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Teacher motivation and commitment to the teaching profession among Slovenian teacher education students

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Abstract: Teachers' motivation for teaching and their commitment to the teaching profession is a research topic that has gained popularity in the last two decades. However, this topic is still largely unexplored in Slovenia, both for pre-service and in-service teachers. This article presents the findings of a study that focused on Slovenian teacher education students' motivations to become teachers, and their commitment to the teaching profession. It included first-year master's students enrolled in two-year teacher education programs at the Faculty of Arts, University of Ljubljana. A total of 399 students completed a survey. The first part of the survey focused on students' reasons for choosing the teaching profession, while in the second part, students' commitment to the teaching profession was examined. The results suggest that teacher education students are multimotivated to become teachers, with altruistic and intrinsic reasons being their most dominant motivation. Students' commitment to the teaching profession is very high and can be predicted by motivational factors, mainly by intrinsic motivation. Some comparisons regarding teacher motivation and commitment to the teaching profession between different groups of students are also presented.

Keywords: teacher education, pre-service teachers, teacher motivation, commitment to the teaching profession

Motivacija za poučevanje in zavezanost učiteljskemu poklicu pri slovenskih študentih pedagoških smeri

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Povzetek: Motivacija učiteljev za poučevanje in njihova zavezanost učiteljskemu poklicu je raziskovalno področje, ki je v zadnjih dveh desetletjih pridobilo na priljubljenosti. Vendar pa je to področje v Sloveniji še precej nepreučeno, tako pri bodočih kot tudi pri aktivnih učiteljih. V pričujočem članku predstavljamo ugotovitve raziskave, v kateri smo se osredotočili na motivacijsko ozadje odločitve skupine slovenskih študentov pedagoških smeri za učiteljski poklic in na njihovo zavezanost učiteljskemu poklicu. V raziskavi je sodelovalo 399 študentov prvega letnika magistrskih smeri pedagoškega študija na Filozofski fakulteti Univerze v Ljubljani. Študenti so izpolnili vprašalnik, ki je v enem delu namenjen osvetlitvi vzrokov, zaradi katerih so se študenti odločili za učiteljski poklic, v drugem delu pa je usmerjen na zavezanost učiteljskemu poklicu. Rezultati kažejo, da študente pedagoških smeri za učiteljski poklic motivirajo mnogovrstni dejavniki, še zlasti altruistični in intrinzični vzroki. Zavezanost učiteljskemu poklicu je zelo visoka, lahko pa jo napovemo z več motivacijskimi dejavniki, še zlasti z notranjo motivacijo. V članku prikazujemo tudi primerjave med skupinami študentov glede motivacije za poučevanje in zavezanosti učiteljskem poklicu.

Ključne besede: izobraževanje učiteljev, bodoči učitelji, motivacija za poučevanje, zavezanost učiteljskemu poklicu

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Teachers' motivation for teaching and their commitment to the teaching profession is a research topic that has gained popularity in the last two decades. This is not surprising, because we need teachers who are motivated and committed to their profession so that our schools can provide students with a good education.

The teaching profession is considered one of the most stressful professions (Johnson et al., 2005; Lens & Jesus, 1999), and when we look at teachers and all the work they do in a workday/week/year, we begin to wonder what motivates them to keep going despite the workload and stress. What are the characteristics of their work motivation? In organisational psychology, work motivation can be defined 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" (Pinder, 2008, p. 11). Thus, work motivation in the teaching profession, or teacher motivation for short, may determine what attracts individuals to teaching, why they enter teacher education, how they engage first in their teacher education and then in their teaching practice, and how long they remain in the teaching profession.

Teacher motivation became the focus of research interest in the late 1990s and the following decade, with researchers focusing primarily on pre-service teachers' motivation to choose the teaching profession (e.g., Kyriacou & Coulthard, 2000; Kyriacou et al., 1999; Sinclair, 2008; Watt & Richardson, 2007). After that, the field of research has evolved and expanded to include in-service teachers' motivation to remain in the teaching profession (for a detailed review, see Han & Yin, 2016).

The research on the pre-service students' initial motivation for teaching consistently points to three primary sources for an individual's decision to become a teacher: altruistic, intrinsic, and extrinsic reasons (Heinz, 2015). Altruistic reasons have to do with seeing teaching as a socially worthwhile and important activity, wanting to be part of the growth and development of young people, helping young people succeed, and wanting to make a difference in society. Intrinsic reasons include aspects of the professional activity, such as enjoying teaching and instructing, guiding children, a love of a particular subject, or a desire to impart knowledge. Extrinsic reasons include aspects of the occupational activity unrelated to work itself, namely occupational benefits such as working hours, vacation, salary, career security, and status. In addition to these three primary sources of the initial motivation for teaching, studies have also considered several other influencing factors, such as the possible influence of others (e.g., family members), the "calling" to teach, or the perceived ease of teaching (for a detailed review, see Heinz, 2015; Sinclair, 2008). Most commonly, research reports pre-service teachers as being attracted to teaching by a desire to work with students, altruism, the influence of others, and the perceived job benefits (Sinclair, 2008). However, the possibility of another extrinsic reason expressing negative motivation and pragmatism in choosing the teaching profession should not be ignored. As some studies have shown, an unwilling choice to enter the teaching profession may be made when individuals are unable to enter their preferred field of study or find a job in their favourite profession, or when they desire a career change; thus, the teaching profession can also be viewed as a fallback career (Watt & Richardson, 2012; Wong et al., 2014).

While studies on pre-service teachers' motivation focus mainly on students' reasons for deciding to enter the teaching profession, the research on in-service teachers' motivation covers a broader field. It focuses on influencing factors, the relationship between teacher motivation and teaching effectiveness, the relationship between teacher motivation and student motivation, and examines teacher motivation across disciplines (for a detailed review, see Han & Yin, 2016).

Another important question when considering teachers and their work with students is that of their commitment to the teaching profession. In the work environment, the concept of commitment is often associated with both attitudes and emotions. It can refer to an individual's psychological and emotional attachment to a relationship, an organisation, a goal, or an occupation (Landy & Conte, 2013). Applied to teachers and teaching, commitment can refer to the teaching profession, teaching/instruction, children/students, student learning, school, and academic subjects. However, a widely used definition of teacher commitment in the literature is that of Coladarci (1992), as the degree of psychological attachment to the teaching profession.

Generally, several factors can influence commitment to teaching. Sinclair (2008), through a review of the relevant literature, identified eight factors that can increase or decrease commitment in terms of retention in the profession: personal factors (e.g., age, gender, work ethic), student factors (e.g., discipline problems and unmotivated students), professional factors (e.g., autonomy, professional development, prior careers), working conditions, and school factors (e.g., pay, teaching load, resources), work-life balance, the influence of others (colleagues and family members), the nature of teaching (e.g., type of work performed, social interactions with colleagues), and teacher preparation (including the practicum).

Research evidence has shown that commitment to teaching is an important factor in both teacher education and teacher practice. It influences pre-service teachers' engagement in learning to teach (e.g., Lee & Turner, 2017) and in-service teachers' retention (e.g., Billingsley, 2004; Klassen and Chiu, 2011).

In Slovenia, teachers' work motivation and commitment to teaching are currently largely unexplored, both for pre-service and in-service teachers. The relevant literature search so far revealed only four studies on teacher motivation and none on the commitment to teaching. The first two studies on teacher motivation were conducted more than 15 years ago; the first involved student teachers of English at two Slovenian universities (Kyriacou & Kobori, 1998), while the second involved students of primary and secondary education at the faculty of education (Javornik Krečič & Ivanuš Grmek, 2005). Both studies reached similar conclusions: intrinsic factors were those that most influenced students' career choices as teachers, altruistic reasons were also rated highly as reasons for choosing a teaching profession, and students in the study generally showed high confidence in their teaching

abilities. Kyriacou & Kobori (1998) also found that extrinsic reasons ranked much lower than intrinsic and altruistic reasons and that the influence of others was not important in students' decision to become teachers. The third study (Tašner et al., 2017) is relatively new; it was conducted on students of primary and secondary education at the faculty of education and showed that for them, the most important factor in choosing a teaching profession was the intrinsic factor of caring, while the extrinsic factors of job security and advantages, in general, seemed to be less important. Although teaching is a highly gendered profession in Slovenia, this was not among the determining factors for choosing a teaching profession. The most recent study (Štemberger, 2020) included active secondary school teachers. This study's conclusions show that female teachers are mainly intrinsically motivated to choose the teaching profession (e.g., due to their interest in the subject they now teach or because they wanted to work with children). In contrast, male teachers predominantly chose this profession due to environmental factors (e.g., the impact of their family and parents).

Due to the lack of research on teacher motivation and commitment to teaching among Slovenian teachers, the present study began to investigate this field of research by focusing on pre-service teachers. The purpose of the study was to examine initial teacher motivation, commitment to the teaching profession, and their relationship to each other among a sample of students at one of the Slovenian faculties offering teacher education programmes. In this study, initial teacher motivation was considered as student's motivation to choose the teaching profession (which can be operationalized as student's reasons for entering a teacher education programme), and commitment to the teaching profession was considered as a person's psychological attachment to the teaching profession (this includes positive emotions toward the teaching profession and willingness to engage in teaching).

The research questions were as follows: First, what are the students' most common reasons for deciding to become a teacher? Second, what is the level of students' commitment to the teaching profession? Third, does students' commitment to the teaching profession depend on their reasons for choosing it? Furthermore, are there differences between groups of students (based on gender, previous teaching experience, and intention to teach) in their initial teacher motivation and commitment to the teaching profession?

Method

Participants

The participants were first-year master's students enrolled in various two-year teacher education programmes at the Faculty of Arts, University of Ljubljana. A total of 399 students (75% female) from four consecutive school years (2017/18 to 2020/21) participated. The age of students ranged from 21 to 34 years ($M = 23.4$, $SD = 1.76$), with the majority in the 22 to 24 years category (84%) and only a small proportion of students older than 25 years (7%). The sample consisted of students of language courses (e.g., Slovene, English; 63%), students of non-language courses (e.g., geography, philosophy; 19%), and students with a combination of language and non-language courses (18%). A predominance of women and language students in the sample accurately reflects the actual state of the student population in the faculty's teacher education programmes.

Measures

Data were collected by using a questionnaire. The first section included questions about respondents' background characteristics (age, gender, course of study), previous teaching experience ("Do you have experience teaching others?" with a sub-question asking "If yes, how much on a scale of 1 - little to 5 - a lot?"), and intention to teach ("Will you seek employment in school after completing your master's degree?").

The remaining part of the questionnaire contained three instruments developed for this study. The first two instruments combined measure various internal and external reasons for entering the teaching profession, while the third instrument examines respondents' commitment to the teaching profession. These instruments were:

Initial Teacher Motivation Scale contains four subscales with twenty items that list various reasons for entering the teaching profession. Participants rate the importance of each of the listed reasons in influencing them to become a teacher. The five-point Likert scale ranges from 1 (not at all important) to 5 (extremely important). The subscales measure four aspects of initial teaching motivation: altruistic motives, desire to teach, teacher qualities, and job benefits.

Teaching as Fallback Career Scale contains three items that list possible reasons for choosing teaching as an alternative career when more desirable career options cannot be achieved. Participants rate the importance of each of the listed reasons for their decision to enter the teaching profession on a five-point Likert scale ranging from 1 (not at all important) to 5 (extremely important).

Commitment to the Teaching Profession Scale consists of a ten-item scale describing psychological attachment to the teaching profession. Participants respond on a five-point Likert scale ranging from 1 (definitely does not apply to me) to 5 (definitely applies to me).

Procedure

Data were collected in November of each school year during the practicum. In 2017, 2018, and 2019, when practicum took place in the classroom, paper questionnaires were distributed. However, in 2020, when the practicums were conducted on Zoom due to the coronavirus pandemic, the questionnaires were answered online (in the Moodle environment). Participation was voluntary and anonymous. All students present on the day of data collection returned questionnaires; since attendance is high in the practicum, the sample represents 94% of the target student population.

Data analysis

Principal component analyses were conducted to examine the factor structure and determine the structural validity of the instruments. Internal consistency reliability was tested using Cronbach's alpha. For each composite variable, individual respondents' responses to the included items were averaged to obtain the scale score. For continuous variables, normality of distribution was tested using the Shapiro-Wilk test, skewness and kurtosis measures, and Q-Q plots. For the regression analysis, preliminary analyses were conducted to ensure that there were no violations of the assumptions of normality, linearity, and homoscedasticity.

Results

Preliminary analyses

Three instruments were developed for this study; therefore, preliminary analyses were required to verify their design and suitability.

The instrument Initial Teacher Motivation Scale measures respondents' reasons for choosing teaching as a future career. The instruments of Kyriacou et al. (1999) and Watt & Richardson (2007) served as the basis. Some of their items were selected, adapted, and modified, and some newly developed items were added to expand the scale. Items were introduced with the wording "I chose to become a teacher because...". Participants responded with a five-point Likert scale. The 20 items were subjected to factor analyses to determine the underlying structure. First, a principal component analysis revealed six components with eigenvalues greater than one, whereas the parallel analysis revealed only four factors. Additional analyses of the scree plot and component weight tables also indicated the existence of four factors. Therefore, the next step was to perform a principal component analysis with four factors using the Varimax rotation method. This four-factor solution explained 57.7% of the variance and proved to be appropriate both in terms of content, since the factors correspond to the theoretical expectations of the scale, and statistically (Bartlett's test for sphericity: $\chi^2 = 3376$, df = 190, $p < .001$; KMO = 0.846; see Table A1 in the Appendix for factor loadings). Four composite variables were formed following the described procedure, each with five items. Factor 1, *altruistic motives* (16.5% of the variance explained), expresses seeing teaching as a socially valuable activity and wanting to help young people succeed (e.g., "...as a teacher I can do good for society"). Factor 2, *desire to teach* (14.1%), expresses intrinsic reasons related to enjoying teaching and working with students (e.g., "...I want to work with children and youth"). Factor 3, *job benefits* (13.8%), expresses external reasons related to the favourable aspects of teachers' working conditions (e.g., "...teaching has good working conditions"). Factor 4, *teacher qualities* (13.3%), expresses intrinsic reasons that relate to the person's confidence in their teaching abilities (e.g., "...I have qualities of a good teacher"). All factors have good internal consistency (Cronbach's alphas: altruistic reasons = .82; desire to teach = .80; teacher qualities = .72; job benefits = .78).

The instrument Teaching as Fallback Career Scale measures respondents' pragmatism in entering a teacher education programme. Initially, a list of four items was formed, prefaced with the phrase wording "I chose to become a teacher because...". Items (e.g., "… teaching is my emergency exit") were chosen based on literature listing various motivations related to a fallback career (e.g., Watt & Richardson, 2007; Wong et al., 2014). Participants responded with a five-point Likert scale. The items were included in a principal component analysis. Both a scree plot and a parallel analysis indicated a one-component solution. One item reached a loading below 0.32 (10% of the variance); therefore, it was deleted. Another PCA was conducted with only three items; the one factor explained 60.6% of the total variance (Bartlett's test for sphericity: $\chi^2 = 189$, df = 3, $p < .001$; KMO = 0.645; see Table A2 in the Appendix for factor loadings). The final scale, with three items, showed moderate reliability ($\alpha = .68$).

The final instrument, Commitment to the Teaching Profession Scale, was based on the previous instruments by Christophersen et al. (2016) and Moses et al. (2016). Since neither instrument was entirely appropriate for this study, only some of the items were selected, and some new items were added based on the literature, resulting in a list of ten items describing psychological attachment to and identification with the teaching profession (e.g., "I look forward to working as a teacher"). Participants responded with a five-point Likert scale. All ten items were included in a principal component analysis. Although the initial analysis revealed two components with eigenvalues greater than one (i.e., 5.36 and 1.02), both a scree plot and a parallel analysis indicated a one-component solution. Therefore, another PCA was performed with one factor; one factor explained 53.6% of the total variance (Bartlett's test for sphericity: $\chi^2 = 2259$, df = 45, $p < .001$; KMO = 0.908; see Table A3 in the Appendix for factor loadings). The scale showed strong internal consistency ($\alpha = .90$).

Descriptive statistics, correlations between variables, and differences between groups of students

A relatively small group of respondents (22%) reported having no teaching experience at all, while the others self-rated their previous teaching experience as little (rating 1 – 20%, rating 2 – 22%), moderate (rating 3 – 22%), or ample (rating 4 – 12%, rating 5 – 2%).

Students' intention to teach was assessed indirectly by asking them if they planned to seek employment as teachers after finishing their studies. The majority of the respondents answered in the affirmative (Group 1, 59%), while another large group was still undecided (Group 2, 36%), and only a very small proportion of respondents (Group 3, 5.0%) has already decided to seek other employment.

Correlations among all composite variables are presented in Table 1. Commitment to the teaching profession (hereafter referred to as commitment) shows statistically significant correlations with all five motivational factors; the correlations are positive, except for fallback career, ranging

Table 1
Correlations between the composite variables

	Variables	1	2	3	4	5
1	Altruistic motives	/				
2	Desire to teach	.43***	/			
3	Teacher qualities	.43***	.55***	/		
4	Job benefits	.35***	.30***	.21***	/	
5	Fallback career	–.18***	–.59***	–.42***	–.12*	/
6	Commitment	.46***	.77***	.60***	.27***	–.61***

Note. $n = 399$; concepts are measured on a scale of 1 to 5.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 2
Correlations between composite variables and students' demographic variables

Variables	Gender	Age	Teaching experience
Altruistic motives	–.06	.03	.18***
Desire to teach	–.15**	.01	.27***
Teacher qualities	–.07	–.02	.27***
Job benefits	–.02	.04	–.01
Fallback career	.08	.02	–.12*
Commitment	–.08	.06	.23***

Note. $n = 399$; concepts are measured on a scale of 1 to 5; gender was coded 0 = female, 1 = male.
*$p < .05$. **$p < .01$. ***$p < .001$.

from weak (job benefits) to strong (desire to teach). Table 2 presents the correlations between the composite variables and the demographic variables. The statistically significant correlations indicate a weak relationship with students' previous teaching experience both for motivational factors and commitment; this relationship is positive for commitment, teacher qualities, desire to teach, altruistic motives, and negative for fallback career. There is also a weak statistically significant correlation between the motivational factor desire to teach and gender; it indicates that this factor influenced female students slightly more than male students.

Table 3 presents descriptives (means and standard deviations) for all motivational factors for the whole sample and separately by gender and by the three groups regarding the intention to teach. The results show that students' choice of teaching was mainly motivated by altruistic motives and teacher qualities; the mean scores for these factors are close to the upper end of the scale (4.3 and 4.2, respectively), thus showing a strong influence on students' decisions. Two other factors, desire to teach and job benefits, have moderate mean scores (3.3 and 3.2, respectively) but are still above the middle point of the scale, showing that their influence on students' decisions is also significant. However, the last factor, fallback career, seemed to have little influence, as its average was relatively low (2.0). Female students' scores are higher than male students' on factors altruistic motives, desire to teach, and teacher qualities, and lower on the factor fallback career, but the differences are relatively small. Comparison of the groups in terms of intention to teach shows the highest scores for Group 1 (will teach), followed by Group 2 (undecided), while Group 3 (will not teach) has the lowest scores. This order applies to all motivational factors except the factor fallback career, where a reverse order is observed.

Concerning commitment, the results in Table 3 show that it is generally very high, with no differences between female and male students. However, comparing the groups in terms of intention to teach shows that the mean scores decrease from Group 1, where commitment seems very high, to Group 3, where it seems moderate.

Because motivational factors and commitment were not normally distributed, nonparametric tests were used to test for significant differences between students. First, the Mann-Whitney test was used to test for differences between female and male students. As shown in Table 4, only the difference in the motivational factor desire to teach was statistically significant. The second comparison tested the differences between the three groups based on intention to teach. The Kruskal-Wallis tests provided a very strong indication ($p < .001$) of a difference between the mean ranks of at least one pair of groups for all variables analysed (see Table 5).

Table 3
Means (and standard deviations in parentheses) of motivational factors and commitment for the total sample and students separately by gender and by the three groups based on intention to teach

		Gender		Intention to teach		
Variables	Total sample ($n = 399$)	Female ($n = 298$)	Male ($n = 101$)	Group 1 – will teach ($n = 237$)	Group 2 – undecided ($n = 142$)	Group 3 – will not teach ($n = 20$)
Altruistic motives	4.3 (0.65)	4.4 (0.64)	4.3 (0.68)	4.4 (0.61)	4.2 (0.65)	4.0 (0.84)
Desire to teach	3.3 (0.82)	3.4 (0.79)	3.1 (0.88)	3.6 (0.71)	2.9 (0.65)	2.1 (0.84)
Teacher qualities	4.2 (0.53)	4.2 (0.51)	4.1 (0.57)	4.3 (0.47)	4.0 (0.74)	3.7 (0.74)
Job benefits	3.2 (0.76)	3.2 (0.77)	3.2 (0.74)	3.3 (0.73)	3.2 (0.77)	2.5 (0.71)
Fallback career	2.0 (0.92)	1.9 (0.90)	2.1 (0.96)	1.6 (0.71)	2.4 (0.87)	3.0 (1.36)
Commitment	4.1 (0.66)	4.1 (0.66)	4.0 (0.64)	4.4 (0.43)	3.8 (0.56)	2.9 (0.88)

Notes. Concepts are measured on a scale of 1 to 5.

Table 4
The results of the Mann-Whitney test for testing the differences in the motivation factors and commitment between female and male students

	Female (n = 298)	Male (n = 101)	Mann-Whitney test	
Variables	Mean Rank	Mean Rank	U	p
Altruistic motives	203.7	189.1	13952.5	.268
Desire to teach	209.3	172.5	12274.0	.005
Teacher qualities	203.8	188.9	13931.0	.261
Job benefits	201.5	195.7	14611.5	.661
Fallback career	195.2	214.0	13631.0	.151
Commitment	206.4	181.2	13147.0	.057

To examine which pairs were different, Dwass, Steel, Critchlow-Fligner (DSCF) pairwise comparison analyses were also conducted; the results implied statistically significant differences between all three groups on commitment and also on the motivational factor desire to teach. There was no evidence of a difference between Groups 2 (undecided) and 3 (will not teach) on the motivational factors altruistic motives, teacher qualities, and fallback career, and no evidence of a difference between Groups 1 (will teach) and 2 (undecided) on the motivational factor job benefits. Since these groups were different, differences between them were further examined. The chi-square test showed that the three groups were not statistically different in terms of gender ($\chi^2(2) = 2.95$, $p = .229$), course study ($\chi^2(4) = 1.52$, $p = .823$) or level of previous teaching experience ($\chi^2(10) = 10.34$, $p = .411$).

Regression analysis

In the last part of the data analyses, hierarchical regression analysis was conducted to examine the extent to which motivational factors explained commitment (see Table 6). First, the control variables (gender, age, previous teaching experience) were entered into the regression equation (Step 1), followed by the five motivational factors (Step 2). The model tested in Step 1, although highly significant (F (3, 395) = 8.42, p <.001), explained only a small portion of the variance. Teaching experience was the only variable entered in Step 1 that significantly related to commitment; however, its predictive power was reduced to nonsignificance when the motivational factors were added in Step 2. The model with motivational factors was highly significant (F (8, 390) = 105.91, p <.001) and explained a large portion of variance, that is 68%. In this model, by far the strongest predictor of commitment is the motivational factor desire to teach. It is followed by three other predictors with significantly lower predictive power: the factors fallback career, teacher qualities, and altruistic motives, while the factor job benefits shows no predictive power. Fallback career is the only significant predictor negatively correlated with commitment.

Discussion

The present study examined initial teacher motivation and commitment to the teaching profession in a sample of Slovenian teacher education students. The first research question related to the students' initial teacher motivation, i.e., what were the reasons that influenced them to choose the teaching profession. The importance of five possible influencing factors was examined; one related to altruistic reasons (factor altruistic motivations), two related to intrinsic reasons (factors desire to teach and teacher qualities), and two related to extrinsic reasons (factors job benefits and fallback career). The results suggest that the respondents were multimotivated to become teachers as all the examined factors influenced their decision in some way. In general, looking at the whole sample, the factors that seemed to have the greatest influence were altruistic reasons and teacher qualities, while the factors desire to teach and job benefits appeared to have a moderate influence. The fifth influencing factor, fallback career, was the only one that seemed to be of very little importance, yet not entirely unimportant. These findings confirm the results of the earlier studies of Slovenian pre-service teachers (Javornik Krečič & Ivanuš Grmek, 2005; Kyriacou and Kobori, 1998; Tašner et al., 2017) and also of the many studies in other countries, which clearly

Table 5
Results of the Kruskal-Wallis test and DSCF pairwise comparisons for testing the differences in the motivational factors and commitment across the three groups of students based on intention to teach

	Group 1 – will teach (n = 237)	Group 2 – undecided (n = 142)	Group 3 – will not teach (n = 20)	Kruskal-Wallis		Pairwise comparions (DSCF)		
Variables	Mean Rank	Mean Rank	Mean Rank	H	p	p (1,2)	p (1,3)	p (2,3)
Altruistic motives	220.7	172.8	147.5	20.2	<.001	<.001	.020	.534
Desire to teach	247.6	140.4	58.9	108.8	<.001	<.001	<.001	<.001
Teacher qualities	223.8	169.9	131.7	27.2	<.001	<.001	.003	.241
Job benefits	215.5	189.5	91.1	23.5	<.001	.080	<.001	<.001
Fallback career	157.7	257.5	292.5	82.4	<.001	<.001	<.001	.074
Commitment	254.8	129.5	50.8	140.5	<.001	<.001	<.001	<.001

Table 6
Results of hierarchical regression analysis for the predicting of students' commitment

Independent variables	ΔR^2	*B*	β
Step 1	.06***		
Gender		–.08	–.05
Age		.02	.06
Teaching experience		.11	.23***
Step 2	.62***		
Gender		.04	.03
Age		.02	.05
Teaching experience		.00	.01
Altruistic motives		.13	.13***
Desire to teach		.39	.49***
Teacher qualities		.22	.17***
Job benefits		.01	.02
Fallback career		–.17	–.23***

Notes. $R^2 = .68$ ($n = 399$, $p < .001$).
* $p < .05$, ** $p < .01$, *** $p < .001$

showed altruistic and intrinsic motivations as the main forces attracting individuals to the teaching profession (e.g., Sinclair, 2008; Thomson et al. 2021; Wong et al., 2014).

In addition, the study looked more closely at different groups of respondents. Not surprisingly, gender does not appear to be a significant distinguishing factor, as the only relatively small significant difference between female and male students was found in the factor desire to teach; this factor was more influential for female students than for male students. This finding is consistent with earlier findings by Štemberger (2020) of Slovenian practising teachers' motivation to enter the teaching profession.

Furthermore, some differences emerged when the groups of students based on their intention to teach were examined. Some of these differences were minor (factors altruistic motives, teacher qualities and job benefits), while others were quite large (factors desire to teach and fallback career). By combining these findings, it can be deduced that students who take up teaching studies at the faculty of arts do so for different reasons and that their initial motivation for the teaching profession is a rather complex one. The students are not a homogeneous group but form three distinct groups with different motivational backgrounds. The largest group, about six-tenths of the sample, consists of students who will seek employment as teachers. They chose to enter teacher education programme primarily for very strong altruistic and intrinsic motives, were moderately influenced by the extrinsic factor of job benefits, but were not motivated by teaching as a fallback career. The second group, which is also quite large and accounts for slightly more than one-third of the sample, consists of students who are currently undecided about whether they will seek employment as teachers after they finish their studies. These students were also primarily motivated by strong altruistic motives and were moderately influenced by job benefits. However, compared to the first group, the influence of intrinsic motives was significantly lower, and the influence of teaching as a fallback career was significantly higher in this group. The third group, which is very small and comprises only five percent of the sample, consists of students who have currently decided not to seek employment as teachers when they finish their studies. Interestingly, even in this group, the initial motivation was generally characterised by strong altruistic motives. In contrast, the influence of intrinsic motives seems to be ambivalent for this group: on the one hand, students seemed to be strongly influenced by the factor teacher qualities, but on the other hand, they showed little desire to teach. Even more, for students in this group, when entering a teacher education programme, the influence of extrinsic motives, expressed in the factors job benefits and fallback career, seemed to be much more important than the influence of intrinsic reasons, expressed in the factor desire to teach. This could mean that if students in this group choose to become teachers after finishing their studies, this change in their decision is likely to be based on pragmatism rather than their enjoyment of teaching.

It is important to note that although the three groups are distinct, the results indicate that students in the "undecided" group are more similar to students in the "will not teach" group than to those in the "will teach" group. Significant differences between the "undecided" and "will not teach" groups were found for only two of the five motivational factors (desire to teach and job benefits). It is also important to note that the three groups differ only in motivational factors and commitment, not their demographic characteristics.

Turning now to the second research question, which concerns respondents' commitment to the teaching profession, the results show that this is generally high. There are no significant differences between genders, which is in accordance with findings from literature (e.g., Moses et al., 2016). However, all differences between the three groups based on intention to teach are large and significant, with the "will teach" group being very well committed, the "undecided" groups highly committed, and the "will not teach" group only moderately committed. It can be concluded that students who are currently decided to work as teachers are already more psychologically attached to the teaching profession than their peers who are still undecided or have already decided not to work as teachers. These differences between the groups are not surprising, as they correspond well with the differences in motivational factors described earlier.

The last research question in this study sought to determine whether commitment depends on initial teacher motivation. Because commitment showed statistically significant correlations with all five motivational factors, a hierarchical regression analysis with commitment as the dependent variable and motivational factors as predictors was conducted. The results showed that students' reasons for teaching explained a large proportion of the variance (68%) on commitment, with some noteworthy findings. First, although the factor desire to teach is not the principal reason for the respondents' decision to teach, it appears to be the strongest predictor of commitment (β = .49), while the most influencing factors, altruistic motives (β = .13) and teacher qualities (β = .17) seem to be noticeably less strong predictors. Second, the factor job benefits has not proven to

be a predictor of commitment even though it has shown a moderate correlation with commitment and differs between groups of students based on intention to teach. Third, although not a very influential factor in the choice of the teaching profession, the factor fallback option seems to be a significant predictor of commitment and even appear to have greater predictive power ($\beta = -.23$) than the factors altruistic reasons and teacher qualities mentioned above. Last, because the level of teaching experience showed a weak correlation with commitment, it was expected that it might prove to be its predictor; however, when combined with motivational factors as independent variables, it had no predictive power. These findings suggest that the students who are most committed to teaching are those who chose teaching because of intrinsic and altruistic motives, especially their desire to teach, and who do not view teaching as a fallback career option.

No supporting evidence can be cited for these findings, as no studies could be found that directly examined the relationship between students' reasons for choosing the teaching profession and commitment. The same is true of previous teaching experience; no studies could be found that address the relationship between teaching experience and commitment. However, since commitment to the teaching profession is defined as a psychological attachment, it is not surprising that in this study's sample, students' commitment is strongly predicted by the factor desire to teach and less strongly by other reasons for choosing teaching. Yet, a note of caution is in order here, as one might wonder which comes first, the initial teacher motivation or the commitment to the teaching profession. In organizational psychology, commitment to an organization is usually considered a predictor of work motivation (Landy & Conte, 2013). In the case of teachers, however, it also makes sense to conceptualize commitment as a consequence of motivation rather than as its antecedent; if commitment is considered as an individual's psychological attachment to the teaching profession, it can be assumed that it strongly depends on the reasons that led the individual to choose this profession. Of course, it is also quite feasible to conclude that both motivation and commitment of pre-service teachers are correlated because they both depend on the experiences these individuals have had as learners. As Pajares (1992) has noted, teachers have been forming beliefs about teaching for years based on their experiences as learners, and their beliefs are well established by the time they enter college. It can be suggested that these beliefs about teaching could be precursors of both motivation and commitment of student education teachers. Of course, further studies that take pre-service teachers' learning experience and beliefs into account will need to be conducted to confirm this assumption.

Limitations and future prospects

The present study has two main limitations. First, it is based on new instruments that have not yet been fully validated. However, these instruments have shown good psychometric properties and, not unimportantly, the sample was large enough, so the results can be considered the first indications of Slovenian teacher education students' reasons for choosing teaching and committing to the teaching profession. As such, they provide a good starting point for future research in this area.

Second, the generalization of the results of this study to all Slovenian pre-service teachers is limited because the sample represented only a specific group of students. The students included in the current study enter the teacher education programme at the faculty of arts after first completing their undergraduate (bachelor's) degree, which is not pedagogical. Their postgraduate (master's) teacher education programme prepares them for the role of subject-specific teachers. They are very likely to work in secondary schools, although their degree will also enable them to work as subject-specific teachers in the higher grades of primary school if they choose to do so. For example, in contrast, teachers who teach in primary school, either as general class teachers or subject-specific teachers, study at the faculty of education where both their undergraduate and postgraduate programmes are pedagogical. Therefore, it can be assumed that the students included in the current study and the students at the faculty of education differ due to different educational trajectories and learning backgrounds, which could lead to differences in their motivation and commitment. Furthermore, the gender distribution in the sample of this study may not be representative of all Slovenian pre-service teachers. Therefore, some currently undiscovered differences between male and female students might be found in a more representative sample.

The present study indicates that teacher motivation and commitment to teaching in Slovenia are fruitful areas for further research. First, the research could be extended to other pre-service teachers: students in the faculty of education, and students in other faculties in areas such as physical education, music, mathematics, and various sciences that also offer teacher education programmes at the master's level. Further research, particularly that which examines the development of students' motivation and commitment as they progress to the end of their master's studies, might provide a basis for some practical implications for the work of educators in teacher education programmes. Intentionally sustaining the students' commitment to teaching could be a promising way to enhance their future teaching effectiveness. Next, as a natural extension of this study, an analysis of in-service teachers' motivation and commitment could be conducted in both elementary and secondary schools, e.g., by examining the motivating and demotivating factors that influence them. In addition, an investigation of the impact of in-service teachers' teacher motivation and commitment to teaching on student motivation and learning should be conducted.

Conclusions

This study represents the first recent systematic investigation of the pre-service teachers' reasons for entering the teaching profession in Slovenia. It also appears to be the first study of Slovenian pre-service teachers' commitment to the teaching profession. As such, it lays the foundation for future research in this area.

Students included in this study were found to have chosen

the teaching profession primarily for altruistic and intrinsic reasons, and their commitment to the teaching profession was high and related to their reasons for becoming teachers. Although they did not form a completely homogeneous group, but three groups with somewhat different motivational backgrounds, the results are encouraging as they indicate that most respondents are motivated to enter the teaching profession because they feel connected to the profession itself and not because it would be their fallback career. Nevertheless, further research is needed to explain the origins of students' commitment to the teaching profession more thoroughly.

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Appendix

Table A1
Factor loadings for the items on the Initial Teacher Motivation Scale

Items	Altruistic motives	Desire to teach	Job benefits	Teacher qualities
Motive_12	.828			
Motive_13	.771			
Motive_15	.751			
Motive_14	.673			
Motive_11	.672			
Motive_1		.768		
Motive_6		.704		
Motive_3		.685		.446
Motive_7		.642		.476
Motive_2		.577		
Motive_17			.839	
Motive_18			.816	
Motive_19			.812	
Motive_16			.530	
Motive_20			.470	
Motive_9				.755
Motive_8				.693
Motive_10				.613
Motive_5				.539
Motive_4				.518

Note: Only factor loadings higher than .40 are reported.

Table A2
Factor loadings for the items on the Teaching as Fallback Career Scale

Items	F1
Fallback_3	.811
Fallback_1	.808
Fallback_2	.713

Table A3
Factor loadings for the items on the Commitment to the Teaching Profession Scale

Items	F1
Commit_2	.894
Commit_1	.877
Commit_4	.864
Commit_3	.732
Commit_5	.709
Commit_8	.691
Commit_7	.666
Commit_6	.650
Commit_9	.588
Commit_10	.564