

# Which Psychological Characteristics Make a Good Geography Teacher in High School?

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## KEYWORDS

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## ABSTRACT

This study seeks to examine what traits, “myths” and skills pupils will attribute to good geography teachers, and whether their assessments are influenced by gender, age, grade and satisfaction with a teacher. The sample consists of 150 high school pupils in Serbia. The survey consisted of four parts: socio-demographic characteristics, Big Five Inventory, good teacher myths, and good geography teacher skills. The results showed that pupils believe that good geography teachers have to be impartial, friendly and conscientious in the first place. Also, 13 high school teachers were also interviewed. The data are somewhat in line with previous research, but also indicate pupils' specific expectations of their geography teachers and teachers' awareness that they are not just ordinary teachers.

## Introduction

### Statement of the Problem

Psychological traits of teachers as well as what makes a good teacher represent topics that have been present for a long time among researchers (Genc et al., 2014; Gordon, 2008; Lamke, 1951; Li & Wu, 2011; Radulović et al., 2019; Ryans, 1960; Sakač & Marić, 2018). The students', the parents', the teachers', the teacher students' or the school principals' beliefs are different concerning what makes a good teacher (Arnon & Reichel, 2007; Bullock, 2015; Zagyvane Szucs, 2017). A teacher's personality is generally claimed to be crucial and the question that is often posed says: “What

are desirable traits that a good teacher should possess?” (Grgin, 1997; Korthagen, 2004; Stanojević, 2009). It is desirable for teachers to be emotionally stable, kind and patient in their work, to be cooperative, impartial and democratic (Stojiljković, 2014). Ryans (1960) claims that crucial dimensions of a teacher's personality are warmth, understanding, responsibility, businesslike manner (efficiency), stimulatory behaviour, and enthusiasm. Good teachers are enthusiastic, friendly, easy-going, able to develop rapport with learners, committed to the growth of their students, approachable, interested in learners as people,

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and always conscious of their status as role models (Guskey, 2002; Samy, 2005).

If teachers are surveyed, researchers generally observe predictive value of measured personality traits on the professional success of surveyed teachers. Comparing successful and unsuccessful beginning teachers in 16 dimensions of Cattell's theory (Cattell & Mead, 2008), Lamke (1951) found that teachers who scored highly in the dimensions F and H (which describe open, friendly, approachable, lively, talkative, cheerful, calm but also socially bold personalities), achieved above-average results. The research conducted by Li and Wu (2011) on 340 university teachers showed no differences between good and bad teacher.

In their research, Genc and his associates (Genc et al., 2014) used the Big Five Model for measuring teachers' personality traits. Their sample were students (N = 443) of the Faculty of Philosophy, Faculty of Sciences and the Academy of Arts, from the University of Novi Sad. First, they estimated their own personalities and then they estimated what are desirable qualities of an university teacher, that is they put themselves in the position of a good teacher and assessed what is, in their opinion, a good university teacher. The results indicate that good teachers are expected to have higher than average scores in all qualities, that is they are expected to be primarily more extraverted, more conscientious, more open to experience, more pleasant and emotionally stable (Genc et al., 2014). The results showed statistically significant gender differences on the scales of agreeableness and extraversion (Genc et al., 2014). It is obvious that female students expect higher agreeableness and extraversion from good university teachers, and the same tendency holds true for openness to experience. In Arnon's and Reichel's study (Arnon & Reichel, 2007), students of education (who work as educators or only study) assessed what is an ideal teacher for them and how they see themselves as future teachers. The results indicate that there are two main categories that shape the image of an ideal teacher – personal traits and the knowledge of the subject they teach. Personal traits of an ideal teacher are sense of humour, kind-heartedness, calmness, fairness, openness, sensitivity towards children, self-discipline, authority, motivation and attentiveness (Arnon & Reichel, 2007). The study of Pavlović and Tošić-Rudić (2009) on primary school pupils, showed that desirable qualities are sense of humour, understanding of pupils, patient explaining and tolerance (Pavlović & Tošić-Rudić, 2009). Undesirable traits that pupils named are strictness, arrogance, excessive seriousness and boringness in giving lectures. There were no age differences, but girls highlighted the importance of fairness while boys gave priority to sense of humour and encouragement.

This research is inspired by the study of Genc and his associates (Genc et al., 2014), except that the focus is on secondary school pupils and a specific profile of a geography

teacher. As Genc and colleagues (2014), we also used the BFI (Big Five Inventory – the Big Five model) (Goldberg, 1993; John & Srivastava, 1999). Teaching geography is rather specific because of its task to create a clear picture in students' mind of a place they live in and of the rest of the world as well. Geography also serves to introduce pupils to natural beauties, landscape differences and to develop pupil's criticalness toward economic, social and political issues in the world. Lastly, geography is largely a multidisciplinary science that partially relies on natural sciences (e.g. geology, climatology, hydrology) and partially on social sciences (e.g. population geography, economic geography, settlement geography). Because of all that, it is very important for geography teachers to be objective, creative, innovative and open to new experiences and knowledge (Romelić & Ivanović Bibić, 2015). The field that a teacher teaches largely determines what characteristics that teacher should possess. Characteristics of, for example, a good music teacher (Bogunović, 2006) and a good natural science teacher (Druva & Anderson, 1983) may differ significantly. Therefore, it is assumed that there is a need to examine what teachers' traits from the aspect of separate disciplines are desirable for the main users of their services – students and that examination would provide a profile that is specific for a given field. Besides personality, this study also examined students' attitudes about good geography teachers.

### Problem and purpose of the Study

The research included eight ideal conceptions of a good teacher that Thomas Gordon mentioned in his book *Teacher Effectiveness Training* (Gordon, 2008). These ideal conceptions are interesting because they vividly depict high expectations that are set for teachers by students or by teachers themselves. We also used three claims that represent skills that a geography teacher cannot do his job without – using modern technology, environmental awareness and following modern trends in geography. The aim of this research was to determine what traits, “myths/ideal conceptions of good teachers” and skills students will dominantly ascribe to good geography teachers and whether the emphasizing of all these traits is influenced by students' gender, age, grade in geography and satisfaction with geography classes and geography teachers. Five questions were addressed in the study: 1) Is there a difference between boys and girls in their perception of what constitutes a good geography teacher? 2) Is there an effect of students' age on the perception and attitudes about psychological characteristics of a good geography teacher? 3) Does a student's grade affect their perception of what psychological characteristics should a good geography teacher have? 4) Do students evaluations of the subject affect their responses regarding psychological characteristics of a good geography teacher? 5) What do geography teachers highlight as characteristics of a good geography teacher?

## Methodology

### Research Sample

150 secondary school pupils were surveyed, the majority of which were from Secondary School of Economics – 90 of them, while the other 60 respondents attended Grammar school and Technical School in Gornji Milanovac, Serbia. Respondents were aged between 15 and 19 ( $M = 16.5$ ) and were predominantly females (64%). Their average mark in geography was 3.4, and their satisfaction with that subject was 4.1. Thirteen high school geography teachers were interviewed in order to get to know what their beliefs are about good geography teachers.

### Instrument and Procedures

For the needs of the study of psychological characteristics of a good geography teacher, respondents responded to surveys anonymously. In the survey, respondents first provided data about their age, gender, mark in geography and the degree to which they are satisfied with the subject (geography). Besides socio-demographic characteristics, the authors also used BFI (Big Five Inventory, John et al., 1991), which measures five personality traits (extraversion, neuroticism, agreeableness, openness to experience and conscientiousness) with 44 items on a 5-point Likert scale. Using Cronbach's alpha, the value obtained for survey reliability was 0.82. The initial question "I see Myself as Someone Who..." was replaced with the question "A good geography teacher should be someone who...". Students also estimated on a 5-point Likert scale 11 statements about what a good geography teacher should be like. The statements were taken from Thomas Gordon's book *Teacher Effectiveness Training* (Gordon, 2008) and adjusted to

geography teaching and they embody ideal conceptions about everything that a good teacher has to know and has to do. In the end, students estimated three chosen skills that a good geography teacher should possess: using modern technology, environmental awareness and following modern trends in geography.

The interview questions for the teachers were designed specifically for the purpose of this research. The interview contained questions closely related to the problem what characteristics make a good geography teacher. In order to investigate the attitudes of teachers pertaining to characteristics of a good geography teacher, the interview mostly contained open-ended questions, where teachers had the opportunity to give longer answers and to explain more precisely their ideas. Four questions were related to the personality traits, skills and abilities of a good geography teacher. Teachers were also asked what are the specificities of geography teachers when compared to the other teachers. Through three items, they estimated their satisfaction and abilities as a teacher on the 5-point Likert scale.

### Research Methods

The data was collected during regular geography classes and the survey was anonymous and voluntary. Before the researchers handed out questionnaires to students, they gave them all necessary instructions and advice so that they could fill out the questionnaire well and to minimise possible mistakes and misunderstandings. As for geography teachers, they were interviewed online through open-ended questions and were informed that their participation was voluntary and anonymous.

## Research results and analysis

The analysis was carried out using the programme for statistical data analysis – SPSS 17.0 (Statistical Package for Social Sciences). Table 1 represents average students' answers to questions about psychological characteristics that a good teacher should possess.

On the basis of the obtained results, we can conclude that for students it is the most important that teachers treat them equally, that is to say that they don't single out favourites or teacher's pets, and then, that they don't treat them unequally because of prejudices, gender differences, or differences in achieved grades. Answers like these are understandable since such teachers' behaviour undoubtedly affects overall classroom climate and overall relationships among pupils. Pupils also emphasised *agreeableness* and cooperativeness as the most important characteristics, which indicates that it is very important to pupils that teachers are attentive, humble, sensitive and open to

any kind of cooperation. On the other hand, pupils believe that a teacher doesn't necessarily have to be in united front with other teachers regardless of personal feelings, values and preconceptions. A teacher should cooperate with pupils and openly solve all problems they face instead of separating himself by forming "fronts" with other teachers. Logically, pupils negatively estimated the group of personal traits that depicts *neuroticism*, which shows that pupils believe a good teacher should not be nervous, insecure, sad nor depressed.

Table 2 shows the influence of pupils' gender to their attitudes about psychological characteristics of "a good teacher". On the basis of the results from the table 2 we conclude that boys' answers and girls' answers differ on almost every variable. It is interesting that girls generally had greater arithmetic means (except for *neuroticism* for which the differences were not statistically significant),

**Table 1.** Average values and standard deviations for all questionnaire items (statements – S and five BFI dimensions)

Items	Arithmetic mean	Standard deviation
S1: Doesn't have favourites nor teacher's pets.	4.53	.880
S2: Doesn't have preconceptions nor prejudices.	4.39	1.067
S3: Provides pleasant work environment.	4.36	.943
S4: Good spatial orientation, skilfulness in using geographic maps and other modern technologies.	4.28	.935
S5: Does not express strong feelings (composed)	4.14	1.017
S6: Has environmental awareness.	4.00	1.030
S7: Keeps abreast with world's geographic current trends.	3.99	1.039
S8: Is consistent, doesn't make mistakes.	3.89	1.031
S9: Hides feelings	3.81	1.097
S10: Is wiser than students	3.79	1.222
S11: Is in united front with other teachers	3.65	1.176
Agreeableness (BFI)	4.15	.701
Conscientiousness (BFI)	4.02	.693
Openness to experience (BFI)	3.84	.529
Extraversion (BFI)	3.83	.559
Neuroticism (BFI)	2.22	.501

that is female pupils gave more significance to all characteristics than the male pupils did.

The correlation between pupils' age and their perceptions of psychological characteristics of a good geography teacher is not statistically significant. That indicates that estimates of what makes a good teacher do not change with age, and that all the researched characteristics were similarly estimated in different forms. Table 3 shows to what degree pupils' answers differ depending on grades they obtained in geography.

On the basis of the results from the Table 3 we conclude that in several cases, there is a significant correlation between grades pupils obtained in geography and their attitudes about characteristics of a good teacher. Pupils who have higher grades think it is less important that good teachers are composed, calm, serene and in a good mood. Likewise, it is less important to them that good teachers are consistent, that they do not make mistakes and that they are superficial. This could be interpreted as a fact that pupils attach the most importance to grades they attained in that teacher's subject, and far less importance to the characteristics of that teacher. This indicates to a certain degree that in our school system still exists the big problem where pupils study solely because of grades and grades are considered to be proper measures of their

**Table 2.** Significant differences in pupils' answers depending on gender (t-test)

Items	t	p
Doesn't have preconceptions nor prejudices	-2.580	0.011
Doesn't have favourites nor teacher's pets	-2.241	0.027
Provides pleasant work environment	-2.465	0.015
Doesn't show strong feelings (composed)	-2.126	0.035
Consistent, doesn't make mistakes	-2.041	0.043
Is wiser than students	-2.527	0.013
Is in united front with other teachers	-2.240	0.027
Has environmental awareness.	-2.002	0.047
Good spatial orientation, skilfulness in using geographic maps and other modern technologies.	-2.234	0.027
Extraversion	-2.073	0.00
Conscientious	-2.221	0.028

knowledge. Weak significant correlation was also established with the variable extraversion, which means that pupils who have higher grades believe that a good teacher should be sociable, communicative, energetic, optimistic and full of enthusiasm. On the other hand, higher correlation was established with the variable *openness to experience*, which indicates that the higher grades pupils have the more importance they ascribe to teacher's originality, creativity, curiosity and intelligence. It is understandable since pupils who achieve better results are usually more creative, more original and more intelligent than other pupils and for those reasons, it is important to them that teachers possess same those characteristics.

The following table shows the correlation between grades with which pupils assessed their satisfaction with the subject and the given variables.

**Table 3.** Significant correlations between obtained grade of a pupil and characteristics of a good teacher

Items	Grade	
	r	p
Doesn't show strong feelings (composed)	r	-.171*
	p	.036
	N	150
Consistent, doesn't make mistakes	r	-.176*
	p	.031
	N	150
Extraversion	r	.172*
	p	.035
	N	150
Openness to experience	r	.244**
	p	.003
	N	150

Looking at Table 4, we can conclude that significant correlations were established for some variables. It is particularly interesting to single out variables that relate to teacher's personal characteristics because that is where we found the strongest correlations between chosen variables. In this case negative correlation was established only with neuroticism, which means that this variable declines with the increase of pupils' satisfaction with the subject.

**Table 4.** Significant correlations between satisfaction with the subject and characteristics of a good teacher

Items	Satisfaction with the subject	
	r	p
Doesn't have favourites nor teacher's pets	.217**	.008
		150
Provides pleasant work environment	.227**	.005
		150
Wiser than pupils	.207*	.011
		150
United front with his colleagues	.170*	.038
		150
Good spatial orientation, skilfulness in using geographic maps and other modern technologies	.163*	.046
		150
Extraversion	.319**	.000
		150
Agreeableness	.335**	.000
		150
Conscientiousness	.316**	.000
		150
Neuroticism	-.422**	.000
		150
Openness to experience	.403**	.000
		150

It should be emphasized that the term “satisfaction with the subject“ implies educational content that pupils learn during the school year and the way class teaching is carried out. In that case we could expect high correlation with variables that relate to teachers' skills and abilities. However, we haven't got such results (even though there are significant, but mostly low correlations). This only shows us to what extent teachers' personal characteristics influence pupils' satisfaction with the subject, regardless of the fact that satisfaction should refer to the educational content and teaching methods. It also indicates that students identify teachers' characteristics with subjects they teach and thus they often say that a subject is “good“ or “their favourite “ if they see their teacher as such.

The interview with the high school geography teachers provided some interesting results. Most of the teachers stated that the main characteristics of a good geography teacher were: excellent professional competences, versatility, tolerance, creativity, patience, determination, empathy. Some of the responses are that high school geography teacher should be adventurous since this trait plays a crucial role in teaching students about places they have never been or about phenomena they have never seen. The respondents provided the authors with a wide variety of answers pertaining to some specific abilities and skills that good geography teacher should possess. Some of the answers were as follows: ability to express geographical content with clarity, good interaction in communication, ability to develop students' skills about applying geographical knowledge in everyday life. Also, they emphasize teachers' skills to develop students' knowledge about modern geographical tools (GPS, GIS), helping students in understanding other cultures, nations and customs and fostering students' habits to learn geography on the field and outside the classroom. When geography teachers were asked to express what distinguished them from other colleagues at school, they stated that they had intimate knowledge of natural and social sciences at the same time. Teachers of other subjects are usually good at natural or social sciences, but geography is an interdisciplinary subject and it requires versatility from the teachers. The possibility of teaching geography outside the classroom and working with students on the field distinguishes geography teacher from others. Having this in mind, it should be stated that most of the respondents don't think that anyone can be a geography teacher. The vast majority of the respondents think that they are good teachers and they are satisfied with their job, which brings them the opportunity to be unique.

## Discussion

Considering different theories of personality, it is very difficult to determine what desirable qualities of a geography teacher are. In this case, teachers and pupils of high schools evaluated good geography teachers' characteristics. Because of previous studies, the authors expected that respondents' answers would show that good geography teachers should be, among other things, innovative, creative, objective; that they shouldn't be emotionally unstable and rigid. The authors also wanted to determine if there are significant differences in pupils' answers with respect to gender, age, grade in a given subject and general satisfaction with teaching.

If we observe average scores of *ideal conceptions* and other characteristics of a good teacher, the results show that a good geography teacher above all else, should not treat pupils unequally and should not have prejudices about them. This finding indicates that pupils were the most conscious of this aspect of the pupil-teacher relationship most probably because it is often talked about and possibly because of aversion since such behaviour is often found in practice. There is a multitude of prejudices at schools (racial, sexist, ethnic, class and so on) and they are a big source of conflicts between teachers and pupils as well as between teachers and parents. The fact that pupils put that very characteristic in the first place as important for a good geography teacher is also an indicator that we should put as much effort as possible to get to know mechanisms that cause favouritism and prejudices. Discussing them and educating in them will surely reduce their occurrence in practice. Interestingly, it was not very important to pupils that teachers are a united front, while teachers in their interviews highlighted precisely this facet i.e. team work and cooperation. It seems that pupils are not aware of the significance of cooperation among teachers and of healthy work environment. They emphasize characteristics that relate directly to themselves, that is the way teachers treat them, and what happens "behind the scenes" is irrelevant to them. Even though team work between colleagues is not of great significance to the pupils, it affects the quality of teaching and teachers are aware of this.

As for the three researched skills, pupils emphasize the importance of spatial orientation and as an important aspect of that orientation they emphasise skilfulness in using geographic maps and modern technologies such as GPS. These results are in accordance with the teachers answers and with the other published articles pertaining to using modern technologies in geography. Geography teacher should be ready to teach his students how to use maps or GPS as a tool for orientation (Simon & Budke, 2023). It is a logical finding since it is a crucial skill that differentiates geography teachers from teachers of other fields. Familiarity with modern technology is very impor-

tant nowadays and is implied for pupils who grow up with it (Olschewski et al., 2023; Wilcke & Budke, 2019). As for the personal traits, it is very important to pupils that geography teachers are attentive, humble, sensitive and open to cooperation and that they are not nervous, insecure, sad or depressed. Since geography teachers teach about other cultures and customs, being openminded and intuitive is crucial. This largely corresponds with findings of previous studies (Arnon & Reichel, 2007; Genc et al., 2014; Stojilković, 2014). However, it is interesting that pupils give preference to agreeableness and conscientiousness while extraversion is second to last. It seems that it is not so important that geography teachers are talkative and sociable as it is that they are reliable and attentive. The combination of traits might be suitable for teaching geography, where a lot of lessons are shown practically and through student's experience. This was substantiated by teachers in their interviews. If the focus of the study were teaching other subjects, such as languages, that require direct teaching and communication skills, the results would be different. Future research pertaining to this are needed.

This study shows differences in answers of pupils of different *gender*, that is, female pupils have higher arithmetic means for every measured characteristic. The biggest differences were obtained in ideal conceptions of good teachers and skills and in two of five measured personal traits – conscientiousness and extraversion. This also partly corresponds with findings of Genc and his associates (Genc et al., 2014), where it was more important for female pupils that teachers are agreeable, extraverted and open to experience, as well as with findings of Pavlović and Tošić-Rudić (2009), where female pupils claimed that teachers should be fair, and male pupils claimed that teachers should encourage them and have a sense of humour. The information that female pupils in their evaluations generally attached higher value to all characteristics is probably the result of their greater awareness of what makes a good teacher, but it may also mean that they are more demanding and have higher expectations from geography teachers.

Pupils' *age* didn't prove to be an important predictor of differences in the assessment of psychological characteristics of good geography teachers. The study of Pavlović and Tošić-Rudić (2009) showed the same, which means that the assessment of characteristics of good teachers remains stable while pupils mature. However, expansion of the research into primary schools would additionally confirm that statement.

Pupils who receive higher *grades* in geography believe that good teachers should be original, creative and curious. Those with lower grades in geography give more importance to teachers' consistency and composedness. It is generally known that grades are not always the reflection

of knowledge, but it is more probable that those who have higher grades also have higher expectations from teachers in terms of knowledge and creativity (Brooks et al., 2017). Gifted pupils often require richer curriculum to be stimulated and not to get bored. That is particularly important in teaching geography, which gives many opportunities for experiential enrichment of the teaching process. Furthermore, pupils with lower grades are probably more afraid of uncertainty and they rely more on luck, thus it is more important to them that teachers are consistent, not unpredictable, in their relations with pupils.

*Satisfaction with teaching* affects the degree to which a teacher will be seen as good or favourite and if a teacher has adequate psychological traits, the satisfaction with teaching will increase or decrease. This variable is in the strongest correlation with teachers' personality traits, which indicates that a teacher's personality is crucial for the satisfaction with the given subject. Skills and ideal conceptions did not prove to be very important for determining satisfaction with the subject. To be satisfied

with the subject, it is important for pupils that teachers are emotionally stable and open, that they are agreeable, extraverted and conscientious. Research should focus on which aspects of teaching make pupils satisfied or dissatisfied.

Finally, the question remains of how much were the pupils using their current or previous teachers as prototypes. The research involved a large number of pupils, but if their teachers were their starting points, there is a question what would results look like if the number of surveyed pupils was far larger. We suggest a larger sample of pupils from different social settings in the future, in order to increase the number of teachers/benchmarks for identifying individual teachers' characteristics. There is a need to conduct the same or similar study with other geography teachers in order to determine "the ideal type of a teacher", that is the profile that satisfies the needs of society/pupils to the largest degree (Azim & Islam, 2018; Lachmann et al., 2018; Maričić et al., 2020; Milošević et al., 2016; Price et al., 2018; Ramli et al., 2018).

## Conclusions and implications

It is very difficult to determine the exact profile of a teacher for a given area – subject, but considering the really large number of desirable personality traits of a teacher, obtained results largely match previous studies (Arnon & Reichel, 2007; Genc et al., 2014; Stojiljković, 2014), but there are also certain specific qualities. Agreeableness, cooperativeness and composedness are undoubtedly characteristics that every good teacher should possess, regardless of what subject they teach. Teachers themselves state that it is important to collaborate with other colleagues, to be openminded and creative and to be versatile.

From the aspect of geography as a subject, we can conclude that the skill that differentiates geography teachers from other teachers is good spatial orientation, and an important segment of it is the usage of modern technology in orientation (GPS and GIS – Geographic Information System). Using modern technologies, a geography teacher can depict and demonstrate some phenomena and processes that pupils haven't had opportunity to encounter with, that they haven't experienced and which contents are abstract and difficult to understand. Because of all those, pupils consider this skill of geography teachers to be very important and useful. Additionally, teachers believe that their specificity is being knowledgeable about both social and natural sciences and being capable of teaching outside the classroom.

Secondary school pupils emphasize the importance of sensitivity, agreeableness, and conscientiousness as personal characteristics of a geography teacher. This has to do with the fact that geography is a subject in which many things could be demonstrated and explained experientially, through sensory perception, and that requires the above mentioned characteristics from a geography teacher. Conscientiousness as a personal characteristic of a geography teacher is desirable in pupils' opinion and it could be connected with conscientiousness and responsibility towards the preservation of nature and natural resources and of historical and cultural heritage. Geography is a subject that synthesizes these spatial components and that is why this personal characteristic of a geography teacher is considered desirable. It is very important to remember the fact that the study was conducted among secondary school pupils who are supposed to already have well-developed consciousness of the importance of protection of natural and social specific qualities and of treating them with care. Since teachers also recognised these qualities, it is believed that they comprise the good geography teacher profile.

Finally, the estimates of a good geography teacher do not change with pupils' age, but there are gender differences in attitudes about desirable characteristics of a geography teacher.

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## References

- Arnon, S., & Reichel, N. (2007). Who is the ideal teacher? Am I? Similarity and difference in perception of students of education regarding the qualities of a good teacher and of their own qualities as teachers. *Teachers and Teaching*, 13(5), 441–464. <https://doi.org/10.1080/13540600701561653>
- Azim, M. T., & Islam, M. M. (2018). Social Support, Religious Endorsement, and Career Commitment: A Study on Saudi Nurses. *Behavioral Sciences*, 8(1), 8. doi: 10.3390/bs8010008
- Bogunović, B. (2006). Svojsva ličnosti nastavnika muzike. [Personality traits of music teachers]. *Zbornik Instituta Za Pedagoška Istraživanja*, 38(1), 247–263.
- Brooks, C.; Butt, G.; Fargher, M. (Eds.) (2017). *The Power of Geographical Thinking*. Cham, Switzerland: Springer International Publishing.
- Bullock, M. (2015). What makes a good teacher? Exploring Student and Teacher Beliefs on Good Teaching, *Rising Tide*, 7, 1–30.
- Cattell, H. E. P., & Mead, A. D. (2008). The Sixteen Personality Factor Questionnaire (16PF). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment*. Vol. 2. *Personality measurement and testing*. Sage Publications, Inc. <https://doi.org/10.4135/9781849200479.n7>
- Druva, C. A., & Anderson, R. D. (1983). Science teacher characteristics by teacher behavior and by student outcome: A meta-analysis of research. *Journal of Research in Science Teaching*, 20(5), 467–479. <https://doi.org/10.1002/tea.3660200509>
- Genc, L., Pekić, J., & Genc, A. (2014). The structure of personality of a good teacher from students perspective according to the Big-Five model. *Psihologija*, 47(1), 49–63. <https://doi.org/10.2298/PSI1401049G>
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48(1), 26–34. <https://doi.org/10.1037/0003-066X.48.1.26>
- Gordon, T. (2008). *Kako biti uspešan nastavnik*. [How to be a successful teacher]. Beograd: Kreativni centar.
- Grgin, T. (1997). *Edukacijska psihologija*. [Educational psychology]. Jastrebarsko: Naklada Slap.
- Guskey, T. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8, 381–391. <https://doi.org/10.1080/135406002100000512>
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big-Five Inventory*. Berkeley, CA: University of California, Berkeley Institute of Personality and Social Research.
- John, O. P., & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In *Handbook of personality: Theory and research*, 2nd ed (pp. 102–138). New York, NY, US: Guilford Press.
- Korthagen, F. (2004). In search of the essence of a good teacher: towards a more holistic approach in teacher education. *Teaching and Teacher Education*, 20(1), 77–97. <https://doi.org/10.1016/j.tate.2003.10.002>
- Lachmann, B., Sariyska, R., Kannen, C., Błaszczewicz, K., Trendafilov, B., Andone, I., Eibes, M., Markowitz, A., Li, M., Kendrick, K.M., et al. (2018). Contributing to Overall Life Satisfaction: Personality Traits Versus Life Satisfaction Variables Revisited—Is Replication Impossible? *Behavioral Sciences*, 8(1), 1. <https://doi.org/10.3390/bs8010001>
- Lamke, T. A. (1951). Personality and Teaching Success. *The Journal of Experimental Education*, 20(2), 217–259. <https://doi.org/10.1080/00220973.1951.11010441>
- Li, H. Q., & Wu, Y. Z. (2011). *Comparative Study on the Personality Patterns of "Good Teacher" and "Bad Teacher" as Perceived by College Students*. *Advanced materials research - ZUG*, 271/273, 760–763. Durnten-Zurich: Trans Tech.
- Maričić, O., Ivkov-Džigurski, A., Stojišić, I., Cvjetičanin, S., & Ivanović Bibić, Lj. (2020). Multimedia Teaching Effectiveness in Natural Science Teaching. *Geographica Pannonica*, 24(2), 147–156. doi: <https://doi.org/10.5937/gp24-23357>
- Milošević, D., Ivanović Bibić, Lj., Đukićin, S., Ivkov-Džigurski, A., & Ristanović, B. (2016). The possibilities of application of programmed instruction in the sixth grade of the second cycle of education in accordance with

- standards. *Geographica Pannonica*, 20(2), 96-104. <https://doi.org/10.18421/GP20.02-01>
- Olschewski, P., Herzmann, P., & Schlüter, K. (2023). Group Work during Inquiry-Based Learning in Biology Teacher Education: A Praxeological Perspective on the Task of (Collaborative) Protocol Generation. *Education Sciences*, 13, 401. <https://doi.org/10.3390/educsci13040401>
- Pavlović, J., & Tošić-Rudić, M. (2009). Mišljenje učenika o osobinama nastavnika. [Students' opinion about teacher's characteristics]. *Nastava i Vaspitanje*, 58(3), 458–468.
- Price, J. A., Morris, Z. A., & Costello, S. (2018). The Application of Adaptive Behaviour Models: A Systematic Review. *Behavioral Sciences*, 8(1), 11. <https://doi.org/10.3390/bs8010011>
- Radulović, B., Gajić, O., Španović, S., & Lungulov, B. (2019). Challenges of initial teacher education in the context of higher education reform in Serbia. *Образование и саморазвитие*, 14(3), 34-39.
- Ramli, N. H. H., Alavi, M., Mehrinezhad, S. A., & Ahmadi, A. (2018). Academic Stress and Self-Regulation among University Students in Malaysia: Mediator Role of Mindfulness. *Behavioral Sciences*, 8(1), 12. <https://doi.org/10.3390/bs8010012>
- Romelić, J., & Ivanović Bibić, Lj. (2015). *Metodika nastave geografije*. [Methodology of teaching geography]. Novi Sad, Srbija: Univerzitet u Novom Sadu, Prirodno-matematički fakultet.
- Ryans, D. G. (1960). *Characteristics of teachers: Their description, comparison, and appraisal*. Washington D. C.: American Council on Education.
- Samy, A. (2005). The qualities of a good teacher: how can they be acquired and sustained? *Journal of the Royal Society of Medicine*, 98(2), 67-69. <https://doi.org/10.1177/014107680509800211>
- Sakač, M., & Marić, M. (2018). Psychological characteristics as the predictors of subjective well-being in future class and preschool teachers. *Zbornik Instituta za pedagoška istraživanja*, 50(1), 93–112. <https://doi.org/10.2298/ZIPII1801093S>
- Simon, M., & Budke, A. (2023). German and French Students' Strategies While Performing Geographical Comparisons in a Group Task Setting. *Education Sciences*, 13(8), 849.
- Stanojević, D. (2009). Kako biti uspešan nastavnik geografije. [How to be a successful geography teacher]. *Globus*, 34, 145–150.
- Stojiljković, S. (2014). *Psihološke karakteristike nastavnika*. [Psychological characteristics of teachers]. Niš, Srbija: Univerzitet u Nišu, Filozofski fakultet Univerziteta u Nišu.
- Wilcke, H., & Budke, A. (2019). Comparison as a Method for Geography Education. *Education Sciences*, 9(3), 225. <https://doi.org/10.3390/educsci9030225>
- Zagyvane Szucs, I (2017). What makes a Good Teacher? *Universal Journal of Educational Research*, 5(1), 141-147. <https://doi.org/10.13189/ujer.2017.050118>