

Pilot Study: Feasibility and Clarity Testing of a career Mentorship Program Survey for Dental Interns at King Abdulaziz University

Abstract

Background: Mentorship is critical in dental education, influencing clinical competence, research engagement, and career decision-making. Structured mentorship remains underexplored in Saudi Arabia. A mentorship survey was designed at King Abdulaziz University to evaluate dental interns' perceptions. Before large-scale administration, a pilot study was conducted.

Objective: To assess the feasibility, clarity, and acceptability of the survey and refine problematic questions.

Methods: Five dental interns completed a 23-item survey. Feedback was collected on wording, clarity, and length through post-survey debriefing. Responses were analyzed qualitatively, and revisions were made to questions that were ambiguous.

Results: All interns completed the survey in ~10 minutes. Two questions (15 and 20) were consistently unclear. Q15 lacked specificity about the meaning of 'structured mentorship, they were confused if it meant being a part of the mentorship program or if the purpose of the program was to be a mentor, while Q20 was vague in defining the concerns some needed an example to understand the questions. Both were revised for clarity. Other items were considered relevant and understandable.

Conclusion: The mentorship survey is feasible and largely straightforward, requiring only minor revisions. Pilot testing ensured the validity and cultural relevance of the approach before its larger-scale use.

Keywords

pilot study, mentorship, dental education, survey validation, Saudi Arabia

Introduction

Mentorship is a key factor in the professional and personal development of health professionals. In dentistry, mentors provide support in clinical training, career planning, and postgraduate preparation. Studies have demonstrated that mentored students report higher confidence, better preparedness, and stronger career direction (Berk et al., 2005; Sambunjak et al., 2010). Globally, structured career mentorship programs are crucial for the professional and personal development of health professionals. In dentistry, mentors play a vital role in providing support for clinical training, career planning, and postgraduate preparation. Research has shown that students who receive mentorship report higher confidence, better preparedness, and clearer career direction (Berk et al., 2005; Sambunjak et al., 2010). Around the world, structured mentorship programs are associated with improved outcomes; however, in many locations, including Saudi Arabia, mentorship often remains informal and inconsistent (Ali et al., 2019).

King Abdulaziz University has made career mentorship a priority within its dental internship program. To evaluate interns' perceptions, barriers, and preferences regarding mentorship, a structured 23-item survey was developed. However, newly created instruments must undergo pilot testing before widespread implementation, as poorly worded questions can undermine data quality and validity. Pilot studies help identify feasibility issues, assess clarity, and ensure cultural relevance (van Teijlingen & Hundley, 2002).

This study reports findings from a pilot test of the survey conducted with dental interns. The objectives were: (1) to evaluate the feasibility and clarity of the survey, and (2) to identify and refine problematic items before large-scale administration.

Methods

Study Design: Cross-sectional pilot feasibility study.

Setting and Participants: Conducted at the Faculty of Dentistry, King Abdulaziz University. Five dental interns were purposively sampled to represent both genders and the survey was sent to them by emails. The sample size aligns with pilot study recommendations, which emphasize testing comprehension.

Survey Instrument: The 23-item survey addressed:

- Demographics
- Undergraduate mentorship experiences (duration, frequency, effectiveness)
- Internship mentorship needs
- Perceptions of structured mentorship programs
- Challenges/barriers to mentorship

- Preferences for meeting format and frequency

Response types included Likert scales, multiple-choice, and open-ended questions.

Pilot Procedure: Participants completed the survey online. Average completion time was noted. Following completion, participants engaged in a structured debriefing where they were asked open-ended questions about clarity, wording, and relevance. Comments were documented and analyzed qualitatively.

Analysis: Responses were reviewed for completeness and clarity issues. Items flagged by multiple participants as ambiguous were revised accordingly.

Ethical Considerations: Ethical approval was obtained from the Institutional Review Board of King Abdulaziz University

Results

Participant Characteristics:

Among the five interns, three were female and two were male, reflecting the typical gender distribution of the internship program. All participants had been in their internship for less than six months.

Feasibility:

All five interns completed the survey without skipping any questions. The average completion time was around 10 minutes, which participants found to be acceptable. No issues were reported regarding the flow or length of the survey.

Clarity Issues:

Two questions received consistent feedback for lacking clarity:

- *Q15* was unclear about what 'structured mentorship' meant. Participants were unsure whether it referred to being part of the mentorship program or whether the goal was to act as a mentor.

- *Q20* was vague in its definition of concerns, with some participants indicating they needed an example to understand the question better. Both questions have been revised for clarity. The remaining items were deemed relevant and understandable.

Revisions:

Both questions were rephrased for increased specificity (see Appendix A)—no other items required modification.

Acceptability:

Participants reported that the topics covered in the survey were highly relevant to their experiences. They emphasized the importance of including questions related to career planning and postgraduate preparation.

Discussion

This pilot study confirmed that the mentorship survey is both feasible and acceptable among dental interns at King Abdulaziz University. The feedback process highlighted two items that needed clarification. Revising these items enhanced the survey's face validity and cultural appropriateness.

Comparison with Literature:

Previous studies (Ali et al., 2019; Berk et al., 2005) emphasize the importance of mentorship in shaping dental career paths. However, in many Middle Eastern contexts, mentorship tends to be informal and often unstructured. Therefore, developing structured tools to assess mentorship needs is critical. Our findings align with prior literature that underscores the necessity for culturally adapted mentorship models.

Strengths:

Early testing identified issues before the survey was administered on a large scale. Involving interns in the refinement process ensured the tool accurately reflected their perspectives. The high completion rates confirmed its feasibility.

Limitations:

The small sample size limited the diversity of feedback. The pilot study did not include psychometric testing, which will be addressed in the larger study.

Implications:

Once validated with a larger cohort, this survey can guide the development of structured mentorship programs not only at King Abdulaziz University but potentially across Saudi Arabia. It will also provide baseline data for international comparisons.

Conclusion

The pilot study confirmed that the mentorship survey is feasible, acceptable, and relevant for dental interns. Minor revisions were required to improve clarity in two questions. Pilot testing strengthened the survey and increased its cultural validity. The revised instrument is now ready for large-scale deployment to inform structured mentorship program design in dental education.

References

1. Ali K, Coombes L, Kay E, Tredwin C. Mentoring in dental education: A review. *Eur J Dent Educ*. 2019;23(3):151-61.
2. Berk RA, Berg J, Mortimer R, Walton-Moss B, Yeo TP. Measuring the effectiveness of faculty mentoring relationships. *Acad Med*. 2005;80(1):66-71.
3. Sambunjak D, Straus SE, Marušić A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *J Gen Intern Med*. 2010;25(1):72-8.
4. van Teijlingen E, Hundley V. The importance of pilot studies. *Nurs Stand*. 2002;16(40):33-6.
5. Buddeberg-Fischer B, Herta KD. Formal mentoring programmes for medical students and doctors—a review of the Medline literature. *Med Teach*. 2006;28(3):248-57.
6. Frei E, Stamm M, Buddeberg-Fischer B. Mentoring programs for medical students—a review of the PubMed literature 2000–2008. *BMC Med Educ*. 2010;10:32.
7. Haq I, Fuller J, Dacre J. Mentoring: A study of the skills, attitudes and behaviours of mentors in a UK medical school. *Med Educ*. 2006;40(5):522-6.

Appendix A – Revised Questions

Question 15 (Original): “Would you be interested in participating in a structured career mentorship program during your internship?”

Revised: “Would you be interested in participating in a structured career mentorship program during your internship as a Mantee?”

Question 20 (Original): “Do you have any concerns about participating in a mentorship programs ?”if yes please specify)

Revised: . What challenges do you face in seeking mentorship during your internship? (if other please specify)

UNDER PEER REVIEW IN IJAR