EXPLORING THE PERCEIVED VALUE AND IMPACT OF MASTER'S DEGREE PROGRAMS IN HEALTH PROFESSIONS EDUCATION: A QUALITATIVE STUDY

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ABSTRACT

OBJECTIVES

This study aimed to explore the perceived value of master's programs in Health Professions Education (HPE) regarding professional development, improvements in learning and teaching, and the overall quality of healthcare education.

METHODOLOGY

A qualitative study using semi-structured interviews was conducted with sixteen healthcare professionals who graduated from KMU HPE Master's programs. Thematic data analysis revealed key themes of the advantages, difficulties, and shifts in the graduates' professional identities.

RESULTS

Five major themes emerged: Perceived Value of the Degree, Career Impacts, Skills Gained, Challenges and Limitations, and Future Perspectives. Participants reported that using educational techniques and educational ideas enhanced their teaching approaches. Nonetheless, difficulties with the thesis process, time constraints, and changing work obligations were also emphasized.

CONCLUSION

The MHPE program enhances participants' educational leadership and reflective teaching practices. The results showed that while these programs offered several benefits, there is still room for improvement, particularly in integrating thesis projects and helping participants balance their academic responsibilities with work commitments.

KEYWORDS: *Health Profession Education, Medical Education, Qualitative Research*

INTRODUCTION

The field of health professions education (HPE) is increasingly recognized as a vital academic discipline that equips healthcare professionals with the necessary skills. To improve leadership, research, and teaching in healthcare education, HPE Master's programs have expanded internationally. To fill educational shortfalls, institutions like Khyber Medical University in Pakistan have started offering HPE Master's degrees. There is, however, still little data on the perceived worth, professional influence, and institutional difficulties faced by HPE graduates in Pakistan. To understand the perceived value of the degree, employment outcomes, skills acquired, difficulties faced, and future possibilities, this study investigates the experiences of HPE Master's students and alums.[1] The progression of HPE has attained global acknowledgment as imperative for fostering proficient healthcare educators. Master's programs in HPE are designed to equip academic staff with competencies in pedagogical approaches, curriculum design, research methodologies, and leadership.[2] In recent decades, the landscape of healthcare education has undergone considerable transformation, characterized by a rising focus on learner-centered pedagogy, competency-oriented curricula, and initiatives aimed at faculty development. In alignment with these evolving paradigms, educational institutions across the globe have instituted specialized graduate degree programs, such as the master's in HPE, to cultivate educators equipped to address the intricate demands of contemporary health professions training. Such programs are structured to augment pedagogical efficacy, enhance leadership capabilities, and elevate scholarly output among academic personnel.[2,3] The international healthcare setting has experienced swift changes, driven by advances in technology, shifting disease epidemiology, and evolving expectations imposed on healthcare systems. As a result, there exists an increasing demand for healthcare educators who not only possess expertise in their respective clinical fields but also hold formal credentials in educational theory and practice. The MHPE program responds to this pressing demand by providing systematic training in instructional practices, assessment methodologies, educational leadership, and research competencies.[4] Pakistan, like many developing nations, faces challenges in healthcare education,

including deficiencies in faculty proficiency in educational theory and practice, inconsistent instructional standards, and a scarcity of research in medical education. Notwithstanding advancements in healthcare provision, disparities in educational quality remain prevalent across medical, dental, and allied health institutions. Acknowledging these deficiencies, establishments such as Khyber Medical University and the University of Lahore have launched MHPE programs aimed at enhancing the capabilities of healthcare educators.[1,4] Despite these programs being in existence for over a decade, empirical evidence on the perceived significance and impact of MHPE programs from the perspective of their alumni remains limited. Faculty development facilitated through MHPE is anticipated to promote enhanced teaching methodologies, evidence-informed curriculum development, academic research, and leadership within pedagogical environments.[6] However, challenges such as institutional inactivity, a lack of acknowledgment for non-clinical qualifications, and the gap between theory and practice have been documented globally.[7] Within the Pakistani context, these challenges may be further exacerbated by systemic barriers, resource constraints, and disparate levels of institutional backing. Gaining insights into the experiences of MHPE graduates is critical for informing policy decisions, fostering institutional recognition of HPE credentials, and steering the future evolution of such programs.[8] This study aims to explore the experiences of MHPE graduates and students to explain the degree's perceived significance, its influence on professional advancement, acquired competencies, institutional challenges, and recommendations for future enhancements.[9] This study highlighted the difference in perceived value between HPE providers and learners, raising concerns about the curriculum's efficacy and relevance. Furthermore, although thesis components are typically incorporated into MHPE programs, further study is required to fully understand their impact on academic and professional growth fully. What is the perceived value of master's programs in Health Professions Education (MHPE) when it comes to professional growth, advancement in a career, educational enhancement, and the overall standard of healthcare education, and how do these programs impact graduates' academic and professional tracks?

METHODOLOGY

A qualitative descriptive design was used to explore the perceived value and impact of the MHPE program. This descriptive approach was chosen to provide an in-depth understanding of the experiences of faculty members holding master's degrees in Health Professions Education. The focus was on how these programs had influenced their professional growth, instructional strategies, and the overall quality of healthcare education. Braun and Clarke's reflexive thematic analysis was used to evaluate the data, enabling the systematic identification of patterns while maintaining a close relationship with participant perspectives. A purposive sampling strategy was used to select individuals who had finished an MHPE program, were actively working in teaching or educational leadership, and agreed to engage in a recorded interview. Through phone calls, emails, and professional networking, sixteen MHPE graduates from medical, dental, and allied health schools were recruited, and all consented to participate. Data saturation was reached when no new concepts emerged, and information power supported sample adequacy, as participants provided detailed descriptions aligned with the study's goal. A semi-structured questionnaire was used to interview 16 individuals in total, and data collection proceeded until data saturation was attained. To identify MHPE alums who could offer rich, pertinent, and varied perspectives on the perceived value and impact of the program, purposeful sampling was employed. Participants were required to be MHPE graduates with at least three years of experience as undergraduate or graduate faculty members. MHPE holding faculty members who were not teaching at the time were omitted. Semi-structured interviews were conducted using an interview guide developed based on the study's objectives, relevant literature, and expert evaluation. The guide included open-ended questions on participants' background, motives for pursuing the MHPE degree, perceived value and impact of the program on their educational practice and career progress, problems they faced, and future recommendations. The interview framework provided the freedom to explore and clarify answers. Annexure I contains the complete list of interview questions. Participants were selected from departmental alumni lists and contacted via email, WhatsApp, Zoom, or phone to schedule interviews. Before the interviews, written informed consent was collected from each participant, and an information sheet and consent form were given to those who showed interest. Depending on participants' availability and interests, interviews will be conducted online. Each interview was audio recorded with consent and lasted between 30 and 40 minutes. Participants' age, gender, professional role, years of experience, and MHPE completion year were recorded using a standardized demographic pro forma. The primary researcher transcribed all interviews verbatim, and transcripts were distributed to participants for member checking to guarantee accuracy. Data collection continued until sufficient data was attained. After the fourteenth interview, no new

codes or thoughts emerged, indicating data saturation. Two further interviews were conducted to verify saturation.[15,16] The interview summaries and preliminary themes were sent to the participants via email for member verification; 12 verified the information without making any changes, and 4 offered minor clarifications that were included. Multiple strategies were used to guarantee confirmability, reliability, and trustworthiness. Two researchers separately coded. 25% of the transcripts were examined for coding consistency. Theme refinement involved analyst triangulation. To improve consistency and repeatability, a thorough audit trail, including interview protocols, code phases, theme development, and analytical choices, was maintained. Interviews were primarily conducted in English, with a few conversational words in Urdu. During transcribing, Urdu passages were translated into English. To ensure accuracy, selected portions were independently back-translated to verify that meaning was retained. Thematic analysis was done manually using Braun and Clarke's framework. This is a methodical approach to studying theme analysis: Familiarization: Get acquainted with the data by reviewing each transcript several times. Coding: Find and underline key phrases, sentences, or paragraphs that influence the goals or research questions. Use codes to symbolize these topics or subthemes. Searching for Themes: Examine the coded data and identify any trends or linkages among the codes. To create themes, group relevant codes together. Reviewing the Themes: Ensure the themes identified are reflective of the data, pertinent, and significant. As necessary, adjust or refine topics. Throughout the analytical process, three researchers collaborated to code the data and find themes and subthemes. This allowed for discussion, disagreement, and consensus, thereby improving the validity and reliability of the study. A total of 18 initial codes were produced after familiarization readings were repeated. Following a methodical evaluation and refinement process, these codes were grouped into 12 subthemes. (detailed summary provided in Table 1) These subthemes were then combined into five overarching themes that encapsulated the significant trends in participants' experiences. To keep the final themes rooted in participants' viewpoints, reflexivity was maintained through ongoing documentation of analytical choices and critical reflection. Research approval was obtained by the Advanced Studies and Research Board (ASRB) with Reference Number as DIR/KMU-AS&RB/EV/003040, and an ethical Clearance Certificate from Khyber Medical University (KMU) with Reference No (1-12/IHPER/MHPE/KMU/25-14) was also secured to proceed with the Research work. Participant provided written informed consent. Only the study team had access to the password-protected device containing the audio files and transcripts. Codes (P1-P16) were used to ensure data anonymity.

RESULTS

The findings of this qualitative study are presented under five major themes and associated sub-themes that reflect participants' perceptions, experiences, and challenges regarding the value and impact of master's programs in HPE. A total of 16 participants from diverse healthcare backgrounds were interviewed, including both male and female professionals across disciplines such as medicine, dentistry, public health, and allied health sciences. Their insights provide a comprehensive understanding of how HPE programs influence personal, professional, and institutional development.

Table 1: Participant's Demographics

Gender	Age (yrs)	Designation	Years of Experience	Qualification	Professional Role
Female	36	Lecturer	05	MHPE	Undergrad MBBS
Female	39	Assistant Professor	13	MHPE	Undergrad and postgrad
Female	44	Histopathologists and Medical Educators	16	FCPS Histopathology	Associate Professor of pathology Deputy Director of DME
Male	43	Senior Lecturer in Dentistry	12	BDS, MPH, MHPE	2nd year and Final year BDS
Female	47	Senior lecturer	12	Masters	Senior lecturer
Female	29	Assistant Professor	04	MME	Assistant Professor for all five years
Female	29	Senior Demonstrator	3.5	MME	Undergrad
Female	40	Assistant Professor	10	PhD	Undergrad and postgrad
Male	51	vice principal, HOD	15	PhD	Undergrad and Postgrad
Female	32	Assistant Director, Medical Education	10	PhD	Assistant Professor
Female	34	Assistant Professor	08	MHPE	Assistant Professor
Female	48	Dental Educationist	05	MHPE	Assistant Professor
Female	37	Medical Educationist	05	MHPE	Assistant Professor
Male	40	Medical Educationist	11	MHPE, MPhil	Assistant Professor
Female	45	Director of Medical Education	17	PhD	Professor
Female	34	HOD of Medical Education	08	MHPE	Undergrad and Postgrad

Perceived Value of the Degree

Participants repeatedly said that the MHPE program had a transformative effect on how they understood, handled, and carried out their jobs as educators. Graduates stated in interviews that the degree changed their teaching identity and increased their teaching confidence. This describes how the MHPE was viewed as a growth path that enhanced their professional thinking and classroom practice, rather than just a qualification.

Sub-themes: Knowledge and Teaching Skills

Improved knowledge and teaching abilities were continuously appreciated by participants:

"The MHPE has totally changed my teaching style. I now consider learner engagement and well-defined objectives while creating sessions."

Graduates experienced a notable increase in both their academic comprehension of educational principles and their practical application of these ideas. Several described a move from traditional didactic approaches to more student-centered procedures, indicating a deeper consideration of learners' needs. *"The MHPE has completely changed my teaching style,"* one participant said. When designing workshops, I now take student engagement and clear objectives into account. (P3). These reflections show a shift in focus toward instructional design clarity, active learning, and organized teaching.

Career Impact

The professional growth, more recognition, and improved credibility that MHPE alums describe are reflected in this domain. Participants said that the degree strengthened their sense of self as capable teachers and offered doors to leadership positions. Many said they were more visible in their organizations and had better prospects for advancement as a result of the qualification.

Sub-themes: Recognition and Growth

Graduates reported more job progress and professional recognition:

*"I was simply another faculty member before MHPE. I now lead curriculum development, and my efforts are at last acknowledged."*After completing the MHPE, graduates reported a significant change in their perceptions of administrators and coworkers. Many claimed to have been given more authority, especially in academic committees and curriculum creation. *Before MHPE, I was just another faculty member, as one participant put it. I now oversee curriculum development, and my efforts are finally recognized. (P9).* These experiences imply that the MHPE certificate promotes upward mobility and increases academic reputation.

Skills Gained

The MHPE increased a wide variety of abilities, including the capacity to design lessons, conduct research, and incorporate technology into instruction, according to the participants. It was often said that the degree had given them a more methodical and academic approach to teaching.

Sub-themes: Education, Research, Technology Skills

It was clear that research capabilities, technology integration, and instructional planning had improved:

"I was able to publish my first educational research paper thanks to the research skills I acquired through MHPE."

Graduates highlighted ways to promote student engagement through research, implementing instructional activities, and utilizing digital technologies. Many said the MHPE program improved their academic writing skills and gave them greater confidence when starting or directing research projects. *"I was able to publish my first educational research paper thanks to the research skills I acquired through MHPE,"* one participant said (P6). This illustrates how the curriculum promotes academic output and contemporary teaching methods.

Challenges & Limitations

Participants identified structural and cultural obstacles that prevented their training from having its full impact, despite the numerous advantages. This theme captures the tension between graduates' improved skills and institutional settings that weren't always open to change.

Sub-themes: Workload and Institutional Resistance

Institutional opposition and workload demands were prominent issues.

"Even with an MHPE, some senior administrators continue to place more importance on clinical knowledge than educational credentials."

The difficulty of managing clinical obligations, instructional duties, and academic demands was a persistent worry. Several participants stated that conventional attitudes and institutional hierarchy made it difficult for educational innovations to be adopted. *"Even with an MHPE, some senior administrators continue to place more importance on clinical knowledge than educational credentials,"* one participant said. (P2). These difficulties highlight the need for educational professionals to have clearer pathways and stronger leadership support.

Future Prospects and Recommendations in HPE

Participants shared ideas on how to increase MHPE graduates' influence and involvement in academic institutions. To maintain gains in teaching quality, their observations emphasize the need for institutional acknowledgment and for leadership positions in education.

Sub-themes: Innovations, Recognition, Acceptance in Academia

Participants emphasized the need for more creativity in instruction and institutional recognition:

"To implement significant improvements in education, MHPE graduates have to be assigned leadership positions. If not, their potential is wasted."

Graduates stressed that chances for innovation, institutional support, and a culture that appreciates educational knowledge are necessary for further advancement in teaching. Many argued that to achieve significant improvements, MHPE graduates had to be carefully placed in leadership roles. As one speaker pointed out, *"MHPE graduates must be assigned to leadership positions in order to implement significant improvements in education."* Their talent is squandered otherwise (P11). These observations highlight the significance of long-term planning and organizational preparedness for educational advancement.

Table 2: A Summary of Emergent Themes and Sub-Themes

Themes	Sub-Themes	Key Codes
Perceived Value of Degree	Knowledge & Teaching skills	Curriculum Design
		Assessment Strategies
		Research and Leadership
Career Impact	Recognition, Growth	Career Advancement
		Professional Recognition
		Leadership role
Skills Gained	Education, Research, Technology	Educational psychology
		Student-centered learning Mentorship
Challenges and Limitations	Workload, Institutional resistance	Time management
		Institutional resistance
		Balancing roles
Future Prospects and Recommendations in HPE	Innovations, Recognition, and Acceptance in Academia	Accreditation
		HPE recognition
		Technology integration
		Strong recommendation
		Limited recognition in certain domains
		Essential for teachers

Overall, the study shows how HPE programs improve research capabilities, academic leadership, and teaching methods. However, further institutional investment, the adoption of new technologies, and initiatives to remove structural barriers to the acceptance of HPE degrees, particularly for non-medical professionals, are necessary to realize the potential of these programs fully.

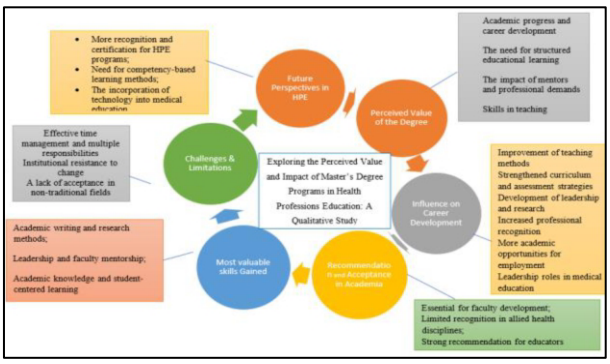

Figure 1: Concept map of Themes and sub-themes

DISCUSSION

This study explored the perceived value and impact of the Master of Health Professions Education (MHPE) program, as well as how alums use HPE concepts in academic settings. The results show that the MHPE degree considerably improves graduates' confidence as faculty members, educational leadership potential, and pedagogical competence. These findings are consistent with global studies showing that formal HPE training enhances curricular alignment, instructional design, assessment literacy, and student-centered pedagogical practices and.[10,2] Graduates in this research reported a shift from teacher-centered to learner-centered methods, consistent with findings from programs in the Middle East, the Netherlands, and the United States.[11] The findings also showed the beneficial effects of MHPE training on the development of professional identities and career progression. In their institutions, participants experienced greater credibility, leadership possibilities, and recognition.[12] These results are consistent with research from Canada and the UK, where HPE graduates often work as curriculum leaders, program directors, and assessment experts.[13] The current analysis supports the idea that institutional transformation and academic leadership are sparked by organized faculty development initiatives.[14] However, this study identifies enduring issues with workload distribution, institutional culture, and low acceptance of educational credentials, especially in environments where clinical knowledge is valued more highly than academic proficiency. This result is in line with research from the Gulf and South Asia that shows organizational resistance when teachers try to change evaluation procedures or implement innovations.[15] The finding that participants felt more opposition in Allied Health and Rehabilitation Sciences than in medical and dentistry faculties is a noteworthy addition to this study.[16] This gap, which has not been extensively documented in earlier research, may be the result of differences in administrative structures, faculty makeup, or institutional maturity. The significant impact of external influences, such as institutional instructions or promotion requirements, on participants' decisions to pursue MHPE was another surprising discovery. A large portion of the international research highlights intrinsic motivation as the main reason people pursue HPE degrees, such as a love of teaching or a desire for academic advancement.[2] By demonstrating that extrinsic, institution-driven motives are important in the Pakistani setting, the current study provides complexity. The degree of engagement, expectations, and eventual practical application of HPE learning may be influenced by these reasons. Participants also pointed out a disconnect between

theoretical information that has been learned and its practical implementation. Despite MHPE programs increasing proficiency in curriculum design and evaluation, some participants found it challenging to implement changes due to hierarchical decision-making, deeply ingrained customs, and a lack of administrative support.[17] Similar conflicts between theory and reality have been documented in research from low and middle-income nations, where the implementation of HPE training is heavily influenced by institutional preparedness and resource availability.[18] This study highlights the necessity of institutional policies that support empowered educational positions and provide protected time for educational obligations.[19] Finally, participants stressed the necessity of formal mechanisms for incorporating MHPE graduates into curriculum design and governance structures, more chances for leadership positions, and ongoing institutional acknowledgment of HPE as an academic specialty. These suggestions align with global calls for strategic funding for competency-based reforms, digital learning, and educational leadership.[20] To improve Pakistan's educational capabilities, graduates also emphasized future goals such as the incorporation of artificial intelligence, simulation-based learning, and research mentorship.[16] Overall, the conversation shows that although MHPE programs have a significant positive influence on teaching quality and educational leadership development, their long-term effects depend primarily on institutional culture, administrative support, and professional recognition. The results identify opportunities for improvement in Pakistani health professions education and provide significant insights into the regional literature.[4] Future research should include MHPE graduates with varying lengths of experience, including those in the early or mid-stages of their programs, to provide a more comprehensive understanding of the program's evolving impact over time. Longitudinal studies could be conducted to track how the MHPE influences professional growth, teaching practices, and leadership roles across different stages of a graduate's career. Additionally, future studies may explore the broader institutional and systemic effects of MHPE training, including its contributions to curriculum reform, educational innovation, and faculty development in health professions education. Comparative studies across institutions or countries could also provide insights into the contextual factors that influence the perceived impact of MHPE programs.

LIMITATIONS

This study has several limitations. First, the sample's application to other settings and MHPE program types in Pakistan may be limited by the small sample size and institutional selection. Selection bias is also a concern, as there may be disparities between those who declined and those who participated. Despite careful efforts, the lead researcher's background as a dental surgeon and MHPE graduate may have influenced data collection and interpretation. Because participant opinions were collected only once, the study's cross-sectional design makes it challenging to assess long-term outcomes. Finally, even though theme analysis yields valuable information, the findings should be interpreted as context-specific understandings to guide future research and program creation because they are not generalizable.

CONCLUSIONS

Healthcare educators in Pakistan benefit greatly from MHPE programs, which enhance their research skills, employment opportunities, and instructional quality.

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REFERENCES

1. Khan S, Jamil B. Challenges in engaging students during an online health professions education course: an exploratory, qualitative study. Pak J Med Health Sci. 2022;16(5):1151-4.
2. Adnan S, Sarfaraz S, Ali SK, Abid F. Characteristics and motivational factors of candidates applying to the Master in Health Professions Education (MHPE) program. J Taibah Univ Med Sci. 2024;19(4):720–7. https://doi.org/10.1016/j.jtumed.2024.06.001
3. Forbes R. The value of vicarious experiences in health professions education. Educ Health Prof. 2022;5(3):130. https://doi.org/10.4103/ehp.ehp_30_22
4. Archer E, Schmutz AMS, Volschenk M, Jacobs C. How the mapping of threshold concepts across a master's programme in health professions education could support the development of mastersness. BMC Med Educ. 2024;24(1):1–12. https://doi.org/10.1186/s12909-024-05500-4
5. Al-Qerem W, Eberhardt J, Jarab A, Al Bawab AQ, Hammad A, Alasmari F, et al. Exploring knowledge, attitudes, and practices towards artificial intelligence among health professions' students in Jordan. BMC Med Inform Decis Mak. 2023;23(1):1–7. https://doi.org/10.1186/s12911-023-02288-4
6. Tekian A, Harris I. Preparing health professions education leaders worldwide: a description of masters-level programs. Med Teach. 2012;34(1):52–8. https://doi.org/10.3109/0142159X.2011.599895
7. Madi M, Hamzeh H, Griffiths M, Rushton A, Heneghan NR. Exploring taught masters education for healthcare practitioners: a systematic review of literature. BMC Med Educ. 2019;19(1):340. https://doi.org/10.1186/s12909-019-1777-6
8. Mohebi S, Parham M, Sharifirad G, Gharlipour Z. Challenges faced by health professions educationists en route to educational reforms in Pakistan. J Educ Health Promot. 2018;7(1):1–6. https://doi.org/10.4103/jehp.jehp_53_17
9. Commission E. Perception of fresh graduates and new academic faculty regarding specialty of "Health Professional Education" as a career: a multicentre study in Pakistan. J HBS M&DC. 2024;4(1):1–23.

10. O'Callaghan C, Sandars J, Brown J, Sherratt C. The value of master's degree programmes in health professions education: a scoping review. Clin Teach. 2024;21(4):e145–54. https://doi.org/10.1111/tct.14564
11. Alanazi AA, Mohamud MS. Masters of Health Professions Education: review of current programs in Saudi Arabia. Health Prof Educ. 2020;6(2):136–41. https://doi.org/10.1016/j.hpe.2019.12.002
12. Challa KT,Sayed A,Acharya Y. Modern techniques of teaching and learning in medical education: a descriptive literature review. MedEdPublish. 2021;10(1):17. https://doi.org/10.15694/mep.2021.000017.1
13. Naveed A, Siddiq A, Khalid S, Shaikh G, Haque A, Farid H. Role of a teacher in a blended learning MHPE program: a qualitative analysis. Ann Punjab Med Coll. 2024;18(1):54–8.
14. Artino AR, Cervero RM, DeZee KJ, Holmboe E, Durning SJ. Graduate programs in health professions education: preparing academic leaders for future challenges. J Grad Med Educ. 2018;10(2):119–22. https://doi.org/10.4300/JGME-D-17-00594.1
15. Tekian A, Roberts T, Batty HP,Cook DA, Norcini J.Preparing leaders in health professions education. Med Teach. 2014;36(3):269–71. https://doi.org/10.3109/0142159X.2013.857520
16. Schermerhorn J, Wilcox S, Durning S, Costello J, Norton C, Meyer H. Masters in health professions education programs as they choose to represent themselves: a website review. MedEdPublish. 2023;13(2):13. https://doi.org/10.15694/mep.2023.000013.1
17. Joyner HS. Curriculum mapping: a method to assess and refine undergraduate degree programs. J Food Sci Educ. 2016;15(3):83–100. https://doi.org/10.1111/1541-4329.12093
18. Education H, Identifier DO, Document E, Education H, Rights P, Manuscript A, et al. Balancing supportive relationships and developing independence. Edinburgh Res Explor. 2024;1(2):30.
19. Peel KL. Beginner's guide to applied educational research using thematic analysis. Pract Assess Res Eval. 2020;25(1):1–16. https://doi.org/10.7275/ryr5-k983
20. van Diggele C, Burgess A, Roberts C, Mellis C. Leadership in healthcare education. BMC Med Educ. 2020;20(Suppl 2):1–6. https://doi.org/10.1186/s12909-020-02288-x

AUTHORS CONTRIBUTION

Ruqayya Shahid *- Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*

Humera Adeeb - *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*

Muhammad Mateen Shahid- *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*

The authors accept responsibility for all aspects of the work and will ensure that any concerns regarding the accuracy or integrity of any part are properly investigated and resolved.