A Descriptive Study of Thesis Completion Challenges Among Medical Students

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Abstract

Background: The Final Project (FP) is a mandatory course for medical education students, typically undertaken in the sixth semester. It is divided into two stages: Final Project 1 (FP1) and Final Project 2 (FP2). In FP1, students develop, document, and present a research proposal, while in FP2, they execute the planned research, analyze the results, and present their findings. A decline in FP2 completion rates was observed in 2024, raising concerns about factors affecting student performance.

Methods: A descriptive analysis methods approach was used, combining quantitative surveys (n=91) and qualitative interviews. The survey, with 10 questions on a 4-point Likert scale, assessed factors affecting FP2 completion. Semi-structured interviews and written responses explored deeper insights, with thematic analysis identifying key barriers.

Results: Survey results revealed moderate motivation (mean=2.77) and high procrastination (mean=3.01). Time management (mean=2.86) and personal issues (mean=2.35) were significant challenges. The main delays were lack of motivation (36.26%) and time management issues (27.47%). Themes from interviews included motivation, time management, supervisor support, data access, and mental health.

Conclusions: Students face key challenges in completing the FP2 course, particularly low motivation, poor time management, and limited supervisor interaction. Addressing these issues through enhanced intrinsic motivation, effective feedback, and structured time management can foster more successful and high-effort student profiles.

Introduction

The Final Project (FP) is a mandatory course for medical education students, culminating in the production of an academic thesis and a first research endeavor that can be published. This project represents students' commitment and dedication to their chosen field of medicine, reflecting their motivation, interests, and perspectives on specific issues. Each student is assigned a faculty advisor who provides guidance and feedback throughout the thesis-writing

process. Weekly meetings between students and advisors are encouraged to discuss each chapter of the thesis, which includes defining the problem, background, research objectives, significance, literature review, theoretical framework, methodology, results discussion, and conclusions.[1]

In addition to writing the thesis, students must fulfill administrative requirements to ensure the FP runs smoothly. Ideally, successful completion of FP requires collaboration and mutual commitment between students and advisors. However, delays in the FP2 process can have significant consequences, particularly for medical students whose progression to clinical training depends on timely FP2 completion. These delays can arise from various factors, warranting a closer examination of challenges impacting the FP process.

Material And Methods

This study employed a mixed-methods approach, combining quantitative descriptive and qualitative methods. The mixed-methods design was chosen to capture a comprehensive understanding of the challenges faced by medical students in completing their Final Project 2 (FP2). Quantitative data provided an overview of the difficulties, while qualitative data offered deeper insights into the underlying issues.[2]

The study population consisted of sixth-semester medical students enrolled in the FP2 course. A purposive sampling method was used to select participants. A total of 91 students completed the survey, which served as the primary instrument for quantitative data collection. The survey consisted of 10 questions designed to evaluate factors affecting FP2 completion, measured on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree). The survey underwent face validation to ensure clarity and relevance. Quantitative data were analyzed descriptively, with frequencies and percentages used to summarize the responses. The Likert-scale data were further analyzed by calculating the mean and standard deviation for each question to identify trends in student perceptions.[2,3]

For qualitative data collection, semi-structured interviews and written responses submitted via Google Forms were utilized. The interviews aimed to explore students' experiences and challenges in greater depth. The qualitative data were analyzed using thematic analysis. The researchers began by reading the raw data multiple times to identify recurring patterns and commonalities. Similar pieces of information were grouped into themes that addressed the research questions. These themes were then analyzed and interpreted in the context of existing literature to draw meaningful conclusions.

Result

The survey conducted among 91 sixth-semester medical students revealed key challenges and factors impacting the completion of Final Project 2 (FP2).

Quantitative data showed varying levels of student motivation and engagement (Table 1). The average motivation level for completing FP2 was moderate (mean = 2.77, SD = 0.73), with frequent procrastination reported (mean = 3.01, SD = 0.74). Time management difficulties were prevalent (mean = 2.86, SD = 0.71), while personal issues disrupting focus had a lower average score (mean = 2.35, SD = 1.03). Students expressed moderate confidence in their ability to complete FP2 in the near future (mean = 2.32, SD = 1.02).

Regarding advisor interaction, students generally felt supported (mean = 3.18, SD = 0.78) and received clear feedback (mean = 3.16, SD = 0.73). However, challenges with communication were reported by some students (mean = 2.13, SD = 1.02). The need for in-depth guidance was also moderately high (mean = 2.79, SD = 0.84).

Table 1. Final Project Evaluation (n=91)

Dimension	Question	Mean	SD	Min-Max
Motivation	How motivated are you to complete your final project?	2.77	0.73	1-4
Procrastination	How often do you procrastinate on working on your final project?	3.01	0.74	2-4
Time management	Do you have difficulties with time management?	2.86	0.71	1-4
Personal problem	Do your personal problems interfere with your focus on completing your final project?	2.35	1.03	1-4
Confidence	How confident are you in completing your final project in the near future?	2.32	1.02	1-4
Supervision frequency	How often do you meet with your supervisor?	2.68	0.74	1-4
Supervisor support	Do you feel supported by your supervisor?	3.18	0.78	1-4
Supervisor feedback	How clear is the feedback you receive from your supervisor?	3.16	0.73	1-4
Communication difficulty	Do you find it difficult to communicate with your supervisor?	2.13	1.02	1-4
Supervision need	Do you feel the need for more in-depth supervision?	2.79	0.84	1-4

The primary factors causing delays in FP2 completion as shown in Table 2, included a lack of motivation (36.26%), difficulties with time management (27.47%), and personal or health issues (12.09%). Fewer students reported delays due to inadequate advisor guidance (3.30%) or challenges in finding references (6.59%).

Table 2. Main Causes of Delay (n=91)

Statement	n	Percentage
Lack of motivation	33	36.26
Difficulty in time management	25	27.47
Lack of guidance from the supervisor	3	3.30
Personal and health issues	11	12.09
Difficulty in finding references	6	6.59

The majority of students identified intensive guidance (47.25%) and mental support or counseling (39.56%) as critical to completing FP2 (Table 3).

Table 3. Things That Can Help in Completing the Thesis (n=91)

Statement	n	Percentage
Intensive supervision	43	47.25
Mental support or counseling	36	39.56

The qualitative analysis of the barriers to thesis completion among medical students revealed several key themes, each of which highlighted the challenges students face in successfully completing their theses.

1. Motivation

Motivation emerged as a critical factor in the thesis completion process. Many students identified internal motivation, such as self-drive, as a significant influence on their ability to overcome procrastination. One student noted, *"Motivation and I am afraid to submit my thesis for defense because the lead examiner is strict.*" This fear, often driven by a desire to avoid failure, frequently interfered with their ability to engage with the thesis process. Additionally, students expressed anxiety and fear about interacting with their advisors or examiners. For instance, one participant shared, *"I'm afraid to contact my advisor because I haven't updated him about my thesis for a long time."* External motivation also played a significant role, with students highlighting the importance of support systems from family, friends, and mentors. *"Support from friends who always remind me and help explain things I don't understand"* was cited as an essential motivator.

2. Time Management

Time management was another major barrier. Procrastination, or the tendency to delay work, was a frequent challenge mentioned by participants. One student explained, *"Motivating myself and reducing the time spent procrastinating."* Balancing the demands of regular coursework alongside thesis revisions was another issue students faced. As one participant noted, *"Managing time between regular classes and revising my thesis"* proved to be a constant struggle. Additionally, students expressed a need for more structured deadlines to ensure progress. *"Set deadlines for choosing a title and completing each chapter to avoid delays"* was a recommendation from one

participant who felt that a lack of concrete timelines contributed to delays.

3. Supervisor Support

The role of the thesis supervisor was also highlighted as a critical factor in the completion process. Students frequently mentioned the need for supervisors who are accessible and responsive. One student remarked, *"A supervisor who is more active in replying to WhatsApp messages"* as a desired quality. Moreover, the quality of feedback was frequently cited as a challenge. As one participant stated, *"Clearer guidance from my supervisor"* would help in making their thesis revisions more manageable. Students also expressed a preference for more frequent and intensive interactions with their advisors, particularly when working through complex sections like data analysis. *"Intensive supervision for data analysis classes"* was a key request.

4. Data Availability

Access to data was a significant barrier for many students, particularly those working in specialized fields. One student explained, *"I need enough samples. Diabetic retinopathy cases and their severity are rare at S Hospital."* Institutional barriers, such as delays in obtaining ethical approval, were also mentioned as obstacles. One student suggested, *"Speed up the ethical approval process so that the data collection can proceed smoothly."* Students also indicated a need for additional academic support in data collection, with one participant stating, *"Help with sample collection"* as a vital aspect of overcoming this barrier.

5. Mental and Emotional Support

Mental and emotional support were critical factors in managing the stress and anxiety associated with thesis writing. Many students acknowledged the toll that the thesis process took on their mental and physical health. As one student described, *"Improving my mental and physical health first so I can focus on my thesis"* was a necessary step before tackling their academic work. Support from family and friends also played a significant role in helping students maintain emotional stability. One participant expressed, *"The prayers and support from my parents"* helped them cope with the stress and maintain their focus on completing their thesis.

Discussion

The majority of students reported experiencing a decline in motivation during the implementation of Final Project II (FP2). This was attributed to various factors, including internal challenges such as lack of self-confidence and dilemmas regarding the likelihood of success. Howard J.L. et al. highlighted that intrinsic motivation is closely associated with academic success and student perseverance.[4] External factors also contributed to the decline in motivation; however, according to Self-

Determination Theory, extrinsic motivation can still be regulated and, thus, does not necessarily correlate with performance and persistence.[5] The type of motivation possessed by students may be a key determinant in how well they adapt to their academic environment.

Another prevalent obstacle was students' tendency to procrastinate and their difficulty in balancing academic responsibilities with research obligations. Many students reported a lack of structured time management, which often led to neglect of their research projects or working on them only close to the deadlines. Valle et al demonstrated that poor time management significantly increases the time students spend on other academic assignments.[6] Students who struggle with time management often fall into the "difficulties profile" or "low effort profile," both of which are associated with reduced academic efficiency. Implementing appropriate strategies to support students in developing effective time management skills during their studies is therefore crucial for academic success. High academic performance is often linked to students who demonstrate effective time management.[6,7]

Students also expressed concerns about the limited interaction with their academic supervisors. Many found it difficult to schedule meetings or receive timely and constructive feedback, which led to stagnation in research progress and a decline in self-confidence. According to Kamphinda and Chilemba, supervisory support plays a critical role in fostering a social environment that enhances the effectiveness of clinical learning.[8] Several factors, including academic workload, environmental and social influences, and prior experiences, may contribute to the limited interaction between students and supervisors.[9] Mubukee A.G. et al, found that positive relationships between students and supervisors significantly influence the effectiveness of the supervisory process. Furthermore, a lack of feedback from supervisors on students' work can negatively impact research performance.[10] Kamphinda emphasized that effective feedback mechanisms can enhance student confidence and positively affect their academic practices. Praise from supervisors also contributes to increased self-confidence.[8] Moreover, ongoing interaction between students and their supervisors fosters motivation, indicating that regular supervisory presence is essential for identifying solutions to emerging challenges and for improving students' research performance.

Conclusion

Studies indicate that students face significant challenges in completing the Final Project II (FP2) course. Among these, lack of motivation, inadequate time management, and limited interaction with academic supervisors were found to be the most influential factors and, therefore, may

require greater attention from the faculty. Course coordinators need to recognize that fostering intrinsic motivation in students is a key factor in ensuring their success. Moreover, effective feedback from supervisors, combined with encouragement to develop structured time management skills, can help students shift toward more effective and high-effort academic profiles.

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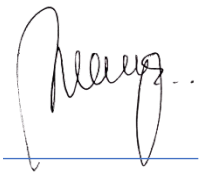

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