

# GENDER-BASED ASSESSMENT OF TEACHER PERSONALITY ATTRIBUTES AND THEIR INFLUENCE ON DENTAL STUDENTS' EXPERIENCES IN PUBLIC AND PRIVATE SECTOR DENTAL COLLEGES OF KHYBER PAKHTUNKHWA, PAKISTAN

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## ABSTRACT

**Objectives:** To determine male and female students at public and private dental colleges in Khyber Pakhtunkhwa, Pakistan by assessing the impact of faculty members' personality qualities on their educational experiences.

**Materials and Methods:** A cross-sectional study was conducted from May to November 2023, surveying undergraduate dental students of Khyber Pakhtunkhwa province about their perceptions of faculty personalities and teaching methods. A customised questionnaire was specially designed to gather data; 124 respondents completed self-administered questionnaires in accordance with ethical requirements.

**Results:** The relationship between gender and students' perceptions of the impact of faculty personality was studied using the chi-square test. The authors found that the perceptions of faculty personality impact and gender were shown to be significantly correlated. The study shows that teacher personality has significant effects on students' learning and engagement. Both male and female students agree about the positive impact of teachers, indicating specific traits that enhance their learning curves. Gender disparities show up, with male students preferring friendliness and female students appreciating empathy more. While males tend to choose interactive and discussion-based teaching approaches slightly more than females do, both genders prefer hands-on, practical training. Interactions between teachers and students are facilitated by positive faculty attributes including approachability, empathy, and openness to student participation. The well-being and self-esteem of students are also influenced by the personalities of the faculty.

**Conclusion:** In conclusion, educational institutions may improve the learning experiences of both male and female students by identifying and meeting the diverse requirements and preferences of students about the personality qualities of their staff.

**Key words:** Faculty personality traits; dental education; gender dynamics; student experiences; teaching methods; well-being; Pakistan.

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## INTRODUCTION

The personality of a teacher play a crucial role, in shaping educational journeys of the students<sup>1</sup>. These personality traits, which have a significant effect on

students' overall development and the quality of education, include a variety of attributes including empathy, effective communication skills, enthusiasm, and adaptability<sup>2</sup>. The effect that these traits have on students' academic and personal growth cannot be overestimated. In fields like medicine and dentistry, the importance of a teacher's personality grows as there are specific requirements and enhanced expectations<sup>3</sup>. This study explores how teacher personality traits that support students' learning development impact the experiences of male and female students at public and private dentistry institutions in Khyber Pakhtunkhwa, Pakistan. Several studies have been conducted concerning the impact of teacher personality traits on students' educational experiences<sup>4-6</sup>. The key personality traits such as empathy, adaptability, and effective communication have been demonstrated to have a positive impact on students' academic performance and emotional health<sup>6-8</sup>. They have also been shown to promote student engagement, especially in clinical practices, and enhance student motivation, all of which improve academic outcomes<sup>9</sup>. In comparison to other academic disciplines, dental education distinctive challenges since students need required knowledge and skills for patient care<sup>10</sup>. It is therefore, crucial for the faculty to possess certain set of personality attributes that will help students grow into competent and caring dental professionals. The patient interactions and ethical concerns are given special attention in dental education due to its clinical nature. Dental professionals need to have a strong sense of ethics, empathy, and interpersonal skills as they are entrusted with their patients' health and well-being. The faculty possessing these qualities can help their students develop moral principles and compassionate patient care. In addition, a significant amount of dentistry involves time in clinical settings, where students collaborate directly with patients. Both students and patients may experience stress and anxiety because of this close interaction<sup>11</sup>. As a result, faculty personalities are crucial in helping students learn how to respond to these circumstances professionally, empathetically, and confidently.

Gender dynamics have a significant role in education in countries like Pakistan, particularly in the region of Khyber Pakhtunkhwa. The understanding how gender and faculty personality traits affect dentistry students' experiences is crucial for policy-makers since it can provide insightful information

for developing policies pertaining to education, college administration, and teaching. Considering this, assessing the impact of a teacher's personality traits becomes even more important. This study is critically important for many reasons. By exploring the significance of teacher personality traits in dental education, it first fills the void in the existing body of research. Very few studies have examined the effects of teacher personality traits on higher education, particularly in dental studies, even though their influence on elementary and secondary education has been well examined<sup>12</sup>. Understanding the connection between teacher personality and student experiences is crucial to raising the standard of dentistry education since the field is different and requires a certain set of qualities from faculty.

This research article is of paramount significance for several reasons. First, it addresses a critical gap in the existing literature by exploring the role of teacher personality attributes in dental education, particularly in the context of Pakistan. While the influence of teacher personality attributes has been extensively studied in primary and secondary education, limited research has delved into their impact on higher education, specifically in dental studies. As dental education is distinct and demands a unique set of attributes from educators, understanding the relationship between teacher personality and student experiences is essential to improving the quality of dental education. The study also provides insights into how gender-related variances may impact student views.

## MATERIALS AND METHODS

A cross-sectional study was conducted from May to November 2023 with an objective of understanding how male and female dental students perceive the influence of faculty members' personality traits on the learning process. The study included the undergraduate dental students from all academic years at provincial public and private universities in Khyber Pakhtunkhwa. A customised tool was created to gather relevant information. One senior faculty member from the Basic Sciences department at each institution was selected to participate in the data collection process. They were all voluntarily asked to participate in online training about the methods for collecting data, and all of them willingly agreed to participate. The faculty members were provided

with a link to support the participants' involvement. The survey link was shared with students through a mobile messaging platform group, either during personal visits to the University/College/Institute or via group messaging. A reminder was given to the students for participation with the support of faculty members.

Following ethical guidelines, the respondents were advised before beginning the questionnaire that their information would be kept private, that data would be published in an aggregated manner, for policy matters. In addition, the objectives and purpose of the research, and that no raw data or portion of the information would be shared with any institutions. Participants who consented to ethical considerations were asked to move forward with the self-administered survey. The study was also ethically approved by the Bacha Khan College of Dentistry Ethical Review Committee.

It is pertinent to mention that this study primarily reports the findings in terms of percentages, reflecting the perceptions and preferences of the surveyed dental students. A chi-square test was conducted to explore the association between gender and the perception of faculty personality impact among dental students. The purpose of this phase was to gather cross sectional data and assess the perceptions of students, and detailed statistical analysis will be considered in subsequent stages to further validate these preliminary findings. The authors used Microsoft Excel for data entry, verification, and tabulation.

## RESULT

Our study included a diverse student sample comprising 58 males and 24 females from public sector dental colleges, as well as 18 males and 24 females from dental colleges in the private sector, within the province of Khyber Pakhtunkhwa, Pakistan.

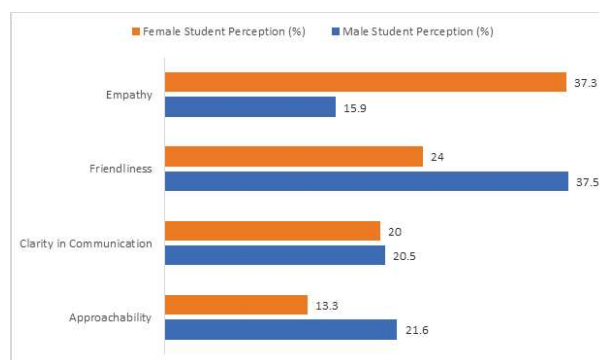
We started by examining the impact of faculty's personality on dental students' involvement. It was observed that the faculty personality was shown to have "no significant impact" on 13.2% of male students, but for the rest of participants, it significantly "increases engagement," as seen in 86.8% of male students of our study population. For female students, a same trend was seen. Only 8.3% of female students indicated "no significant impact,"

but 91.7% of them said that teacher personality "increases engagement" in their dental studies greatly. Next, we explored how faculty personalities were thought to have improved student learning. Only, 2.1% of female students disagreed with the overwhelming 97.9% of those who said there had been an improvement. Similar recognition of the impact was shown by male students, with 90.8% agreeing and 9.2% disagreeing.

We then investigated how effective communication affects the learning process. There is a striking consensus among male and female students about the positive impact that faculty members have on the educational experiences of students, with 93.8% of female students agreeing and 6.3% opposing, this idea was widely supported by them. While on the other hand, with 96.1% of male students agreeing and 3.9% opposing, there was strong agreement.

The preferred personality attributes for effective communication were further explored in our study. As demonstrated in figure 1, 15.9% of the male students regarded empathy, 21.6% addressed favourability, 20.5% stressed communication clarity, and 37.5% valued friendliness. Among the female students, the following were highly regarded: 13.3% approachability, 24.0% friendliness, 24.0% clarity in communicating, and 37.3% empathy.

Furthermore, we also explored student preferences for methods of learning. As shown in figure 2, interactive and discussion-based strategies were favoured by both genders, with 42.5% of females and 46.8% of males favouring this approach. 20.3% of males and 20% of females preferred lectures with detailed explanations, whereas 30.4% of males and 37.5% of females preferred hands-on, practical in-

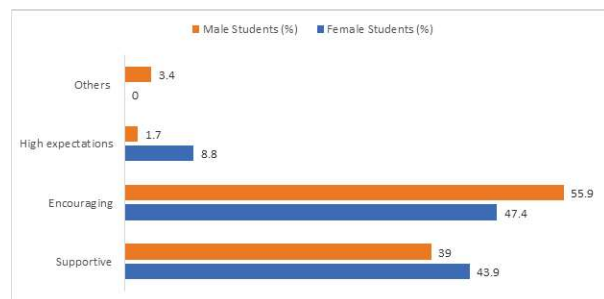


**Fig 1: Comparison of Male and Female Student Perceptions of Faculty Personality Traits for Easier Communication**

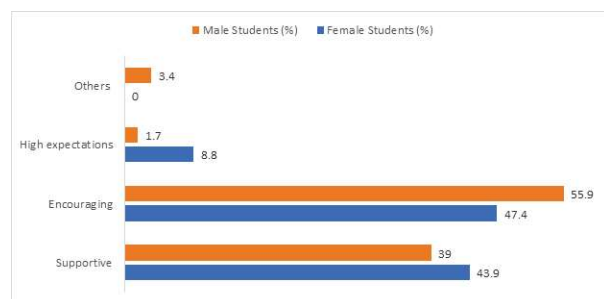
struction. According to the statement, when student preferences were contrasted, both genders preferred interactive and discussion-based strategies, with males favouring these methods slightly more than females. Males also preferred lectures with thorough explanations, but females preferred hands-on, practical instruction.

It was evident from our study that both male and female students recognise the how particular traits of personality improved relationships between teachers and students. Among the male participants, 40.2% highlighted openness to student feedback, 32.7% acknowledged being approachable, 24.3% valued empathy, and 2.8% mentioned additional positive attributes. Similar opinions were expressed by female students, who valued approachability at 34.8%, empathy at 20.3%, openness to student feedback at 42.0%, and other contributing qualities at 2.9%.

We also investigated how teacher personalities affected students' well-being. 75% of female students thought this had a positive impact, compared to 20.8% who thought it had no effect at all and 4.2% who thought it had a negative impact. 69.7% of male students reported a positive impact, compared to 26.3% who saw no change at all and 3.9% who saw a negative impact.



**Fig 2: Comparison of Teaching Method Preferences between Female and Male Students**



**Fig 3: Comparison of Faculty Personality Traits Enhancing Confidence between Female and Male Students**

Lastly, we examined at how the personalities of the faculty boosted students' self-esteem. Of the female students, 43.9% praised the supportive faculty, 47.4% the encouraging faculty, and 8.8% the high-expectations faculty as shown in figure 3. By comparison, 39.0% of male students ascribed their confidence to their supporting faculty, 55.9% to their encouraging faculty, 1.7% to their high expectations, and 3.4% to other reasons. The chi-square test was performed to determine the association between gender and the perception of faculty personality impact among students. The authors found that the perceptions of faculty personality impact and gender were shown to be significantly correlated ( $\chi^2(1) = 7.786, p < 0.05$ ). Further analysis revealed that male and female students' perceptions of the influence of the faculty's personality differed considerably.

## DISCUSSION

Our study revealed that a faculty personality greatly improves student engagement and learning. Most students, male and female alike, acknowledged the positive impact of faculty members. This is consistent with other studies that highlight the critical impact that teacher personality plays in inspiring and engaging pupils<sup>13</sup>. Our study is distinct, though, since it adds to the limited literature on dentistry students in the Khyber Pakhtunkhwa province of Pakistan by concentrating on this particular group. It also implies that; the personalities of faculty members have a significant influence on how dental students perceive their education. This emphasises the need of comprehending and utilising faculty-student relationships to enhance learning outcomes.

Female students valued empathy more than male students did, presumably as they are inclined to communicate in a more sympathetic and compassionate manner<sup>14</sup>. Male students, on the other hand, indicated that friendliness was preferred over empathy in their choices. Notably, studies have indicated that placing an excessive amount of focus on empathy has a detrimental impact on male students' dedication to their careers, but not on female students<sup>15</sup>. This contrast emphasises how important it is to modify communication strategies to accommodate the particular requirements of various genders.

The interactive and discussion-based teaching approaches were preferred by both male and female students, which is consistent with earlier research

that highlighted the significance of active learning<sup>16</sup>. While female students showed a stronger preference for practical, hands-on learning, male students showed a minor preference for these techniques. This is consistent with the body of research that highlights the importance of practical components in dental education<sup>16</sup>. The study confirms earlier studies highlighting the value of active learning by highlighting the efficacy of interactive and discussion-based teaching techniques. To maximise the overall educational experience, faculty members should be aware of these gender-based biases and incorporate a balanced mix of interactive and practical aspects into their teaching plans.

Positive faculty traits, such as approachability, empathy, and openness to student input, greatly improved teacher-student interactions<sup>3,17,18</sup>. These findings are consistent with the relevance of these features in fostering a pleasant learning environment<sup>4,8,19,20</sup>. Additionally, our results demonstrated that the personalities of the faculty had a beneficial impact on students' well-being, which is in line with other researches indicating that students' psychological and emotional wellbeing is influenced by supportive teacher-student relationships<sup>2,18,21,22</sup>. Both male and female students credited encouraging and supportive faculty members for their improved self-esteem, demonstrating the influence of faculty on students' confidence and self-perceptions<sup>22,23</sup>.

Both male and female students favoured interactive and discussion-based teaching methods, aligning with previous research emphasizing the importance of active learning<sup>16,24</sup>. Male students slightly favoured these methods, whereas female students exhibited a greater preference for hands-on, practical instruction. This aligns with existing literature underscoring the need for practical components in dental education<sup>16</sup>. Faculty should recognize these gender-based preferences to optimize teaching strategies.

Our study has limitations even though it provides crucial insights into how faculty personalities affect dental students. Since the study was carried out in a specific region, contextual and cultural factors can have an impact on the findings. To improve the generalizability of the findings, larger and more varied samples should be included in future research.

## CONCLUSION

In conclusion, educational institutions may improve the learning experiences of both male and female students by identifying and meeting the diverse requirements and preferences of students about the personality qualities of their staff. The study offers insightful information for developing curricula, training faculty, and developing educational policies. Further research should examine the findings' cross-cultural relevance, integrate longitudinal studies, and encourage faculty development to accommodate students' unique needs while concurrently bolstering their mental and overall wellbeing.

## REFERENCES

1. Ahmad N, Kamarudin MK, Jasmi KA. The Concept of Teachers' Personality in Shaping Students' Characters. *Research Journal of Education*. 2017;3(11):157-63.
2. Sun B, Wang Y, Ye Q, Pan Y. Associations of Empathy with Teacher-Student Interactions: A Potential Ternary Model. *Brain Sciences*. 2023;13(5).
3. Saif M, Saif S, Shahid N, Anwar A, Kazmi T. Medical Students' Perception about the Impact of Teachers' Attitude on their Academic Performance and Character Building. *Journal of University College of Medicine and Dentistry*. 2022;2(1).
4. Alphonsine M, Andala HO. Influence of Teachers' Personality Traits on Students' Academic Performance In Public Secondary Schools In Kicukiro District Rwanda *International Journal of Research in Engineering, IT and Social Science*. 2022;12(10):1-17.
5. Lukman, Marsigit, Istiyono E, Kartowagiran B, Retnawati H, Kistoro HCA, et al. Effective teachers' personality in strengthening character education. *International Journal of Evaluation and Research in Education*. 2021;10(2):512-21.
6. Bediako A, Nyatsikor MK, Sualihu W, Marmah SN. Perceived Effects of Teacher Personality Traits on Students' Mathematics Achievement: Case of Some Selected Junior High Schools in Wenchi Municipality in Ghana *International Journal of Research and Innovation in Social Science*. 2023;VII(V).
7. Singh S, Pai DR, Sinha NK, Kaur A, Soe HHK, Barua A. Qualities of an effective teacher: what do medical teachers think? *BMC Medical Education*. 2013;13(128).
8. Aldrup K, Carstensen B, Klusmann U. Is Empathy the Key to Effective Teaching? A Systematic Review of Its Association with Teacher-Student Interactions and Student Outcomes. *Educational Psychology Review*. 2022;34:1177-216.
9. Cents-Boonstra M, Lichtwarck-Aschoff A, Denessen

- E, Aelterman N, Haerens L. Fostering student engagement with motivating teaching: an observation study of teacher and student behaviours. *Research Papers in Education*. 2020;36(6):754-79.
10. Ryder MI, Morio I. Current challenges for dental education in Japan and the United States. *Japanese Dental Science Review*. 2011;47(1):23-30.
  11. Basudan S, Binanzan N, Alhassan A. Depression, anxiety and stress in dental students. *International Journal of Medical Education*. 2017;8:179-86.
  12. Rubaia'an MAB. Dental Education: A Guide for Novice Tutors. *Cureus*. 2023;15(8):e43227.
  13. Maazouzi K. The Impact of Teacher's Personality and Behavior on Students' Achievement. *Global Journal of Human-Social Science: (G) Linguistics & Education*. 2019;19(9).
  14. Olson RE, McKenzie J, Mills KA, Patulny R, Bellocchi A, Caristo F. Gendered emotion management and teacher outcomes in secondary school teaching: A review. *Teaching and Teacher Education*. 2019;80:128-44.
  15. Nesje K. When the education emphasises empathy: does it predict differences in professional commitment between male and female students in caring education? *Tertiary Education and Management*. 2023;29(3).
  16. Yakovleva NO, Yakovlev EV. Interactive teaching methods in contemporary higher education. *Pacific Science Review*. 2014;16:75-80.
  17. Jurczak I, Jurczak E. Personality of the Teacher as an Important Element in the Educational Process of the Child. *Pedagogika Rodziny*. 2015;5(2).
  18. Maulana R, Helms-Lorenz M, Klassen RM. Effective teaching around the world - Theoretical, empirical, methodological and practical insights. Hofkens T, Pianta RC, Hamre B, editors: Springer; 2023.
  19. Sukawati NN, Gunawan I, Prayoga AG, Adetya, Wardani D. Teacher Personality, Interpersonal Relationships, Performance, and Professionalism in the Learning Process: A Qualitative Study. *Advances in Social Science, Education and Humanities Research*. 2020;501.
  20. Siddiqui S, Ahamed MM. Teachers' Roles Beyond and Within the Context: An Ever-Changing Concept Arab World English Journal. 2020;11(1):282-96.
  21. Cents-Boonstra M, Lichtwarck-Aschoff A, Denessen E, Aelterman N, Haerens L. Fostering student engagement with motivating teaching: an observation study of teacher and student behaviours. *Research Papers in Education*. 2021;36(6):754-79.
  22. Qamar W, Qayum M, Nisar A. Breaking the barriers: addressing dental students bullying by medical counterparts and promoting a collaborative learning environment. *Frontiers in Education*. 2023;8.
  23. Baby S, Fatima M, Kaneez S. Impact Of Social Well-Being On Academic Performance Of Students. *Journal of Positive School Psychology*. 2022;6(8):8786-92.
  24. Nisar M, Khan IA, Khan F. Relationship between Classroom Management and Students Academic Achievement Pakistan Journal of Distance & Online Learning 2019;V(I):209-20.