

Citation: Khan, A., Shah, R., & Shahzada, G. (2021). Impact of Teacher Professional Characteristics on Students' Academic Achievement at Secondary School Level. *Global Educational Studies Review*, VI(IV), 102-110. [https://doi.org/10.31703/gesr.2021\(VI-IV\).11](https://doi.org/10.31703/gesr.2021(VI-IV).11)



Impact of Teacher Professional Characteristics on Students' Academic Achievement at Secondary School Level

Abid Khan *

Rahmatullah Shah †

Gulap Shahzada ‡

Abstract: *This research paper investigated the effect of teachers' professional characteristics on students' academic achievement in secondary schools of district Bannu. The population of the study constituted all public secondary schools of district Bannu. For a collection of data and generalization of results, 600 respondents were taken as a sample. The sample was drawn by using the Stratified Random Sampling technique. For data collection, a self-developed questionnaire was used. For students' academic achievement self-developed Achievement test was used. The data was analyzed by using Linear Regression. The results show those secondary school teachers' professional characteristics such as teacher subject knowledge, teaching prowess, teacher-student relationship, and communication skills are significant predictors of students' academic achievement.*

Key Words: Academic Achievement, Characteristics, Teacher, Profession

Introduction

The backbone of any nation is teachers, and its development and improvement mostly depends on its teacher's contributions in nation-building, according to UNCTAD (United Nations Council for Education, Scientific and Cultural Organization) Secretary-General Dag Hammarskjöld. The teacher is the most important human resource in the world. For shaping and making each and every person of the society, the teacher's contribution is outstanding. For the determination of the quality of education, the quality of teachers plays an important role, just as much as the subject matter taught. (Kareem, J., and Ravivot, B.2014).

During modern years study has been able to illustrate that student results level most significant in the classroom than the school level, from all the factors that students learn from their teachers in a systematic way which is very effective for future study (Muijs et al. 2014).

There is prevalent agreement that for student

success teacher quality is essential, but the little contract on which characteristics of teachers are most important for students' success. (Darling Hammond, L. 2006, Hattie, J. A. 2009, Scheerens, J., & Blömeke, S.2016). Traditionally in research of education, formal qualifications and experience rather than how well they interact with students have been measured teacher quality. Various researchers have studied that teacher teaching experience, their level of teaching in education, teacher educational background, certification status are directly effected students' performance (Darling-Hammond, L. 2014, Goe, L. 2007, and Wayne, A. J., & Youngs, P. 2003). Teachers' individual characteristics, such as personality character, locus of the controller, or oral intellect to be vital for teachers' achievement as studied by another researcher (Scheerens, J. 2016). Faridah (2018). Gave a definition that the teachers are the educators that play the roles as the spearhead of knowledge and morals transformation and the

* Ph.D. Scholar, Institute of Education and Research, University of Science & Technology Bannu, KP, Pakistan.

† Associate Professor, Institute of Education and Research, University of Science & Technology Bannu, KP, Pakistan.
Email: rahmatullahshah@gmail.com

‡ Associate Professor, Institute of Education and Research, University of Science & Technology Bannu, KP, Pakistan.

students' character shapers and is directly responsible for achieving the education purpose.

There are various factors that bring effectiveness in teachers' teaching. This teaching effectiveness can be observed by educators' characteristics which they possessed. Students results as an indicator of teacher teaching effectiveness have been widely explored. This parameter is determined by teacher level of education. Teacher quality is determined by various factors. This is a complex one (Scheerens, 2016). It comprises cognitive skills, i.e., knowledge and non-cognitive features (opinion and attitude). Therefore, the student's achievement in a specific course may give a further accurate detail for change in an educator teaching effectiveness in relating indicators from both sides of teacher quality (Goe, L. 2007, Cochren Smith, M. & Zeichner. 2005).

Orlando, M. (2013) Be of the opinion that most teachers do not strive to sort out extra than the least required. Teaching is a difficult job. Various teachers can certainly not be excellent in the teaching-learning process. They remain in the middle levels of proficiency and ability in instruction. On the way to remain an ideal and great educator and to motivate maximum learning for their students, one must persistently effort to provide an enriching and interesting environment for them.

Student academic performance can be affected by a large number of factors. The factors are school environment, family life of individuals, public, food, participation in co-curricular activities. However, teachers have directly affected the character of a student's academic accomplishment. School-based factors critically affected the process of the teaching-learning system (e.g., Rockof 2004, Rivken, Aaronson, Barrow & Sander 2007). This is why teacher professional characteristics are most important to examine student academic performance. Teachers' characteristics are held to play a significant role in their students' academic improvement (Clotfelter, C.T, Ladd, H.F, & Vignor, J. L. 2007, Wayne, A. J. & Youngs, P. 2003).

It is a multidimensional conception that effective teaching can be acknowledged in a number of ways. (Farrell, T. S. C. 2015, Steele, N. A. 2010) discussed that effective teaching is linked with three characteristics, namely non-verbal

communication, educator self. efficacy, and domestic leadership.

Professional characteristic is a part that agrees to an individual to see respect from the environment. A professional teacher should have a mutual relationship with others colleagues. Have a place in the public and impressions valuable. It provides a person with an outlet for their creativity and expression (Kuzgun, Y. 2000). The profession of teaching is as old as the history of civilization. In each period, the social structures and cultures are dependent on the different duties and functions of the teacher. In transmitting culture and social values to the young generations, teachers have essential responsibilities and duties. It accomplishes a social combination and develops society (Dogan, M. C. 2003). The process of education begins from the birth of men's knowledge capability and remains the whole life (Aydin, I. 2016).

Sufficient competence and ability are the aims of education that promote the individuals to become a part in the field of any profession (Celiktan *et al* 2005). The typical profession concerning the abilities to stay certain instructors can only be possible when the institute's training teachers are accepted for their conformity (Bakioglu, A. 2014).

Review of Related Literature

A profession is a skill in demanding innovative teaching and learning (Ganer 2004). This one can also be defined for example, a knowledgeable action that includes recognized teaching training. It can be within a comprehensive intellectual framework (Bull, 1998). Conferring to Bone (2001), professions are such types of skills which are based on: "Philosophical and Scientific facts developed completely by scholarly recommend you. An individual who comes into any profession do so for reasons. It can distinguish them from other work or vocations i.e. one profession is different from others. They realize that their work concentrates a sole public service with a philosophical, psychological, or scientific basis. Similarly, the subject of knowledge involves a comprehensive period of academic performance and hands-on preparation. To perform in the public service professions are also established on specific skills such as command over the subject, interaction with students communication skills, etc. which

are essential especially for the teaching profession."

There are so many numbers of professional characteristics are identified by education expert. Some of these are as follows.

1. Teaching Professions are such types of skills that are based on philosophy developed through innovative training programs.
2. Teaching professionals concentrate on distinctive public services involved in wide professional development training.
3. Any professional work has to need its own unique nature for which individuals should be prepared.
4. Every profession is based on some specialized skill e.g. teaching profession is based on teacher subject knowledge, teaching prowess, teacher-student relationship, and communication skills, etc.
5. Every professional service should be focused on the public benefit and country level.

The profession can be defined by the Australian Council of Professions (2004) in the following ways:

"A profession is a well-organized group of individuals who keep to ethical code of conduct, standards and defend themselves. They are recognized by the public as having distinct knowledge and skills in an extensively accepted body of learning consequent from research, education, and training at a high level. They are also able to exercise this knowledge and related professional skills in the awareness of others. It is important in the definition of a profession that a code of ethics manages the activities of each profession. All the ethical codes which are necessary for any profession are required the individuals' behavior. They have a good personal moral character in this sense. The public and in dealing with professional colleagues, define and demand high standards of behavior in respect to the services provided. Further, these ethical codes are required by the profession are accepted and recognized by the public."

The explanation stated above recognizes a number of significant professional characteristics.

Firstly, any profession must be well organized disciplined. Secondly, every profession must keep

to a positive ethical code of standards that are accepted as compulsory for all members of the profession. Thirdly, individuals of any profession must have some special knowledge and skills related to their profession due to their wide and distinctive training in a specific field. Fourthly, professions must offer their services not for their own particular gain but for the advantage of the whole public and community. ([Juman & Tom, 2001](#)).

According to recent studies, the most critical elements influencing student results are the quality of teachers and their instruction. The efficacy of teachers varies greatly, and inequalities in student achievement are frequently better between different schools ([OECD, 2005](#)). [Walker, R. J. \(2020\)](#) Identify that Effective teacher have 12 personal and professional characteristics: i.e. Prepared, Positive, Communication skill, Extraordinary Potentials, Fair, Creative, Personal Touch, Develops a Sense of Belonging, Sense of humor Admits Mistakes, Gives Respect to Students, Forgiving, and Compassionate. Professionalism of teacher is their membership about teacher's subject knowledge, peer networks, and their self-sufficiency ([Kubacka, K. 2016](#)). In this sense, different facets of teacher professionalism focus on educational systems. Teaching organization put additional importance on incentivized teacher professional development supporting the teacher knowledge base through accomplishment. The process of teaching and learning is a self-motivated and pleasing. Well-structured learning experiences can be provided to students by good teachers. A good teacher is well expertise in their subject, and took keen interest in teaching profession. The opportunities offered by the profession and appreciation to teachers through learning experiences enjoy their achievements by individuals and community. The ability to offer involvements for students involves a basis of subject knowledge, teaching skills and abilities built in the initial years of the teaching profession. The Standards of teachers describe the subject knowledge, teaching skills and understanding expected of competent and effective teachers according to the Australian Professional Standards. Teachers are recognized as meeting the structure through Standards Authorization. It make sure the reliability and responsibility of the profession ([Australian Council of Professions 2004](#)).

Numerous research projects confirm the importance of teachers' professional acting as one of the main factors of effective teaching and students' school achievement, especially taking into account factors from the school environment ([Marzano, Robert J. 2003](#)). In school performance factors, from all the factors that influenced and changed more easily and to a greater extent is a teacher, like students' abilities, school programs, educational policies, etc. ([Digic, Gordana 2017](#)). For this reason, the investigation of teachers' professional characteristics and factors related to their professional roles performance is of great value.

The professionalism of teachers is about their membership of peer networks, teacher's autonomy, and their subject knowledge ([Kubacka, K. 2016](#)).

[Mafakheri, K. \(2016\)](#) Defines CPD as "a process whereby teachers try to develop their personal and professional qualities, skills, and to improve their knowledge, qualifications, and practice, leading to their empowerment, the improvement of their authority and the development of their organizations and their pupils."

Objective of the Research Study

This research paper investigates the impact of teacher professional characteristics on students' academic achievement in secondary schools of the District of Bannu.

Research Questions of the Study

In this research paper, the following research questions were framed.

- 1: Is there any significant impact of teachers' professional characteristics as subject knowledge parameters on students' academic achievement at the secondary schools level of district Bannu, Pakistan?
- 2: Is there any significant impact of teachers' professional characteristics as teaching prowess parameter on students' academic achievement in secondary schools?
- 3: Is there any significant impact of teachers' professional characteristics as teacher students' relationship parameters on students' academic achievement in secondary schools?

- 4: Is there any significant impact of teachers' professional characteristics as teacher commitment parameters on students' academic achievement in secondary schools?
- 5: Is there any significant impact of teachers' professional characteristics as teacher communication skill parameters on students' academic achievement in secondary schools?

Significance of the Study

The findings of this research paper enabled educational policymakers to improve the academic performance of students in District Bannu. The researcher gave suggestions for further research into education, especially in Pakistan, which has no research on teacher characteristics in the field of education. This is necessary for the improvement of academic performances in secondary school students. The outcome of this study helped in planning for educational development. The findings were very useful to the practitioners such as administrators and teachers. The important purpose of classifying the characteristics of admirable teachers is to shape the base of knowledge for educational professionals who want to improve their own teaching, peers, pre-service teachers, and within the school community.

Delimitation of the Study

The study was delimited to 10th class students of public secondary schools of district Bannu, Pakistan.

Methods of the Study

The nature of the research study was correlational. The researcher used a correlational research design for the study. The population of the study was constituted by the students of all secondary schools in district Bannu. Bannu district is an administrative unit of the province of Khyber Pakhtunkhwa, Pakistan. There was a total of 135 secondary schools in District Bannu. The number of Girls secondary school was 58, and the number of Boys secondary school was 77. The chosen probability sampling technique was a stratified random sampling technique. Respondents were selected from the population through this sampling technique. A self-developed

questionnaire was distributed among the sampled students of public secondary schools. The self-developed questionnaire has contained these dimensions; Subject knowledge, teaching

proWess, commitment, and teacher-student relationship and communication skill. The researcher developed the statements of the questionnaire by using a five-point Likert scale.

Results

Table 1. Shows Impact of Subject Knowledge Parameter of Teacher Professional Characteristics on Students' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.920	.846	.845	4.13976

a. Predictors: Subject Knowledge

b. Dependent Variable: Students Academic Achievement

Table 1 shows the score of the Linear Regression model. The "R" score is .920, R Square score is .846. The "R" value in the above table shows a simple correlation while R Square represents Linear Regression. The Linear Regression score is

.846, which means that 84 % change has generated by the Independent variable, which is the subject knowledge independent variable which is students' academic achievement.

Table 2. Shows the Impact of Teaching Prowess of Teacher on Learners' Academic Performance

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.749	.562	.541	6.97609

a. Predictors: Teaching Prowess

b. Dependent Variable: Academic performance of learners

Table 2 is contained the values of Linear Regression Models. The generation of this table aims to show the impact of the Independent variable (Teaching Prowess) on the dependent variable (Students' academic marks). R-value in

this table is .749. R-Square value is .562. The Linear Regression value is .562. This meant that teaching prowess produced a 56% change in the academic performance of secondary school students.

Table 3. Shows Impact of Teacher-students' Relationship on Students' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.849	.762	.741	6.97609

a. Predictors: Teacher Students Relationship

b. Dependent Variable: Students Academic Achievement

Table 3 contained Linear Regression model values. The table was developed to generate various values for the investigation of the impact of the student-teacher relationship on students' academic performance. This performance was determined by the learners getting a score in a test.

In the above table, R-value is .849, while R Square value is .762. The R Square value reflects that 76% change/variance has been produced by teacher-students relationship in learners' performance in the shape of got a score in a specified achievement test.

Table 4. Shows the Impact of Commitment of Teacher as Professional Characteristics on Students' Academic Performance

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.449	.362	.341	4.97609

a. Predictors: (Constant), Teacher Commitment

b. Dependent Variable: Students' Academic Achievement

Above table 4.4 carries the values of a linear regression model. This model aims to investigate the impact of independent variables on dependent variables. In the above table, the independent variable is teacher commitment as teacher professional characteristic, while students obtained marks is a specified test is a dependent variable. The above table indicates r value and r square values. The R-value reflects a simple

correlation value, while R square is the Linear Regression value. The Linear Regression value is .36, which means that 36% change/ impact has been generated by teacher commitment as teacher professional characteristics in students' academic performance. The academic performance is students obtained marks in a specified test which was developed by the principal author of this paper for his Ph.D. thesis.

Table 5. Shows the Impact of Communication Skills as Teacher Professional Characteristics on Students' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.819	.722	.711	6.97609

a. Predictors: communication skills

b. Dependent Variable: Students Academic Achievement

Above table 4.5 carries the values of a linear regression model. This model aims to investigate the impact of independent variables on the dependent variable. In the above table, the independent variable is communication skills as teacher professional characteristic, while students obtained marks is a specified test is a dependent variable. The above table indicates r value and r square values. The R-value reflects simple correlation value, while R square is Linear Regression value. The Linear Regression value is .722, which means that 72% change/ impact has been generated by communication skills as teacher professional characteristics in students' academic performance. The academic performance is students obtained marks in a specified test which was developed by the principal author of this paper for his Ph.D. thesis.

Discussions

The findings of this research paper found a positive impact of professional characteristics and the academic attainment of secondary school learners in Bannu, Pakistan. This finding was expected, and is related with preceding research that teacher subject knowledge for students is very significant for student achievement, mostly in mathematics (Baumert et al 2010). In the dimension, namely, 'Knowledge of Subject matter' of teacher professional characteristics, a significant difference was found by means of high opinion to academic disciplines of the teachers (Cochran-Smith, 2006; Kaur, 2013). According to

their different academic disciplines, knowledge and approach provided that knowledge of the proficient teachers were different (Cochran-Smith, 2006; Darling-Hammond, 2002 ;) Good content knowledge was a vital factor in the field of teaching profession. The result of this study shows that all the parameters of teacher professional characteristics such as teacher subject knowledge, teaching prowess, teacher-student relationship, and communication skill have a high degree of correlation except teacher Commitment of teacher professional characteristics, which is low.

Conclusions

This study focused on teacher professional characteristics. Teachers establish a most important factor in recognition of the goals of secondary education. The study focused on some aspects of professional characteristics expected by a secondary school teacher. It concluded from the study that teachers' subject knowledge of professional characteristics is significantly related to students, and similarly, teacher teaching prowess is closely related to students' performance. Professional characteristics of teachers covered in this study are subject knowledge, teaching prowess, teacher-student relationship, and teacher commitment, and teacher communication skill. A teacher should have command over subjects in all fields. They thought to their students according to their mental ability and philosophical circumstances. According to the results of the study, secondary

school teacher professional characteristics were a substantial predictors of students' academic performance. In other words, we can assert that when teachers' have well-defined professional

characteristics inside and outside school, the level of students' academic achievement is expected to increase as well.

References

- Aaronson, D., Barrow, L., & Sander, W. (n.d.). Teachers and student achievement in the Chicago public high schools. (2007). *Journal of Labor Economics*, 25(1), 95-135.
- Australian Council of Professions. (2004). *About Professions Australia: Definition of a Profession*.
- Aydin, I. (2016). *Yonetsel Mesleki ve Orgutsel Etik (Managerial Professional and Organizational Ethics)*. Ankara: PegemA Yayıncılık. Bakioglu.
- Bakioglu, A. (2014). *Egitim Bilimine Giriş (Introduction to Educational Science)*. (Ed.). Ankara: Nobel.
- Baumert, J., Kunter, M., Blum, W., Brunner, M., Voss, T., Jordan, A., & Tsai, Y.M. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. *American Educational Research Journal*, 47(1), 133-180.
- Boone, T. (2001). Constructing a Profession' Professionalization of Exercise Physiology online: *An international electronic journal for exercise physiologists*, 4(5) May, ISSN 1099
- Bryan, A., & Garner. (2004). *Black's Law Dictionary*.
- Bull, B. L. (1988). The Nature of Teacher Autonomy. Revision of Paper Presented at the Annual Meeting of the American Educational Research. ERIC.
- Celikten, M., Sanal, M., & Yeni, Y. (2005). Öğretmenlik Mesleği ve Özellikleri (Teaching Profession and Characteristics). *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 19(2), 207-237.
- Cochran-Smith, M., & Zeichner, K. (2005). Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26, 673- 682.
- Cochran-Smith, M. (2006). Ten promising trends and three big worries. *Educational Leadership*, 63(6), 20-25.
- Ferguson, R. (1991). Paying for Public Education: New evidence on how and why money matters. *Harvard Journal of Legislation*, 28, 465-498.
- Darling-Hammond, L. (2014). Strengthening clinical preparation: The holy grail of teacher education. *Peabody Journal of Education*, 89(4), 547-561.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1).
- Đigic, Gordana. Upravljanje razredom: savremeni pristup psihologiji nastavnika. Niš: Folozofski fakultet, 2017. <https://izdanja.filfak.ni.ac.rs/monografije/2017/upravljanje-razredom-savremenipristup-psihologiji-nastavnika>.
- Dogan, M. C. (2003). Türkiye'de Öğretmenlik Mesleğinin Sorunları ve Öğretmen Adaylarının Mesleğe İlişkin Görüşleri (Relating to the Profession of Teaching Profession eyesight problems and Teachers in Turkey). İstanbul: Burak yayınları.
- Faridah. (2018). Pengaruh Sertifikasi dan Komitmen terhadap kinerja guru melalui motivasi kerja. Universitas Wijaya Putra Surabaya.
- Farrell, T. S. C. (2015). It's not who you are! It's how you teach! Critical competencies associated with effective teaching. *REL C Journal*, 46(1), 79-88. doi:10.1177/0033688214568096.
- Goe, L. (2007). The link between teacher quality and student outcomes: A research synthesis. Washington, DC: National Comprehensive Center for Teacher Quality.
- Hattie, J. A. (2009). *Visible learning: A synthesis of 800+ meta-analyses on achievement*. Abingdon: Routledge.
- Juman, & Tom. (2001). Principal vision, environmental robustness and the teacher sense of autonomy at the high school. ERIC.
- Kaur, S., & Sachdeva, R. (2013). Organizational Role Stress among Elementary Teachers in relation to gender. *Edu Tracks: A Monthly scanner of trends in education*. 12(12),
- Kareem, J., & Ravivot, B. (2014). A Study on the Self-Concept of Teachers Working in Government, Aided and Unaided Colleges in

- Bangalore. *The IUP Journal of Organizational Behavior*, XIII(1), 61-70.
- Kuzgun, Y. (2000). *Meslek danismanligi (Occupational counseling)*. (2nd Edition) Ankara: Dogus Matbaacilik.
- Kubacka, K. (2016). Why teacher professionalism matters. Retrieved on 26th March, 2018. <http://oecdeducationtoday.blogspot.com.ng/2016/02/why-teacher-professionalism-matters.html?m=1>
- Muijs, D., Kyriakides, L., van der Werf, G., Creemers, B., Timperley, H., & Earl, L. (2014). State of the art Teacher effectiveness and professional learning. *School Effectiveness and School Improvement*, 25(2), 231-256.
- Marzano, R. J., & Marzano, J. S. (2003) "The Key to Classroom Management." *Educational Leadership*, 61(1), 6-13. Available at: file:E:Downloads.The Key to Classroom Management. Pdf Marzano
- Mafakheri, K. (2016). The Relationship between English Language Teachers' Lifelong Learning Competence and their Beliefs on Continuing Professional Development. [Master's thesis, Shahid Rajae Teacher Training University], Tehran, Iran.
- OECD. (2005). Teachers matter. Attracting, developing and retaining effective teachers. Overview.
- Orlando, M. (2013). *Nine Characteristics of a Great Teacher. Faculty Focus: Higher Ed. Teaching Strategies from Magna Publications.*
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (n.d.). Teachers, schools, and academic achievement. (2005). *Econometrica*, 73(2), 417-458.
- Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *The American Journal of Economic Review*, 94(02), 247-252.
- Scheerens, J., & Blömeke, S. (2016). Integrating teacher education effectiveness research into educational effectiveness models. *Educational Research Review*, 18, 70 -87.
- Scheerens, J. (2016). Educational effectiveness and ineffectiveness. A Critical Review of the Knowledge Base, (2016, 389.
- Steele, N. A. (2010). Three characteristics of effective teachers. *MENC: The National Association for Music Education*, 27(2), 71-78. doi:10.1177/8755123310361769.
- Walker, R. J. (2020). *12 Characteristics of an Effective Teacher*. Lulu. com.
- Wayne, A. J., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73, 89 -122