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IMPACT OF MENTORSHIP ON ACADEMIC PERFORMANCE AND PROFESSIONAL DEVELOPMENT AMONG UNDERGRADUATE DENTAL STUDENTS IN PAKISTAN: A MULTICENTER CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Mentorship is one of the key factors of dental education that can potentially be a support to academic achievement, competency, professional development, and psychological well-being.

Objective: To assess the relationship between mentorship with academic performance, clinical competency, professional confidence and psychological status of undergraduate dental students in Pakistan.

Materials and Methods: A multi-centre study of analytical cross-sectional design was carried out with 550 undergraduate dental students using non-probability sampling technique of consecutive sampling. The participants were divided into two groups: mentored (305 participants) and non-mentored (245 participants). The measures of academic performance, clinical competency, professional confidence, and psychological distress were measured by GPA, clinical assessment scores, self-reported confidence rating, and DASS-21, respectively. Data were analysed by SPSS version 26, using the p value of < 0.05 as the level for statistical significance. Conclusions: Student outcomes in terms of academics and clinical practice were significantly better for students who were mentored compared to those who were not.

Results: The percentages of GPA ≥ 3.5 was 48% versus 26% and ≥ 90 was 38% versus 15%, respectively ($p < 0.001$). Mentored students reported high or very high professional confidence at 78% while 31% of non-mentored students reported high or very high level of professional confidence. No more than 8% of mentored students experienced severe psychological distress compared to 24% of non-mentored students. A longer mentorship duration was seen to be correlated with increasingly higher scores in GPA, clinical competency and confidence.

Conclusion: They found that mentorship participation was strongly correlated with positive academic, clinical, and psychosocial results, indicating the need to continue to investigate structured mentorship programs in undergraduate dental education.

Keywords: dental education, mentorship, academic performance, professional development, students, curriculum.

INTRODUCTION

Dental education is a demanding academic and professional discipline that requires students to Gain theoretical knowledge, clinical skill, technical skill, ethical judgment and effective communication skills.[1] For undergraduate dental students, the demands of their education are demanding time, effort and work, as well as intense testing and more and more responsibility in dealing with patients. The challenges might affect academic performance, career confidence and mental health, especially at the stage of shifting from a preclinical to a clinical learning environment.[2] Mentorship has therefore become recognized as a vital part of education in health professions and is known to provide guidance, professional role modeling, and emotional support during the training. A clear and structured mentor–mentee relationship is likely to help facilitate learning, encourage reflective practice, and help to build a professional identity and support students in dealing with the complexities of dental education.[3,4] Mentorship in dental education can be provided as a formal faculty-led program, peer mentoring, near-peer mentoring or informally through faculty and/or clinical relationships. In formal mentorship, the mentor tends to be more experienced and the student learn more from the mentor, whereas peers and near peers share experiences, are more available, and are more likely to teach the student. These models can help to complement and support students' academic concerns, clinical learning needs, career aspirations, and adjustment to institutional environments. Structured mentoring schemes have been shown to have potential benefits in medical education, and specifically in career guidance and professional development.[5] Lopez et al. also studied peer mentoring among dental students, and concluded that its relevance was as an adaptive coping strategy during dental training.[6] Even so, the results of mentorship can differ in terms of program organization, availability of mentors, relationship quality, and the amount of interaction.

Academic achievement and clinical skills are two essential measures of progress that students in the dental school experience. Academic achievement indicates students' knowledge of theory, and clinical competency involves the ability to apply knowledge, technical skills, decision making and professional conduct in patient care. Mentors can help students recognize learning challenges, promote good study habits, offer feedback and support clinical problem solving. Furthermore, mentorship can offer chances for students to share difficult patient scenarios and build their competence in carrying out clinical skills. There is a lack of clear evidence in the published literature about the benefits of mentoring for professional learning and development, although such benefits are suggested,[5,7] and are dependent on the nature and quality of the mentoring relationships. Therefore, it is important to examine academic and clinical outcomes in addition to mentorship involvement to gauge its impact on undergraduate dental education.

One important factor of dental education is professional confidence; in addition, the students are often subjected to academic stress, exam anxiety, clinical expectations, and anxiety about future professional duties, which are all vital factors of their psychological well-being. Positive learning relationships can provide opportunities for students to talk about problems, get feedback and boost their sense of belonging in school. Sanders and Lushington studied subjective stress levels in dental students and found that stress from the faculty and administration was linked to poor performance in aspects of clinical and contextual assessments, but not to overall academic performance.[8] Self-efficacy beliefs and educational stresses were also found to be significant factors in the stress experienced by dental students in earlier studies.[9]. However, mentorship could be an extra source of interpersonal and academic support, but should not be taken for granted as a protective factor in relation to psychological distress, and should be tested empirically.

The undergraduate dental education in Pakistan is set in a context of rigorous syllabus, heavy workload, and varying institutions' strategies for student support. Mentorship has been given more and more attention, however, the organisation of mentoring programmes and the effectiveness experienced may vary from institution to institution. A cross-sectional study done in Pakistan involving 761 undergraduate medical and dental students reported that 95% of students felt that mentorship is needed in medical education and 92% felt that mentorship is a way of giving guidance to the students.[10] The results suggest students are highly interested in mentoring programs, but that does not necessarily equate with actual improvements in academic or clinical practice. Furthermore, there is still little evidence to compare mentored and non-mentored undergraduate dental students in terms of various educational and psychological outcomes in the context of Pakistan. Examining these may yield evidence to inform student-centered mentorship policies and areas for further student support in learning.

Given these differences, it is appropriate to investigate how much students are involved in mentored programs in undergraduate dental education, particularly where the educational and institutional experiences of students may impact their academic achievement, clinical expertise, career aspirations, and psychological wellbeing. Also, the duration of mentorship should be assessed since continuing mentorship relationships may provide continued feedback and support for academic interests, clinical guidance, and career development. This was the aim of the present multicenter cross-sectional study to evaluate the relationship between mentorship participation and academic performance, clinical competency, professional confidence as well as psychological well-being of the undergraduate

dental students in Pakistan. It also studied the effect of the difference in academic and professional achievement stemming from the length of the mentorship period. Results may be incorporated into an evidence base to develop, deliver, and evaluate structured mentorship programs for dental undergraduate programs.

MATERIALS AND METHODS

Study design and setting

This is a multicenter analytical cross sectional study done among undergraduate students of Bachelor of Dental Surgery (BDS) of participating dental institutions of Pakistan during 2025-2026. The purpose of this study was to assess the correlation between participation in mentorship with academic performance, clinical competence, professional confidence and psychological health amongst undergraduate dental students. The number of students involved was 550 (non-probability consecutive sampling technique). The participants were divided into mentored group and non-mentored group based on their self-reported experience of engaging in a structured mentorship during their undergraduate dental education. The cross-sectional design allowed comparisons across groups at the assessment time, but did not allow for temporal or causal comparisons.

Eligibility criteria

Students who were enrolled in any year of study, either undergraduate or professional, in a recognized BDS program were eligible, regardless of prior mentorship experience, and agreed to participate and gave informed consent. The original eligibility criteria excluded students who were post graduate dental students and were being treated for a mental health disorder diagnosed by a psychiatrist. Questionnaires with incomplete data were NOT automatically excluded but were evaluated using the procedure below for missing data.

Sample Size

The study comprised 550 undergraduate dental students, with 305 mentored and 245 non-mentored students. The participating institutions were sampled consecutively (non-probability sampling) to recruit participants. The students who were eligible were approached during the period of data collection and were invited to participate in the study voluntarily. This final sample is not a randomized sample.

Data collection procedure

After institutional ethics approval, the purpose of the study was explained to all eligible participants who were informed that participation was voluntary and that the information collected would be treated with confidentiality. Informed consent was obtained prior to participation in writing. Data was gathered using a structured questionnaire, which was either given electronically or face-to-face. The questionnaire included sociodemographic data (age, gender, academic year, residential background, academic failure history, etc.), as well as data on mentorship participation and the length of participation. Academic performance was measured using student's self-reported grade point average (GPA) and clinical competency by case based assessment (CBA) scores matched to the available clinical logbooks. Professional confidence was determined by a five-point Likert scale, and psychological distress was determined by the Depression Anxiety Stress Scales (DASS-21) with 21 items. The data collection methods and outcome measures were designed to be similar for mentored and non-mentored subjects. Exposure to mentorship assessed in the current study. Mentorship participation was deemed the main exposure variable. Undergraduates who reported engaging in a structured mentorship program in their undergraduate dental education were designated as "mentored," while those who reported not participating were designated as "non-mentored.

Undergraduates who reported being in a structured mentorship program during their undergraduate dental education were considered “mentored,” and those who reported not being in a structured mentorship program were considered “non-mentored.” As there are other comparisons to be made, mentorship duration was broken down into less than six months, six to twelve months and more than twelve months. The differences in academic performance, clinical competency, and professional confidence were analyzed by these categories, based on the length of mentorship exposure.

Evaluation and measurement of learning and learning outcomes. Academic performance was determined by GPA and divided into three categories: GPA<3.0, GPA 3.0 – 3.49, GPA ≥3.5. Clinical competency was determined using scores from cases recorded in clinical log books and divided into three categories: below 80, 80-89, and ≥90. Professional confidence was assessed by self-reported responses using a Likert scale and then collapsed into low, moderate, high and very high confidence categories for group comparisons. The psychological distress was assessed by a standardised instrument, the DASS-21, which includes three subscores of anxiety, depression and stress, each consisting of seven items. The scoring procedure and the severity classification was derived from the appropriate DASS-21 scoring system. The data quality assurance and missing data management were performed.

Data quality assurance and missing data management was done. Before statistical analysis, the responses to the questionnaires were checked for completeness, internal consistency, duplicate entries, and impossible answers. Where applicable, available academic and clinical assessment records were used to verify. In cases of missing values, they were to be noted and summarized in different categories of each of the following principal variables: GPA, clinical competency, professional confidence, psychological distress, and mentorship duration. For each analysis the number and percentage of missing observations should be reported along with the appropriate

denominator of the valid observations. Participants with missing data on a specific outcome should not be excluded from analyses that do not require the specific outcome unless the analyses that do require the outcome are also appropriate for the extent and pattern of missing data. The answers of participants should NOT be assumed if there are missing answers.

Statistical analysis

IBM SPSS Statistics version 26 was used for the statistical analysis. Categorical variables were summarized by frequencies and percentages and continuous variables were summarized by means and standard deviations. The differences between categorical outcomes of mentored and non-mentored students were analyzed by Pearson's chi-square test, based on the appropriate assumptions. When the distributional assumptions were met, independent-samples t-tests were used to compare continuous variables. The relationship of mentorship duration and the continuous outcomes was explored descriptively using group means and standard deviations. All data analyses were two-tailed and p values < 0.05 were regarded as significant. The associations were interpreted and the findings generalized taking the observational design and non-probability sampling technique into consideration.

Ethical considerations

Institutional ethics review committee was obtained for ethical approval. The participants gave their informed consent in writing prior to data collection.

RESULTS

The average age of students was slightly higher, 21.5 ± 1.6 years compared with non mentored students, 21.0 ± 1.8 years $p = 0.04$. This difference likely reflects seniority. The gender distribution of students was similar to that of non mentored students with 125 males and 180 females in the mentored group and 85 males and 160 females in the non mentored group $p = 0.77$. The distribution of students across study years was fairly balanced for both groups. Urban residence was more common among students 65 %, than among non mentored students 58 % but this difference was not statistically significant $p = 0.09$. Prior academic failure was lower among students 9 % than among non mentored students 14 %, $p = 0.08$.

Table 1: Demographic Characteristics of Participants

Characteristic	Total (n=550)	Mentored (n=305)	Non-mentored (n=245)	Test statistic	p-value
Age (years), mean ± SD	21.3 ± 1.7	21.5 ± 1.6	21.0 ± 1.8	t ≈ 3.40	≈0.001
Gender				χ^2=2.28	0.131
Male	210 (38.2%)	125 (41.0%)	85 (34.7%)		
Female	340 (61.8%)	180 (59.0%)	160 (65.3%)		
Professional year				χ^2=5.52	0.137
First year	120 (21.8%)	60 (19.7%)	60 (24.5%)		
Second year	130 (23.6%)	65 (21.3%)	65 (26.5%)		
Third year	150 (27.3%)	90 (29.5%)	60 (24.5%)		
Final year	150 (27.3%)	90 (29.5%)	60 (24.5%)		
Residence				χ^2=2.48	0.116
Urban	341 (62.0%)	198 (64.9%)	143 (58.4%)		
Rural	209 (38.0%)	107 (35.1%)	102 (41.6%)		
Previous academic failure				χ^2=3.48	0.062
Yes	61 (11.1%)	27 (8.9%)	34 (13.9%)		
No	489 (88.9%)	278 (91.1%)	211 (86.1%)		

Mentored students performed better academically. Forty eight percent of students achieved a GPA of 3.5 or higher compared with only twenty six percent of non mentored students. In contrast eleven percent of mentored students had a GPA below 3.0 whereas twenty six percent of non mentored students had a GPA below 3.0 $p < 0.001$. This shows a positive association between mentorship and academic achievement.

Table 2: Academic Performance (GPA)

Performance Level	Total (n=550)	Mentored (n=305)	Non-Mentored (n=245)
GPA ≥ 3.5	38% (209/550)	48% (146/305)	26% (63/245)
GPA 3.0–3.49	44% (242/550)	41% (125/305)	48% (117/245)
GPA < 3.0	18% (99/550)	11% (34/305)	26% (64/245)

In performance thirty eight percent of mentored students scored 90 or higher in their assessments compared with only fifteen percent of non mentored students. Moreover ten percent of mentored students scored below 80 whereas thirty nine percent of non mentored students scored below 80 $p < 0.001$. This indicates that mentored students were more likely to achieve clinical proficiency.

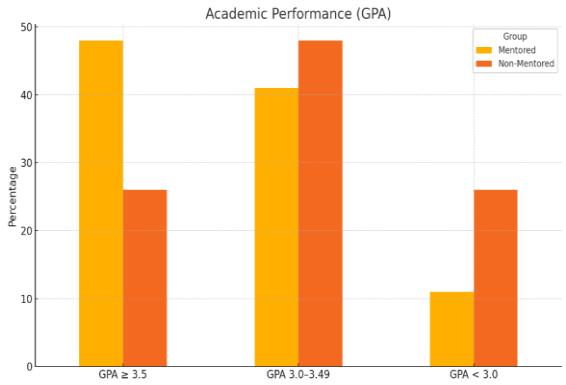


Figure 1: Academic Performance (GPA)

Table 3 demonstrates a significant association between mentorship participation and clinical competency scores among undergraduate dental students ($\chi^2 = 74.19$, $p < 0.001$). A higher proportion of mentored students achieved clinical scores ≥90 compared with non-mentored students (38% vs. 15%). Similarly, 52% of mentored students scored between 80 and 89, compared with 46% of non-mentored students. Conversely, scores below 80 were considerably more frequent among non-mentored students (39%) than mentored students (10%). These findings indicate that mentorship participation was significantly associated with better clinical competency outcomes.

Table 3: Clinical Competency Scores

Score Range	Total (n=550)	Mentored (n=305)	Non-Mentored (n=245)
≥ 90	28% (154/550)	38% (116/305)	15% (38/245)
80–89	49% (270/550)	52% (158/305)	46% (112/245)
< 80	23% (126/550)	10% (31/305)	39% (95/245)

A greater proportion of mentored students rated their professional confidence as very high or high 22 % and 56 % respectively compared with only four percent and 27 percent of non mentored students. In contrast twenty two percent of students reported low confidence whereas only four percent of mentored students reported low confidence, $p < 0.001$. This suggests mentorship strongly enhances competence.

Table 4: Professional Confidence (Self-rated)

Confidence Level	Total (n=550)	Mentored (n=305)	Non-Mentored (n=245)
Very High	14% (77/550)	22% (67/305)	4% (10/245)
High	43% (237/550)	56% (170/305)	27% (67/245)
Moderate	31% (171/550)	18% (55/305)	47% (116/245)
Low	12% (65/550)	4% (13/305)	22% (52/245)

Mentored students demonstrated better psychological health. Normal well being was reported by forty two percent of students compared with only fifteen percent of non mentored peers. Severe psychological stress was present in twenty four percent of students versus only eight percent of mentored students. The difference across all categories was statistically significant $p < 0.001$ underscoring the emotional benefit of mentorship.

Table 5: Psychological Well-being (DASS-21)

Category	Total (n=550)	Mentored (n=305)	Non-Mentored (n=245)
Normal	30% (165/550)	42% (128/305)	15% (37/245)
Mild	24% (132/550)	28% (86/305)	19% (46/245)
Moderate	31% (170/550)	22% (67/305)	42% (103/245)
Severe	15% (83/550)	8% (24/305)	24% (59/245)

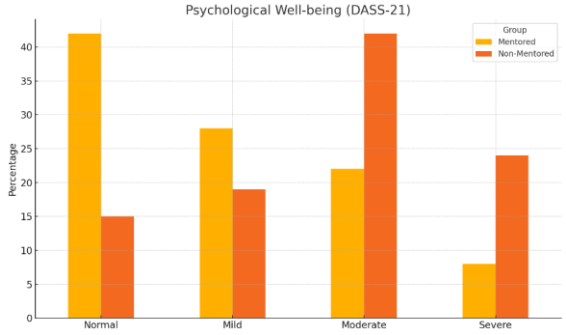


Figure 2: Psychological Well-being (DASS-21)

Longer mentorship duration showed a relationship with outcomes. The students who were mentored for over 12 months had the highest mean GPA (3.54 ± 0.31), clinical competency score (92.1 ± 5.4), and professional confidence rating (4.4 ± 0.5) compared to those mentored for less than 6 months (3.28 ± 0.39, 85.3 ± 5.8, and 3.6 ± 0.8, respectively). The intermediate outcomes for the students who receive mentorship for 6–12 months had a mean GPA of 3.41 ± 0.35, clinical competency score of 89.5 ± 6.1, and confidence rating of 4.1 ± 0.6. The results indicate a positive relationship between mentorship exposure and academic and professional success, which may be attributed to the long-term nature of the mentorship exposure and the benefits of continuous mentorship education, clinical feedback, and professional support. The differences shown, however, should be confirmed by suitable inferential analysis.

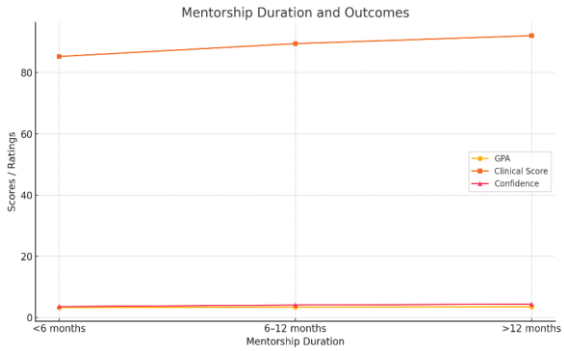


Figure 3: Mentorship Duration and Outcomes

DISCUSSION

This was a multicenter cross sectional study that assessed the correlation of mentorship with academic performance, clinical competency, professional confidence and psychological well being of 550 undergraduate dental students from Pakistan. A total of 305 (55.5%) indicated they had been mentored in one of the following ways: 245 (44.5%) stated they were not mentored in a structured mentorship program. In general, the results indicated that in the academic, clinical, and psychosocial domains, mentored students had more positive outcomes than their counterparts. The results corroborate previous studies suggesting the need for mentorship in health professions education. In a cross-sectional study of 761 undergraduate medical and dental students in Pakistan, Chaudary et al. found that 95% of the students were aware that mentorship was necessary, and 92% believed it was a valuable source of academic advice.[10] Likewise, Ali,[10] conducted a study with 312 medical and dental students in Islamabad where the perceptions of students regarding mentorship were found to be positive with differences between medical and dental students. Unlike the more perception-based investigations, the present study measured outcomes that were academic and clinical, as well as self-reported professional confidence and psychological distress, providing further evidence of the relationship between mentorship and student development.

The participation in mentorship was significantly correlated with academic achievement, with 48% of students being mentored achieving a GPA of 3.5 or higher, while 26% of those not being mentored achieved the same grade point average or better ($p < 0.001$). On the other hand, the share of students with a GPA below 3.0 was smaller for the mentored group (11%) as compared to the non-mentored group (26%). The results indicate that mentorship involvement could have an impact on increased academic involvement, learning approaches, and academic advice. The findings are different, though, from Fallatah et al,[12] who explored mentorship among the clinical-year medical students at King Abdulaziz University, Saudi Arabia. However, while mentoring had positive perceptions among students and was perceived as a support, their academic examination outcomes did not differ significantly from those of students who were not mentors. These conflicting results could be attributed in part to variations among mentorship programs in terms of mentorship organization, program length, participant characteristics, and academic evaluation methods. Furthermore, this study did not determine if there were differences between mentorship-seeking and mentorship retention among students who achieved higher academic performance, necessitating further adjustments and longitudinal analyses before drawing simple conclusions about mentorship's impact on academic performance.

Another important measure of outcome was clinical competency, with 38% of mentored students scoring at least 90 on the clinical assessment compared to 15% of non-mentored students ($p < 0.001$). Moreover, in each group, 10% and 39% of the scores have been noted as less than 80. This gap indicates an intriguing relationship between mentorship and clinical learning, especially considering the need for precision, clinical judgement, patient interaction, and effective assessment in dental training. Keinänen et al,[3] investigated the competence of mentoring among dental health care professionals and highlighted the competence of the mentors in supporting clinical learning environments. They report that their findings give a relevant educational explanation for the observations as supervision and constructive feedback can help facilitate students developing practical skills. However, the two studies measured different results, and the results of the current study must not be taken as evidence that mentoring alone was the cause of the improvement in the measures of procedural competence. The observed associations may have been influenced by differences in academic year, the amount of clinical experience students have had before starting the program, institutional assessment practices, and baseline abilities.

Students in a mentoring relationship had significantly more confidence than they did if they were not in a mentoring relationship; 78% of the mentored students reported high or very high confidence, while 31% of the non-mentored students reported the same. By comparison, however, 4% of the mentored students and 22% of the non-mentored students reported low levels of confidence ($p < 0.001$). This result indicates the possible implications of mentoring relationships in relation to professional identity and self-efficacy, and students' perceptions of readiness for clinical duties. In dental education, peer mentorship was explored by Lopez et al,[6] as an adaptive coping strategy and further discussed the importance of peer mentorship in the broader context of education. Likewise, Usmani et al,[13] found that most of the Pakistani undergraduate students in medical and dental fields viewed their mentors as supportive, but perceived level of mentoring relationship. Overall, these studies indicate that mentorship can offer avenues for positive interaction, support, and information in the professional field. In

the present study, however, the differences observed could be due to variation in students' individual personalities, previous learning experiences and the willingness of students to seek mentorship, as the professional confidence was self-reported.

There was also a difference in psychological well-being between the two groups. The reported categories of psychological distress showed a difference between mentored and non-mentored students, with 42% of the former falling within the normal range, versus 15% of the latter; 8% of mentored, versus 24% of non-mentored, students fell into the category of severe distress ($p < 0.001$). These results suggest that mentorship participation is related to a more positive psychological profile. In a systematic literature review of the near-peer mentoring programs for first-year medical students, Akinla et al,[7] found stress reduction, professional and personal development, and smoother transition into medical education as common outcomes. But the authors did not fail to acknowledge the lack of rigorous longitudinal studies and the need for such studies. Likewise, Sanders and Lushington,[8] assessed perceived stress among 202 students in the Australian dental profession, and found associations between particular aspects of the stress and school performance, highlighting the multifaceted nature of psychological stress and academic outcomes. Overall, the present results confirm the significance of supportive educational contexts, but due to the different instruments used and the different approaches employed, no strict comparisons can be drawn. Importantly, the results from the DASS-21 are preliminary and must be confirmed before any conclusions can be drawn related to any specific aspect of psychological distress measured by the DASS-21 subscale analyzed and the severity classification used.

The length of mentorship was also found to be linked with academic performance, clinical skills and professional confidence. Students who had received mentorship for over 12 months had the highest mean GPA (3.54 ± 0.31), clinical competency score (92.1 ± 5.4) and confidence rating (4.4 ± 0.5) compared to students who had been mentored for less than 6 months, who had a mean GPA of 3.28 ± 0.39, a mean clinical competency score of 85.3 ± 5.8, and a mean confidence rating of 3.6 ± 0.8. Mentorship length showed a graded association with positive educational outcomes in students mentored for 6–12 months, which were intermediate between the 6-month and 1 year groups.[14] These are probably indicative of the need for continuity, ongoing feedback and increasingly robust mentor–mentee relationships. But mentorship time was not random and students that were mentored for longer periods might also have had more academic seniority or clinical experience. Therefore, the observed pattern should be considered an association rather than evidence of a causal dose–response effect. Further longitudinal research is required to determine if there are measurable benefits of mentorship over time.

The implications of the findings are significant for dental education in Pakistan, as mentorship programs could be structured in different ways, be accessible to dental students, and have a different level of integration with undergraduate education. This cross-cutting work across several educational and psychosocial areas indicates that structured mentorship should be considered as an integral component of a broad-based approach to student support. Institutions may wish to consider having well-defined mentorship goals, training mentors appropriately, frequent mentor–mentee contact, academic monitoring and referral to professional psychological support services as needed. However, mentoring should not be a substitute for structured teaching, clinical supervision or mental health services. Standardized outcome metrics, follow-up and control for potential confounder variables should also be included in future program evaluations to identify which aspects of mentorship are most strongly linked to academic and professional outcomes.

Strengths and Limitations

The present study has a number of strengths, such as the relatively large sample of 550 undergraduate dental students, multicenter design and thorough evaluation of academic performance, clinical competence, professional confidence and psychological well-being. Mentored and non-mentored students were included to enable comparative evaluation, and the duration of mentorship was examined to provide further insight into the relationship between mentorship duration and educational outcomes. However the cross-sectional design does restrict the ability to make causal inferences and non-probability consecutive sampling may lead to selection bias and the findings may not be generalisable. Moreover, academic skills and self-motivation at the beginning of the program and the different institutional mentorship practices may have affected the results. Adjustment of potential confounding factors is limited because of the lack of adjusted multivariable analyses. The results need to be interpreted with due attention to these limitations.

CONCLUSION

This study showed the important association of mentorship participation with academic performance, clinical competency, professional confidence and psychological well-being of undergraduate dental students in Pakistan. Overall, the students in the mentored group had higher GPAs, higher clinical assessment scores, higher professional confidence and lower psychological distress scores than the non-mentored students. In addition, greater length of mentorship was linked to more positive academic and career outcomes. These findings indicate that structured and sustained mentorship can be an important component of undergraduate dental

care education that can be beneficial. A well-structured mentorship program in dental education can be a part of the curriculum and could help create a more positive learning experience, but more long-term data is needed to determine its effectiveness and its long-term impact.

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