Original Article

Study of the Factors that Influence the Completion of the Thesis of Master of Health Professions Education Graduates: A Qualitative Study

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Abstract

Objective: To investigate the experience of timely thesis completion by the graduates of the Master of Health Professions Education (MHPE) program in Pakistan.

Study Design: Qualitative interpretative study design.

Settings: Riphah University Islamabad and HITEC-IMS Taxila, from May 2018 to June 2019.

Materials and Methods: Data was collected by semi-structured interviews. All interviews were carried out in person. Detailed notes were taken, and conversations were audio-recorded. Three authors analyzed data independently using iterative thematic analysis. Inconsistencies were resolved through discussion.

Results: Two major themes out of five were identified: Intrinsic attributes of the graduates and the role of the supervisor, including sub-themes of intrinsic motivation, self-regulation, age of the participant, supervisor-trainee relationship, supervisor's availability, supervisor's commitment, and personality traits of the supervisor. Positive relationship with a committed supervisor who was readily available and had a friendly, yet professional attitude aided in the completion of the thesis on time while a supervisor lacking these traits posed challenges for the graduates.

Conclusion: Several factors were identified which influenced thesis completion among the graduates of MHPE in Pakistan. The five major ones consisted of the following, 1) Research Project-Related Problems; 2) Support System; 3) Supervisor Guidance; 4) Attributes of the Researcher; 5) Conducive Research Environment.

These results can help influence policies to evaluate and improve this program.

Keywords: MHPE, education, Thesis, Health profession, Intrinsic motivation, Supervisor.

Introduction

For the last two decades, there has been a consistently increasing need for graduates in medical education. According to principles laid down by the pioneers of education, rigorous medical а curriculum implemented by a dedicated faculty actively engaged in research is essential for health care advancement.¹ The curricula designed and implemented under guidance by experts in the field is critical for the improvement of the health education system and health system of the country, in the long term.² To address this need, health care professionals are expected to advance their knowledge through postgraduate studies in medical education. This is particularly important in developing countries where the traditional way of teaching is prevalent and skills to practice evidence-based medicine are lacking.³

Master's in Health Professions Education is one of the popular programs known to prepare leaders in educational theory and practice all over the world. To meet the global advancement in medical education, the national regulatory body in Pakistan directed the establishment of departments of medical education (DME) throughout the country in 2008.^{2,8} This caused an upsurge in demand for trained faculty to run these departments. In response, the "Master's in Health Professions Education" (MHPE) program was initiated in more than eight universities across the country.^{3,6} This blended teaching program consists of face-to-face sessions and online learning periods. Medical doctors with diverse backgrounds who are interested in medical education join the course. Along with coursework, thesis completion is a major requirement to complete the course. Writing a research-based thesis requires evidence-based practice and experiential learning. Under the guidance of a supervisor, personal effort on part of the trainees is required to synthesize and apply knowledge for the successful completion of the thesis. Timely completion of the thesis is required to attain the degree.9 However, not all doctors who get enrolled in the MHPE program are able to complete this essential component of the course.¹⁰ Several factors may be responsible for success or failure to conclude this task. Although the MHPE program is being conducted in Pakistan for over a decade, these factors have not been explored.

Above in view, this study was designed to explore the thesis experiences of graduates who completed their degrees in MHPE programs at different institutions in Pakistan. Recognizing challenges and understanding the experiences of these professionals, of this relatively novel specialty, may help guide planned interventions to promote and develop medical education programs in the future. This is especially critical in developing countries like Pakistan where the importance of quality medical education cannot be understated.⁸

Materials and Methods

Study Design and Participants: After ethical approval was acquired from the Institutional Review Boards (IRB) of International Riphah University and HITEC-Institute of Medical Sciences, a qualitative interpretative study was conducted for over a year from May 2018 to June 2019.

Participants were selected through purposive sampling in which participants are intentionally selected to comprehend a critical phenomenon.10 Individuals who had completed their MHPE degree from different universities of Pakistan who were working in Riphah University and HITEC-IMS were emailed about the study and 14 MHPE graduates who were willing to participate were included in this study whereas doctors who could not complete their MHPE were excluded.

Data Collection Method: After careful consideration, an interview Form (IF) was planned. Section I of the IF consisted of informed consent and section II comprised of validated questions and space for answers. After a pilot study on two interviewees, language changes were made and IF was finalized.

Afterward, using the IF, semi-structured interviews of 14 participants were conducted in person, until data saturation was achieved. Interview questions (23 items) based on a methodological conceptual framework of the components of thesis completion were developed. The interviews were recorded. The conversations were later transcribed precisely and emailed to participants for verification.

Data Analysis: Data was analyzed by using thematic analysis, major themes were identified as main challenges encountered during thesis completion. Three authors analyzed audio recordings and written notes independently and identified a list of themes. These themes were then discussed amongst authors and sub-themes were defined. Themes and sub-themes were discussed and revised until data saturation was reached. Finally, findings were discussed with all the investigators which served as a means of member checking to ensure that the final themes were representative of the interviews that each investigator had conducted.

Results

Initially, 40 doctors were invited through e-mail to participate. Fourteen doctors were willing to be interviewed. Table 1 shows the demographic information of the participants. Response rate (38%). The mean time from commencement to completion of the MHPE program for these participants was 3.2 years (range = 2-4.6 years).

Two major themes were identified.

- 1. Intrinsic Factors: Main personal attributes of the researcher that facilitated the completion of the thesis and their absence posed hindrance.
- 2. Extrinsic factors: Supervisor's Role to facilitate thesis-related challenges. Seven sub-themes

All interviewed graduates commented on one or more intrinsic and extrinsic factors that helped them succeed in completing their master's thesis and results with representative quotes are presented in Table 2 were considered under these two main themes.

Sample	, ,
<u>Characteristic</u>	<u>Sample (n= 14)</u>
Gender	N (%)
Male	04 (29)
Female	10 (71)
Qualification	
MPhil, MHPE	10 (29)
FCPS, MHPE	04 (71)
Designation	
Professor	8(57.14)
Associate Professor	6 (42.85)
Assistant Professor	
Lecturer	
Age	
35-45	8 (53)
46-55	6 (47)

Table 1: Demographic Characteristics of the Study

Intrinsic	Candidate #1: - "Self-motivation plays quite a significant role. I was motivated, I wanted to
Factor: Self-	be an educationist. My motivation resulted in the completion of the thesis on time"
Motivation	Candidate# 2: - "Self-motivation is very important especially for working people. For
and Regulation	higher studies, working people have the burden of their work as well and if they do not
	complete their tasks in time so, it adds to their overall burden. No one can work without
	being self-motivated as that is need of the hour"
	Candidate#6 "I must say the level of patience, passion, and determination are very
	important. No one can push you to do a post-graduation degree as you are an adult
	learner."
	Candidate # 9 "To me, I think the most important thing is time management and setting
	your priorities. If somebody is determined and prioritizes the tasks for timely completion,
	he generally accomplishes"
Main Extrinsic	Candidate# 2 "Supervisor is the most important person in your research"
factor:	Candidate# 5 "My supervisor was a very busy person, he did not guide me as I collected the
Attributes of	data myself and analysed it by myself. My seniors and colleagues guided and helped me in
the Supervisor	this regard. The role of supervisor should be supportive otherwise research becomes very
	difficult."
	Candidate# 6: "Supervisor should be an experienced researcher and only then he/she can
	guide you well and can foresee all the upcoming problems. A supervisor can help the
	researcher sail through the storm."
	Candidate# 9: Supervisor matters a lot! One of the supervisors I know calls his trainees
	regularly and takes notice of their progress. One trainee was not responding so the
	supervisor went to his office to inquire about the problem.
Intrinsic Factor: A	ttributes of the Researcher successful completion of their master's course when

All participants commented on the attributes that helped them to complete their master's thesis. The results are depicted in Table 2. Several factors were considered essential traits in the progression towards successful completion of their master's course when present and their absence negatively affected the completion of a thesis. Sub-themes were identified as self-motivation, self-regulation, age of the participant, and career progression. Almost all the participants

Table 2: Intrinsic and Extrinsic Factors

believed that their self-motivation played a critical role in the progression of their thesis. The main motivating factors to complete the thesis were to be better teachers, progression in their career, and reaching a milestone. Most of the respondents were motivated to learn to teach better as well as implement changes in their institutions. Three of the interviewees also stated that during face-to-face sessions the level of motivation is better as compared to that during remote learning. The social interaction with other colleagues during face-to-face sessions motivates them to complete their thesis according to another participant.

The presence of self-regulation was also described as an important attribute that played a crucial role in the completion of the thesis on time. The participants were able to complete the thesis when they set aside an allocated time for its completion. The busy schedule of most of the participants was their greatest hindrance to complete the thesis in time. According to one participant, had she regulated her work-life balance better, the thesis would have been completed in time.

Main Extrinsic actor: Attributes of the Supervisor

Regarding the role of the Supervisor in thesis completion, a few sub-themes were identified. These included the Supervisor-student relationship, Supervisor's commitment, Availability of Supervisor, Personality traits of the Supervisor.

One of the main factors responsible for the completion of a timely thesis was the relationship of the interviewee to his supervisor. The supervisor's availability and commitment were also directly related to the timely completion of the thesis. According to one participant, thesis writing was positively affected by input from an international supervisor although his availability was limited. Contrary to this, another participant communicated that thesis writing was greatly hampered by the inadequate availability of the supervisor. This problem was more pronounced when the supervisor was from another country and communication was possible only remotely and at specific times.

Among personality traits of the supervisor, friendliness and give timely feedback was appreciated by all interviewees. Similarly, ability, knowledge, and readiness to share information were also considered as essential traits aiding the completion of the thesis.

Discussion

The current study aimed to gain an insight into the factors which influenced the thesis writing of postgraduate medical educationists. Among intrinsic determinants, one of the main factors considered by the interviewees was their personal motivation and self-regulation. Self-regulation has been defined as the process by which students take charge of their learning and use individualized strategies to monitor their task achievement.¹² Furthermore, motivation goes hand in hand with self-regulation and is essential for the effective control of task completion.¹¹

The participants suggested that after each face-to-face contact session, they became more motivated and self-regulated, but the motivation and self-regulation decreased over time especially during the intervals of remote learning. This is in line with previous studies which document difficulty to regulate learning and goal setting in distant learning environments.⁵ According to social-cognitive theory, motivation, and self-regulation are enhanced through reciprocal social and environmental interactions.¹⁵ Lack of contact with peers and instructors may have decreased intrinsic motivation according to self-determination theory according to which social relatedness is essential and one of the basic psychological needs modulating motivation.

It is suggested by empirical evidence that individuals tend to passively procrastinate during periods of low motivation.¹⁶ This passive procrastination is particularly associated with distance learning environments.¹⁷

To achieve their goals, they must formulate and modify strategies, manage their time, and individualize their learning. All this may overwhelm the trainee, posing difficulties to complete the given task on time.¹⁸

The second theme identified as a factor affecting the completion of the thesis was the role of the supervisor. It is well documented that the expertise provided by the supervisor is indispensable to develop research skills and produce a quality thesis.¹⁹

Among the sub-themes, the supervisor-student relationship was considered important by all participants. The value of good communication and working relationship between supervisor and students have been shown previously 20 Psychosocial interactions between the supervisor and student helps to develop confidence and self-efficacy. Studies show that a supportive mentor-supervisor relationship plays a vital role in developing competencies like motivation, attention, problem-solving, and self-esteem.20 Studies also link positive teacher-student relationships to better academic performance.²⁰ There is a consensus among researchers, teachers, and

scholars that motivation is one of the variables that determine academic success and enhances learning.

Better relations between the supervisor and the students are critical to motivating them to learn through fulfilling their basic needs according to the theory of self-determination. Therefore, students need to communicate with their supervisors for autonomy, competence, and relatedness.¹³ A supervisor who develops a personal and caring relationship and shows genuine interest, leads to the fulfilment of the need for relatedness. Moreover, it is documented that need satisfaction enhances internal motivation.¹³

Similarly, Supervisor's availability and commitment also impacted the completion of the thesis in our sample of participants. In the case where the supervisor was residing abroad, his time commitment and availability were compromised. Detailed and timely feedback is critical. Lack of commitment and limited availability of a supervisor can be major barriers to the completion of the thesis.

Another sub-theme identified relevant to the supervisor was his personality traits. Most respondents considered the supervisor's personality to be a critical factor in the completion of their thesis. A supervisor having a positive influence on thesis completion was reliable, competent, had listening skills, encouraging students, provided timely feedback, and was understanding.

This is in accordance with the Social Cognitive theory which suggests that the mentors can effectively regulate student learning through interaction and positive relationships. Learning results from reciprocal personal among behavioral interactions and environmental factors.20 Acting as role models, teacher's constructive feedback and encouragement are directly linked to the trainee's task achievement.²⁰ Motivation to learn and achieve increases when the student believes that the teacher cares about them. A warm and friendly environment facilitates adaptation and motivates the learner to interact. They can take intellectual risks, and this enhances their learning. On the other hand, relational conflict has been shown to lower self-esteem and is associated with lower achievement. Students were inclined to work harder if they experienced a caring attitude from their teachers; that motivated students to learn better and learn by themselves.²⁰ Accordingly, steps can be taken to address the difficulties faced by MHPE trainees to enhance their thesis completion experience.

Above all, supervisors and teachers should be better trained to help trainees develop strategies to selfregulate and motivate during the periods of remote learning sessions. Interaction opportunities during periods of distant learning should be provided. These may be in the form of video conferences/online forums to discuss progress and trainee virtual groups for group projects. Senior fellows who are ahead in their thesis completion should pair up with juniors to provide peer mentorship. This may alleviate pressure and help novices to understand the requirements and expectations.

The role of the supervisor is critical during this process; training sessions should be frequently organized to reinforce the importance of regular feedback and development of skills to supervise effectively. Only those should be recruited as supervisors who can commit to the exhaustive time requirements of this position.

Limitations

It should be mentioned that this study came with certain limitations which could change the results of the study. Researchers who couldn't complete their Masters in Health Profession Education could not be interviewed since were difficult to approach. Certain Intrinsic or extrinsic factors may have been over or underestimated due to this limitation.

Conclusion

It is evident that the successful completion of the MHPE thesis depends on multiple factors. The rising demand for trained faculty in medical education necessitates further investigation of these factors. The development of self-regulation strategies through qualified and competent mentorship may play a key success factor in thesis completion. A structured program for the professional development of supervisors is essential. Effective and timely feedback may increase internal motivation and self-regulation for timely thesis completion.

It is advised that in future studies conducted on similar topics, the researchers should also mention the intrinsic and extrinsic factors from the perspective of the supervisors.

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