are connected to this issue also occur in pedagogical and psychological literature, such as extrinsic and altruistic motivation. Although higher performance might be achieved via extrinsic motivation, it is only for a short term. The disputable relation is also between motivation and a specific activity (Klein, 2006). The extrinsic motives in a teaching profession are undesirable because of dissatisfaction in performance may be shown in the teacher's workplace, as well as in their actions (Fresko, Kfir & Nasser, 1997). We registered the following extrinsic motives in pedagogical and psychological literature: a desire to have steady income (Saban, 2003), a stable working place after studies (Papanastasiou & Papanastasiou, 1997), holidays (Kyriacou & Coulthard, 2000), job security (Johnston, McKeown & McEwen, 1999), more time for family and children (Watt & Richardson, 2007), and teaching profession prestige in the society (Bastick, 2000). Altruistic motivation plays an important role when choosing teaching as a profession. An altruistic motive may be understood as the desire to improve well-being of others (Klein, 2006). It is connected with the concept of prosociality and it covers doing things intentionally to help another person or a group of people. The altruistic motives are closely related to intrinsic motives because they correspond with the professional content (Kyriacou & Coulthard, 2000; Saban, 2003). In relation with this issue, several models of motivation for choosing teaching as a profession have been developed. For example, SMVUP and Fit-Choice (Watt & Richardson, 2007) models of motivation for choosing teaching as a profession are based on the theory of expectation and values (Eccles & Wigfield, 2002) and work motivation (Holland, 1985) and self-determination theory (Ryan & Deci, 2000). Presuming

the impact of various social factors on the personality that are the decisive factors in the choices of profession, the impact of socio-cultural, family environment, peers, personality and other influences can be considered to be significant determinants of the choice. The model of motivation for choosing teaching as a profession points to different psychological mechanisms that are involved in the process of choosing teaching as a profession, but all parts of the model work together in the decision making process (Tomšik, 2016; Watt & Richardson, 2012; Figure 1).

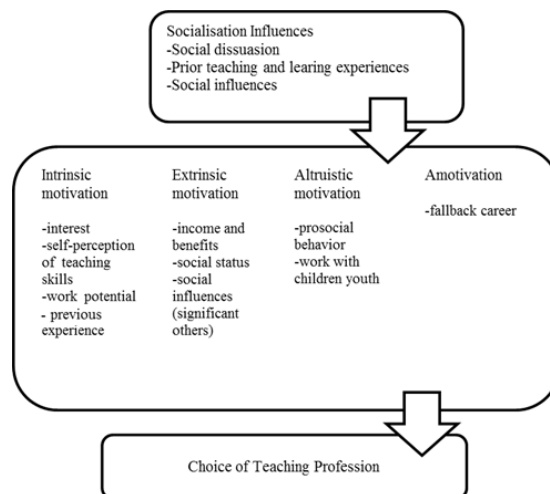


Figure 1. Theoretical Framework of SMVUP Model Based on Fit-Choice Model by Watt & Richardson (2012).

These models, based on the theory of work motivation, point to the fact that not only the previous factors influence the motivation (in general, or motivation for choosing teaching as a profession), but also that the motivation influences the performance (for example work performance, academic achievement, demand for the tasks, interpersonal relationships).

1.1 Motivation and academic achievement

Motivation is defined as the process that accounts for an individual's intensity, direction and persistence of effort toward attaining a goal. The psychological meaning of motivation refers to the internal mental state of a person that relates to the initiation, direction, persistence, intensity and termination of behaviour. The issue of motivation and performance is not only relevant in education science, but also in other spheres such as work motivation or work performance. Motivation of individual in the work place still remains one of the sensitive subjects that determine the level of input that employees will put in the organization to commit to good performance. This means that motivation either intrinsic or extrinsic contribute to employee satisfaction and thus enhances performance and productivity (Bhattacharyya, 2007; Kuranchie-Mensah & Amponsah-Tawiah, 2016). Motivation plays an important role in the academic achievement of students. In the educational perspective, motivation has a multidimensional structure which is correlated with learning and academic motivation. Psychologists have noted that motivation should be taken into account in education because of its effective relationship with new learning, abilities, strategies and behaviors, and they have presented motivation for academic achievement as one of the preliminary constructs for defining such a type of motivation. Motivation for academic achievement is attributed to behaviors which lead to learning and achievement. In other words, motivation for academic achievement is such a pervasive inclination towards doing a task achievement fully in a particular context and assessing the performance spontaneously (Amrai, et

al. 2011). Academic achievement is still discussed and an insufficiently clarified term. According to the pedagogical terminology (Průcha, Walterová & Mareš, 1995), Academic achievement or (academic) performance is the extent to which a student, teacher or institution has achieved their short or long-term educational goals. In this context, school achievement means an average grade of all the subjects at the end of the school year (great point average – GPA; Tomšik, 2015). Cumulative GPA and completion of educational benchmarks represent academic achievement. Previous research (Bandalos, Gwske & Finney, 2005; Chemers, Hu & Garcia, 2005; Zohar, 1998) shows, that the achievement of the stated goals, the fulfillment of the academic tasks, the interest in the tasks and their achievement positively correlate with the GPA. Several studies have pointed out that internal motivation is positively related to students' learning outcomes and their competencies (Ames, 1992; Blumenfeld & Pokay, 1990). Internally motivated students engage in activities for their own purposes, working on tasks, which make them satisfied. On the other hand, students may also be motivated by external motives if they believe that work or achievement will be positively evaluated, for example through rewards, good grades, praise from parents, teachers, and so on. In contrast, internal motivation usually leads to greater cognitive engagement than external (Ryan & Deci, 2000). However, the relationships between internal and external motivation, engagement and achievement are complex. It is more appropriate to ponder internal and external motivation as two separate continuums than two antithetic poles of motivation, as students can score low in one, and high in different types of motivation, low in both or high in both (Pintrich & Schunk, 2002; Tomšik, 2016). However, external motivation is not as effective as internal. People tend to avoid effort, which is also reflected in engagement in a particular work environment (Watt & Richardson, 2012). However, the motivation for choosing teaching as a profession is also associated with other factors, such as gender (Yüce, et al. 2013), study program (Watt, Richardson & Devos, 2013), satisfaction with the choice of profession (Tomšik, 2016), impact on work performance (Watt, & Richardson, 2012), personality traits (Tomšik & Gatial, 2018), etc. These factors overlap with time. For example, personality traits, and gender have impact on motivation, while motivation has an impact on satisfaction or learning outcomes of the academic achievement. This study focuses on a number of these factors: gender and motivation for choosing teaching as a profession, academic achievement and motivation for choosing teaching as a profession, a previous secondary school type and chosen study program in relation to motivation for choosing teaching as a profession. Studies have shown that the teaching profession is increasingly feminized; moreover, there are factors such as low income (Blount, 1999; Johnson, 2008), a low social status (Cushman, 2005) and public suspicion of men who want to work with children; especially at pre-primary or primary stage of education. On the other hand, such problem is rare at secondary stage of education, where men are the most typically teachers of subjects such as mathematics, physics or technology (Birrell & Rapson, 2006; Watt, Richardson, 2012). Watt & Richardson (2012) found that women showed stronger motivation than men in their desire to work with children/adolescents ($F = 18.93$; $\eta^2 = 0.023$). The category *Benefits for individuals and their families* that teaching profession is offering ($F = 5.27$; $\eta^2 = 0.007$) was also significantly higher elected by females respondents as well as intrinsic motivation, and dedication/passion to the teaching profession ($F = 7.15$; $\eta^2 = 0.009$). At the same time, female respondents showed more experience of teaching than male respondents ($F = 4.83$; $\eta^2 = 0.006$). In contrast, men showed a negative statistically a significantly higher score on a scale *Fallback career motivation* – decision to become a teacher ($F = 6.73$; $\eta^2 = 0.008$). Despite the gender differences, researchers in the national studies published in 2001 found that among graduates in the STEM study programs (Science, Technology, Engineering and Mathematics) there is lack of interest in teaching (Papanastasiou & Papanastasiou, 1997). Watt, Richardson & Devos (2013) compared motives of choosing teaching as a profession on a sample of Australian students of STEM and non-STEM teaching study programs found

differences in following motives of choosing teaching as a profession: an alternative option (Fallback career), where students of the STEM subjects score significantly higher ($F(1.799) = 6.66$, $n^2 = .008$) in the motive of learning experiences. The students in STEM subjects score significantly lower in comparison to students of non-STEM subjects ($F(1.799) = 4.46$, $n^2 = .006$), but they were significantly higher motivated by the benefits of teaching profession and time for family ($F(1.799) = 7.38$, $n^2 = .009$).

2 Methods

The aim of research is to point out the importance of motivation for choosing teaching as a profession. This aim involves measuring the level of specific motives for choosing teaching as a profession and covariant factors. In order to confirm the predictions mentioned above, it was decided to carry out quantitatively oriented research. Validated research tools were chosen (questionnaires, paper form) for measuring research variables. Participants submitted questionnaires with their consent to data processing. All questionnaires were anonymous. The data were collected by the psychologists at Slovak universities. Participants had 45 minutes to complete the questionnaires. The final version of the research tool was elaborated and piloted in June 2017. The data were collected in September 2017 (mapping motivation) and June 2018 (mapping academic achievement). In September 2018 the data were processed and analyzed.

2.1 Research sample

The research sample consists of 402 teacher trainees. The respondents aged from 18 to 20 years ($M=19.10$) were from the following regions of Slovakia: Nitra, Bratislava, Banská Bystrica, Prešov, Trenčín, Trnava, Košice and Žilina. The parent population was 3300 teacher trainee students that were enrolled in the academic year 2015/2016 into their first year of study. According to the approximation of Morgan & Krejcie (1970), at least 346 respondents must be included in the set, with a percentage distribution corresponding to the size of the parent population in each region. This criterion is fulfilled (Confidence 95.0%, Margin of Error 5%). Based on the aim of the research, the research sample was divided into several groups based on gender, Secondary school and Study program (Tab. 1).

Table 1: Distribution of research sample.

Characteristics	N	%
Gender		
Males	132	32.8
Females	270	67.2
Secondary school		
Grammar School	221	55.0
Secondary Vocational School	116	28.9
Secondary School of Education	42	10.4
Art School	23	5.7
Study program		
STEM	46	11.4
nonSTEM	249	61.9
Combination	62	15.4
Art	12	3.0

2.2 Instruments

The Scale of Motivation for Choosing a Teaching Profession (fourth re-edition, version for students (S); thereafter SMVUP-4-S) is a validated research and diagnostic tool for identifying the motives for choosing teaching as a profession. The SMVUP-4-S scale was based on the globally used Fit-Choice scale (Watt & Richardson, 2012), which was adapted to the conditions of the profession and educational system of the Slovak Republic. Following the agreement of the authors of the Fit-Choice model,

the scale was translated into Slovak language and subsequently translated by different translators into English. Based on several validations (Tomšik & Verešová, 2015; Tomšik, 2016, Tomšik, 2016) of the internal consistency and validity of the model, the final, fourth re-edition of the SMVUP model was developed for the teacher trainee students. This model consists of three scales that are saturated with the following factors, based on Confirmatory Factor Analysis: Intrinsic motivation: interest, self-perception of teaching capabilities, work potential, previous experience; Extrinsic motivation: benefits, income, social status, significant others; Altruistic motivation: prosocial behavior, work with children, work with youth. Each of the subscale consists of four items. The score of the respondents can range from 4 points as a minimum score to 20 points as a maximum attainable score. The higher score represents a higher level of motivation factor. Items of the range are in the form of assertions that the respondent answer on a 5-point Likert's type scale. Academic achievement GPA – a measure of a student's academic performance, calculated by dividing the total number of grade points received by the total number attempted. The GPA score is reversed and can range on a scale from 1 to 3 (lower score represents better academic performance).

2.3 Statistical analyses

For the description of the research data and detecting associations between variables statistic programs SPSS (Statistical Package for Social Science ver. 20) and STATA 13 were used. MCAR test (Little's Missing Completely at Random

test) was used to verify the missing data. After assuring that the data in the file is missing randomly, the Missing Value Analysis (Expectation-Maximization method) was applied to replace the missing data. To verify the normality of the research data the D'Agostino's K2 test was used. Null hypotheses have been rejected ($p < .05$). A multivariate regression model (GLM) was used to determine the relationships between motivation for choosing teaching as a profession and academic achievement. Results of Levene's Test of Equality of Error Variances were non-significant ($p > .05$).

3 Results

Table 2 indicates the intensity data of the constituent motivation factors. From observing the average values of the constituent variables, the most frequent motives for choosing a teaching profession are intrinsic and altruistic motives: Self-perception of teaching capabilities ($M = 14.78$, $SD = 3.210$), Work potential ($M = 14.67$, $SD = 3.389$), Working with children ($M = 14.62$, $SD = 4.504$), Prosocial behavior ($M = M = 14.47$, $SD = 3.155$) Interest ($M = 13.25$, $SD = 4.418$) and Working with youth ($M = 12.47$, $SD = 4.264$). Mediate or lower score was achieved in extrinsic motives for choosing teaching as a profession: Benefits ($M = 11.89$, $SD = 3.535$), Significant others ($M = 10.90$, $SD = 4.727$), Income ($M = 10.38$, $SD = 3.786$) and Social status ($M = 9.91$, $SD = 3.586$), as well as in Fallback career ($M = 8.80$, $SD = 4.143$) variable and Previous experience ($M = 11.20$, $SD = 4.888$). Average academic achievement of the teacher trainee students was $M = 1.59$ with $SD = .488$ on scale 1 to 3.

Table 2: Descriptive statistics of research variables: motives for choosing teaching as a profession and academic achievement.

Variable	N	M	SD	SEM	MIN	MAX	SK	KU
Academic achievement*	375	1.59	.488	.025	1	3	.311	-.610
Interest	402	13.25	4.418	.220	4	20	.007	-.971
Self-perception of teaching capabilities	402	14.78	3.210	.160	4	20	-.266	.008
Work potential	402	14.64	3.389	.169	4	20	-.207	-.386
Previous experience	402	11.02	4.888	.244	4	20	.166	-1.076
Social status	402	9.91	3.586	.179	4	19	-.079	-.869
Benefits	402	11.89	3.535	.176	4	20	.046	-.272
Income	402	10.38	3.786	.189	4	20	-.019	-.835
Significant others	402	10.90	4.727	.236	4	20	.047	-1.087
Working with children	402	14.62	4.504	.225	4	20	-.365	-.882
Working with youth	402	12.47	4.264	.213	4	20	-.135	-.656
Prosocial behavior	402	14.47	3.155	.157	4	20	-.057	-.396
Fallback career	402	8.80	4.143	.207	4	20	.401	-.958
Intrinsic motivation TOT	402	53.70	11.299	.564	19	80	.102	-.132
Altruistic motivation TOT	402	41.78	8.753	.437	16	74	.124	.396
Extrinsic motivation TOT	402	43.08	10.390	.518	19	70	-.069	-.561

Notes. N = number; M = mean; SD = standard deviation; SEM = standard error of mean; SK = skewness; KU = kurtosis, * = score is reverse.

Table 3 shows the results of multivariate tests (GLM analysis). The analysis shows that the model consists of the motives for choosing teaching as a profession, academic achievement, gender and secondary school type, and it is statistically significant in terms of prediction. However, the analysis confirms that motivation for choosing teaching as a profession is a significant predictor of academic achievement ($F(1, 325) =$

2.307 , $p < .01$), while gender ($F(1, 325) = 2.658$, $p < .01$) and secondary school type ($F(1, 325) = 2.087$, $p < .001$) play significant roles as intermediary factors. The model consists of motives for choosing teaching as a profession, academic achievement and study programme is not statistically significant in terms of prediction ($F(1, 325) = .539$, $p > .05$).

Table 3: Multivariate tests.

Effect	V	F	Hypothesis df	Error df	p	η^2
Academic achievement	.081	2.307	12	313.000	.008	.081
Gender	.092	2.658	12	313.000	.002	.092
Study program	.060	.539	36	945.000	.988	.020
Secondary school	.221	2.087	36	945.000	.000	.074

Notes. V = Pillai's Trace value, F = ANOVA, df = degrees of freedom, p = p-value, level of significance, η^2 = Partial Eta Squared coefficient; Computed using $\alpha = .05$.

Table 4 shows tests of between-subjects effects. Only a few motives were detected as a significant prediction of academic achievement among teacher trainee students: Social status ($F(1, 325) = 13.039, p < .001$), Benefits ($F(1, 325) = 6.162, p < .05$) and Income ($F(1, 325) = 8.267, p < .01$). These motives are in a negative correlation ($p < .01^{**}$) with academic achievement, which means that weaker extrinsic motivation leads to higher academic achievement. Nevertheless, gender is a significant predictor of motivation for choosing teaching as a profession. An effect of a specific component on academic achievement has a different level in terms of variance. While assuming gender as an intermediary factor, statistically significant differences have been found in following variables: Social status ($F(1, 325) = 8.008, p < .05$), Benefits ($F(1, 325) = 4.614, p < .05$), Income ($F(1, 325) = 14.664, p < .001$), Significant others ($F(1, 325) = 4.449, p < .05$), and Fallback career ($F(1, 325) = 7.385, p < .01$). In all the mentioned variables, men score significantly higher compared to women, based on the t-test comparison analysis ($p < .001$). The previous secondary school type has shown as a significant intermediary factor between studied types of motivation for choosing teaching as a profession and academic achievement, specifically: Previous experience ($F(1, 325) =$

$6.154, p < .001$), Income ($F(1, 325) = 8.008, p < .001$), Working with children ($F(1, 325) = 2.628, p < .05$). Based on Post Hoc LSD analysis, students from Secondary school of education ($M = 16.14, SD = 3.440$) scored significantly higher in variable Previous experience compared with students from Grammar Schools ($M = 10.31, SD = 4.547$), Vocational schools ($M = 10.78, SD = 5.159$) and Art schools ($M = 9.69, SD = 3.197$). Similar, result was achieved in variable Working with children: Secondary school of education ($M = 17.66, SD = 3.905$), Grammar School ($M = 14.135, SD = 4.327$), Vocational school ($M = 14.55, SD = 4.727$) and Art school ($M = 14.62, SD = 4.115$). Interestingly, students from Secondary school of education scored higher in extrinsic motivation variable Income ($M = 12.36, SD = 3.406$), compared with students from Grammar School ($M = 10.25, SD = 3.860$), Vocational schools ($M = 10.13, SD = 3.362$) and Art schools ($M = 9.17, SD = 3.142$). All differences were significant at level $p < 0.001$. As has been show in Multivariate tests analysis, study program do not play significant role as an intermediary factor between studied types of motivation for choosing teaching as a profession and academic achievement ($p > .05$).

Table 4: Tests of Between-Subjects Effects.

	Source	Type III Sum of Squares	df	Mean Square	F	p	η^2
Corrected Model	Interest	1190.555 ^a	25	47.622	2.657	.000	.170
	Self-perception of teaching capabilities	862.681 ^b	25	34.507	4.009	.000	.236
	Work potential	470.957 ^c	25	18.838	1.720	.019	.117
	Previous experience	1639.224 ^d	25	65.569	2.959	.000	.186
	Social status	1109.996 ^e	25	44.400	4.185	.000	.244
	Benefits	437.943 ^f	25	17.518	1.343	.130	.094
	Income	873.683 ^g	25	34.947	2.601	.000	.167
	Significant others	1065.740 ^h	25	42.630	2.031	.003	.135
	Working with children	1888.766 ⁱ	25	75.551	4.483	.000	.257
	Working with youth	775.968 ^j	25	31.039	1.756	.015	.119
	Prosocial behavior	432.918 ^k	25	17.317	1.812	.011	.123
Fallback career	1535.199 ^l	25	61.408	4.390	.000	.253	
Academic achievement	Interest	52.288	1	52.288	2.917	.089	.009
	Self-perception of teaching capabilities	14.790	1	14.790	1.718	.191	.005
	Work potential	2.030	1	2.030	.185	.667	.001
	Previous experience	20.048	1	20.048	.905	.342	.003
	Social status	138.329	1	138.329	13.039	.000	.039
	Benefits	80.386	1	80.386	6.162	.014	.019
	Income	111.087	1	111.087	8.267	.004	.025
	Significant others	17.360	1	17.360	.827	.364	.003
	Working with children	.013	1	.013	.001	.978	.000
	Working with youth	2.347	1	2.347	.133	.716	.000
	Prosocial behavior	4.273	1	4.273	.447	.504	.001
Fallback career	31.109	1	31.109	2.224	.137	.007	
Gender	Interest	6.340	1	6.340	.354	.552	.001
	Self-perception of teaching capabilities	24.822	1	24.822	2.884	.090	.009
	Work potential	15.078	1	15.078	1.377	.241	.004
	Previous experience	3.632	1	3.632	.164	.686	.001
	Social status	84.952	1	84.952	8.008	.005	.024
	Benefits	60.194	1	60.194	4.614	.032	.014
	Income	197.055	1	197.055	14.664	.000	.043
	Significant others	93.384	1	93.384	4.449	.036	.014
	Working with children	59.015	1	59.015	3.502	.062	.011
	Working with youth	21.035	1	21.035	1.190	.276	.004
	Prosocial behavior	1.573	1	1.573	.165	.685	.001
Fallback career	103.304	1	103.304	7.385	.007	.022	

Table continues on next page.

Source		Type III Sum of Squares	df	Mean Square	F	p	η^2
Study programme	Interest	41.194	3	13.731	.766	.514	.007
	Self-perception of teaching capabilities	7.056	3	2.352	.273	.845	.003
	Work potential	12.361	3	4.120	.376	.770	.003
	Previous experience	11.219	3	3.740	.169	.917	.002
	Social status	16.629	3	5.543	.522	.667	.005
	Benefits	15.065	3	5.022	.385	.764	.004
	Income	5.285	3	1.762	.131	.942	.001
	Significant others	23.945	3	7.982	.380	.767	.004
	Working with children	40.798	3	13.599	.807	.491	.007
	Working with youth	27.168	3	9.056	.512	.674	.005
Secondary school	Prosocial behavior	13.227	3	4.409	.461	.709	.004
	Fallback career	36.062	3	12.021	.859	.462	.008
	Interest	71.947	3	23.982	1.338	.262	.012
	Self-perception of teaching capabilities	32.151	3	1.717	1.245	.293	.011
	Work potential	3.694	3	1.231	.112	.953	.001
	Previous experience	409.093	3	136.364	6.154	.000	.054
	Social status	22.411	3	7.470	.704	.550	.006
	Benefits	29.591	3	9.864	.756	.519	.007
	Income	222.776	3	74.259	5.526	.001	.049
	Significant others	34.374	3	11.458	.546	.651	.005
Working with children	132.449	3	44.150	2.620	.049	.024	
Working with youth	25.050	3	8.350	.472	.702	.004	
Prosocial behavior	52.910	3	17.637	1.846	.139	.017	
Fallback career	57.681	3	19.227	1.375	.250	.013	

Notes. F = ANOVA, df = degrees of freedom, p = p -value, level of significance, η^2 = Partial Eta Squared coefficient.

a. R Squared = .170 (Adjusted R Squared = .106)

b. R Squared = .236 (Adjusted R Squared = .177)

c. R Squared = .117 (Adjusted R Squared = .049)

d. R Squared = .186 (Adjusted R Squared = .123)

e. R Squared = .244 (Adjusted R Squared = .186)

f. R Squared = .094 (Adjusted R Squared = .024)

g. R Squared = .167 (Adjusted R Squared = .103)

h. R Squared = .135 (Adjusted R Squared = .069)

i. R Squared = .257 (Adjusted R Squared = .200)

j. R Squared = .119 (Adjusted R Squared = .051)

k. R Squared = .123 (Adjusted R Squared = .055)

l. R Squared = .253 (Adjusted R Squared = .195)

m. Computed using alpha = .05

4 Discussion and conclusion

The aim of the research was to find out whether it is possible to predict school success on the basis of motivation for choosing teaching as a profession. Also, the research has investigated whether factors such as gender and previous secondary school type affect the motivation and academic success, or whether motivation affects the choice of study program. In assessing the frequency of motives for choosing a teaching profession, it was found that the most frequent motives for choosing the teaching profession are intrinsic and altruistic motives. Mediate or lower score was achieved among extrinsic motives for choosing teaching as a profession as well as in Fallback career. This can be seen as a positive result, although we expected the internal motives to be scored even higher (taking in account scale range).

Based on GLM analysis, it has been found that the motivation for choosing teaching profession is a significant predictor of the academic success of teacher trainees, $F(1, 325) = 2.307$, $p < .01$, but only the extrinsic motives (Social status, Benefits, Income) were shown as a significant predictors. This means that extrinsic motives reduce engagement in learning and do not predict good academic success. Students who are rather motivated by extrinsic motives have reduced the level of intrinsic motives and

are not so strongly interested in the field of study. Acquiring knowledge and good academic achievement is not a priority for them. What is interesting, however, is that intrinsic and altruistic motives were not statistically significant in terms of prediction.

Gender has been shown as a significant moderator of the motivation for choosing teaching as a profession ($F(1, 325) = 2.658$, $p < .01$). While significant differences have been found only in the following variables: Social status, Benefits, Income, Significant others and Fallback career – in other words, in all the extrinsic motives and in the Fallback career variable, based on statistical analysis ($p < .001$). That means that extrinsic motives are preferred by men rather than women, and this is a logical consequence meaning that the professional orientation of men tends to focus on technical disciplines while teaching is a profession that is highly feminized. This is reflected in the results of these analyses and in this research sample of the Slovak teacher trainee students.

The previous secondary school type has been shown as a significant intermediary factor ($F(1, 325) = 2.087$, $p < .001$) between studied types of motivation for choosing teaching as a profession and academic achievement, specifically: Previous experience, Income, Working with children. Based on Post Hoc

LSD analysis, students from Secondary school of education (scored significantly higher in variables previous experience and Working with children compared with students from Grammar Schools, Vocational schools and Art schools. Logically, these students have more experience with teaching practice and teaching than students from other secondary schools under this review. This means that the secondary school type predicts this type of motivation and academic success. Interestingly, students from Secondary school of education scored higher in extrinsic motivation variable Income, compared with the students from Grammar Schools, Vocational schools and Art schools – this is probably caused due to fact that these students have much higher experience with teaching and the teaching profession, they are also more familiar with the content of the work, duties and income of the teachers, and then require a higher income for this job.

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Primary Paper Section: A

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