

DOI 10.51558/2490-3647.2022.7.4.481

UDK 159.9:371.13

Primljeno: 08. 09. 2022.

Izvorni naučni rad
Original scientific paper

Mirjana Beara, Lejla Muratović

ACHIEVEMENT MOTIVE AS A PREDICTOR OF READINESS FOR THE PROFESSIONAL DEVELOPMENT OF TEACHERS

An achievement motive is a significant predictor of achievement in many areas of work. Our research aimed to determine whether it is possible, based on the achievement motive and its factors, to predict the readiness of teachers for professional development and certain sub-factors of this dimension. Also, through research, we tried to determine the predictive value of socio-demographic variables: gender, years of service, type of school where teachers work and previous education, motivation, achievement, and readiness of teachers for professional development. The research was conducted on a sample of 452 primary and secondary school teachers, and the following research instruments were used: Scale MOP 2002 (Franceško, Mihić, and Bala 2002) and Scale SPR–N (Beara and Okanović 2010). The results have shown a relationship between the general achievement motive and teachers' readiness for professional development. Multivariate analysis of variance determined that the components of achievement motivation, such as *setting and achieving goals, competition with others, persistence, and orientation toward planning* are statistically significant predictors of certain aspects of teachers' readiness for professional development. The research determined that the socio-demographic variable *years of service* statistically significantly predict the motivation of teachers' achievements, while *gender* is a significant predictor of teachers' readiness for professional development. Taking into account the fact, that the professional development of teachers is one of the key elements of the quality of education, the obtained results offer information about the foundations of professional development and indicate the direction of the practical activities of experts in this area.

Keywords: achievement motive; teacher's professional development; teacher's readiness for professional development; motivation to work

INTRODUCTION

Challenges and changes that occur in all segments of life determine upbringing and education as an important moment of facing new opportunities, and teachers as the key bearers of these changes. In order to assume and develop their professional roles and follow innovations in education, teachers must be open and ready for changes and motivated for lifelong learning and continuous professional development (Kostović 2008).

The term *professional development of teachers* implies increasing the teacher's awareness of what he/she does, how he/she does it and how he/she can improve it (Bjekić 1999). Tančić (2022) emphasizes that professional development and professional growth are interconnected and cannot happen without each other. The professional development of teachers is a long-term transformative process of improving the professional competences of teachers, and encompass both pre-service and in-service, as well as formal, informal and non-formal education. Some authors define it as a process of improving the knowledge, skills and abilities of teachers, whereby the teacher is mostly responsible for the quality of his/her work (Kostović, Šijaković, Oljača 2011); yet, in the normative framework, it is considered as a process of the development of teachers' competences (Standardi kompetencija za profesiju nastavnika i njihovog profesionalnog razvoja 2011). The most important function of the professional development of teachers is changing themselves in order to more effectively change their work and positive effects in the teaching and educational process (Krstić, Osmanović 2015). Therefore, the professional development of teachers is usually regulated.

Authors who deal with this issue generally agree that studies of the professional development of teachers, understood as the process of maturing a professional decision, are rare and not sufficiently broad-based. In this regard, theoretical-conceptual analyzes of this area are leading in relation to empirical research (Tančić 2022). Earlier research (e.g. Bjekić 1999) that dealt with motivation for work and professional development of teachers found that active teachers love their profession, most teachers would not change it, they rather emphasize elements of gratification of their needs than elements of frustration of their needs, and for their work is primarily determined by the intrinsic elements of the profession and the possibility of monitoring and participating in the development of students. The same author determined that a successful teacher is characterized by the following motivational components: higher motivation for teaching, higher general work motivation, higher motivation by factors

of intrinsic motivation, social support, job responsibility, opportunities for learning and development (Bjekić 1999). Teachers who are motivated by intrinsic motivation factors do more than what the curriculum prescribes, and they perceive more recognition from colleagues and superiors (Frase 2002). Also, research (Marušić 2014; Ovesni, Hebib, Radović 2019) has shown that teachers who were motivated by intrinsic motives, such as self-realisation and love for teaching when approaching this vocation during their careers demonstrate more favourable characteristics of professional behaviour, are more active in the field of improvement, assess their commitment and work ethic as higher, and feel more successful in their professional career roles. Interest is the basis of motivation and continuous engagement of an individual (Hidi 2006). This conclusion suggests the importance of intrinsic motivation for the overall professional development of teachers. Teachers who are intrinsically interested in the teaching profession invest more in their work and improvement, which improves their skills as well as a sense of security and satisfaction in their professional role (Marušić 2014). Also, teachers expect their professional development to be institutionalized to a large extent, while realized in their immediate work environment, and only a few independently create their own improvement activities; therefore, it is necessary to build the readiness of teachers for further improving themselves, especially for self-education (Bjekić 1999).

David McClelland and John Atkinson's *theory of achievement motivation* (1948) is particularly important for understanding motivation for professional improvement. According to this theory, motivation is defined as the need to achieve results, which is an acquired predisposition to strive for success. The result is defined as learning in the environment in which a person lives, studies and works, and the manifestation of achievement motives depends on environmental factors: recognition, support, respect, material and other benefits. Therefore, motivation is a product of achievement motives, motives for social recognition and other motives acquired through socialization. In the psychological sense, behaviour is motivated by achievement only if it tends to its own evaluation of its effectiveness and that by facing the standards for what is good that should be achieved or surpassed (Rheinberg 2004). Achievement motivation is often defined as a permanent characteristic of personality and the desire for success and the desire to avoid failure (McClelland and Atkinson 1948; according to Vizek Vidović et al. 2014). Heckhausen (1989; according to Rheinberg 2004) emphasizes the comparison of our activities with standards of high quality: achievement motivation is the effort to increase or maintain one's effectiveness at a high level in all those activities in which the standard of what is good is considered binding and the per-

formance of which therefore it may or may not succeed. Reeve (2010; according to Muratović 2019) points out that the theory of achievement motivation appeared to actually explain how people react to performance criteria and why some people show enthusiasm and approach behaviour, while some people show anxiety and avoidance when faced with performance criteria. Therefore, our assessment of the probability of achieving the desired success is important for achievement motivation. McClelland (1985) states, that every motive is essentially an anticipation of pleasure. Anticipation of a more pleasant state than the current one or a less unpleasant state than the current one acts as a basic driver of activity.

People with a developed achievement motive tend to choose moderately difficult tasks: on the one hand, they like challenges, but on the other, they don't like failure, and therefore they will choose and set realistic tasks for themselves – neither too difficult, nor too easy (Atkinson 1957). These people are ready to take risks, but not excessive, but moderate. Also, a significant finding confirmed by research in our community is that people with a high level of motivation are more inclined to plan long-term and show better success in various long-term goals, and are therefore more successful in school and achieve a higher level of education. Thus, high school students who show a higher level of achievement motivation approach learning in a strategic manner, and therefore achieve better results in learning (Muratović 2012). For us, the result is also significant that people with a high achievement motive set goals and tasks more clearly and in detail and are more specific about what is success and what is failure. They are able to determine in much more detail what needs to be done in certain stages of progress in order to achieve the ultimate goal (Franceško, Mihić and Bala 2002). Furthermore, research conducted by Bipp, Steinmayr and Spinath (2008) have shown that individuals who express a high motivation for achievement to a greater extent set goals aimed at developing competencies and mastering tasks.

Achievement motive in teachers supports the improvement of teachers performance – for example, research of Padalia and Nurochmah (2022) showed that achievement motivation determines 13,9% of variation in teacher performance; other research showed that teacher's competencies and their achievement motivation influence teaching performance significantly through variable of creativity (Fatmasari, Laksana Budi, Mardiana and Misnawati 2017).

McMillan, McConnell and O'Sullivan (2016) developed a model that offers a comprehensive view of intriguing and inhibiting factors of teachers' motivation for continuous professional development at three levels: personal, school, and systemic.

The authors indicate the importance of intrinsic motives that encourage teachers to professional development in order to satisfy their personal and/or professional needs. Investigating the influence of personal and contextual factors of teachers' participation in various forms of professional development, Kwakman (2003; according to Tančić 2022) found a more significant influence of personal factors compared to contextual factors. Similar results were obtained by Zhang, Admiraal and Saab (2021) in an effort to explain the differences in teachers' motivation to participate in different forms of professional development. The results of the aforementioned research indicated a more significant influence of the teacher's personal factors (assessment of self-efficacy, previous experience of the teacher in professional development activities) compared to the factors of the school context (interpersonal relations and school policy). Most teachers see the connection between continuous and planned professional development on the one hand, and professionalism, teaching quality and professional self-satisfaction on the other (Beara 2006). The results of the research conducted by Krstić and Osmanović (2015) have shown that teachers who were more involved in various types of professional development, are more motivated for professional development and professional progress.

Work motivation of teachers is the process of stimulating action, supporting activities and regulating complex work activities in educational work. We will present some research that give better insight into the work motivation of teachers:

- Sylvia and Hutchinson (1985) singled out the following factors in this psychological category for teachers: *social factor* (satisfaction/dissatisfaction with social aspects of the work situation and collegial support), *relationship with superiors* (i.e. satisfaction/dissatisfaction with them), *intrinsic factor* (i.e. satisfaction/dissatisfaction with these work factors), *job responsibility* (satisfaction/dissatisfaction with the responsibility that the teaching profession sets), *opportunity for learning and development* (satisfaction/dissatisfaction with opportunities for further professional development, for learning and development), and the *job security and scope of duties factor* (satisfaction/dissatisfaction with this aspect).
- Geijseli et al. (2009) found that teachers with a strong belief in their own abilities to organize and carry out certain tasks showed more enthusiasm and passion for learning and were more involved in professional development activities compared to teachers with a low perception of self-efficacy.
- Petrović (1991; 1992), Petrović-Bjekić (1997) found that teachers who are more motivated to teach are more successful in teaching.

- Highly motivated teachers prefer to participate in educational reform and show a high willingness and openness to implement innovations in their own teaching practice (De Jesus and Lens 2005; Đerić, Malinić, Šefer 2017).
- Teachers with more years of service were less motivated for professional development compared to teachers at the beginning of their career. This is understandable given the expressed need of teachers at the beginning of their careers to acquire and improve their own teaching competencies. Also, the obtained result suggests the need for the organization of professional development activities that will be challenging enough for teachers with many years of experience and represent a real opportunity for acquiring and improving the necessary knowledge, skills and abilities (Hildebrandt and Eom 2011; Zhang, Admiraal, Saab 2021).

According to the authors' awareness, there are few studies of the development and structure of the achievement motive among teachers in schools in our region, while this motive has been investigated in several studies among students. In the research carried out by Salaj-Franceško, Kodžopeljić and Mihić (2002) on a sample of 382 adult respondents, gender differences were determined in terms of the degree of expression of the achievement motive as a whole, but statistically significant differences were determined in the *components of persistence in achieving goals* and *goal achievement as a source of satisfaction*. The determined difference has shown that females see goal achievement as a source of satisfaction to a greater extent than males, and that they are more persistent in achieving their goals compared to males. Regarding the educational level, differences were observed only in the aspect of the achievement motive, which refers to competition with others. Respondents with a lower educational level and age had a greater tendency towards this way of expressing motivation for achievement.

From these numerous considerations arises the need to investigate certain aspects of teacher motivation, which almost all would have as its ultimate goal not only the determination of regularity and empirical indicators of phenomena, but also concrete guidelines and recommendations for management in education.

RESEARCH METHODOLOGY

Subject of research

The research deals with determining the relationship between achievement motivation and readiness for professional development of teachers. Regarding the achievement motive, the degree of development of the general achievement motive among teachers was examined, as well as the structure of the achievement motive (through 4 factors operationalized by the MOP 2002 scale: *competition with others, persistence in achieving the goal, achievement of goals as a source of satisfaction and orientation towards planning*). These dimensions were treated as predictors of readiness for professional development of teachers. We operationalized the variable “readiness for professional development” in accordance with the research findings of Beara and Okanović, (2010) through five sub-factors: external motivation for improvement, awareness of the importance of improvement for the teaching profession, awareness of the importance of improvement for the quality of teaching, monitoring of modern achievements and self-initiative for improvement. Accordingly, we decided to collect data on readiness for professional development using the SPR-N Beara and Okanović (2010) scale.

In short, in this paper we tried to answer the following basic questions:

1. Does the achievement motive significantly predict teachers’ willingness to develop professionally and what is the structure of the predictive relationships between the sub-factors of both variables?
2. Are there significant differences between different subgroups of teachers (by gender, years of service, type of school where they work, previous education) in terms of the development of achievement motives and readiness for professional development?

The draft of the research is correlational and exploratory, given that there is not enough data on the dependent variable of readiness for professional development. The research is transversal in terms of the time criterion.

The aim of the research

The main aim of the research was to determine whether the readiness for professional development and certain sub-factors of this dimension can be predicted based on the

motive of achievement and its individual factors. Accordingly, we will investigate whether Competition with others, Persistence in achieving a goal, Goal setting as a source of satisfaction and Orientation towards planning are predictors of Readiness for professional development and its sub-factors (External motivation for improvement, Awareness of the importance of training for the teaching profession, Awareness of the importance of training for the quality of teaching, Self-initiative for improvement and Monitoring of modern achievements).

Research hypotheses

H1- we assume that the achievement motive is a statistically significant predictor of teachers' readiness for professional development, that is, that teachers with a more pronounced achievement motive will show a greater willingness to improve professionally.

H2 - we assume that the years of service are a statistically significant predictor of achievement motivation and readiness for professional development of teachers, while gender, type of school they work in and previous education do not have that predictive value.

Sample of respondents

The research sample consisted of 452 respondents of both genders (78% of whom are females), primary and secondary school teachers in Vojvodina; 57% of respondents are younger than 45. In terms of years of experience, 182 respondents or 42,6% are in the category of 0 to 10 years of experience in education, 114 or 26,7% have 11 to 20 years of experience and 131 respondents or 30,6% have over 21 years of experience. 66% of teachers from the sample completed their initial education at "teaching" faculties, that is, they passed pedagogic-psychological-methodical subjects. 37% of teachers from the sample are employed in secondary vocational schools, 33% in elementary schools and 30% in gymnasiums.

Instruments

The following instruments were used in the research:

- *Scale MOP 2002* (Franceško, Mihić, Bala 2002). The scale consists of 55 items in the form of a five-point Likert-type scale. The metric characteristics of this scale

are very good: high reliability (value of the Alpha-Cronbach reliability coefficient is 0,91) and representativeness of the statements (normalized KMO 0,92). Four factors (36,80% of the total variance) were extracted: the first factor is a person's tendency to be more successful than other people (e.g., *"I tend to be ahead of others in everything"*). The second factor is defined as persistence in achieving the goal (*"I always persist in achieving my goal"*). The third factor refers to achieving the goal as a source of satisfaction (*"Successfully completed work is the greatest reward for me"*). The fourth factor indicates an orientation towards planning (*"I plan everything in advance in order to achieve better results"*). A second-order factor analysis identified a general factor with which all four primary factors have a high positive correlation (from 0,52 to 0,84), which was called the motive of general achievement.

- *Scale SPR – N* (Beara and Okanović 2010). The scale has 17 items with good psychometric characteristics. Through factor analysis (principal components method with Promax oblique rotation), a five-factor interpretable structure was extracted, which explained 60,19% of the variance (Beara and Okanović 2010). The selection of five factors was made on the basis of the Kaiser-Gutman criterion and the Scree plot. The reliability of the scale as a whole is high (Alpha-Cronbach reliability coefficient is 0,83). The five subscales that represent the factors also meet the reliability criterion. Those are following subscales: 1. *External motivation for improvement*; 2. *Awareness of the importance of training for the teaching profession*; 3. *Awareness of the importance of training for the quality of teaching*; 4. *Monitoring of modern achievements* and 5. *Self-initiative for improvement*. Consistently positive intercorrelations of factors 2, 3, 4 and 5 indicate that this set of factors forms a compact whole that we can recognize as "intrinsic factors of motivation for professional development". The significant negative correlation of factors 2, 3, 4 and 5 with the first factor ("external motivation for professional development") also speaks in this direction. A significant correlation was obtained between those components. This indicates that they form a common factor of the second order - general readiness for professional development.

RESULTS WITH DISCUSSION

Table 1 shows a statistically significant relationship (Pearson's correlation coefficient) between the general factor of readiness to improve and the general factor of achievement motivation.

Table 1. Correlation of readiness to improve and achievement motivation

Variables	N	r	p
Readiness to improve, Achievement motivation	452	.447*	.000

The results in *Table 1* indicate a high and significant correlation between the predictor - the general achievement motive and the criterion - readiness for professional development ($p < .001$). This would mean that by measuring the degree of significance of achievement motivation, it would be possible to predict how much a teacher is ready to improve professionally, and that those teachers who have the achievement motive as a personality trait will also show a marked readiness for professional development during their teaching career.

In order to deepen this analysis, we applied the MANOVA technique in which we treated the individual components of the SPR-N and not the total score as criterion variables. This gave us a more detailed insight into the connections between all components measured by MOP 2002 and SPR-N. MOP 2002 components were treated as continuous predictors.

Table 2. MANOVA, predictor significance

Effect	Wilks' Lambda	F	df	Error df	p
MOP2002-Setting and achieving goals	.963	3.196	5	418	.008
MOP2002-Competition with others	.899	9.342	5	418	.000
MOP2002-Persistence	.862	13.334	5	418	.000
MOP2002-Planing	.970	2.621	5	418	.024

Table 2 shows that all four components measured by the MOP2002 scale are significant predictors of the components of readiness for professional development, at a significance level of $p=.000$.

Table 3. MANOVA, significance of the model

Model	R ²	SS	df	MS	F	p
External motivation for improvement	.126	53.67	4	13.41	15.209	.00
Awareness of the importance of training for the teaching profession	.165	70.18	4	17.54	20.809	.00
Awareness of the importance of training for the quality of teaching	.074	31.45	4	7.86	8.410	.00
Monitoring of modern achievements	.231	98.56	4	24.64	31.758	.00
Self-initiative for improvement	.110	47.04	4	11.76	13.097	.00

Table 3 shows that all the components of readiness for professional development can be predicted based on the components measured by MOP 2002. More details on how the components of MOP 2002 are connected with the components of readiness for professional development are given in Table 4, which shows the univariate effects of the predictors (of MOP 2002 components).

Table 4. MANOVA, univariate predictor effects

Predictor	Criterion	SS	Df	MS	F	p	Beta
	External motivation for improvement	.217	1	.217	.246	.620	-.035
MOP-Setting and achieving goals	Awareness of the importance of training for the teaching profession	11.413	1	11.413	13.536	.000	.171
	Awareness of the importance of training for the quality of teaching	.425	1	.425	.454	.501	.303
	Monitoring of modern achievements	.002	1	.002	.003	.955	-.089
	Self-initiative for improvement	1.737	1	1.737	1.935	.165	.251
	External motivation for improvement	7.810	1	7.810	8.852	.003	.137
MOP-Competition with others	Awareness of the importance of training for the teaching profession	5.044	1	5.044	5.982	.015	.035
	Awareness of the importance of training for the quality of teaching	.428	1	.428	.458	.499	-.058
	Monitoring of modern achievements	21.383	1	21.383	27.559	.000	-.048
	Self-initiative for improvement	.440	1	.440	.489	.485	.040
	External motivation for improvement	20.681	1	20.681	23.440	.000	-.108
	Awareness of the importance of training for the teaching profession	.272	1	.272	.323	.570	-.176
MOP-Persistence	Awareness of the importance of training for the quality of teaching	2.609	1	2.609	2.790	.096	.004
	Monitoring of modern achievements	26.274	1	26.274	33.863	.000	.282
	Self-initiative for improvement	20.556	1	20.556	22.892	.000	.341
MOP-Planing	External motivation for improvement	2.065	1	2.065	2.340	.127	-.047
	Awareness of the importance of training for the teaching profession	.892	1	.892	1.058	.304	.098
	Awareness of the importance of training for the quality of teaching	8.145	1	8.145	8.712	.003	-.040
	Monitoring of modern achievements	.570	1	.570	.734	.392	.302
	Self-initiative for improvement	3.251	1	3.251	3.621	.058	-.111

The results presented in Table 4 indicate that *setting and achieving goals as a source of satisfaction* is a significant predictor of *awareness of the importance of training*, which means that the higher the tendency towards setting and achieving

goals, the higher the awareness of the importance of training for the teaching profession. All other components of readiness for professional development are insignificantly related to the first component of achievement motivation, which means that the result of measuring this dimension cannot predict all components of readiness for professional development except awareness of the importance of training for the teaching profession. This MOP 2002 component has a negative (insignificant) relationship only with the *monitoring of modern achievements* component, which can be understood as interest in the development of one's subject or field, but also as interest in the development of teaching methodical practice (items that make up this factor indicate both of these dimensions).

It is evident, from *Table 4*, that *competition with others* has a positive significant correlation with the components of *external motivation for improvement* and *awareness of the importance of improvement for the teaching profession*, which means that people who are motivated by competitive motives also expect to a greater extent some kind of "arbitration" from the outside about to how successful they are (by the CEO, for example). External incentives are measurable and visible (number of hours, promotion, praise...) and can be compared with others based on them. The connection with the awareness of the importance of training for the teaching profession may indicate that competitive teachers try to prove themselves within the framework of their profession, but perhaps also to overcome the framework of their profession, i.e. to improve the profession through their advancement and comparison with others and thereby achieve some wider social recognition – both of the profession and of themselves. The significant negative correlation of *competition with others* with the component of *monitoring modern achievements* may indicate that people who have an aspiration to compete with others are less important to the intrinsic value of new professional and methodical knowledge, i.e. that they are less interested in the contents of the professional development program itself.

Persistence, as a component of achievement motivation, has a negative relationship with the component of *external motivation for improvement*, which can be interpreted by different individual meanings of hedonism. On the one hand, the source of satisfaction can be in situations that lead to immediate reinforcement and immediate need satisfaction, such as external incentives. On the other hand, the source of satisfaction can be the achievement of a goal, which implies a prior long-term investment of effort, persistent work and a person's readiness for delayed gratification, so that later reinforcement produces a greater and longer-lasting effect (Salaj-Franceško, Kodžopeljić, Mihić 2002). *Persistence* has a significant positive relationship with the

components of *monitoring modern achievements* and *self-initiatives for improvement*, which may indicate that these people are more independent and interested in innovations in their profession and that they are therefore ready to work persistently and independently on their professional development. Taken together, we could point out that persistence is a good predictor of intrinsic motivation in professional development, which also implies a greater readiness for self-education and self-leadership.

Orientation towards planning, as shown by the results of our research, is significantly and negatively correlated only with the *awareness of the importance of training for the quality of teaching*, which can also be interpreted by the peculiarity of the teaching job itself, which implies a lot of teaching planning (goals, outcomes, teaching areas, unit, teaching method), but also planning at the school level (developmental planning, self-evaluation plan, etc.). The established negative correlation indicates that people who are “good planners” may not go further in considering what else constitutes the quality of teaching, but are content with the fact that their teaching and other activities are well planned and therefore of sufficiently high quality.

In order to determine whether there are significant differences between subgroups of respondents, i.e. what is the significance of certain socio-demographic variables such as *gender, years of experience in education, type of school where they work and previously graduated college*, and in terms of achievement motivation and readiness for professional development, we applied the method analysis of variance (ANOVA). We treated socio-demographic variables as categorical predictors, and as criteria the general motivation for achievement (*Table 5* and *Graph 2*) and readiness for professional development (*Table 6* and *Graph 3*).

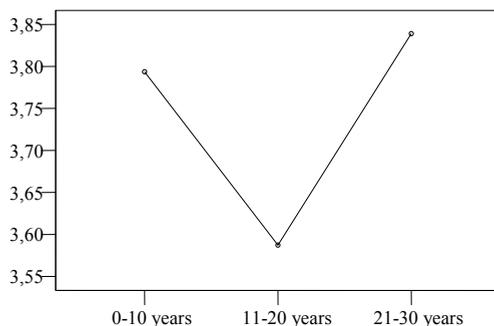
Table 5. The effects of socio-demographic variables on the general achievement motive

Effect	SS	Df	MS	F	p
Type of School	.566	2	.283	1.770	.172
Type of College	.028	1	.028	.174	.677
Years of service	1.454	2	.727	4.544	.011
Gender	.367	1	.367	2.293	.131
Type of School * Type of College	.323	2	.161	1.008	.366
Type of School * Years of service	.163	4	.041	.254	.907
Type of School * Gender	.264	2	.132	.824	.439
Type of College * Years of service	.334	2	.167	1.045	.353
Type of College * Gender	.419	1	.419	2.621	.106
Years of service* Gender	.417	2	.209	1.304	.273

Considering the different demographic categories included in the research, there are no significant differences in the degree of achievement motivation among teachers. Only the years of service showed to be a predictor of MOP, $p=.011$, in the sense

that people in the middle of their careers have a decline in achievement motivation (Graph 2).

Graph 2. Differences in the general motive of achievement with regard to the years of service



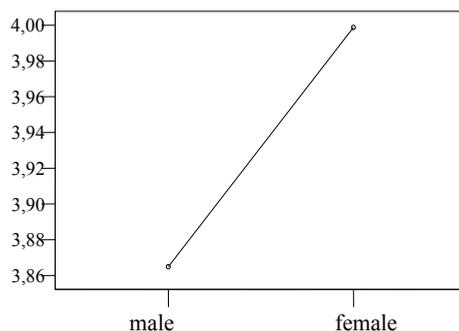
At the beginning of their career, teachers have a strong need to acquire and improve their own teaching competencies. The decline in achievement motivation in the middle of their career can be explained by the fact that teachers are mostly females, who in the middle of their career give priority to the realization of some other roles, such as motherhood, and also the same could be said for fathers. At the beginning of a career, it is necessary to “prove yourself”, and therefore the motivation for achievement is higher. In the later phase of the career, when the children grow up, it is again relevant to give one’s best in professional roles, therefore we believe that this is the reason for the increase in the achievement motive measure among more experienced teachers.

Table 6. Effects of socio-demographic variables on readiness for professional development

Effect	SS	Df	MS	F	p
Type of School	.157	2	.078	.354	.702
Type of College	.273	1	.273	1.236	.267
Years of service	.213	2	.107	.482	.618
Gender	.837	1	.837	3.787	.050
Type of School * Type of College	.845	2	.422	1.911	.149
Type of School * Years of service	.626	4	.156	.708	.587
Type of School * Gender	.208	2	.104	.470	.625
Type of College * Years of service	.322	2	.161	.728	.483
Type of College * Gender	.065	1	.065	.293	.589
Years of service* Gender	.301	2	.150	.681	.507

There are no statistically significant differences in terms of teachers' readiness for professional development with regard to the *type of school they work in, years of service and previous education*. The only significant difference ($p = .05$) is observed in the *gender variable*, which speaks in favor of the fact that female teachers are readier to improve professionally than male teachers (*Table 6*).

Graph 3. Teachers' readiness for professional development - gender differences



The result obtained on the observed gender differences is in accordance with the results of the research conducted by Tančić (2022), where it was also established that female teachers expressed a greater willingness to improve professionally than their male colleagues.

CONCLUSIONS AND IMPLICATIONS

The concepts of motivation for work, motivation for quality as well as motivation for professional development are of particular importance for understanding the behavior of teachers as well as the interrelationships between psychological dimensions and performance of teachers in their daily work in teaching. At the same time, teaching should not be viewed only as a process in which students acquire and build knowledge, skills and attitudes, but also as a teacher's work, in which she/he can and should realize themselves as professionals and satisfy their own needs.

The results of our research allowed us to draw the conclusion that the teachers with a more pronounced achievement motive show greater readiness for professional development during their teaching career. The conducted research could point towards answers to the questions of the structure of predictive relationships between the sub-factor of the achievement motive and readiness for professional development. Mul-

tivariate analysis of variance have shown that the component of achievement motivation, *setting and achieving goals*, is a statistically significant predictor of *awareness of the importance of training and development for the teaching profession*, the component of *competition with others* is a statistically significant predictor of *external motivation* for improvement, awareness of the importance of improvement, while a statistically significant but negative correlation with the *monitoring of modern achievements* component. *Persistence*, as a component of achievement motivation, has a negative relationship with the component of *readiness for professional development*, external motivation for improvement, and a positive relationship with the components of *monitoring modern achievements* and *self-initiative for improvement*. The last component of achievement motivation, *orientation towards planning*, statistically significantly negatively correlates with the awareness of the importance of training for the quality of teaching. When it comes to the variables that make a significant contribution to the prediction of achievement motivation, statistical significance was determined with regard to *years of service*. The results have shown a decline in the achievement motive in the middle of the teaching career. Teachers from our sample, regardless of years of service, type of school where they work and previous education, show equal readiness for professional development. The difference was determined only in relation to the socio-demographic variable gender, where female teachers expressed a higher degree of readiness to improve professionally than their male colleagues.

The obtained results hold the potential to indicate the direction of action in educational practice. It is extremely important for school management to know the motivation profile of its employees, because the quality of teaching directly depends on the degree of motivation, as well as on its direction and intensity. Furthermore, the obtained results suggest the need to organize professional development activities that will be sufficiently challenging for all teachers, regardless of years of service, and represent a real opportunity to acquire and improve the necessary knowledge, skills and abilities. In order for teachers to develop more successfully professionally, be more competent and satisfied at work, it is advisable for the management and decision makers in education to take into account what motivates the teachers to develop and how they strive to achieve their needs and desires in the work environment. According to the theory of achievement motivation, people with a pronounced achievement motive tend to evaluate their effectiveness by facing the standards for what is good that should be achieved or overcome. This is in accordance with the quality standards in the modern school, because the teacher is expected to assume the role of

a “reflective practitioner” who him/herself regulates, manages and evaluates his/her work based on quality standards and takes actions to improve it. We believe that successful management in schools should first of all intervene on an intrinsic set of factors and enable teachers to express the motive of achievement, first of all by enabling and encouraging professional development, raising the level of responsibility assumed by the teacher, enabling self-initiative for professional development, providing challenging situations in teaching practice as well as nurturing a climate of support for professional development, high expectations and trust in teachers (Beara 2009). The results of this research indicate that the majority of teachers want to effectively and creatively contribute to the achievement of valuable goals, both their own and the educational goals of the school, i.e. they have a pronounced orientation towards setting and achieving goals as a source of satisfaction, and we believe that this should be supported in the right way in schools. If it is possible for them, teachers will responsibly apply self-direction, self-leadership and self-management in the achievement of worthwhile goals and for the fulfilment of which they have support managers. This shows the result that the teachers have strong dimensions of persistence and planning in achieving the goal, within the achievement motive. In order to achieve the set goals, teachers are largely aware of the need to develop professionally. Therefore, enabling professional development (by removing negative and strengthening positive factors of motivation for professional development, such as providing constructive feedback for improving and applying what has been learned, recognizing progress, etc.) can further strengthen this readiness among teachers.

Our research results, as well as those of other authors, which we present in the paper, shed light on the important issues of motivating teachers for continuous professional development and improvement. We hope that our research will contribute to a better understanding of the relationship between achievement motivation and teachers’ readiness for professional development, and serve as inspiration or a starting point for new research in this area.

REFERENCES

1. Atkinson, John W. (1957), "Motivational determinants of risk-taking behavior", *Psychological Review*, 64(6), 359-372.
2. Beara, Mirjana (2009), "Motivacija nastavnika vs. spremnost na profesionalni razvoj", Master's thesis, University of Novi Sad
3. Beara, Mirjana, Predrag Okanović (2010), "Spremnost na profesionalni razvoj nastavnika – kako je izmeriti", *Andragoške studije*, No.1, 47–60.
4. Bipp, Tanja, Ricarda Steinmayr, Birgit Spinath (2008), "Personality and achievement motivation: Relationship among Big Five domain and facet scales, achievement goals, and intelligence", *Personality and Individual Differences*, 44(7), 1454–1464.
5. Bjekić, Dragana (1999), *Profesionalni razvoj nastavnika*, Učiteljski fakultet, Užice
6. Đerić, Ivana, Dušica Malinić, Jasmina Šefer (2017), "Kako unaprediti proces inoviranja školske prakse", *Inovacije u nastavi*, 30(4), 1–13.
7. Franceško, Mirjana, Vladimir Mihić, Gustav Bala (2002), "Struktura motiva postignuća merena skalom MOP2002", u: Branislav Čukić i Mirjana Franceško (ur.), *Ličnost u višekulturnom društvu*, Zbornik Odseka za psihologiju Filozofskog fakulteta u Novom Sadu, 134-143.
8. Frase, Larry E. (2002), *Maximizing people power in schools: motivating and managing teachers and staff*, Corwin Press, Inc., Newbury Park, CA
9. Frase, Larry E. (2002). *Maximizing people power in schools: motivating and*
10. *managing teachers and staff*. Newbury Park, CA: Corwin Press, Inc.
11. Frase, Larry E. (2002). *Maximizing people power in schools: motivating and*
12. *managing teachers and staff*. Newbury Park, CA: Corwin Press, Inc.
13. Geijsel, Femke P., Peter J. Sleegers, Reinoud D. Stoel, Meta L. Krüger (2009), "The Effect of Teacher Psychological and School Organizational and Leadership Factors on Teachers' Professional Learning in Dutch Schools", *The Elementary School Journal* 109(4), 406–427.
14. Hidi, Suzanne (2006), "Interest: A unique motivational variable", *Educational Research Review*, 1(2), 69–82.
15. Hildebrandt, Susan A., Minhee Eom (2011), "Teacher Professionalization: Motivational Factors and the Influence of Age", *Teaching and Teacher Education*, 27(2), 416–423.
16. Kostović, Svetlana (2008), *Pigmalion u razredu*, Filozofski fakultet, Novi Sad

17. Kostović, Svetlana, Tanja Šijaković, Milka Oljača (2011), "Profesionalno usavršavanje nastavnika – diskurs upravljanja", u: Olivera Gajić (ur.), *Kvalitet obrazovnog sistema Srbije u Evropskoj perspektivi – zbornik radova, Ka uspostavljanju vrednosnih okvira i standarda kvaliteta: odabrani teorijsko – metodološki koncepti*, Filozofski fakultet, Novi Sad, 303–314.
18. Krstić, Aleksandra, Jelena Osmanović (2015), "Motivisanost nastavnika za profesionalni razvoj i samorazvoj", *Godišnjak Učiteljskog fakulteta u Vranju*, No. 6, 187–200.
19. Marušić, Milica (2014), "Da li je intrinzička motivacija profesionalnog izbora značajna za kasniji profesionalni razvoj nastavnika?", *Psihologija*, 47(4), 449–464.
20. McClelland, David C. (1985), *Human motivation*, Scott-Freeman, New York
21. McClelland, David C., John W. Atkinson, Russell A. Clark, Edgar L. Lowell (1953), *The achievement motive*, Appelton Century Crofts, New York
22. McMillan, Dorothy, Barbara McConnell, Helen O'Sullivan (2016), "Continuing Professional Development—why Bother? Perceptions and Motivations of Teachers in Ireland", *Professional Development in Education*, 42(1), 150–167.
23. Muratović, Lejla (2012), "Odnos motivacije srednjoškolaca za školskim postignućem i strateškog pristupa učenju", *Pedagogija*, No. 2, 220–233.
24. Muratović, Lejla (2019), *Motivacija i učenje u nastavi: mogućnosti podsticanja i unapređenja*, Off-set, Tuzla
25. Ovesni, Kristinka, Emina Hebib, Vera Radović (2019), "Continuing Professional Development of Teachers: Interplay of the School Management, School Climate, Motivation, and Incentives", *Nastava i vaspitanje*, 68(2), 159–177.
26. Padalia, Andi, Andi Nurochmah (2022), "The Relationship of Achievement Motivation with Teacher Performance in the Implementation Teaching and Learning Process in Senior High Schools", *Advances in Social Science, Education and Humanities Research, volume 654*, Proceedings of the 1st World Conference on Social and Humanities Research (W-SHARE 2021).
27. Petrović, Dragana (1992), "Radna motivacija i samoprocena uspešnosti nastavnika srednjih škola", *Psihologija*, No. 1–2, 145–160.
28. Petrović-Bjekić, Dragana (1997), "Dinamičke osobine ličnosti nastavnika i uspešnost u nastavi", *Psihologija*, 30(1–2), 93–110.
29. Rheinberg, Falko (2004), *Motivacija*, Naklada Slap, Jastrebarsko

30. Fatmasari, Rhini, Untung Laksana Budi, Ade Mardiana, Misnawati (2017), "The effect of Teacher's Competency, Achievement Motivation and Creativity on their Teaching Performance: A study in distance learning education program", *International Journal of Current Research*, 9(12), 63541-63544
31. Salaj-Franceško, Mirjana, Jasmina Kodžopeljić, Vladimir Mihić (2002), "Neki socio-demografski i psihološki korelati motiva postignuća", *Psihologija*, 35(1-2), 65–79.
32. Standardi kompetencija za profesiju nastavnika i njihovog profesionalnog razvoja (2011), *Službeni glasnik RS, Prosvetni glasnik*, br. 5/2011
33. Sylvia, Ronald D., Tony Hutchison (1985), "What makes M. S. Johnson teach? A study of teacher motivation", *Human Relations*, 38(9), 841–856.
34. Tančić, Nataša (2022), "Prediktori profesionalnog razvoja nastavnika u inkluzivnoj školi", *Inovacije u nastavi*, 35(1), 1–16.
35. Vizek Vidović, Vlasta, Majda Rijavec, Vesna Vlahović-Štetić, Dubravka Miljković (2014), *Psihologija obrazovanja*, IEP - Vern, Zagreb
36. Zhang, Xin, Wilfried Admiraal, Nadira Saab (2021), "Teachers' motivation to participate in continuous professional development: relationship with factors at the personal and school level", *Journal of Education for Teaching*, 47(5), 714–731.

MOTIV POSTIGNUĆA KAO PREDIKTOR SPREMNOSTI ZA PROFESIONALNI RAZVOJ NASTAVNIKA

Sažetak:

Motiv postignuća predstavlja značajan prediktor uspjeha u mnogim područjima rada. Cilj našeg istraživanja bio je utvrditi da li se na osnovu motiva postignuća i njegovih pojedinih faktora može predvidjeti spremnost nastavnika za profesionalni razvoj i pojedini subfaktori ove dimenzije. Također, istraživanjem smo nastojali utvrditi prediktivnu vrijednost sociodemografskih varijabli: spol, dužina trajanja radnog staža, vrsta škole u kojoj rade i prethodno obrazovanje, motivacija postignuća i spremnost nastavnika na profesionalni razvoj. Istraživanje je sprovedeno na uzorku od 452 nastavnika osnovnih i srednjih škola, a od instrumenata su korišteni Skala MOP 2002 (Franceško, Mihić i Bala 2002) i Skala SPR – N (Beara i Okanović 2010). Rezultati su pokazali povezanost između opšteg motiva postignuća i spremnosti nastavnika za profesionalni razvoj. Multivarijantnom analizom varijance utvrđeno je da su komponente motivacije postignuća: postavljanje i ostvarivanje ciljeva, takmičenje sa drugima, istrajnost i orijentacija ka planiranju statistički značajni prediktori pojedinih aspekata spremnosti nastavnika za profesionalni razvoj. Istraživanjem je utvrđeno da sociodemografska varijabla dužina trajanja radnog staža statistički značajano prediktuje motivaciju postignuća nastavnika, dok je spol značajan prediktor spremnosti nastavnika za profesionalni razvoj. Uzevši u obzir činjenicu da je profesionalni razvoj nastavnika jedan od ključnih elemenata kvalitete obrazovanja, dobijeni rezultati nude informacije o osnovama profesionalnog razvoja i ukazuju na smjer praktičnog djelovanja stručnjaka u ovom području.

Ključne riječi: motiv postignuća; profesionalni razvoj nastavnika; spremnost nastavnika za profesionalni razvoj; motivacija za rad

Adrese autorica

Authors' address

Mirjana Beara
University of Kragujevac
Faculty of Philology and Arts
mirjana.beara@gmail.com

Lejla Muratović
University of Tuzla
Faculty of Humanities and Social Sciences
lejlamuratovic81@gmail.com

