

## Personality of Students: The Role of Pakistani Teachers

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**Abstract** *This research investigated the impact of four features of teachers' behavior viz. teachers' support, facilities provision, security in classroom, and motivation of teachers on five aspects namely agreeableness, extraversion, conscientiousness, neuroticism, and openness personality traits of the students. The technique of Stratified random sampling was used for the selection of 1438 students from a population of 10 graders of the Hazara Division. The questionnaires, for teachers' behavior and for exploring the Big Five personality of the students, were used for gathering data from the students. For analysis, Mean (M), standard deviation (S. D), and multiple regression analysis were used. Results showed that Teachers' support negatively predicts the agreeableness trait of personality, Provision of facilities positively predicts extraversion factor of personality. Classroom security positively predicts the extraversion, conscientiousness, agreeableness, and openness factors of personality. Teachers' motivation positively predicts extraversion, and conscientiousness factor of personality and negatively predicts neuroticism factor of personality.*

### Key Words

Big Five Factors of Personality, teachers' support, facilities provision, security in classroom, and motivation of teachers

### Introduction

Personality can be defined as constant; distinctive and planned group of characteristics of a person; decided by environmental as well as genetic traits that control one's cognition, motivation and behaviors in various situations (Ryckman, 2004). According to Kyllonen et al., (2014) Big Five personality traits have been playing a significant role in every field of life including school. These personality traits are influenced by parental behavior and the characteristics of teachers in classrooms. If these teachers are trained, they definitely build the personality of children (Bastian et al., 2015), meeting the special needs of children having a high risk of failure and motivating them for adopting a balanced approach is the characteristic of a trained teacher (Fla and Orlando, 2014). Additionally, these teachers maintain their classes through planned rules and regulations procedures (Omomia & Omomia, 2014). So it is a technique that the teachers use for maintaining control in classrooms (Glackin, 2018).

The development of students beyond academic skills has long been emphasized in the theories of learning and teaching. According to Pianta and Hamre (2009), both Emotional support and organizational techniques are important to conceptualize the high-quality teaching of teachers. Others argue that self-efficacy as a personality trait is developed through the significant role of teachers (Bandura et al, 1996). Similarly, teachers play a significant role in reducing math anxiety (Usher & Pajares, 2008).

### Teachers' Support

Self-determination and social support have emerged as the two major definitions of teacher support. When students imagine effective support, or cognitive support (Skinner & Belmont, 1993; Skinner et al, 2008) from the teachers during the process of students' learning (Wellborn and Connell, 1987), this type of support is called self-determination view. The social support model is divided into broad as well as narrow observations. According to Tardy, (1985) and Malecki and Demary ( 2002), the broad viewpoint explains teacher support as informational, emotional, instrumental, or judgmental support given by the teacher to the students. Providing recommendations in the content part is informational support. Granting of money or time is the instrumental support given by the teacher. Trust, love, and

empathy is emotional support. Giving evaluative feedback to students is appraisal support (Malecki and Elliott, 1999). On the other, a narrow point of view of teacher support includes facilitation, confidence, companionship, and awareness in the classroom environment (Aldridge et al., 1999).

These different perspectives on teacher support have many benefits. For instance, the teacher-student relationship is strengthened through teacher support. According to Longobardi et al., (2016), this support is reciprocated by students in the form of following the classroom norms. Conversely, if the teachers aggressively discipline them, shout at them, or blame them, the students will show less worry for them and consequently adopt a smaller number of cooperative behaviors in the classroom (Miller et al., 2000).

### **Teachers' Motivation**

Our environment has profoundly influenced the motivation level (Cash, et al, 2003). Some environments such as learners' homes, social circles, are out of control of an educator. However, the teachers have control over the classroom environment as it can enhance the motivation level of the students immensely.

### **Relevant Researches**

The underlying discussion elaborates on the relationship between teachers' behavior and Big Five personality traits. For example, different aspects of teachers' behavior affect the extraversion personality trait of students. Extraversion refers to the outgoing, energetic versus solitary and reserved tendencies of the individual (Costa and McCrae, 2006). The relationship between teachers' effectiveness and extraversion has been explored (Srivastava and Bhargava, 1984). Later studies also found a moderate level of correlation between extraversion and teacher effectiveness (Chan, 2003). Similarly, a positive relationship between classroom management skills of teachers and the extraversion factor of personality has been explored (Chiang, 1991). A correlation has been found between the teachers' support and the extraversion factor of personality (Jamil et al., 2012).

Being reliable, purposeful, determined, and individuals' tendency to plan, organize, and carry out tasks refers to the conscientiousness factor of personality (Costa and McCrae, 2006). A meager encouraging correlation between conscientiousness and effectiveness in teaching has been found by Job (2004) in his study. A modest relationship has been found between conscientiousness and teachers' classroom management as well as teachers' support and conscientiousness by Chiang (1991). On the other hand, a strong correlation has been found between teachers' motivation and conscientiousness, openness to experience, and neuroticism (Stewart et al., 2008).

Experiencing anxiety in new environments, negative self-esteem, having high levels of guilt are the characteristics of neuroticism (Costa and McCrae, 2006). Jamil et al (2012) have established too little correlation between neuroticism and teachers' emotional support whereas some research studies have found a negative relationship between neuroticism and teachers' effectiveness (Job, 2004) while modest relationship between neuroticism and ensuring students' motivation in the form of their motivation has also been found in some studies (Chiang, 1991).

A quality of being friendly as well as compassionate versus analytical and detached is called the agreeableness factor of personality (Costa and McCrae, 2006). Bastian et al., (2015) and Job, (2004) reported a negative correlation between agreeableness and teacher effectiveness while others found a positive relationship between agreeableness and principal evaluation.

Individuals' curiosity regarding the inner and outer world and the force with which they practice their emotions is called openness to experience (Costa and McCrae, 2006). There is a negative correlation between openness and teacher effectiveness (Job, 2004). There is a positive relationship between openness and performance of professionals (Barrick and Mount, 1991).

### **Objectives of the Study**

1. To describe the different aspects of teachers' role in relation to teachers' support, provision of facilities, security in the classroom, and motivation of teachers.
2. To describe the aspects of the personality of students.
3. To look at the impact of teachers' behavior on the personality of students.

### **Research Questions about the study**

1. Do teachers provide support to their students?
2. To what extent the facilities are provided in schools to the students?
3. To what extent teachers ensure security in the classrooms?
4. To what extent the teachers motivate their students?

5. What is the effect of teachers' role on aspects of the personality of the students?

## Research Methodology

The following procedure was adopted to conduct this survey research.

### The Population of this Study

This study consisted of class ten students as the study population.

### Participants of this Study

From class ten, the sample of 1438 (fourteen hundred and thirty-eight) students was selected by applying the technique of stratified random sampling. The selected sample belonged to the Hazara Division. District Abbottabad, District Haripur, and District Mansehra were visited for the purpose of selection of the sample. Students from a demographic point of view are represented in the following paragraph.

The sample of the study comprised of 725 (50.4%) public school students and 713 (49.6%) private school students. From a location point of view, the sample consisted of 720 (50.1%) urban students whereas 718 (49.9%) rural school students. According to the responses of the students, 990 (68.8%) of the mothers were low (0-8 years) educated, 366 (25.4%) were medium (9-13) educated, and only 82 (5.8%) of the mothers were highly (14+ years) educated. Similarly, 437 (30.4%) of the fathers were low (0-8 years) educated, 639 (44.4%) were medium (9-13 years) level educated while only 362 (21.65) were highly educated.

### The Procedure of Conducting the Study

Samples from these eight (84) schools from Abbottabad, Haripur, and Mansehra were contacted to collect information. Two questionnaires namely questionnaire for the role of teachers and questionnaires for exploration of personality traits were used to collect information for the respondents.

After proper permission from the Principals of the respective institutions, 20 students each was selected randomly. They were assured that their names will be kept anonymous and the information which they provide would be kept confidential. The students were required to respond to the behavior of their teachers to the questionnaire having options of Always (5) to Never (1). The positive role of the teachers was represented by a high score while the negative role of the teachers was represented by the lowest scores.

### Description of the Questionnaires

The instrument used for collecting information about the teachers' role included four parts namely teachers' support, facilities provision, security in classrooms, and motivation of teachers.

The instrument to check out the teachers' role was developed after consultation of a systematic review of literature related to the topic. Resultantly 40 items were included in the questionnaire. out of it, Teachers' attitude in the form of support encompassed ten (10) items, the provision of facilities comprised of eleven (11) items, ten (10) items were used for security in classroom, and nine (9) items were used for the motivation of teachers. To explore the personality traits of the students, the Big Five factors of personality inventory was adopted. The five aspects included agreeableness, conscientiousness, extraversion, neuroticism, and openness of experience.

Dr. Tom Buchanan developed this 41 item questionnaire from taking the idea from the material of the international personality item pool (Goldberg, 1999). The author of the said questionnaire was formally consulted and sought permission for using it in our study. The instrument about the teachers' role had the Cronbach reliability coefficient of 0.722. It was due to conducting a pilot study on one hundred respondents.

**Table 1.** Description of Different Aspects of The Role of Teachers

	Mean	Std. Deviation
Teachers' Support	4.094	0.664
provision of facilities	2.989	0.464
Class security	3.994	0.769
teachers' Motivation	3.804	0.701

Table number 1 depicts mean (M) along with standard deviation (S. D) of different aspects of the teachers' role. Tables 1 demonstrate the mean score of teachers' support as 4.094 and standard deviation (S.D) as 0.664. The mean score of the provision of facilities is 2.989 and the standard deviation is 0.464. The mean score of security in

the classroom is 3.994 while its standard deviation is 0.769. The mean score of the motivation of teachers is 3.804 while its standard deviation is 0.701.

**Table 2.** Description of Personality Traits of Students

	Mean	Std. Deviation
Openness	3.402	0.598
Extraversion	3.187	0.579
Conscientiousness	3.576	0.623
Neuroticism	3.071	0.636
Agreeableness	3.884	0.709

Table number 2 depicts mean (M) along with standard deviation (S. D) of the personality traits of students. Table number 2 demonstrates the mean score of openness to experience as 3.402 while its standard deviation is 0.598. The mean of extraversion is 3.187 while its standard deviation is 0.579. The mean of conscientiousness is 3.576 whereas its standard deviation is 0.623. Neuroticism's mean is 3.071 whereas the standard deviation is 0.636. The agreeableness's mean is 3.884 while the standard deviation is 0.709.

**Table 3.** Effect of Teachers' Behavior on Extraversion Traits of Personality

	B	Std. Error	Beta	t value	$\alpha$
(Constant)	3.169	0.136		23.340	0.000
Teachers' Support	0.007	0.030	0.008	0.229	0.819
Facilities provision	0.087	0.041	0.070	2.130	0.033
Class security	0.150	0.020	0.199	7.673	0.000
Teachers' Motivation	0.077	0.035	0.079	2.202	0.028
R= 0.232	R <sup>2</sup> =0.054	Adj. R <sup>2</sup> =0.051	F=20.420	p value=0.000	

*Extraversion as the dependent variable*

Table 3 highlights that teachers' support positively ( $\beta$ = 0.007, 0.819) but insignificantly predicts the extraversion personality trait. The provision of facilities positively ( $\beta$ = 0.087, 0.033) predicts the extraversion personality trait. Classroom security positively ( $\beta$ = 0.150, 0.000) predicts the extraversion personality trait. Teachers' motivation positively ( $\beta$ = 0.077, 0.028) predicts the extraversion personality trait.

**Table 4.** Effect of Teachers' Behavior on Conscientiousness Trait of Personality

	B	Std. Error	Beta	t value	$\alpha$
(Constant)	2.866	0.148		19.357	0.000
Teachers' Support	-0.013	0.033	-0.014	-0.403	0.687
Facilities provision	-0.031	0.045	-0.023	-0.683	0.495
Class security	0.112	0.021	0.139	5.260	0.000
Teachers' Motivation	0.096	0.038	0.091	2.501	0.012
R= 0.166	R <sup>2</sup> = 0.028	Adj. R <sup>2</sup> = 0.025	F=10.146	p value=0.000	

*Conscientiousness as a dependent variable*

Table 4 shows up that teachers' support negatively ( $\beta$ = -0.013, 0.687) but insignificantly predicts the Conscientiousness personality trait. The provision of facilities positively ( $\beta$ = -0.031, 0.495) predicts the Conscientiousness personality trait. Classroom security positively ( $\beta$ = 0.112, 0.000) predicts the Conscientiousness personality trait. Teachers' motivation positively ( $\beta$ = 0.096, 0.012) predicts the Conscientiousness personality trait.

**Table 5.** Effect of Teachers' Behavior on Neuroticism Personality Trait

	B	Std. Err	Beta	t value	$\alpha$
(Constant)	3.771	0.152		24.871	0.000
Teachers' Support	0.018	0.034	0.018	0.523	0.601
Facilities provision	0.002	0.046	0.001	0.035	0.972
Class security	-0.092	0.022	-0.111	-4.211	0.000
Teachers' Motivation	-0.096	0.039	-0.089	-2.449	0.014
R= 0.145	R <sup>2</sup> = 0.0210	Adj. R <sup>2</sup> =0.018	F=7.672	p value=0.000	

*Neuroticism as a dependent variable*

Table 5 highlights that teachers' support positively ( $\beta = 0.018, 0.601$ ) but insignificantly predicts the Neuroticism personality trait. The provision of facilities positively ( $\beta = 0.002, 0.972$ ) predicts the Neuroticism personality trait. Classroom security negatively ( $\beta = -0.092, 0.000$ ) predicts the Neuroticism personality trait. Teachers' motivation negatively ( $\beta = -0.096, 0.014$ ) predicts the Neuroticism personality trait.

**Table 6.** Effect of Teachers' Behavior on The Extraversion Personality Trait

	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t value</b>	<b><math>\alpha</math></b>
(Constant)	2.591	0.150		17.261	0.000
Teachers' Support	-0.125	0.033	-0.117	-3.776	0.000
Facilities provision	-0.029	0.045	-0.019	-0.636	0.525
Class security	0.432	0.022	0.468	19.934	0.000
Teachers' Motivation	0.040	0.039	0.033	1.017	0.309
R= 0.479      R <sup>2</sup> = 0.230      Adj. R <sup>2</sup> = 0.227      F=106.775      p value=0.000					

Agreeableness as a dependent variable

Table 6 highlights that teachers' support negatively ( $\beta = -0.125, 0.000$ ) predicts the agreeableness personality trait. The provision of facilities negatively ( $\beta = -0.029, 0.525$ ) predicts the agreeableness personality trait. Classroom security positively ( $\beta = 0.432, 0.000$ ) predicts the agreeableness personality trait. Teachers' motivation positively ( $\beta = 0.040, 0.309$ ) predicts the agreeableness personality trait.

**Table 7.** Effect of teachers' behavior on the extraversion personality trait

	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t value</b>	<b><math>\alpha</math></b>
(Constant)	3.300	0.144		22.994	0.000
Teachers' Support	0.013	0.032	0.015	0.418	0.676
Facilities provision	0.036	0.043	0.028	0.834	0.404
Class security	0.050	0.021	-0.065	-2.433	0.015
Teachers' Motivation	0.033	0.037	0.033	0.896	0.371
R= 0.088      R <sup>2</sup> =0.008      Adj. R <sup>2</sup> =0.005      F=2.776      p value=0.026					

Openness as a dependent variable

Table 7 highlights that teachers' support positively ( $\beta = 0.013, 0.676$ ) predicts the Openness personality trait. The provision of facilities positively ( $\beta = 0.036, 0.404$ ) predicts the Openness personality trait. Classroom security negatively ( $\beta = -0.432, 0.015$ ) predicts the Openness personality trait. Teachers' motivation positively ( $\beta = 0.033, 0.371$ ) predicts the Openness personality trait. Classroom security positively ( $\beta = 0.150, 0.000$ ) predicts the Openness personality trait.

## Discussion

This study provides a unique insight into the role of different aspects of teachers' behavior on the personality traits of the students of the secondary stage. The first question which was discussed was that what was the level of teachers' support towards their students? The results of our study showed that as whole teachers provide maximum support to the students. The four aspects of teachers' behavior indicate that as a whole the teachers in Pakistan are cooperative with their students during interaction and teaching. These outcomes mean that Pakistani students have a positive perception of their teachers. These results are reliable and same as the preceding researches which stated a similar understanding of students about their teachers (Lee, Fraser, Fisher, 2003; Sivan, Chan, Kwan, 2014). It is also suggested in the previous studies that students in Asian countries perceived their teachers as more positive compared to the groups of another background (Moos & Moos, 1981; Lee, Fraser, & Fisher, 2003; Sivan, Chan, Kwan, 2014).

These results indicate a clear fact that the teachers take the responsibility of their students and deal with them in an authoritative manner.

Resultantly they get admiration from students which helps in promoting a well-arranged classroom. It also implies that the teacher applies the maximum pressure on the classroom environment and on the development of the student (Oldenburg et al, 2015). Teachers' support negatively predicts the agreeableness trait of personality.

The provision of facilities positively predicts the extraversion trait of personality. Teachers with a facilitating attitude tend to enable students to feel comfortable in the class and promote their mental health (Wang, Brinkworth, & Eccles, 2013).

Classroom security positively predicts the extraversion, conscientiousness, agreeableness, and openness factors of personality. Cheng and Zamorro (2016) argued that the teachers who enforce rules have usually conscientiousness personality and that consequently boost the conscientiousness personality trait as well. As a result of this enforcement of rules of teachers, the students use self-regulated learning strategies (Ryan & Patrick, 2001). Classroom security negatively predicts the neuroticism factor of personality. The same results were produced by Job (2004) who stated that a correlation between neuroticism and effective teaching in terms of making sure that there is no bullying in the classrooms and that teachers do not adopt a harsh attitude in the classroom. On the other hand, a small correlation between neuroticism and classroom organizational support was found (Jamil et al. 2012). The results of the study show that classroom security positively predicts the agreeableness personality trait. Contrary to these results, Bastian et al., (2015) and Job, (2004) have found a negative correlation between agreeableness and teacher effectiveness. The results of the study further showed that classroom security has a positive effect on the openness personality trait. These results support the results of Barrick and Mount (1991) who state a positive relationship between openness personality trait and professional attitude of teachers in relation to maintaining a secure classroom. Teachers' motivation positively predicts the extraversion, and conscientiousness factor of personality and negatively predicts neuroticism factor of personality. These results prove that the behaviors and emotions of the students are directly affected by the behavior pattern of the teachers. This is proved by many studies that a positive relationship between teachers and students is directly related to the mental health of the students (Mcgrath, 2009; Wang, Brinkworth, & Eccles, 2013).

### **Conclusion**

Teachers' support negatively predicts agreeableness personality traits. The provision of facilities positively predicts personality traits. Classroom security positively predicts extraversion, conscientiousness, agreeableness, and openness personality traits. Teachers' motivation positively predicts the extraversion, and conscientiousness factor of personality and negatively predicts neuroticism factor of personality.

## References

- Aldridge, J. M., Fraser, B. J., & Huang, T. C. I. (1999). Investigating classroom environments in Taiwan and Australia with multiple research methods. *The Journal of Educational Research*, 93(1), 48-62.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, 67(3), 1206-1222.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Bastian, K. C., McCord, D. M., Marks, J. T., & Carpenter, D. (2015). Do personality traits impact beginning teacher performance and persistence. *Chapel Hill, NC: University of North Carolina*.
- Chan, S. (2003). *Influence of instructors' and students' personalities on student ratings of teaching effectiveness* (Doctoral dissertation, University of Texas at Arlington).
- Cheng, A., and Zamarro, G. (2016). Measuring Teacher Conscientiousness and its Impact on Students: Insight from the Measures of Effective Teaching Longitudinal Database. EDRE Working Paper No. 2016-05
- Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the impacts of teachers: Evaluating bias in teacher value-added estimates. *American Economic Review*, 104(9), 2593-2632.
- Chiang, G. C. (1991). Student Ratings of Teachers, Teacher Psychological Type, and Teacher Classroom Behaviour: An Exploratory Study in Gifted Education (UMI No. 9128966). Doctoral dissertation, Northwestern University, Evanston, IL.
- Chu, C. (2003). A Study of the Relationship Between Personality Traits and Teaching Effectiveness of Teachers in Reward and Non-Reward Kindergartens in Taiwan (UMI No. 3103355). Doctoral dissertation, Spalding University, Louisville, KY
- Costa, P. T., & McCrae, R. R. (2006). *Revised NEO Personality Inventory (NEO PI-R): Manual*. Hogrefe.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. *Personality psychology in Europe*, 7(1), 7-28.
- Jamil, F. M., Downer, J. T., & Pianta, R. C. (2012). Association of pre-service teachers' performance, personality, and beliefs with teacher self-efficacy at program completion. *Teacher Education Quarterly*, 39(4), 119-138.
- Job, A. P. (2004). *The relationship between personality, occupation and student evaluations of teaching effectiveness of adjunct faculty* (Doctoral dissertation, Portland State University).
- Lee, S. S., Fraser, B. J., & Fisher, D. L. (2003). Teacher-student interactions in Korean high school science classrooms. *International Journal of Science and Mathematics Education*, 1(1), 67-85.
- Lombardi, C., Prino, L. E., Marengo, D., & Settanni, M. (2016). Student-teacher relationships as a protective factor for school adjustment during the transition from middle to high school. *Frontiers in psychology*, 7, 1988.
- Malecki, C. K., & Demaray, M. K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the Schools*, 39(1), 1-18.
- Malecki, C. K., & Elliott, S. N. (1999). Adolescents' ratings of perceived social support and its importance: Validation of the Student Social Support Scale. *Psychology in the Schools*, 36(6), 473-483.
- McGowen, R.S (2007) The impact of school facilities on students achievement, attendance, behaviour, completion rate, and teacher turnover rate in selected schools. United State –Texas.
- McGrath, B. (2009). School disengagement and 'structural options' Narrative illustrations on an analytical approach. *Young*, 17(1), 81-101.
- Miller, A., Ferguson, E., & Byrne, I. (2000). Pupils' causal attributions for difficult classroom behaviour. *British Journal of Educational Psychology*, 70(1), 85-96.
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ... & Sears, M. R. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108(7), 2693-2698.
- Moos, R. H., & Moos, B. S. (1981). Manual for the family environment scale. *Palo Alto, Calif.: Consulting Psychologists Press*, 50, 33-56.
- Oldenburg, B., van Duijn, M., Sentse, M., Huising, G., van der Ploeg, R., Salmivalli, C., & Veenstra, R. (2015). Teacher characteristics and peer victimization in elementary schools: A classroom-level perspective. *Journal of Abnormal Child Psychology*, 43(1), 33-44.
- Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational researcher*, 38(2), 109-119.
- Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437-460.

- Sivan, A., Chan, D. W., & Kwan, Y. W. (2014). Psychometric Evaluation of the Chinese Version of the Questionnaire on Teacher Interaction (C—QTI) in Hong Kong. *Psychological reports, 114*(3), 823-842.
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of educational psychology, 85*(4), 571.
- Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic?. *Journal of educational psychology, 100*(4), 765.
- Srivastava, G. N., & Bhargava, A. (1984). Personality factors and teaching effectiveness of science pupil-teachers. *Journal of Education Research and Extension, 21*(2), 103-11.
- Stewart, L. J., Palmer, S., Wilkin, H., & Kerrin, M. (2008). The influence of character: Does personality impact coaching success?. *International Journal of Evidence Based Coaching & Mentoring, 6*(1).
- Tardy, C. H. (1985). Social support measurement. *American journal of community psychology, 13*(2), 187-202.
- Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of educational research, 78*(4), 751-796.
- Wang, M. T., Brinkworth, M., & Eccles, J. (2013). Moderating effects of teacher–student relationship in adolescent trajectories of emotional and behavioral adjustment. *Developmental psychology, 49*(4), 690.
- Wellborn, J. G., & Connell, J. P. (1987). Manual for the Rochester assessment package for schools. *Rochester, NY: University of Rochester.*
- Wentzel, K. R. (1994). Relations of social goal pursuit to social acceptance, classroom behavior, and perceived social support. *Journal of Educational Psychology, 86*, 173-182.