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Walden University 2024

Abstract

Female Medical Students' Lived Experiences of Financial Stress and Coping

by

Untara Shaikh

MA, Walden University, 2022

BS, Liaquat University of Medical and Health Sciences, 2005

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Psychology

Walden University

February 2024

Abstract

The purpose of this study was to explore coping strategies among female medical students who suffered from financial stress. The adaptation model of nursing, along with Lazarus and Folkman's coping theory, provided a conceptual framework for understanding and addressing financial stress and coping among female medical students. The research employed a phenomenological approach, utilizing face-to-face, semistructured interviews of selected participants who met the inclusion criteria, consisting of female medical students aged 18 years or older currently enrolled in medical university/college. Giorgi's phenomenological analysis model guided qualitative data's systematic examination and interpretation. This study offered invaluable insights into the intricate relationship between financial stressors and emotions, emphasizing the pressing need for comprehensive support systems within medical education institutions. Four themes and 11 subthemes were identified. Results revealed that despite manifold challenges, participants employed diverse coping mechanisms, underscoring the significance of financial literacy, social support, professional assistance, and self-care strategies. The findings may support the development of interventions to help reduce academic stress and promote healthy coping behaviors among female medical students. Doing so may lead to positive social change, ultimately increasing the number of welladjusted female doctors who graduate from medical schools.

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Dedication

I dedicate this dissertation and my PhD to my beloved children, Zoha, Rushaan, Zeeshan, Abeer, and Zara. You are the embodiment of my hopes and dreams, and it is for our future that I have tirelessly endeavored to contribute a grain of knowledge through this academic pursuit. Zoha! Your belief in my potential has been a force that propelled me forward through late nights and daunting obstacles. You have been both my sanctuary and my counsel, keeping me grounded and focused on the goal ahead. May this work reflect the strength of our bond and the collective spirit of support we share. This achievement is not mine alone but a testament to the collective power of our shared dreams and ambitions. May you see in these pages the value of dedication and the power of perseverance.

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Chapter 1: Introduction to the Study

Financial problems predispose many individuals to financial stress, which has adverse impacts for affected individuals, their interpersonal relationships, and the broader society. The identified problems across households associated with financial stress include unstable relationships and marital conflict, which distract parents from their responsibility to nurture their children, reducing parental support (Hughes, 2021).

Financial stress has an adverse impact on an individual's mental health and could lead to depression and anxiety. Physical health effects include physical impairment, worsening self-care, pain, problems performing usual activities, poor self-assessed health, and poor health-related behaviors (French & Vigne, 2019). Consequences of financial strain are societal and economic and include intimate partner violence, marital conflict, lowered couple time quality, intense disagreements, and lower marriage chances (French & Vigne, 2019).

Financial stress is a common problem facing medical students. Academic stress is the most typical source of stress among medical students who use avoidant strategies to cope with stress (Henderson et al., 2021). Financial stress has been reported and identified as a less common cause of stress among health sciences students (Henderson et al., 2021). However, financial stress is pervasive and is associated with adverse physical health, psychological morbidity, and ineffective coping.

However, there are differences in stress levels among female and male students.

Even though financial stress affects most students, research indicates that female and sexual minority students may experience an increased impact from financial stress (Hoyt

et al., 2021). The inequalities of stress in women in comparison to men are also comparable to the inequality of stress in sexual minorities in comparison to their cisgender, heterosexual counterparts (Hoyt et al., 2021). There are very few up-to-date studies that have as their focus coping strategies among female medical students, according to my review of the literature.

Researchers have called for further exploration of the effects of stress on subgroups to better identify the consequences. French and Vigne (2019) recommended further research into financial strain dynamics, coping strategies, heterogeneity of coping, the association of financial stress with health outcomes, sensitization, and habituation for welfare based on chronic stress. Similarly, Hoyt et al. (2021) recommended the exploration of stress by gender subgroups. To address this gap in the literature, I delved into female medical students' financial stress and coping strategies. Guided by a mission for positive social change, this study aims to address a critical societal challenge—the highly stressful population of female medical students. By examining the impact of financial stress and experiences of coping among female doctors, this study has the potential to inform the development of interventions that alleviate financial stress and promote well-being among female medical students.

In this chapter, I discuss the background of the research topic, highlighting the research focusing on stress among students and, notably, financial challenges, followed by an identification of the gap in knowledge and justification for the study. I then address the research problem and provide a logical argument as to why it is relevant, current, and significant to health psychology. The following section includes the study's purpose.

Next, I address the research question of the study and provide an overview of the study's conceptual framework and how the two theories I used related to the study approach and the research question. After describing the nature of the study, I define key terms and discuss the assumptions, scope and delimitations, limitations, and significance of the study. The chapter concludes with a summary of key points.

Background

Health-related, academic, or psychosocial stressors are the most scrutinized stressors in medical school. The most common form of stressor that has been extensively captured in literature among medical students is academic-related, such as poor performance, disappointment with lectures, frequency of examinations, length of the academic syllabus, lack of interest in medicine, and other worries about academic performance (Gazzaz et al., 2018). Academic studies and other life pressures result in emotional exhaustion, little time for learning, unhealthy lifestyles, social isolation, increased stress, and academic performance (Bergmann et al., 2019). Other studies have captured financial stress as a risk factor for perceived stress among medical students. Economic and financial status determine perceived stress levels, and poor financial status has been associated with high stress levels among medical students (Hill et al., 2018; Leombruni et al., 2022). In one study, financial pressure was prevalent in 8.58% of the participants, accompanied by inadequate time for recreation and hobbies and ineffective coping strategies such as alcohol consumption, smoking, and drug abuse in less than 8% of the population (Ragab et al., 2021). In another study, debt was a risk factor for poor academic performance and adverse mental health outcomes (Pisaniello et al., 2019).

Medical students with debt are under much study pressure, have poor sleeping habits, or are more likely to show signs of sadness and anxiety (Shao et al., 2020).

Transitioning from the challenges faced by medical students, it is crucial to recognize that financial stress is a pervasive issue affecting households, causing unstable relationships, adverse mental health impacts (e.g., depression and anxiety), physical impairment, worsening self-care, somatic pain, problems in daily activities, poor selfassessed health, poor health-related behaviors, intimate partner violence, marital conflict, lowered couple time quality, intense disagreements, and lower marriage success as French and Vigne (2019) highlighted. One review captured consistent associations between depressive symptoms and low-income populations, linking depression to financial stress, such as unsecured debt, material assets, and financial hardships (Guan et al., 2022). High stress levels can also lead to psychological morbidity among medical students (Kumar et al., 2019; Mirza et al., 2021; Slimmen et al., 2022). Acute stress has pro-inflammatory effects, whereas intense stress leads to imbalance and antiinflammation. Furthermore, the financial burden is a risk factor for adverse psychological health. Increasing stress levels among medical students can have deleterious short- and long-term effects, including poor performance and poor quality of life. Anxiety, depression, and stress among medical students are associated with adverse psychological well-being and poor satisfaction with life (Lopes & Nihei, 2021).

In the pursuit of understanding coping heterogeneity across genders, particularly the distinct experiences of female medical students compared to their male counterparts, this study aims to fill a crucial gap in the current literature. The varied nature of research

on gendered differences is a compelling rationale for our investigation. Through this study, we endeavor to unveil the coping mechanisms employed by female medical students, recognizing the significance of their input in shaping lifelong coping skills and stress management strategies. By delving into the intricacies of stress and coping among female medical students, we aspire to contribute to developing targeted stress reduction programs and implementing effective coping strategies. As we embark on this journey, the insights gained may play a pivotal role in advocating for system-level interventions, aligning with the recommendations of Hill et al. (2018) to enhance support structures, facilitate career planning, and foster a conducive environment for the well-being of female medical students.

Problem Statement

Enrollment in "U.S." medical schools is growing steadily. The Association of American Medical Colleges (AAMC) reported an increase in 1st-year students' enrollment in U.S. medical schools by 52% from 2002 to 2022. Over 21,000 students enrolled in medical schools, and over 8,100 enrolled in osteopathic medicine programs (DO) in 2018 (Association of American Medical Colleges, 2022). In 2021, a total of 22,666 enrolled in medical schools. The number of women applicants increased in 2022, while the proportion of medical students enrolled in U.S. medical schools was 54%. More women have been applying in the recent medical school application cycle than ever before. The AAMC reported that 53.5% of women applicants sought admittance to MD programs and 53.4% to DO ones. MD (Doctor of Medicine) and DO (Doctor of Osteopathic Medicine) are distinctive medical degrees with variations in philosophy,

curriculum, and training methods. MD programs align with the allopathic tradition, emphasizing conventional medicine, whereas DO programs adhere to osteopathic principles, emphasizing holistic patient care. Both MDs and DOs contribute significantly to the healthcare system, and the decision between the two paths is often influenced by personal preference and alignment with an individual's approach to patient care (Contributors, 2023).

In reviewing the literature, I found no current studies on coping heterogeneity across genders, notably female medical students versus male ones. According to Ogunyemi et al. (2020), women in colleges face gender discrimination, affecting their perception of financial stress, and are more likely to take out loans to continue their studies to earn their degrees. Various coping strategies have been used in the face of financial stress among all genders and identities. There are reported gaps regarding the level of implementation of system-level interventions, such as access to professional mentors, budgeting and financial planning assistance, and accessibility of university faculty to address students' financial problems (Hill et al., 2018). Further research is needed to clarify how female medical students cope with financial stress. The field of health psychology may benefit from insight into how medical students adjust to financial hardship. Such knowledge may inform the development of approaches to help students better manage financial stress.

Purpose of the Study

In this qualitative study, I explored coping strategies among female medical students who experienced from financial stress. The rationale for focusing exclusively on

female medical students was that, according to my research, female medical students' financial stress coping strategies had not been examined in comparison to other genders, even though the Association of American Medical Colleges has reported that more women are applying for medical schools than ever in the last few years (Association of American Medical Colleges, 2022). For this qualitative study, I defined coping strategies as cognitive and behavioral responses to lower tension and stress levels, per Lazarus and Folkman's (1984) analysis. I sought to identify the coping mechanisms of female medical students to inform the development of interventions to help them cope. This study may help the scholarly community better understand this under researched problem. With this knowledge, stakeholders may be able to take action to increase the number of well-adjusted female doctors graduating from medical schools. The knowledge from this study can potentially be transferred and applied to other disciplines and fields where women face highly stressful situations.

Research Question

Hill et al., (2018); Leombruni et al., (2022) research has indicated a prevalence of financial stress among medical students. However, not much was known about coping strategies among female medical students. In this study, I examined the strategies that female medical students use to cope with and manage financial stress. I sought to answer the following question: What is the experience of coping used by female medical students under financial stress?

Conceptual Framework

I explored the impact of financial stress on female medical students and the resultant coping mechanisms that these students employed. The adaptation model of nursing, developed by Roy (1976), posits that adaptation occurs via a positive response to environmental challenges by utilizing self-reflection, conscious awareness, and choices to create the integration of the human and the environment (see also Callis, 2020). The two subsystems in Roy's adaptation model of nursing include coping processes such as learning, perceptual and information processing, and emotion. These are the four cognitive-emotive channels. Second, Lazarus and Folkman (1984) developed the coping theory, which defines coping as conscious or unconscious and intentional responses to stress. Individuals solve a problem or regulate a problem when faced with stress. Coping correlates with problem coping (solving or avoiding the problem) and emotion coping regulation of emotions during stressful situations (Hayden, 2019). Emotional coping via regulation can include positive emotional coping (reinterpretation, humor) or negative emotional coping such as rumination, venting, and emotions (Stanisławski, 2019). Coping strategies are thus defined as cognitions, behaviors, and perceptions, specific coping responses to life problems (Stanisławski, 2019). Maladaptive coping responses include avoidance, escape, unhealthy comfort zone, and emotional numbin. This qualitative study defined coping strategies as cognitive and behavioral responses to lower tension and stress levels. More detailed explanations of the two theories and a literature review summarizing their application in research are provided in Chapter 2.

Nature of the Study

I used a basic interpretive and descriptive approach to understand medical students' gender-specific experiences and to answer the study's research question.

Qualitative research designs constitute a strategy for conducting qualitative research, including ethnographic studies, action research, case studies, and grounded theory research (Merriam & Tisdell, 2015). A researcher used a basic interpretive and descriptive qualitative research design to explore and explain a phenomenon, often by gathering data from various sources and analyzing it through various methods such as interviews, focus groups, and participant observation (Creswell & Poth, 2018). Generally, basic interpretive and descriptive qualitative research designs involve gathering data from the studied people, often by conducting interviews or focus groups and then analyzing the data for patterns and insights (Creswell & Poth, 2018). Qualitative research designs are beneficial for exploring complex, nuanced phenomena that quantitative research designs cannot measure (Merriam & Tisdell, 2015).

Qualitative researchers can study the more profound impact of an experience on an individual and gain an in-depth understanding of the individual's subjective experience. In the current study, I sought an in-depth understanding of female medical students' experiences of coping strategies and financial stress. The use of basic interpretive and descriptive qualitative research techniques, such as interviews and focus groups, allow the researcher to better understand the individual's experiences, thoughts, feelings, and motivations (Creswell & Poth, 2018). Additionally, qualitative research techniques such as participant observation and document analysis allow the researcher to

comprehensively understand the individual's experience. Combining these qualitative research techniques allows the researcher to better grasp an individual's experience and its profound impact (Creswell & Poth, 2018).

Definitions

The following terms and definitions are used in this study:

Coping: "Constantly changing cognitive and behavioral efforts to manage specific external and internal demands" that an individual appraises as taxing or exceeding the individual's resources (Lazarus & Folkman, 1984).

Financial stress: A state of financial scarcity or worry that might lead to a psychological stress response (Guan et al., 2022).

Phenomenology: In phenomenology study, the researcher explores the appearance and experience of things, how things appear in the participants' experiences, and the structures in the meanings of these experiences, focusing specifically on the first-person experience of consciousness (Wojnar & Swanson, 2007).

Saturation: In this study, the point at which no new information was found to develop a new category of coping mechanisms. Saunders et al. (2018) stated that saturation is achieved when the researcher repeatedly sees similar themes.

Self-care: A continuous dedication to engaging in behaviors that foster health enhancement (Dyrbye & Shanafelt, 2015). These behaviors range from nutritional choices and physical activity to stress alleviation, acquisition of social support, and self-realization.

Semi structured interview: A type of data collection method in qualitative research in which a predetermined set of open questions is used to prompt discussion, thus allowing the researcher to more broadly explore a given topic (Farmer et al., 2022).

Stress: The body's unspecific reaction to any demand (Habib et al., 2001, p. 15). Further, Habib et al. (2001) postulated that stress can pose a potential threat to an individual's well-being.

Stressors: Demands exceeding an individual's capacity, ultimately eliciting stress (Habib et al., 2001). These demands manifest in diverse forms, including cognitive, biological, environmental, personal behavior, life circumstances, social interactions, interpersonal relations, and time management challenges.

Stress-related health risks: Health alterations steered by adverse emotional reactions invoked by stressors (van der Molen et al., 2020). These alterations can impede an individual's immunological, physiological, and psychological functionalities.

Target population: A group of people or items from which a sample is drawn for the purpose of conducting research and drawing a conclusion.

Well-being: The joy and contentment derived from life, fostering a sense of life's meaningfulness (Ross et al., 2020). Various facets, such as spiritual, interpersonal, social, emotional, physical, intellectual, and environmental, play a pivotal role in shaping well-being (Travia et al., 2020).

Assumptions

The assumptions for this qualitative study fall into four categories: ontological, epistemological, axiological, and methodological. Regarding ontological assumptions, I

assumed that there was no single way of coping with financial stress and that participating students had different ways of coping with different financial stresses. I, therefore, sought to explore some of these coping mechanisms. Epistemological assumptions were reflective of comprehension of the knowledge related to coping. In conducting this research, I was engaged in an immersive exploration, striving to establish proximity with female medical students actively participating in the study. Within the epistemological assumptions guiding this study, uncertainties existed regarding the collective nature of the reaction to financial stress. In qualitative studies, a researcher is considered an integral instrument, and their role is characterized by subjectivity rather than independence or objectivity (Rohleder & Lyons, 2015). The axiological assumptions in this study reflected my beliefs, objectives, mission, values, goals, and opinions and those of the participants. The assumption was that biases would affect the participants' actions and behaviors and 'my understanding and interpretation of the study phenomenon. Pertaining to the methodological category of assumptions, I assumed that employing a qualitative design and conducting Zoom video call semi structured interviews would allow the respondents to describe their experience concerning financial stress and coping mechanisms. I disproved or proved study findings based on specific details before seeking to generalize. I examined the preferences of individual participants through the lens of perceived value, positing that individuals maximize resources for coping, and I made the assumption that participants employed independent coping mechanisms aligned with their preferences (Lazarus and Folkman's, 1984).

Scope and Delimitations

There is an increasing number of women in medical school, with female students comprising over 54% of the total population of 1st-year students enrolled in 2022. Many may be experiencing financial stress. The negative impacts of financial stress are less widely researched and understood among female medical students (Hoyt et al., 2021). Understanding measures adopted by students to cope with this financial stress is crucial. Therefore, I explored the financial stress female medical students face and their coping strategies. The scope of this study was limited to recruiting 14–20 female students until data saturation. The participants were students pursuing a medical course in a university or college who were aged 18 years and above. The sampling strategy was snowballing. I employed a phenomenological research approach to obtain data from the respondents; data collection involved face-to-face Zoom video call semi structured interviews. Each participating student was required to give an account of the financial stress she had experienced during the course period and the coping mechanisms she employed to cope with the stress. Participants answered questions about sociodemographic characteristics such as age, year of medical school, medical university location, marital status, number of children, race of origin, education achieved to date, year of graduation of last degree, employment status, and family financial support.

Limitations

Qualitative research focuses on sociocultural settings and human experiences. I sampled female medical students to examine coping strategies for financial stress. The data-gathering approach involved semi structured interviews to understand the deeper

extent of female medical students' experiences with detrimental financial concerns and their strategies to cope. Researchers access to suitable interviewees could be limited because of the inclusion criteria and the sensitivity of the study. Second, an anticipated limitation was the interviewing skills because qualitative research hinges on professional interviewing skills. Effective interviewing requires a well-planned guide and flexibility from the researcher to explore unexpected opportunities (Coleman, 2019). The researcher must cultivate a working relationship and an effective rapport with interviewees while appropriately responding with cultural considerations. The researcher must be sensitive and responsive to alternative perspectives and pursue responses in a detailed fashion to avoid making rushed interpretations (Farmer et al., 2022). The researcher must also encompass reflexivity to ensure the study is valid, robust, and reliable. The weaknesses of the qualitative approaches include labor-intensive processes and data that cannot be objective. To enhance the trustworthiness of this study and address potential limitations, I employed a reflective journal to maintain reflexivity and identify any transparent biases that might have influenced the approach and interpretation of the results (Creswell, 2014). Following Giorgi's (2009) method, data collection preceded the analysis process, wherein the restructuring of the phenomenon's structure from individual meaning units into significant psychological expressions occurred. The sample size was determined by data richness, examination complexity, data delivery, and the allotted study time (Creswell, 2014). It is important to acknowledge several limitations in interpreting the study findings.

Significance

This study is significant because I used a gender perspective to examine the dimensions of coping with financial constraints. Medical education is considered to impose a high level of stressful learning and training with stress among medical students. Medical schools' highly individualized and competitive environment generates stress even after graduation. Financial stress has been reported and identified as a cause of stress among health sciences students (Graves et al., 2021; Henderson et al., 2021; Hughes, 2021). In the present qualitative study, I examined the dimensions of coping due to financial constraints using a gender perspective. In particular, I examined the coping experiences of female medical students; I sought to identify coping strategies for women in highly stressful situations. The findings may facilitate interventions and programs to help female doctors to be less stressed.

According to Joseph et al. (2021), there is a need to create a study environment free of excessive stress, educate students about the ramifications of stress, mentor them on coping strategies, and have interactive academic sessions for stress control. There is a need to provide financial assistance and/or other timely support to meet the personal and academic needs of students. There is a need for more research into coping to inform the development of stress reduction programs and effective coping strategies among health sciences students (Graves et al., 2021). More intervention studies are needed to compare and identify interventions for effective coping for undergraduate students.

Positive Social Change

Guided by the mission for positive social change, I hoped to effect positive change through this study. The critical societal challenge identified in this study was a highly stressful population of female medical students. I examined the impact of financial stress and experiences of coping among female doctors. The study may inform the development of interventions that alleviate financial stress among female medical students. The study's findings provide insight into stress levels, determinants, nature, and coping. The findings may translate into a larger population of students who manage stress appropriately, preventing psychological morbidity. In addition, the study may translate into cost savings by preventing adverse outcomes in female medical students, who constitute a highly stressful population (Bermejo-Franco et al., 2022). Proposed solutions may reduce academic stress and promote healthy coping behaviors among female doctors. The resultant effect may be improved academic performance and decreased anxiety. According to Poon et al. (2022) the enduring global deficits in the healthcare workforce have been compounded by increased workloads linked to the COVID-19 pandemic. Looking at the broader picture, with the projected shortage of healthcare workers, this study's findings will facilitate the development of interventions that promote resilience among female medical students. By addressing the stressors, they face and equipping them with effective coping strategies, we can support their long-term success and retention in the healthcare field. This, in turn, will contribute to addressing the critical shortage of healthcare professionals and ensuring the provision of quality healthcare services. The implications of this study extend beyond the field of medicine.

The insights gained from understanding financial stress and coping strategies among female medical students can be transferred and applied to other disciplines and fields where females face highly stressful situations. By developing immediate solutions and interventions based on these findings, we can positively impact individuals, organizations, communities, and society at large.

Summary

Few current researchers have focused on coping strategies among female medical students. Stress effects should be explored among subgroups to better identify their impacts (French & Vigne, 2019). The extant literature on gendered differences in coping varies and justifies the significance of the study. In the present study, I sought to uncover how female medical students cope with financial stress using a qualitative research design. Specifically, I used a basic interpretive and descriptive approach to explore medical students' gender-specific experiences. The study may contribute to efforts to increase the number of well-adjusted and well-trained female doctors graduating from medical schools. This information can be transferred and applied to other disciplines and fields where women face highly stressful situations. The data-gathering approach involved semi structured interviews to understand the deeper extent of female medical students' experiences with detrimental financial concerns and their strategies to cope with them. The expected limitations included access to participants and limited interviewing skills because of my status as a student researcher. The study's findings provide insight into stress levels, determinants, nature, and coping. The study may inform the development of holistic solutions to decrease academic stress and promote healthy coping behaviors. In the next chapter, I address the findings from the literature regarding stress among medical students, gender differences, coping strategies, and gendered differences, and ways in which financial stress can be mitigated.

Chapter 2: Literature Review

Introduction

The dynamic processes of financial strain on medical students need to be better. understood (French & Vigne, 2019). Analysis may clarify the contradictory findings. found in the literature, such as financial dynamics and heterogeneity in coping strategies. In the present study, I examined how female medical students cope with financial stress. This chapter will provide a synopsis of the literature to establish the significance of the problem. In the first section, I detail the literature search strategy, databases, search engines, and key terms I used to mount a comprehensive search. The following section includes discussion of the study's conceptual framework. In the section that follows, I present the findings from the literature. The literature review includes an exploration of stress sources and impacts among medical students, gender as a risk factor for stress, coping strategies that medical students employ, strategies to mitigate the effects of stress, and gender differences in coping styles.

Literature Search Strategy

I examined the coping mechanisms used by female medical students to cope with financial stress. The selected databases I used to find pertinent literature included CINAHL, EMBASE, PsychINFO, PubMed, Web of Science, and Scopus. The research question informed the keywords and search terms. Keywords included *medical students*, *female students*, *financial stress*, *financial difficulties*, *stress management*, *financial management*, *resilience*, *nursing education*, *medical education*, *maladaptive behavior*, *coping strategies*, and *coping skills*. Peer-reviewed journal articles published within the

past 5 years in English were included in the literature review. The search strategy encompassed using one keyword combined with a Boolean operator and, subsequently, mounting a search in the six databases. I reviewed several articles. However, no study on coping strategies among female medical students facing financial stress was found. The topics covered in the literature review were related to medical students facing stress and mental health problems, including anxiety and depression, poor academic performance, family support, burnout, and gender bias.

Conceptual Framework

Theory aids research problem identification, hypothesis, and conclusions while guiding research design. Conceptual and theoretical frameworks are thus essential in nursing research (Callis, 2020). Theory organizes several ideas with higher explanatory power. Theory offers guidance to the researcher to understand the methods to answer the questions. A conceptual framework is a map of all literature works within a study. Last, a theoretical framework incorporates theories to deeply address the researcher's values and articulate how a study processes new knowledge. Theoretical frameworks integrate the researcher's epistemological dispositions, existing knowledge, methodological analytic approaches, and what is understood regarding the phenomena under study (Collins & Stockton, 2018). The research delved into the impact of financial stress on female medical students and the resultant coping mechanisms that these students employed.

Lazarus and Folkman's Coping Theory

Lazarus and Folkman (1984) developed the coping theory, which define coping as conscious or unconscious and intentional responses to stress. Individuals solve a problem

or regulate a problem when faced with stress. Coping correlates with problem coping (solving the problem or avoiding it) and emotion coping (regulation of emotions during stressful situations; Hayden, 2019). A high level of problem-coping indicates active behavioral and cognitive efforts to solve the stressful problem, whereas common problem-coping indicates avoidance of the problem. Emotional coping via regulation can include positive emotional coping (reinterpretation, humor) or negative emotional coping such as rumination, venting, and emotions (Stanisławski, 2019). Stanisławski (2019) defined coping strategies as cognition, behaviors, perceptions, and specific coping responses to life problems. Positive coping can include wellness, relaxation, and a support system. Maladaptive coping responses include avoidance, escape, unhealthy comfort zone, and emotional numbing (Stanisławski, 2019). Lazarus and Folkman (1987) described types of stress management, including problem-oriented coping and emotionoriented coping. Problem-oriented coping denotes trying to adapt or control problems by acting, seeking information, or choosing not to act. In emotion-oriented (intrapsychic) coping, the individual is concerned with decreasing emotional upset. Effective coping reflects a mastery of external and internal demands of the transaction between the environment and the individual (Wurth et al., 2021).

Some researchers have used the coping theory by Lazarus and Folkman as a theoretical/conceptual framework. For instance, Graves et al. (2021) examined stress and coping mechanisms for stress, determining gender differences across students toward the completion of the semester. A total of 448 students from three different undergraduate courses were enrolled in the study. The data collection instruments were the Brief Coping

Orientation to Problems Experienced Inventory and Perceived Stress Scale (PSS). Findings indicated that female students experienced higher stress levels than male students. Women were more likely to use emotion-focused coping and endorsed the use of venting, instrumental support, emotional support, and self-distraction more often than men. Understanding the factors associated with stress and coping dimensions is essential to protect the well-being of students. Garves et al. (2021) study detailed gender differences across coping strategies and dimensions using the coping theory. Second, Henderson et al. (2021) explored strategies for stress and coping, identifying the sources of stress among undergraduate students in health sciences and strategies that the students used to cope with stress. The authors integrated 33 studies—25 quantitative and six qualitative studies—and two systematic reviews. The coping strategies included problemfocused strategies, use of social support networks, avoidance, transference, and substance use. Social support was broadly used as a coping strategy. The findings of the two studies support the exploration of stress and experiences of coping used by female medical students using the coping theory by Lazarus and Folkman.

The Adaptation Model of Nursing

The adaptation model of nursing, developed by Roy in 1976, posits that adaptation occurs via a positive response to environmental challenges by utilizing self-reflection, conscious awareness, and choices to create the integration of the human and the environment (see also Jennings, 2018). The model concepts are environment, health, person, and nursing. The environment includes contextual, focal, and residual. The external and internal forces represent the focal stimuli that confront the person

immediately. The contextual stimuli are integrated into the situation, which affects the focal stimuli, whereas the residual stimuli remain unclear. The stimuli jeopardize the person's circumstances, influencing their development and behavior (Callis, 2020). The two subsystems in Roy's adaptation model of nursing include coping processes such as learning, perceptual and information processing, and emotion. These are the four cognitive-emotive channels. The regulator subsystem is the adaptive process that automatically responds to stimuli via endocrine, chemical, and neural coping channels. Nurses contribute to the adaptation of individuals in the four adaptive models: self-concept, role function, physiologic needs, and interdependence. According to Roy, the six steps include assessment (behavior then stimuli), patient diagnosis, goal setting, interventions, evaluations, and a nursing care plan that promotes patient progress toward health.

Ahmad and Meriç (2021) employed Roy's adaptation model and theory of coping and adaptation. The authors described the adaptation model as interrelated systems (psychological, biological, and social systems) where individuals aim to maintain balance via innate or acquired responses to changes in the environmental systems and their systems. The theory of coping and adaptation was used to describe the mechanisms by which individuals develop and exhibit therapeutic positive coping skills to adapt to new situations. Ahmad and Meriç evaluated the impact of a psychoeducational stress management program on students' coping and adaptation to stress. The program demonstrated efficacy in decreasing stress and enhancing the ability to cope with stress. In the present study, I examined the subsystems in Roy's adaptation model-coping

processes, such as learning, perceptual and information processing, emotion, and four cognitive-emotive channels.

Conceptual Framework as Applied to This study

The adaptation model of nursing could provide a valuable framework for understanding and addressing financial stress and coping among female medical students. By assessing stressors, identifying coping strategies, implementing interventions, modifying environmental support, and evaluating outcomes, nurses and health care providers may be able to support these students in adapting to financial challenges and promoting their overall well-being. Furthermore, evaluation is an essential part of the adaptation model. Regular assessments of the student's adaptation to financial stress and the effectiveness of interventions could be conducted. Regular assessments can involve tracking academic performance, self-reported stress levels, and satisfaction with available financial resources. Based on the evaluation findings, adjustments can be made to interventions and support services to ensure they meet the evolving needs of female medical students.

Lazarus and Folkman's coping theory provided a valuable framework for understanding and addressing financial stress and coping among female medical students. By recognizing the importance of problem-focused coping strategies, emotion-focused coping strategies, and cognitive appraisals, health care providers and educators can support female medical students in effectively managing financial stress and promoting their overall well-being. Applying Lazarus and Folkman's coping theory to financial stress among female medical students involved understanding the unique stressors female

medical students face and identifying their preferred coping strategies. Providing educational resources and support systems that empower students to use effective coping strategies is essential. These resources and support systems include financial literacy programs, counseling services, and peer support groups that foster problem-solving skills, emotional regulation, and positive cognitive appraisals.

Literature Review Related to Key Variables and/or Concepts Stress and Coping Mechanisms Among Female Medical Students

Stress is associated with physical and mental health and causes depression and anxiety. Physical health effects included physical impairment, worsening self-care, pain, problems performing usual activities, poor self-assessed health, and poor health-related behaviors. Consequences of financial strain are societal and economic pressure that has resulted in intimate partner violence, marital conflict, lowered couple time quality, intense disagreements, and lower marriage chances (French & Vigne, 2019). Other social effects of stress include unstable relationships, adverse mental health impacts (depression and anxiety), physical impairment, worsening self-care, pain, problems in daily activities, poor self-assessed health, poor health-related behaviors, intimate partner violence, marital conflict, lowered couple time quality, intense disagreements, and lower marriage chances (French & Vigne, 2019). The physical effects of stress include sleeping challenges, exhaustion, chest pain, body aches, muscle tension, clenching of the jaw, digestion problems, headaches, lethargy, dizziness, shaking, sexual performance challenges, and weak immune systems. Acute stress has pro-inflammatory effects, whereas intense stress leads to imbalance and anti-inflammation.

Stress Among Medical Students

Medical students are exposed to several stressors during their education. These include time pressure, tight schedules, being away from home, relationships, poor teaching skills, poor teacher support, poor motivation, loneliness, lack of family support, high self-expectation, parental expectation, personal life events, heavy workload, financial problems, fear of failure, family problems, exam frequency, difficulty comprehending lectures, competition with peers, attendance (Bergmann, Muth, & Loerbroks, 2019; Gazzaz et al., 2018; Hill, Goicochea & Merlo, 2018; Ragab et al., 2021; Neufeld & Malin, 2021). In one study, Bergmann, Muth, and Loerbroks (2019) sampled 68 medical students from Düsseldorf, Germany. They found that stressors resulted in emotional exhaustion. Students felt guilty if they spent less time learning and had less leisure time or time to lead healthy lifestyles. Students reported social isolation. Social ties averted stress. Side jobs increased stress and were perceived to lead to poor performance. Personality characteristics amplified the perceptions. High conscientiousness was linked to increased stress and academic performance. Gazzaz et al. (2018) sampled medical students from a medical college in Jeddah, Saudi Arabia. About 59.2% of the participants had high-stress levels. Students with more than five siblings had higher mean PSS scores than students with fewer siblings. Mean PSS scores for students frequently having a psychosocial stressor were higher than those without psychological stressors. Students with lower examination scores had higher stress levels.

Disappointment with lectures, frequency of examinations, performance in practicums, length of academic syllabus/curricula, lack of interest in medicine, and

worries about future performance in the examination were rated severe stressors. Stressrelated causes were academic stressors, the number of siblings, and the last examination marks. In the PRIMES study (Psychosocial Report in Italian Medical Students), Leombruni et al. (2022) determined the factors associated with perceived stress among 12 Italian medical schools. The characteristics associated with high PSS scores included poor financial status, female gender, sexual minority, having hobbies, resting, competitive atmosphere, and sleep hindered by medical schools. Protective factors included good relationships within the family, current relationship status, and lack of concerns about the future. Sexual minorities significantly impacted students not residing away from home, while the other group reported a lack of satisfying relationships (Leombruni et al., 2022). Hill et al. (2018) surveyed medical students from nine schools in Florida. The sources of stress were financial stressors, time management, difficulty studying, excessive workload, health concerns, challenges in work-life balance, conflicts in relationships, and peer relationships. Besides, unique concerns at the system level include performance pressures related to assessments, administrative failures by medical schools, and inadequate career planning assistance. Ragab et al. (2021) sampled 617 Sudanese medical students from six universities. About 31.7% of the responses indicated significant stress. The findings indicated that financial pressure, a psychosocial stress factor, affected 8.58% of the participants. Under coping, the study established that up to 73.7% of students reported inadequate time for recreation and hobbies. Most students did not report substance use as a coping mechanism. Only 1% reported alcohol consumption,

2.9% reported drug use, and 7.3% admitted smoking as a coping mechanism (Ragab et al., 2021).

Gender as a Risk Factor for Stress

Several studies have suggested that gender differences in perceived stress may be apparent among medical students. Several studies have supported gender differences in stress levels, indicating that females have higher stress levels than males. Across the research, results indicate that female students were at a higher risk of depression. However, males may have been less willing to speak about or seek help when stressed.

In the PRIMES (Psychosocial Report in Italian Medical Students) study, female gender was a significant factor associated with stress across every subgroup from a sample of medical students from 12 Italian medical schools (Leombruni et al., 2022). The study by Kumar et al. (2019) indicated higher anxiety scores and extremely severe stress levels among female final-year medical students in Karachi, Pakistan. In a study sample from Austria medical students, female students in preclinical and students undergoing clinical training experienced higher stress levels than males (Mar et al., 2023). Hill et al. (2018) reported higher levels of distress from females compared to males when exposed to the suffering of others. In addition, female medical students had more difficulty when it came to managing time management and academic workload than males. Ragab (2021) established that the level of psychosocial stress was similar across gender, and only academic stress was higher among females than males in a sample of 617 Sudanese medical students.

The findings are similar across studies with other populations of students. Xu and Huang (2022) established gender differences in stress due to the COVID-19 pandemic and the perception of risk among college students studying various courses in China, with female students having higher levels of pandemic stress. Lopes and Nihei (2021) established the female gender as a predictor for symptoms of stress, depression, and anxiety in a sample of Brazilian undergraduate students studying various courses. Manti et al. (2022) established that the female gender, among other risk factors, was associated with increased stress among nursing students in Greece during the economic recession. Mirza et al. (2021) established that female undergraduate nurses had reported higher levels of depression and frequency/severity of anxiety symptoms compared to their male counterparts.

Five studies established gendered differences in stress levels among medical students. Females had higher levels of distress than males, with females being more predisposed to depression. The findings are similar among samples of students from different courses. Two studies focused on nurses and established high distress and predisposition to symptoms of anxiety and depression among female students. Among samples studying various courses, stress has been established as more predominant among females. This informs the present study regarding the likelihood of females having higher stress levels and psychological morbidity.

Impacts of Stress-Related Factors on Students Health

Stress has physical and psychosocial adverse outcomes. Stress is associated with poor physical and mental health impact was found to be depression and anxiety. Physical

health effects included physical impairment, worsening self-care, pain, problems performing usual activities, poor self-assessed health, and poor health-related behaviors (French & Vigne, 2019). The physical effects of stress include sleeping challenges, exhaustion, chest pain, body aches, pains, muscle tension, clenching of the jaw, digestion problems, headaches, lethargy, dizziness, shaking, dizziness, sexual performance challenges and weak immune systems. Acute stress has proinflammatory effects while intense stress leads to imbalance and anti-inflammation.

Perceived stress harms student' well-being. Several articles have captured adverse outcomes of financial strain on physical and mental health and the impact of stress (financial, academic, family, and side-activity) on students, including psychological morbidity (Guan et al., 2022; Kumar et al., 2019; Ma et al., 2022; Mirza et al., 2021; Pham et al., 2019; Pisaniello et al., 2019; Shao et al., 2020; Slimmen et al., 2022; Wurth et al., 2021). High-stress levels, burnout, and passive coping can lead to adverse psychological impacts among health sciences students.

Increasing stress levels among medical students can have deleterious short- and long-term effects, including poor performance and poor quality of life. Studies have pointed out adverse physical and mental health outcomes due to stressors. The systematic review by Guan et al. (2022) linked depression and financial stress among adults, notably in lower socioeconomic status groups. There were variations between depression and financial stress across various stress indicators, such as unsecured debt, material assets, financial hardships, and subjective measures of depressive symptoms. Income was correlated with other dimensions, such as education and employment, which affect

mental health outcomes, and relative income was a more significant indicator of depression than total income. The evidence established a positive association between depression scores, low-income ranks, and follow-up scores, while total income did not correlate with total income. In the review by Guan et al. (2022) explored the correlation between relative wealth/income and depression. Some reviews indicated an association between depression and debt. French and Vigne (2019) highlighted that financial problems within a household predispose members to economic shocks, leading to unstable relationships and marital conflict, which distract parents from their responsibility to nurture their children, reducing parental support. Physical health effects included physical impairment, worsening self-care, pain, problems performing usual activities, poor self-assessed health, and poor health-related behaviors. Consequences of financial strain are societal and economic pressure that has resulted in intimate partner violence, marital conflict, lowered couple time quality, intense disagreements, and lower marriage chances. Mirza et al. (2021) established that anxiety and depression were more common in females than males. Associated factors were academic and non-academic. The study did not establish whether medical students experienced higher symptoms of depression and anxiety compared to other non-medical students. The study provides insight into student" psychological well-being, implicating health policy formulation for therapeutic and preventive purposes.

Students with poor skills in managing stress can have difficulties balancing responsibilities and stressors. In the study by Lopes and Nihei (2021), anxiety, depression, and stress presented significant positive correlations with five maladaptive

coping strategies (self-distraction, denial, self-blame, substance use, and behavioral disengagement) and a negative association with all dimensions of psychological wellbeing, satisfaction with life, and three copings (adaptive) strategies: planning, active coping, and positive reframing. Besides, the study established seven predictors of symptoms of stress, depression, and anxiety. These included higher scores in two types of maladaptive coping (substance use and self-blame), lower scores for psychological wellbeing (self-acceptance and positive relations with others), having a chronic disease, 18-24 years, and female gender. Shao et al. (2020) examined depression and anxiety symptoms among 2057 Chinese medical students and established that depression and anxiety were more common among students over 20. Students who had high debt or poor sleep habits were more likely to show signs of sadness and anxiety. Depressive and anxious symptoms were common among college students who were home-schooled or had strained relationships with significant others, classmates, or close friends. Shao et al. (2020) identified and examined the relationship between stress levels, burnout, and coping styles among nursing students in China in their late-clinical practice stages. A positive coping style had a protective effect against diminished personal accomplishment and depersonalization. Furthermore, the predictors of the intention to quit nursing education were high-stress levels and passive coping.

The financial burden Is a risk factor for suicidal ideation and depression among medical students. Medical students are more likely to suffer from sadness and anxiety than the general population. Unsecured debt or late mortgage repayment was associated with depressive symptoms (Guan et al., 2022). Slimmen et al. (2022) established

significant interactions between mental well-being and perceived stress for emotional stability and approach coping. In the study comprising 875 university students, perceived stress had a significant negative association with mental well-being. Family, academic, financial, and extracurricular activities pressure negatively impacted medical student'' well-being. Perceived stress mediated this effect, but there was still a direct effect on family and academic pressure. In another study, Pisaniello et al. (2019) highlighted high levels of financial stress among medical students that correlated with debt. Debt led to poor academic performance and was associated with poor mental health outcomes. The study by Pham et al. (2019) that sampled medical students at a medical university in Vietnam identified significant risk factors for depression as perceived financial burden, non-self-determined motivation, and vigorous physical activity level. Suicidal ideation was linked to perceived financial burden and non-self-determined motivation.

In the study by Kumar et al. (2019), anxiety mean scores for private school students were higher, whereas public college students indicated higher scores for depression. About 74% had moderate-severe anxiety, 57.6% had moderate-severe depression, and 57.7 reported moderate-severe stress. Causes of stress and anxiety included dissatisfaction with the administration, exam pressure, family expectations, and stepping into the real world. Shao et al. (2020) indicated that family functioning, social support, and coping style were all strongly linked to depression and anxiety symptoms. Wurth et al. (2021) sampled 467 medical students from the University of Geneva (Years 2–6). The pandemic had a negative impact on training, and students reported decreased concentration and motivation. Those who helped at the hospital reported increased

positive effects due to clinical exposure. Coping strategies were increased telecommunications with loved ones and increased physical activity.

Stress severely impacts physical health and emotional well-being and contributes to psychological morbidity. Besides, stress had social effects such as strain on household relationships and marital conflicts. These findings articulate the recognition of the holistic impacts of stress. Perceived stress was highly associated with psychological morbidity, including increased risk of suicide among students. Importantly, students with poor skills in managing stress can have difficulties balancing their responsibilities.

Coping Strategies Employed by Medical Students

Stress is a common stressor that medical students experience. García et al. (2018) emphasized that assessing stress determinants and coping strategies are recommended to determine remedies to improve medical student' well-being. Several studies have explored how medical students cope with various stressors, with the majority focusing on coping when medical students face general stressors, including academic stress (Haider et al., 2022; Moore et al., 2022; Sattar et al., 2022; Tahir et al., 2022). The findings have indicated that many medical students may not be coping appropriately. The literature on financial stress coping among medical students is less widely pervasive.

Sattar et al. (2022) identified the coping strategies employed by medical students from 14 countries when dealing with mental health disorders (burnout, depression, anxiety, depression, and stress). The most common strategies for coping included seeking support, acceptance, denial, avoidance, active coping, substance use, religion, faith, and other styles. Similarly, Shao et al. (2020) identified that the most significant stressor was

performance pressure overload. Financial uncertainties were also significant stressors among 589 Medical University of Vienna students. About 52.4% of students reported critical depression scores. Active coping and positive thinking were associated with lower stress scores. Positive thinking protects students against depression.

Haider et al. (2022) explored the association between life satisfaction, coping mechanisms, and resilience among 351 1st- and ^{5t}h-year undergraduate medical students. The study identified a moderately negative correlation between avoidant coping and life satisfaction. Religious coping, avoidant coping, and resilience was significant. In the study by Moore et al. (2022) that surveyed the relationship between depression and anxiety and coping styles of 511 medical students of Asian-American descent, depressive symptoms among Asian American students were not correlated with increased negative coping skills.

In contrast, anxiety was positively correlated with an increase in negative coping skills. Students who experienced anxiety were more likely to use negative or avoidant coping strategies, while those who encountered depression were not likely to employ negative coping. Tahir et al. (2022) identified coping strategies included self-monitoring, goal setting, a conducive learning environment, self-evaluation, task management, self-reward, self-regulation, self-reminders, time management, and the establishment of priorities. These coping strategies combated procrastination behavior.

Six studies reported subgroup differences in stress and coping strategies among medical students. Zvauya et al. (2017) compared stress levels, psychological morbidity, and coping styles between 64 U.K. graduate-entry medical students and 346

undergraduate medical students. Both groups reported high and equally similar levels of perceived stress and psychological morbidity. Similarly, the scores of stress-related personality traits and recent adverse life events were identical. Graduate entry students were more likely to use positive reframing and active coping than undergraduates. They were also more likely to use alcohol and drugs to cope. The 2nd-year graduate-entry students showed less psychological morbidity and perceived stress compared to 1st-year ones. Garg et al. (2022) explored coping styles used by pre/para-clinical versus clinical undergraduate medical students to minimize the risk of psychological morbidity incorporating 382 students from a tertiary care teaching institution in India. The clinical group had higher dissatisfaction with performance (academic), substance consumption behavior, and a tendency to seek psychiatric treatment and take psychiatric treatment compared to the pre/para-clinical group. Both student groups used good coping. The pre/para-clinical group used functional problem coping more significantly than the clinical group. In the clinical groups of students, passive emotional coping and passive problem coping correlated with psychological morbidities. Abouammoh et al. (2020) explores medical student' coping strategies between medical interns and final-year medical students from a large medical school in Riyadh, Saudi Arabia. Time management and planning were perceived as stress-coping strategies, while some students utilized them to cope with stress. Avoidant stress-coping strategies captured by students were avoiding medical matters discussions, smoking, and building relationships with the opposite sex.

Salam et al. (2019) explored the coping strategies employed by 3rd- and 1st-year medical students from a public university in Malaysia to explore differences between study years and gender. The most reported coping strategy was task-oriented, while emotion-oriented coping was the least among all students. There were insignificant differences between genders. First-year students had higher scores than 3rd-year students, indicating higher adaptability to newer environments. Similarly, Neufeld and Malin, (2021) conducted a study to determine coping reactions and the influence of study years and gender on coping among 400 medical students (53% females) from the University of Saskatchewan, Canada. The overall coping strategies were adaptive among most students. Female medical students used behavioral engagement, while males used less instrumental and emotional support. Third-year medical students exhibited more denial as a coping strategy than in the first years. Joseph et al. (2021) evaluated academic stress and its determinants, assessed other stress sources, and explored coping styles for academic stress used by 400 medical students from South India. There were no differences in emotional coping across gender. Students preferred sharing their problems with their parents or preferred talking to friends. Poor self-esteem and worrying about the future were associated with academic stress. Male students had unsatisfactory coping behaviors (Joseph et al., 2021).

Coping Strategies by Students in Other Health-Related Fields

The student" life cycle is full of stressors such as work lives and academic or personal stressors. Undergraduate health sciences, pharmacy, nursing education, and dental sciences as a source of great stress for students. There are shared sources of stress

among medical students and other health students, such as nursing students. Exploring stress and coping among health sciences students can paint a picture of the situation relating to medical students. This review included studies on coping among other students, predominantly health students, including nursing students. The studies explored sources of stress and coping styles for young adult students. Understanding the factors associated with stress and coping dimension is essential to protect the well-being of students. Several studies illuminate coping strategies used by other students.

Onieva-Zafra et al. (2020) sampled 190 students from a university based in Spain, with 47.92% of the participants reporting moderate stress levels. Compared to novice students, senior students experienced higher levels of stress. Findings established a correlation between state anxiety and stress and train anxiety and stress. The study identified the relationship between perceived stress and coping styles such as problemsolving, wishful thinking, self-criticism, cognitive restructuring, social withdrawal, and social support. The most used coping strategies were problem-solving, social support, and cognitive restructuring. In a review by McCarthy et al. (2018), maladaptive and adaptive coping strategies were influenced by student' present/past circumstances, such as needs, stress levels, and coping options. For the sample, the interventions for coping differed across stages of the development of stress. There were also interventions targeting society, organization, or an individual level. Xu and Huang (2022) explored the impact of stress due to the COVID-19 pandemic, perception of risk, and coping efficacy on the mental health of 3,381 college students in China. Mental health during the pandemic was of good quality. Mental health quality was negatively associated with pandemic risk,

stress, and perceived infection risk. It was positively associated with coping efficacy. Similarly, coping efficacy was negatively correlated with perceived pandemic risk, pandemic stress, and perceived risk of infection.

Furthermore, Manti et al. (2022) identified coping means were positive or active coping, expressing negative feelings, seeking support, and avoiding. Higher maladaptive coping strategies were noted in respondents with higher worries, personal problems subscales, and total SNSI scores. Grant-Smith and de Zwaan (2019) indicated that many participants struggled financially during clinical placements but were financially adequate during regular study periods or outside semesters. The financial stressors during clinical placements included loss of income and increased transport costs, additional means, purchasing additional materials and resources, costs to get work-appropriate clothing and childcare costs. The major strategies used to cope with financial strategies nursing students included budgeting, savings, borrowing, and changing expenditure patterns. Weber et al., (2019) indicated that respondents perceived financial stress as contributing to adverse academic performance. Participants identified coping strategies and ranked less effective and effective coping strategies to deal with the ramifications of financial difficulties. Over half of the population considered praying as a more effective coping mechanism. Other strategies included asking for loans from family and sharing worries with peers, family, and friends. A second effective coping strategy was looking for a job with improved salaries. Negative coping strategies included smoking and drinking alcohol. On the other hand, Al-Gamal, Alhosain, and Alsunaye (2018) sampled 121 female nursing students, indicating that stress affected the ability of nurses to care for their patients. In Graves and colleague" (2021) study, females were more likely to use emotion-focused coping. They endorsed the use of venting, instrumental support, emotional support, and self-distraction more often than males.

In one study, financial stress was reported and identified as a less common cause of stress among health sciences students. Henderson, Chetty, and Gurayah (2021) explored strategies for stress and coping among students from Nigeria, South Africa, the United Kingdom, the United States, Saudi Arabia, and Australia. Three sources of stress included clinical training, academic activities, and social or interpersonal interactions with peers and family and professional relationships. Stress caused by clinical training included poor staffing, wards, high level of patient care, and clinical placements. Other reported stressors included financial concerns, personal issues, lack of professional skills among students, psychosocial issues, environmental factors, and psychosocial issues. Students were also stressed about illness and health-related issues. Students expressed worry due to career choices and postgraduate opportunities. Students primarily used problem-focused strategies to cope with stress. Some of the coping strategies included the use of social support networks and avoidance when faced with financial stress. Negative coping strategies included transference, avoidance, and substance use.

These findings illustrated a variety of coping mechanisms among other students, predominantly health students, including nursing students. Most studies explored sources of stress and coping styles for young adult students. The findings identified gaps regarding other student' experiences of financial stress and coping approaches used.

Understanding the factors associated with stress and coping dimension is essential to protect the well-being of students.

Approaches to Mitigate Stress

Medical students are prone to stress due to a strenuous curriculum. Understanding the factors associated with stress and coping dimension is essential to protect the wellbeing of students. Zvauya et al. (2017) showed that medical students had high-stress profiles, with graduate-entry students using more active coping strategies and maladaptive coping, such as alcohol and other substances. This is a target for positive coping to ensure resilience to deal with hardships encountered during the career of medical students. Abouammoh et al. (2020) outlined that many interns and medical students struggle to deal with stress via healthy strategies for coping. Stress management programs are essential to foster coping skills among medical students. In addition, Garg et al. (2022) reported a correlation between psychological morbidity and passive styles of coping among clinical undergraduate medical students. Research into financial stress and other stressors will uncover student" perspectives and experiences, facilitators, and barriers to support student' needs from mentor' and preceptor' perspectives. The life of medical students can be enhanced by examining resilience strategies (Haider et al., 2022). More intervention studies are paramount to compare and identify interventions for effective coping for undergraduate students (McCarthy et al., 2018).

Hughes (2021) highlighted risk factors for stress and the coronavirus pandemic impact calling for system-level changes to support the occupational health of nursing students. The authors described occupational health approaches to creating safer and

healthier educational environments. The findings indicated that the application of occupational health concepts in nursing education has the potential to identify health risks, such as mental health risks and offer key avenues to manage student health risks and provide practical approaches for communicating risks with mitigation tactics. Using an occupational safety and health perspective creates an approach to investigate stress following the pandemic, providing a holistic approach to addressing stress within medical education. The purpose of occupational health is the utilization of frameworks and perspectives to understand and mitigate health risks and promote well-being by enhancing occupational health. Hughes (2021) called for educators to use the knowledge to ensure system-level changes to support healthy and safe learning environments for students.

Tarique et al. (2022) conducted a quasi-experimental study that investigated the perceived stress levels among 95 fifth year medical students sampled from a medical college in Pakistan. The study also explored stress management activities that help decrease stress. The students participated in a full-day workshop teaching stress management. Training undergraduate students on stress-relieving activities lowered perceived stress scores. The authors asserted that social support, psycho-educational, and mindfulness-based stress reduction programs are associated with high satisfaction levels. Hill, Goicochea, and Merlo (2018) call for an examination of system-level interventions such as enhancing access to professional mentors for career planning and work-life balance, budgeting and financial planning assistance for financial stress and accessible and open communication to increase the accessibility of university faculty.

Other studies have also established implications for mitigating stress among medical students. Guan et al. (2022) highlighted a need for collaborative efforts between finance professionals and psychology experts to develop interventions that alleviate stress. This implicates health policy formulation for therapeutic and preventive purposes (Mirza et al., 2021). Various interventions on positive psychology will have beneficial impacts on depression (Mar et al., 2023). Manti et al. (2022) recommended providing financial assistance to needy students. Similarly, Grant-Smith and de Zwaan (2019) supported including personal finance education and financial support for nursing students to decrease the financial stress of nursing students participating in unpaid clinical placements. Henderson, Chetty, and Gurayah (2021) recommended timely support for student" personal and academic needs. Shao et al. (2020) called for efforts to alleviate medical student" depression and anxiety by providing them with educational counseling and psychological assistance.

Several studies have highlighted the beneficial effect of teaching coping skills to health students. Notably, Stress management programs are essential to foster coping skills among medical students (Abouammoh et al., 2020). Joseph et al. (2021) recommended counseling to address the identified issues in coping behaviors, a study environment free of excessive stress, educating students about the ramifications of stress, mentoring provided by teachers on coping strategies, and interactive academic sessions for stress control to decrease academic stress and anxiety, promote healthy coping behaviors and enhance academic performance. Graves et al. (2021) recommended educational interventions to promote healthy coping among students. According to Lopes

and Nihei (2021), adaptive coping, psychological well-being dimensions, and higher scores for life satisfaction will have protective efforts during pandemics. Decreasing perceived stress and suppressing stressors coupled with approach coping can protect the well-being of students (Slimmen et al., 2022). Ma et al. (2022) called for interventions and strategies to prevent burnout and promote positive coping to mitigate the high rates of decline of students entering nursing education. For the long-term benefits of students, medical schools should create awareness of task-oriented coping, such as problem-solving (Salam et al., 2019).

Gendered Differences in Coping

Gender plays a role in maladaptive and adaptive coping strategies. As noted earlier, several studies reported gender differences in perceived stress levels. Similarly, there are gender differences in coping behaviors. Graves et al. (2021) illuminated differences in perceived stress levels across male and female students. Some studies showed that women rely on social support and venting (emotional and instrumental coping) to cope with stress (Neufeld & Malin, 2021). At the same time, males generally preferred avoidant coping methods, such as drugs and alcohol (Abouammoh et al., 2020; Weber et al., 2019). Other studies established that females employed more maladaptive strategies for coping (denial, self-distraction, and behavioral disengagement) than their male counterparts. García et al. (2018) found that women scored higher in self-distraction, emotional support, instrumental support, religion, denial, venting, and behavioral disengagement than men among 1847 Chilean adults. A review by Sattar and colleagues (2022) established that female student preferred sleeping and studying, while

male participants preferred socializing with peers, detaching themselves from others, or engaging in sports. Neufeld and Malin (2021) asserted that female and male students have different coping approaches- females used behavioral engagement, while males used less instrumental and emotional support.

The gendered differences can be attributed to gendered constructs, culture, and social norms. Some adaptive coping strategies have been considered "masculine." Studies have linked masculinity to coping (García et al., 2018). The environments and gender roles evolution may explain the differences in coping due to gender. The most used coping technique among Saudi female students was a problem-solving strategy (Al-Gamal, Alhosain, & Alsunaye, 2018). However, one study did not identify differences in coping across gender in a sample of Malaysian students (Salam et al., 2019). Onieva-Zafra et al. (2020) established gender differences across the dimension of coping using the Coping Strategy Inventory, with female participants showing higher scores for social support, expression of emotion, and avoidance of the problem. Zvauya et al. (2017) did not establish sex differences in coping among undergraduate medical students.

Summary

This literature review explored sources of stress and impacts among medical students, gender as a risk factor for stress, coping strategies employed by medical students, strategies to mitigate the effects of stress, and gender differences in coping styles. From the literature findings, medical students have various sources of stress. The review established gendered differences in stress levels among students. Medical students use various coping styles to deal with various sources of stress. The extant literature

highlighted that gendered differences in coping vary and justifies the significance of the study. Research into gender differences in stress levels and coping will promote the development of stress reduction programs and utilize effective coping strategies.

Therefore, the present study sampled female medical students and examined coping strategies for financial stress. In the next chapter, I discuss the research design and rationale, my role as the researcher, and the methodology of the generic qualitative research study.

Chapter 3: Research Method

Introduction

In this qualitative study, I explored coping strategies among female medical students suffering from financial stress. I fulfilled this purpose by following several steps described in this chapter. This chapter includes details on the study research location and target population, design, sample size, sampling methods and processes, procedures, and the methods to collect data for a successful research undertaking. Additionally, I discuss the different tools and methods I used in data analysis and the ethical procedures I followed to guarantee successful research.

Research Design and Rationale

As discussed in Chapter 1, this study's research question was, What coping strategies are used by female medical students under financial stress? Therefore, the central phenomenon of the study was financial stress. According to the research (Grant-Smith & de Zwaan, 2019), financial stress can be described as a condition in which one experiences challenges in meeting basic financial commitments due to a shortage of money. Financial stress increases vulnerability among students and can lead to dropping out. It can also negatively impact the psychological well-being of a student.

I employed qualitative research design techniques to meet the study objective. Specifically, I adopted the phenomenology approach to collect and analyze the data. This tradition was preferred because it allowed for the firsthand collection of data about the experience of female medical students during their course period through interviews. The approach helped me to obtain in-depth insight into how female medical students went

about their day-to-day activities during the course period, how often they experienced financial stress, and what measures they undertook to ensure that they effectively coped with these financial stresses.

Phenomenology

As a research method, phenomenology centers on exploring the structures of consciousness from the perspective of a firsthand person (Wojnar & Swanson, 2007). In this approach, the primary focus lies in the intentionality of an experience directed toward an object. Researchers in phenomenology gather information about a phenomenon by engaging individuals through interviews or narratives rather than employing direct observation, as in ethnography or lab manipulation. Phenomenology takes various formats, such as phone surveys, face-to-face interviews, and case narratives, enabling an in-depth analysis of the structures of diverse human experiences, including perception, thought, memory, imagination, emotion, desire, volition, physical awareness, expressed action, and social activity, including linguistic activity.

Qualitative research featuring phenomenological designs offer crucial insight into how fieldwork is undertaken, provide insight into the structure of consciousness as perceived by the target population, and allow for the analysis of the nonverbal expressions of the interviewee, such as emotions (Wojnar & Swanson, 2007). By conducting detailed, in-depth, semi structured interviews, phenomenological researchers can yield knowledge about crucial issues that directly affect society (Farmer et al., 2022). This approach is also essential in giving a holistic, rich, and multi-faceted account of the occurrence. Therefore, even if a study is focused on a specific aspect, like in the case of

this study, where the focus was only on financial stress coping strategies, it can allow for a comprehensive exploration of the topic and the respondents.

Role of the Researcher

The role of the researcher in any qualitative study is an important attribute.

Regarding this primary role, I was guided by the belief that a researcher in qualitative research must be willing to dedicate much time to collect data, engage in data analysis and write long reports by themselves. Based on this belief, I played several roles, such as interviewing participants, transcribing and analyzing data, and reporting the findings.

As the researcher, I first built a relationship with the participants as an interviewer. This was followed by making sure that all the female medical students participating in the study were reached in advance to book an appointment with them. I sent an introduction email with a detailed explanation of the study procedures, followed by a consent form if they still wanted to be part of the study. I used personal empathy and techniques such as thinking and listening skills and probing for questions to ensure that the respondents told their stories. Because I was the part of the study, there was a high risk of researcher bias. Researcher bias refers to the potential influence of the researcher's personal beliefs, perspectives, or preconceived notions on the study's design, conduct, or interpretation of results, introducing a subjective element that may impact the objectivity of the research (Creswell, 2014). To address this bias, I ensured that the Walden faculty supervised the collection and analysis of the data. Because audio recordings accompanied the semi structured interviews, I transcribed all the recorded interviews, and employed suitable analysis methods and procedures for the qualitative research.

Methodology

Participant Selection Logic

Participant Recruitment

The study population included female medical students aged 18 years and above who were admitted to medical colleges to become a physician. Therefore, this study focused on female medical students currently enrolled in medical school and undergoing their medical training who had encountered financial difficulties. I explored the financial stress experience among female medical students and some coping strategies these female medical students employed to ensure they survived financial stress during their medical education. A semi structured interview was conducted with the respondents and the responses were qualitatively analyzed. I employed both purposive and snowballing sampling techniques. I used social media (such as Facebook, LinkedIn, and Instagram) for the recruitment of the participants. As part of the purposive sampling, the study depended on set inclusion criteria, including being a female, aged 18 years and above, and pursuing a medical education for qualification.

Consequently, I selected the sample population based on the socio-demographic traits, balancing for age, year of study, ownership of university/college, and sponsored/non-sponsored, to attain a number representative of the female medical student population. I used snowballing techniques to identify potential study respondents. In accordance with the snowballing technique, I relied on individuals with access to female medical students to recruit more participants. Inclusion criteria included female gender, currently enrolled in medical college/university, and at least 18 years of age.

Sample Size

According to Fugard and Potts (2015), a sample size of at least 10 is required in a qualitative study to reach data saturation, based on studies conducted using empirical data that saw researchers reaching saturation at a range of 9 to 17 interviews. Based on this research, I sought to recruit 10–15 medical students who were female participants in medical college/university who were at least 18 years of age.

Relationship Between Saturation and Sample Size

The concept of data saturation describes a point in qualitative research where the researcher has gathered enough data that the new data being collected no longer contribute to developing or modifying the emerging themes or concepts. Saturation has become a critical component of qualitative research that helps make data collection robust and valid (Saunders et al., 2018). Fugard and Potts (2015) suggested that a sample size of at least 10 participants is necessary to achieve data saturation in a qualitative study based on studies that showed that a range of 9 to 17 interviews is sufficient for saturation. However, the sample size required to achieve saturation may vary depending on the complexity of the research question, the variability of the participants, the richness of the data, and the level of detail required to analyze the data adequately.

I sought a sample size of 14 to 20 female medical students who had experienced financial stress to ensure data saturation. The target sample size was determined based on the study's research question, the available resources, and the practical constraints of recruiting participants. By reaching data saturation, the study provided an in-depth

understanding of female medical students' experiences with financial stress while pursuing their medical education (Saunders et al., 2018).

Data Collection

To collect data, I conducted in-depth, semi structured interviews. I conducted indepth interviews because they provided detailed information about the participants and allowed me to answer the study's research question. Use of this method helped me to evaluate the thoughts and experiences of female medical students related to financial stresses and the coping strategies used by the students during their study period. The qualitative means considered for effective data collection was phenomenological.

For recruiting purposes, I posted the invitation flyers on various social media platforms, including Facebook, Instagram, TikTok, Medical Students forums, and LinkedIn, including the researcher's email address in these flyers. Prospective participants were instructed to contact the researcher via the flyer's provided email.

Upon receipt of emails from potential participants, I promptly responded by elucidating the study's criteria, purpose, and voluntary nature. If individuals expressed sustained interest, the researcher promptly emailed them a consent form and any supplementary information necessary for an informed decision.

After securing consent, I efficiently scheduled participants for qualitative interviews. These interviews, spanning 30-40 minutes, were actively conducted virtually through Zoom. Initially, I actively reviewed the nature of the study and the consent form with the participant. I presented the interview questions if the participant chose to proceed.

Upon completion of the interview questions, participants were allowed to pose additional questions, and discussions on data privacy ensued. Participants were also actively queried about potential referrals for the study.

Throughout the process, I diligently took detailed reflective notes before, during, and after all interviews. Subsequently, I actively transcribed all interviews and notes. The collected data was securely stored electronically on a password-protected laptop and, if paper-based, in a locked filing cabinet in the researcher's office.

Participants were entitled to receive a copy of their transcription and informed consent. Virtual interviews were conducted for participants' convenience, utilizing Zoom. It is essential to highlight that, based on IRB feedback, the study did not involve deception; therefore, no debrief was provided.

Instrumentation

In this qualitative research, the main instrument was semi structured interviews to collect data to get the respondents' perceptions of financial stress and their strategies to cope with it. I conducted semi structured interviews to elicit in-depth details of participants' experiences (see the interview guide in Appendix A). The semi structured interviews included 12 participants who were all medical students in different years of study. This approach was critical in helping the study answer key questions associated with coping with financial stress among students. Applying phenomenology necessitated the reliance on face-to-face communication, which was essential in observing the respondents' emotions (see Wojnar & Swanson, 2007). I conducted these semi-structured interviews to evaluate the financial stress coping strategies used by participants of

different ages and year of study. The interviews were semi- structured to ensure that the respondent could discuss topics that they felt were relevant.

Data Analysis Plan

The study employed both qualitative data processing and analysis techniques. The study involved semi structured interviews with the study respondents. For the semi structured interviews, the first data processing approach involved deciding what level of details to include in the study, ensuring that the data were correctly captured, interpreted, and data visualized. The study's language of the survey was English. Therefore, this leads to no cases that require translation. Next, since the study anticipates having audio captures to accompany the written interviews, transcription was needed. The audio was transcribed verbatim to ensure that the written interview matched the transcription from the audio. Once the data were processed and ready for analysis, the study employed qualitative data analysis methods to uncover relevant insights from responses to key informant interviews and case narrative interviews. For data analysis, I used the model of Giorgi.

The first step involved familiarization. As a researcher, I had dived in the data through reading and listening to participant" descriptions of their experiences, so that they familiarize with the data and obtain the initial understanding of the phenomena under study. The second step consisted of bracketing. In this step, data were approached with receptivity and openness, leaving out preconceptions, biases, and assumptions about the phenomenon I might have, for better understanding of the participant" experiences from their own perspectives.

Meaningful unit identification and transformation was the third step. Here I identified key segments that hold meaning in the participant" descriptions. A meaning unit can be a word, a phrase, a sentence, or a longer passage that captures a specific aspect of the experience being studied. The meaningful units were converted to psychological statements that capture the meaning of the participant" experiences. That was done through summarizing and rephrasing the meaning units into direct statements that communicate the psychological content of the experiences.

In the fourth step, I grouped the psychological themes. Next steps involved grouping together of the similar psychological themes based on the common themes or patterns, to facilitate the identification of key themes or categories that emerged from the data. Then, I developed inclusive description. I came up with a comprehensive description capturing emerging insights from the data, based on the grouped psychological themes. The description gave an account of the pattern exhibited by the themes, hence, provided a rich, detailed account of the participant' experiences.

I also employed narrative analysis to examine other important insights into the complexity of respondent" lives in medical school, feelings, and attitudes. Here the study tried to unearth how the respondents perceived their lives in school, how they felt about the financial shocks during their studies, and their general attitude toward school life. The narrative analysis was critical in unearthing essential information about the unspoken respondents, thus complementing the content analysis. To aid in the analysis, I used hand coding for qualitative data analysis.

Issues of Trustworthiness

Credibility

To ensure credibility, the study sought to recruit female students from different medical education levels. This study also relied on information provided through face-to-face interaction via Zoom video call, which was preferred because it gave easy interaction and allowed the interviewees to be more familiar with me as a researcher. Zoom calls reduced the chances of the key informants declining to participate in the survey or offering false information. The key informant interviews were conducted using a semi-structured approach. These key informants were selected from the sampled population to validate the findings in the first interview.

Transferability

Kuper et al. (2008) pinpointed that one of the best ways to enhance transferability in qualitative research was to thoroughly describe the research context and the assumptions central to the research. Based on this argument, the study achieved transferability by describing the target population and the exclusion/inclusion criteria, which involved ensuring that the sample population was selected from female medical college/university participants at least 18 years of age.

Dependability

To ensure dependability, the study provided a detailed description of the methods employed in the research and allowed peers to participate in the analysis through coding and reviewing the work (Carter et al., 2014).

Confirmability

The study ensured confirmability through the audit trial. The study had listed in detail the process of data collection, data analysis, and interpretation, which provided a promising avenue for confirmability.

Ethical Procedures

To successfully roll out this study, I considered several ethical considerations. Among the principal requirements and ethical considerations was the participants' informed consent. The consent form involved ensuring that each participant knew what the study sought to achieve, how the information would be treated and used, the scope of their participation, and that the study was entirely voluntary. There was no compensation involved for the study participants. The participants were informed that they were accessible only to answer the questions they felt like answering and that participants could drop the interview at any point in the study whenever they did not feel like proceeding with the interview. Researchers define *informed consent* as a show of voluntary willingness by the interviewee to participate in the study. The informed consent form, therefore, must entail all relevant information that the respondent needed to know before female medical students agreed to take part in the study and must be made available to respondents to read and understand before agreeing to sign the form as an acknowledgment of agreeing to take part in the study.

Ravitch and Carl (2016) emphasized the principle of beneficence, which obliges researchers to consider the welfare of all participants continuously during the research process, ensuring adherence to established guidelines for their protection. To safeguard

participant well-being during the interview process, I meticulously evaluated the guiding questions to confirm their appropriate construction and mitigate the risk of emotional distress. Attention was directed explicitly towards sensitive subjects with the potential to cause discomfort, ensuring that respondents could engage comfortably and without offense. Additionally, the guiding questions underwent a review for ethical compliance by the Institutional Review Board of Walden University before interviews were conducted, further reinforcing the commitment to ethical research practices. The IRB approval # is 08-17-23-1047429.

Ravitch and Carl (2016) asserted that upholding confidentiality and the security of data is essential for ethical research particles. For the need for confidentiality, the participants were assured that no personal identifying information would be used in the research and that any information collected from them would be handled with extreme confidentiality. The sole reason the study collected the names and email addresses of the respondents was solely for follow-ups in case something was not apparent during data processing. This information was dropped and not included in the analysis. All data and information collected during this study are kept on a password-controlled computer and in a locked file cabinet to ensure high safety. All data will be kept confidentially for at least 5 years after this study, as required by Walden University, after which data will be destroyed securely by deleting the files from the operating device permanently, and paper files will be shredded.

Summary

In this chapter, the study gave a detailed description of how it achieved its aim. The chapter involved a detailed description of the research design and rationale, the researcher's role, methodology, trustworthiness issues, and ethical considerations. The phenomenon of the study was explained as financial stress. Therefore, the study employed a qualitative research design using a phenomenology approach to evaluate this phenomenon. Data were collected using semi-structured interviews. During this survey study, my role as a researcher included interviewing, transcribing, data analysis, and reporting the research findings.

On methodology, the study population was the female students admitted to medical colleges and universities. Sampling was done through both purposive and snowballing approaches to obtain a sample size of 12 respondents, with the sample selected subjected to Zoom video call semistructured interviews. The inclusion criteria included a female participant in a medical college/university who was not younger than 18 years. Data analysis was conducted using narrative analysis, a qualitative data technique.

On trustworthiness issues, this chapter explained how credibility, transferability, dependability, and confirmability were met. Credibility was through Zoom video interaction, which allowed for prolonged engagement and persistent observation of the respondents' non-verbal. The study also clearly described the research context and assumptions central to enhancing transferability. Finally, to ensure ethical consideration, I paid keen attention to several measures such as informed consent from the respondent,

appropriate structuring of questions, and sensitivity to respondents' emotions; I also ensured confidentiality by not collecting personally identifiable information and ensuring that the information collected was only used for the study.

Chapter 4: Results

Introduction

The purpose of this qualitative descriptive phenomenological study was to explore coping strategies among female medical students who suffer from financial stress. The research question and subsequent interview questions directly addressed this purpose. I sought to answer the following research question: "What is the experience of coping used by female medical students under financial stress?" In this chapter, I explain the setting, demographics, data collection, and analysis; discuss the study's trustworthiness; and outline its result.

Setting

I conducted one-on-one interviews with each participant using the videoconferencing platform Zoom. This method allowed me to interview participants from different universities and geographical regions. All 12 participants reported feeling comfortable using this technology as they use it frequently for school lectures and study groups. I conducted the interviews in my private office based on my schedule and the requested times of the participants. Prior to the interviews, I reviewed with each participant the voluntary nature of the study, the limits of confidentiality (audio-recorded interviews would be for data analysis purposes), and their right to discontinue their participation in the research study at any time without explanation or penalty. There were no personal or organizational conditions that I knew of that may have influenced the interview experience of the participants. There was no reported discomfort, and I did not encounter issues in conducting the interviews.

Demographics

I made initial contact with participants through the social media recruitment flyer. A total of 12 inquiries were acknowledged in response to the recruitment process. Prior to the interviews, I sent each participant an invitation to the study via email for review. If the participants understood the study and wish to volunteer, the informed consent form was emailed for their records. I interviewed 12 participants and gave them pseudonyms using the letter "P" for participant, a numerical and alphabet designation that matched the order of the interview. I collected demographic information to ensure that participants met my inclusion criteria (i.e., female medical students in medical university/college, at least 18 years of age and facing financial stress) to enhance the credibility and transferability of the results. All 12 participants stated they had never been married before. None of the participants reported receiving financial support from their family. Table 1 outlines participants' demographics.

Table 1Participant Demographics

Participant	Age	Current	Location	Current	Children	Race of	Highest	Graduation
•	(years)	year of	of medical	marital	(no.)	origin	educational	date for
	,	medical	school	status	` ,	Ü	degree to	last degree
		school					date	· ·
PA1	25	²ⁿ d	Caribbean	Single	None	Jamaican Black	BS	2019
PA2	24	^{4t} h	West Virginia	Single	None	Vietnamese	BS	2020
PB1	30	²ⁿ d	Aruba	Married	None	Afghani	BS	2014
PB2	23	^{5t} h	Pakistan	Single	None	Pakistani	-	=
PF	21	1st	St. Vincent Island	Single	None	Pakistani	-	-
PG	30	^{4t} h	Aruba	Married	1	Indian	Associate's	2014
PJ	24	^{4t} h	New York	Single	None	Black African American	BS	2019
PL	24	^{4t} h	West Virginia	Single	None	Black African American	BS	2018
PM	22	^{1s} t	St. Vincent Island	Single	None	Pakistani	-	-

PN	40	^{4t} h	Senegal, West Africa	Single	None	Asian	BS	2014
PP	25	^{4t} h	West Virginia	Single	None	Hispanic	BS	2019
PS	30	^{5t} h	Dominican Republic	Married	None	Hispanic	-	-

Note. BS = Bachelor of Science degree.

Data Collection

After interviewing the 12 participants, I stopped collecting data because saturation was reached. The participants were selected utilizing purposive and snowballing sampling methods. Social media platforms (Facebook, LinkedIn, and Instagram) were instrumental in recruiting participants for the study. As part of the purposive sampling, the study depended on the specified inclusion criteria, including being a female, aged 18 years and above, and pursuing a medical course for qualification. Data were gathered through individual Zoom interviews, each lasting approximately 30 min, concluding when participants indicated no further contributions. I recorded the interviews utilizing Quick Player and encountered no audio recording issues. I integrated Giorgi's (2009) methodological guidelines throughout the data analysis process. There were seven steps:

- I embraced a phenomenological approach, bracketing my preconceptions and personal experiences. This method allowed me to reexamine the transcripts with a renewed perspective while maintaining their integrity and authenticity.
- 2. Within this process, I read, reviewed, and listened to the interview audios to get a sense of the whole data. To gain a deeper understanding of the data, I reread, reviewed observation notes, interview transcriptions, and highlighted the information pertinent to the interview questions. I maintained a

- phenomenological attitude that allowed for detailed reflection on the participant's experience and presentation of the given data.
- 3. I reviewed the highlighted data, and I reread the narrative. Concurrently, I hand-coded each participant's narrative as I discovered the codes. I continued gaining the sense of the whole and identifying the patterns of meaning shifts or transformations in the flow.
- 4. I systematically assessed and converted the codes into psychological statements that captured the fundamental meaning of the codes related to the phenomenon under investigation. I carefully reviewed each participant's interview, assigning categories based on the phenomenon and the constructs conveyed through the participants' expressions.
- 5. I identified significant themes to ensure psychological interpretations. This process is referred to by Giorgi (2009) as an *imaginative variation* to determine the essence of the most relevant themes.
- 6. I labeled patterns from the codes acquired through the initial review. I continuously compared, reviewed, and analyzed the data to identify the experience's constructed. Steps 1–5 were repeated with constant comparison and contrast of the data on a continuum.
- 7. I documented in rich detail by identifying each theme based on the participants' lived experiences within the data. This process produced four main themes and 11 subthemes.

Evidence of Trustworthiness

Credibility

To ensure credibility of the study findings, I selected the participants who met the inclusion criteria, after which I conducted Zoom video and audio semi-structured interviews. In qualitative research, credibility is the ability to identify the difficulties presented and process the patterns that are not quickly clarified (Giorgi, 2009). All transcripts were reviewed to ensure no bias was presented. I fostered credibility in this descriptive phenomenological study through engagement, note-taking, and the formulation of the research question and study conclusion. There was no change in procedure from what I discussed in Chapter 3.

Transferability

Kuper et al. (2008) pinpointed that one of the best ways to enhance transferability in qualitative research was to thoroughly describe the research context and the assumptions central to the research. Based on this argument, the study achieved transferability by describing the target population and the exclusion/inclusion criteria, which involves ensuring that the sample population is selected from female medical college/university participants at least 18 years of age. This enabled me to provide a rich description of the participants' experiences. There was no change from what I reported in Chapter 3.

Dependability

Dependability relates to the consistency of data and its ability to remain relevant over time (Ravitch & Carl, 2016). Following Pandey and Patnaik (2014)'s

recommendations, I established dependability by providing a clear description of the steps that I took to analyze my data and shared documents—all 12 transcripts and the Microsoft Excel spreadsheet that I used to organize the raw meaning units—with my dissertation chair. This ensures that research could be replicated in the future. There was no change from what I reported in Chapter 3.

Confirmability

In qualitative research, objectivity was sought; however, the goal is to confirm the findings. The researcher's positionality and bias are essential qualities that must be examined due to the researcher being the primary instrument in qualitative research (Ravitch & Carl, 2016; Sundler, 2019). As the researcher, I verified the findings consistent with remaining neutral and duplicated the process. Additionally, I documented all procedures for accuracy, including data collection, data analysis, bracketing, audit trails, notes, and structure of the psychological phenomenological descriptive results. The confirmability phase allowed me to eliminate bias and maintain the participant's attitude throughout the study (Amankwaa, 2016; Sundler, 2019). There was no change from what I reported in Chapter 3.

Results

The research question that underpinned this descriptive phenomenological inquiry was, What is the experience of coping used by female medical students under financial stress? I used an interview guide (see Appendix A) to gain insight on the in-depth lived experiences of the participants. The interview questions focused on the stressors, barriers, institutional Influence, financial challenges, gender perspectives, coping with stress in

academic and clinical training, gender, and professional development. According to Giorgi (2009), participants' experiences are uniquely diverse, and themes emerge from the data that discovers the essence of which the phenomenon can be obtained. The interview transcripts show the coding process, as illustrated in Appendix B, which contains a verbatim transcript of the participant interviews. Four themes and 11 subthemes were identified and reviewed by my chair and committee member and are outlined in Figures 1-4. Female medical students aged 18 and above currently in medical school facing financial stress provided insight into their experiences of financial and academic stressors and gender bias during their medical education. I provided examples of each theme and subtheme. These themes and subthemes provide a comprehensive overview of the experiences of female medical students under financial stress, encompassing their challenges, coping mechanisms, emotional responses, and the role of various support systems. Researchers can further explore these themes to gain deeper insights into the coping strategies employed by female medical students facing financial stress.

Theme 1: Stressors

All participants shared experiences related to the first theme, stressors, which had three subthemes: institutional, financial, and academic stress.

Subtheme: Institutional Stress

Research by Brown and Davis (2018) underscored that the absence of targeted financial aid programs exacerbates the burden on female students, often leading to increased stress levels and hindered academic performance. This financial strain affects

their ability to cover tuition costs and hampers access to essential resources, hindering their educational experience (Jackson & White, 2017). Although the faculty-student connection was not the central phenomenon of this inquiry, and I, as a researcher, specifically asked participants to discuss the topic, it is essential to note that all participants validated that they received no support from their faculty. The characteristics of each participant explored barriers that persist in supporting female medical students from ascending in their careers.

Lack of Financial Support

In medical education, the lack of sufficient financial support provided to female medical students is a pressing concern that significantly impacts their academic pursuits and overall well-being. Numerous studies have highlighted the challenges faced by female medical students due to financial constraints, including high tuition fees, limited scholarship opportunities, and inadequate support for living expenses. PA2 conveyed the frustration, stating,

School is not very good, and do not think about helping students with financial stress ...We (school) will add it to your loan more stressful because now I have more money on my loan ... did not solve the problem. So, I stopped asking for help.

The consistent response from the participants indicates a shared sentiment of neglect regarding their financial struggles. Participants expressed dissatisfaction with the lack of understanding and empathy from the school administration and faculty members. The participants felt that their financial stressors were overlooked, with little effort to

comprehend their situations' gravity. Participants PA2, PJ, PN, PP, and PS expressed a pervasive perception of indifference from the school toward their financial concerns. PJ said, "I do not think they (school) care, honestly. Yeah, I do not even really think they (school) care anything about financial aid."

This lack of institutional empathy amplified their stress and hindered their ability to focus on their studies. Participants reported that the school's response often boiled down to fulfilling financial obligations rather than genuinely addressing their needs. PB1, PB2, and PF revealed that professors remained detached from the financial struggles faced by their students. Their apathy further isolated the participants, leaving them without a desperately needed support network. PF stated, "I have never experienced where my professor, can see that (financial stress)."

Gender Bias and Discrimination

The issue of gender bias and discrimination faced by female medical students is a pervasive challenge in medical education, adversely affecting their learning experiences and professional development. Numerous studies have documented the presence of gender disparities in medical classrooms and clinical settings, where female students often encounter biased attitudes, unequal opportunities, and discriminatory behavior (Sukhera et al., 2022). Participants PF and PN shared explicit instances of gender bias within the academic setting. PF recounted an experience with a professor who openly favored male students, creating an uncomfortable and hostile environment for female students. PF expressed her frustration, stating, I had one professor in the past who did not care for a woman's opinion and would openly say, you (female students) will not do well,

but the guys (male students) will all do well ... it aggravates you hearing that ... it affected that class a lot." PN similarly highlighted favoritism during surgery rotations, perpetuating a male-dominated culture within medical education.

In addition to challenges within the academic environment, participants PL and PP shared encounters with gender bias from patients, further complicating their clinical training. Ogunyemi et al. (2020) stated that female medical students are more likely to face microaggressions and subtle forms of discrimination, which can lead to decreased confidence and hindered participation in class discussions. PP shared her frustration stating, "patients feel sometimes more comfortable with the male student ... it makes a little bit harder ... to continue with the patient interview.

Participant PS emphasized the intersectionality of discrimination, where gender bias intersected with racism, further intensifying the challenges faced by female medical students. PS shared how male students and patients favored individuals based on gender and ethnicity, creating a hostile environment that affected educational and professional experiences.

Sense of Belonging

The sense of belonging among female medical students within their university environment is significantly influenced by the financial constraints they face. Research indicates that financial challenges can create a profound sense of exclusion and isolation among students in higher education, particularly in demanding fields such as medicine (Wright-Mair et al., 2023). Female medical students often experience a heightened sense of vulnerability due to financial constraints, which can affect their perception of

belonging within the university community (Joo et al., 2008). Limited access to resources, extracurricular activities, and social events due to financial restrictions can lead to feelings of alienation and hinder the development of a supportive social network (Joo et al., 2008). Consequently, these challenges can impact their overall academic experience and psychological well-being, creating barriers to a sense of belonging and connection with their medical school community. Participants PP, PA2, PB2, PN, PS, and PG highlighted the stark financial disparities among students, leading to feelings of exclusion and a diminished sense of belonging. The inability to participate in social activities, trips, or outings due to financial constraints created a sense of isolation and a fear of missing out for some students. This financial divide led to social exclusion, impacting their interactions with classmates, and diminishing their sense of community within the medical university.

PP conveyed her experience, "I felt less than my colleagues. For example ... if there was a trip, I could not go. So that would give me ... fear of missing out ... I would avoid, opening different pictures of people doing things because it makes me sad because I was not there." PA2 candidly shared her feelings of exclusion, expressing,

It really made me feel like not belonging...I am the poorest person in the class ... I do not think I belong in med school. It is embarrassing ... I cannot do this (go out or dinner, play or something) ... I do not want them (classmates) to know.

The financial challenges faced by students, as expressed by PN, imposed a significant mental strain. Knowing that most of their peers had financial support from various sources, including parental assistance and scholarships, increased the burden on

those lacking such resources. This mental strain contributed to a sense of alienation and further hindered the development of a strong sense of belonging. PN reflected on this strain, stating, "I think it puts a burden, a strain mentally ... the majority of the students had money, either their financial aid through the American medical schools or Caribbean schools and parents were helping them as well."

PS noted the cyclical nature of economic disparities within the medical university community. Students from affluent backgrounds perpetuated a cycle of privilege, creating divisions between those without financial resources. This socioeconomic gap reinforced feelings of isolation and hindered the formation of meaningful connections among students. PS elucidated this cycle, explaining,

It does a lot because I went to a university where a lot of people have very high economic status. Isolated because a of people also that study medicine or come from parents who are doctors, and then those parents have a certain level, they have money, and it's just, it is just like a cycle of people with money and people that do not have money, and when you do not have it, you feel isolated.

PG shared a perspective emphasizing the burden of student loans and the understanding that most students were enduring financial challenges. Despite the collective struggle, there was a recognition that the investment in medical education was substantial and long-term. This shared experience did not eradicate the difficulties but created a common understanding among students.

Subtheme: Financial Stressors in Medical Education

Participants shared their experiences of stringent budgeting and making difficult choices regarding their expenditures. The PA2 emphasized the importance of budgeting and choosing essentials over luxuries, indicating the need for careful financial planning. This pressure to economize led to sacrifices, impacting their social lives, and limiting leisure activities. PM illustrating this, stating,

Have a budget and ... stay inside of it ... pick and choose ... control my eating out, and what I buy. So, if I cannot get something, I will try to find an alternative. Depending on what it is, if it is mandatory, if it is just something for fun that could, it is just for fun, whatever I can leave it, something I needed, then the stress comes on, like, what do I do in exchange, or how can I make up for it?

PP echoed this sentiment, describing the constant worry and restrictions imposed by financial constraints. She expressed, "Stressful ... always ruminating on in my mind. Oh, like I cannot get a coffee this morning ... restricting what I buy ... going out with my friends."

Financial constraints affected participants' academic pursuits significantly. PB1 discussed the stress caused by the inability to afford essential study materials like Uworld Qbank. The lack of access to necessary resources hindered effective studying, leading to distractions and compromised focus. PN's situation was even more dire, with financial stressors affecting their ability to concentrate on exams and ultimately leading to medical school dropout. PJ shared her experience, noting, "This upcoming year was my 4th year

after like cause I'm repeating my ^{4th} year, and I spent so much money on residency applications that ... I had to withdraw (from class)."

PP echoed this sentiment, describing the constant worry and restrictions imposed by financial constraints. She expressed, "Stressful ... always ruminating on in my mind. Oh, like I cannot get a coffee this morning ... restricting what I buy ... going out with my friends." PF found a way to cope with financial challenges by sharing resources with her sister, indicating, "I have another sister who does also go to medical school with me. So usually what we do is just buy one online program and then share it. So that ends up cutting the cost in half I guess since it is more necessary for both of us, we could both use it." PN revealed the profound impact of financial stressors on her academic journey, recounting,

Oh, I struggled. I could never focus on my board exams and pass them. I failed step one and step two twice. I still have not passed my step one or two. So, I lost a lot of money and realized I should stop trying to register for the exam and study.

Being a caregiver. It just puts a lot of strain on focus.

Financial stressors had a profound impact on participants' personal and professional lives. PS revealed how her inability to work due to the demanding nature of medical school affected her financial freedom and hindered her personal and family goals. Similarly, PA2 discussed the constant worry about loans, day-to-day living expenses, and the inability to afford vacations or certain luxuries due to financial constraints. Likewise, PG also shared,

While you are in the process of school (medical), it is so demanding time wise that it is hard to work a job and be able to dedicate the amount of time that medical school will naturally require of you If you are in rotations, you are there nine to five, so you cannot work. It is usually Monday to Friday and then when you are studying for board exams.

The fear of accumulating more debt and the burden of student loans amplified the stress among participants. The PM emphasized the need to maintain financial stability to avoid accruing additional loans, especially if faced with the possibility of repeating semesters or courses. This fear of failure linked with financial repercussions created immense pressure. Participants recognized variations in their classmates' financial circumstances based on cultural and international backgrounds. PA1 noted differences in the ability to pay tuition upfront, with some classmates relying on loans. PB1 highlighted the challenges of securing loans due to immigration status, whereas PG pointed out that many students, regardless of cultural background, are burdened with student loans. PL summed up the prevailing sentiment, stating, "Fear student loans. I can budget, but there is always that point when you worry if you have some emergency bill."

Subthemes: Academic Stressors in Medical Education

Participants voiced significant apprehensions regarding the financial burdens associated with medical education, encompassing expenses such as textbooks, training, and other essential resources. PN underscored the lack of affordable resources tailored to medical students, exacerbating financial strain. The dearth of accessible medical

materials amplified academic stressors, hindering participants' ability to obtain crucial learning materials. PN articulated this concern, stating,

"Books are so expensive, training so expensive, everything is just so costly, and there are just no resources. There are not many resources out there for medical students because I have searched, I have looked, they have resources for every other type of training in the world except for medicine."

The academic workload emerged as a recurrent source of stress among participants. PM, PB2, PA1, and PA2 shared their struggles with a demanding curriculum, numerous assignments, and exams. The pressure to meet deadlines and excel academically heightened stress levels. PA1 specifically mentioned challenges in meeting tight deadlines, intensifying academic stress. The PM described the usual academic pressures: "It is just the usual getting the grades, trying to pass through, adjusting my schedule to fit all that I need to study, assignments.... since this is my 1st year. I am still adjusting to the new amount of work and everything, so it is a lot." PB2 expressed the difficulties of beginning studies, especially during exams, saying, "Beginning my studies is difficult, stressful, and depressing during exams time. Because of studies, coping with all the stress of clearing your exams. And then, at this stage, doing my final exams, I feel stressed regarding my (residency) house job. I want to carry out my house job at another institute, but that institute will not pay me."

Career Aspirations and Anxiety

Beyond immediate academic stressors, participants expressed concerns about their future careers in medicine. PA2 encapsulated the anxiety tied to achieving success

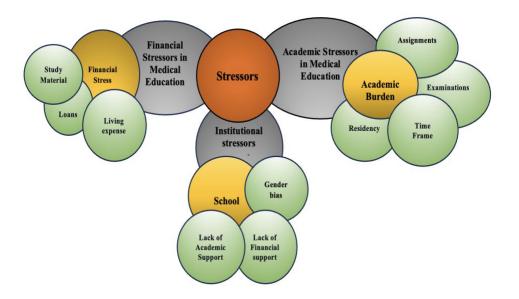
in medical school to secure a desired residency. The anticipation of postgraduate training introduced additional stressors related to academic performance and career progression. PA2 elucidated this anxiety, stating, "So it is always in my head that I gotta do well to reach the big goal of getting to residency....achieving what I was in med school for causes anxiety."

PL, PF, and PJ shared insights into the persistence of academic stressors throughout their medical education journey. PL discussed day-to-day stressors related to rotations and upcoming exams, while PF highlighted the cumulative effect of constant exams and assignments in an accelerated program. PJ emphasized the ongoing academic requirements necessary to complete medical school. PL shared, "I guess the academic stressors are more like day-to-day things that I experience, just with rotations or exams coming up." PF expressed the escalating stress towards the end of the term, stating,

"In the beginning, it was not too bad, but towards the end, I started to get stressed out.... worried...juggling so many classes. I think I performed better at the beginning of the term than at the end. It is mostly school-related whenever there is an exam or an assignment, since I am in an accelerated program,....three to four months of constant, back-to-back exams."

Figure 1 illustrates the components underlying Theme 1.

Figure 1
Underlying Components of Theme 1: Stressors



Theme 2: Emotional Responses to Financial Stress

The emotional responses of female medical students to financial stress are intricate and impactful, significantly influencing their overall well-being and academic performance. Studies have demonstrated that financial stressors evoke a range of emotional responses among female medical students, including heightened anxiety, worry, and a sense of helplessness (Dyrbye et al., 2015). The burden of managing high tuition fees and living expenses can lead to chronic stress, affecting their mental health and emotional stability (Zondi, 2018). Additionally, financial stress often intensifies feelings of self-doubt and inadequacy, potentially undermining their confidence in academic settings (Glenn et al., 2019). These emotional responses may further impact their interpersonal relationships, both within and outside the academic environment, potentially leading to social withdrawal and isolation (Atkins et al., 2017).

Participants recognized variations in their classmates' financial circumstances based on cultural and international backgrounds. The emotional responses to financial stress experienced by female medical students are multifaceted and deeply impactful. One of the participants, PA1, elucidated how financial stress amplifies her generalized anxiety, occasionally manifesting as panic attacks. This exacerbated anxiety disrupts her academic trajectory by delaying her study regimen, highlighting a pivotal link between financial burdens and mental health. This suggests a critical relationship between financial stress and mental health, with anxiety as a prominent emotional response.

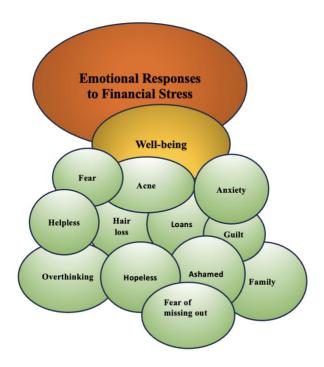
Participants shared their anxiety, worry, and helplessness when grappling with the weight of financial responsibilities. These emotions, often heightened by the demands of medical school, can profoundly affect students' mental health and overall emotional well-being. PB2 revealed that financial and academic stressors contribute to overthinking and anxiety, affecting daily activities and study patterns. As a result, students may face difficulty submitting assignments on time, exacerbating academic stress.

Several participants, like PM and PG, relied on financial support from their families. While this support alleviates some financial stress, it also introduces the pressure to excel academically. The fear of disappointing their parents and becoming a financial burden intensified their emotional responses to stress. Participants, mainly PM, and PG, expressed their concerns about failing academically and adding financial strain to their families. This emotional response emerges from a deep sense of responsibility and commitment to their parents' financial sacrifices.

PS conveyed the duality of familial expectations, stating, "Sometimes it helps, sometimes it does not ... in medicine, you need to have somebody helping you all the time." It is imperative to recognize that the repercussions of financial stress transcend academic realms. They seep into these students' physical well-being and social facets. Some participants noted physical manifestations of stress, including weight fluctuations, acne outbreaks, and hair loss. PN underscored medical education's physical and mental toll, likening it to preparing for a marathon, while PS recounted frequent illnesses exacerbated by financial worries. Moreover, the social ramifications of financial stress were palpable. PP felt a growing chasm between herself and her peers due to financial constraints, inhibiting her from partaking in shared social endeavors, underscoring the potential social isolation from financial stress. Figure 2 illustrates the components underlying Theme 2.

Figure 2

Underlying Components of Theme 2: Emotional Responses to Financial Stress



Theme 3: Resilience and Coping Mechanisms

Research has shown that coping strategies were influenced by the stressor as well as the environment in which the stressor occurred (McLoughlin et al., 2023). Although each of the participants discussed very stressful situations unique to their lived experiences of studying medicine. All 12 participants made a comment about having a coping mechanism to deal with financial stress. Each participant implemented some form of coping strategy and some also used professional help and prescription medications to facilitate their stress with finances. Participants stressed the importance of mindfulness, nature-based activities, and self-care practices to manage stress effectively.

Recommendations included engaging in hobbies, regular exercise, meditation, and spending time in nature. Additionally, participants emphasized the significance of listening to one's body, taking breaks, and eliminating toxic influences such as excessive social media use. Female medical students emphasized the need for readily accessible mental health support, suggesting regular therapy sessions. Participants advocated for flexibility within the medical profession, recognizing the detrimental impact of excessive work hours on mental health.

Subtheme: Financial Consciousness and Responsibility

The qualitative phenomenological research sheds light on the heightened financial awareness and responsibility expressed by female medical students, particularly within familial financial support and the demands of medical education. The pressure of balancing academic demands with financial constraints engenders a distinct sense of financial consciousness among these students. PF articulated her conscious decision-making regarding financial expenditure, aiming to relieve her parents from additional financial strain. She remarked,

Since my parents do cover school fees ... Groceries are pretty much all I spend on ... I try not to socialize too much. Maybe after a final or something. But just so my parents do not have any extra burden, I try not to spend anything more than I must.

In a similar vein, PM acknowledged the financial contributions from her parents.

However, she was also keen on emphasizing the importance of responsible spending. PM voiced,

I cannot say too much on finances because I am not the one paying. But then again, I do have to respect my parents and not go crazy with everything ... I have to control myself and stay within my budget ... I keep an eye on everything, ensuring that whatever I'm doing is not extreme. If I do spend on something, I compensate it elsewhere.

PA1 delved deeper into the measures she undertakes to ensure financial prudence. The presence of a younger sibling in undergrad further emphasized her sense of financial responsibility. PA1 shared,

Well, I am mindful when it comes to spending ... The main thing is tuition and extra resources for United States Medical Licensing Examination (USMLE) courses. My parents, of course, contribute, and I also have a younger sibling in her undergrad ... I am always aware of other expenses ... When I need to go out or do extra things, I try to be mindful of that. I do not go out every weekend or anything like that. I cut down expenses by making a budget on an Excel sheet, tracking spending, and planning future expenditures. And yes, I also inform the school administration or financial bursar if I anticipate any payment delays or need to negotiate a payment plan.

Subtheme: Professional Help and Therapy

For many individuals grappling with anxiety and its associated challenges, seeking professional help is a pivotal coping mechanism. Participants in this study illustrated the significant role that therapy, and counseling played in their journeys of understanding and managing their anxieties. PN recounted her experience by sharing, "I

did see a therapist ... She was a social clinical social worker through the women's center. I saw her for 2 whole years. She helped me build my self-esteem and confidence.

PN and PJ's narratives shed light on therapy's multi-dimensional role, not only as a tool for self-awareness and coping but also as a conduit to building broader support networks. Both participants highlight the intrinsic value of having a neutral third party, like a therapist or counselor, to provide unbiased guidance and perspective. Additionally, PJ's account emphasizes the significance of a robust support system beyond professional help, signifying the holistic approach needed to manage anxiety effectively.

Subtheme: Social Support Networks

Social connections, particularly those with friends and family, emerged as a foundational pillar of support for the participants of this study. While financial assistance from parents was not universally experienced, each participant distinctly recognized at least one family member and a friend as sources of unwavering support and encouragement. These relationships were pivotal in motivating, sharing resources, and providing solace during trying times. PL highlighted the holistic nature of support, emphasizing, "the significance of quality sleep, family support, and cooking together with friends as stress relievers." PJ's reflections further elaborated on these networks' crucial role in offering emotional and physical support, especially during particularly challenging phases of his life. PJ expressed,

Having a good support system around you, friends, and family... I do not feel like I would make it through if I did not have the support that I needed ... when I was at ... rock bottom over the past year ... I would have been

driven to if I did not have ... my family ... caring for me emotionally and physically. My friends are always checking up on me.

The sentiments of turning to family for guidance and discussions were echoed by PG, who stated, "I think family is a good go-to for ... finding resolutions or just discussing what your current situation might be." Additionally, PP emphasized the significance of specific family ties, noting," talk to my mom because she would be the person to help me." The academically oriented support was highlighted by PF, who valued collaborative learning experiences. PF shared, "have a big study group, order food. We just kind of study together like that."

Subtheme: Self-Care Strategies

The participants vividly shared a repertoire of self-care strategies, signaling the importance of maintaining well-being amidst academic and life pressures. These strategies encompassed physical, emotional, and practical measures. PL, emphasizing the restorative power of sleep, shared, "I honestly try to sleep a lot relieves stress for me." The significance of companionship and diversion was mirrored by PM, who explained,

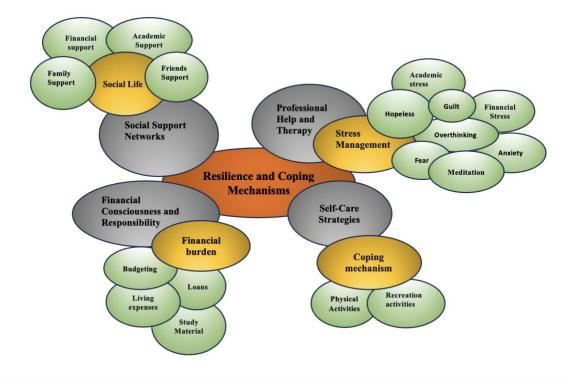
"I will just hang out just talking, joking around, probably watch a movie or ... go out to eat ... not think about school." PF also leaned into physical activities as a coping mechanism, expressing, "I would say going for walks, listening to music go to the gym ... talk to my friends." On a practical note, PP detailed the role of fiscal planning and budgeting as strategies to mitigate financial stressors, asserting, "I do a lot of planning ahead. I meal prep a lot ... I have a budget that I follow, and if something is out of the budget, then I will talk to my mom ... I just think being optimistic about the

future." On the other hand, PN emphasized the mental realm of self-care, providing a holistic view of well-being. PN suggested,

I think it would be good to have hobbies and interests outside of medicine ... during COVID, we learn like nature hikes ...Practicing mindfulness. Listening to your body ... if you need a break, nap ... I would recommend ... walking an hour a day, every day ... Stay off social media... eliminating toxic relationships ... Overall, do what makes you happy. Figure 3 illustrates the components underlying Theme 3.

Figure 3

Underlying Components of Theme 3: Resilience and Coping Mechanisms



Theme 4: Recommendations

The theme of recommendations emerged from the following interview question: "What recommendations do you have for promoting coping strategies and gender equity and inclusivity within the medical profession and education to address the unique experiences and concerns face by you?" The recommendations provided by the participants underscored the need for comprehensive changes in medical education institutions. Addressing financial stress, bolstering mental health resources, fostering inclusive mentorship, and eliminating gender biases are crucial steps toward creating a supportive, equitable, and nurturing environment for all medical students. The participants spoke about the importance of having strong support networks to cope with financial and academic stressors of being a medical student. Recognizing and addressing these emotional responses is crucial for medical institutions to provide adequate support systems, including counseling services and mental health resources, to help female medical students cope effectively with financial stress and maintain their emotional wellbeing throughout their education. Implementation of these recommendations can pave the way for a more resilient, diverse, and empowered generation of medical professionals.

Subtheme: Emotional Well-Being and Coping Strategies

A significant concern raised by female medical students was the accessibility and availability of mental health support structures. They advocated for routine therapy sessions and emphasized the necessity of accommodating professional structures to safeguard mental well-being, particularly given the intense demands of medical training

and practice. One participant, PN, reflected on her therapeutic experience, stating, "I did see a therapist ... She helped me build my self-esteem and confidence."

Subtheme: Student Financial Wellness

The financial wellness of female medical students emerged as a central theme. This theme was developed from the participants' thoughts on how school administrators, staff and professors can support the financial and academic success of female medical students. Support systems have always been vital factors for the academic and career success of female medical students. Without such support, the success of Female medical students would be hindered immensely. Participants PB1 and PB2 highlighted the necessity of paid internships, job opportunities, and part-time positions related to the medical field. Paid internships and jobs were essential for financial independence, reducing reliance on parental support. PL emphasized the significance of proactive financial education. Schools should educate students about the additional costs associated with medical education, allowing them to plan effectively.

Moreover, providing scholarships and grants can substantially alleviate financial strain, enabling students to focus more on their studies and less on financial worries.

Support tailored to individual needs was a recurring suggestion. For instance, PN recommended establishing offices dedicated to financial counseling, "Build the support system. An office for students who are facing financial hard trips that they can come to and talk to." On the topic of financial literacy, PA1 emphasized the value of budgeting tools and payment plans, "Support system ... making a budget on an Excel sheet, tracking spending and what you plan to spend or coming up with some payment plan."

Regular check-ins, questionnaires, and early interventions emerged as potential solutions to monitor and support students' financial well-being, as PP stated, "Keeping up with questionnaires and checking in on the student would be great." Meanwhile, PM highlighted the potential impact of seemingly small measures, such as making meals more affordable on campus or assisting with transportation for grocery shopping, "Make meals (school lunch) cheaper or transportation help if you want to go to grocery stores."

Subtheme: Academic Support and Mentorship

Participants vividly highlighted the significance of faculty involvement and the broader academic community's role in their academic journey. PF accentuated the benefits of direct academic guidance from professors. Such interactions, PF believes, could demystify study strategies and resource acquisition, ultimately lightening the students' load. As PF elucidated, "It would be nice if your professors told you... just study and try your best ... make it easier to find ... deals for books ... so you [students] do not have to do all the research on your [student] own."

Echoing PL's sentiments, both PM and PN foregrounded the pivotal role of tutoring services, emphasizing the value brought in by seasoned students and even practicing physicians. PM shared, "Teachers can give us a better rundown of the exams ... give us good resources to study Seniors who can tutor us and give us advice."

PG underscored the nuances of individualized learning. The suggestion was for educators to recognize and accommodate unique learning styles, thus crafting a more student-centric learning environment, "recognizing ... way of learning. So maybe in medical

school, it would be helpful if you (students) were guided based on how you (students) learned."

The specific challenges encountered by international students were brought to the fore by PL and PB1. Besides the overarching academic demands, international students grapple with language barriers and adapting to unfamiliar educational paradigms. PB1 elaborated, "students like me who are coming from outside the country, English being the second language is very hard To manage ... medical school material."

PL underscored the potential value of a specialized support system for international students, "I feel like being an international student ... an office committed to

Financial wellness, education."

Subtheme: Gender Equality

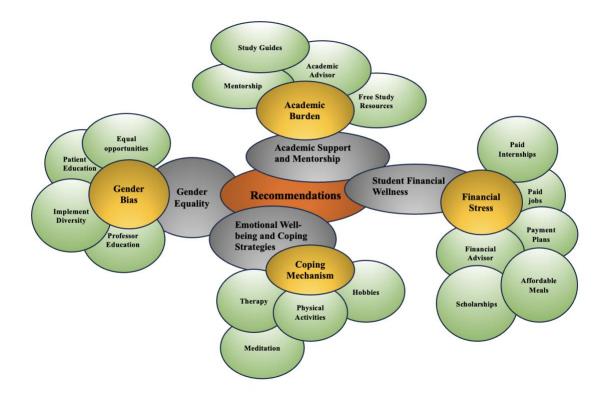
The lack of financial support can perpetuate gender disparities in the medical field, limiting the representation of women in health care professions (Cohen et al., 2002). Moreover, these biases can extend into clinical training, impacting the quality and diversity of medical care provided by future physicians (Cohen et al., 2002). The perpetuation of gender biases in medical education not only undermines the confidence and professional growth of female students but also reinforces existing gender disparities in the health care industry. It is imperative for medical institutions to address these biases through comprehensive educational interventions, faculty training programs, and policy changes to create an inclusive and supportive learning environment for all students, irrespective of their gender. PA1 articulated the significance of equitable gender representation in academic activities, explaining, "Professors should engage more with

the female students instead of always picking ... a male volunteer assistant. ... they should have an equal number of both genders instead of a majority of males." Echoing this sentiment, PN highlighted the deeply entrenched leadership stereotypes that often favor men, "Providing equal opportunities for males and females. Not just picking males because ... they are usually leaders.

PP emphasized the need to dispel stereotypes about female health care providers. Patients need to be educated that women in health care are as capable as their male counterparts. Educating both patients and professors can dismantle ingrained biases, fosteIg a more respectful and supportive atmosphere. She stated, "Patient education ... they (female doctors) can do the same job as ... male health care workers For my professors, it is like them being more cognizant of not blaming everything on ... our period, or that time of the month because that is not true."

PF offered a critical perspective on the discriminatory behavior exhibited by some educators, urging for swift action. She shared, "Professors who treat women differently need to either ... be given a warning to stop or ... be taken out immediately ... it does impact the students." PS expanded the discussion on gender equality to encompass broader inclusivity, emphasizing that medical programs should embrace diversity beyond tokenism. She remarked, "More education to staff, professors, and patients in general ... We need to normalize it ... I believe in bringing more diversity into the programs and making it more equal." Figure 4 illustrates the components underlying Theme 4.

Figure 4
Underlying Components of Theme 4: Recommendations



Summary

The research question that underpinned this descriptive phenomenological inquiry was the following: What is the experience of coping used by female medical students under financial stress? I used Giorgi's (2009) five-step descriptive phenomenological method to support the data analysis collected from 12 participant interviews. The data analysis process produced thematic categories that personified the study participants' lived experiences to address the research question and purpose of the study. 4 themes and 11 subthemes as described and outlined in the results section of this chapter. Female medical students aged 18 and above currently in medical school facing financial stress

provided insight into their experiences of financial and academic stressors and gender bias during their medical education. The participants also discussed their resiliency and coping skills to overcome financial, professional, academic, and personal challenges associated with medical education and clinical training. Participants also recommended *coping mechanisms*, *financial wellness*, *academic support*, *and gender equality within medical education*. This study revealed several findings due to the data analysis process that require further discussion. Chapter 5 interpreted the participants' lived experiences and the study's findings. In addition, a discussion on the limitations, implications, social change impact, and suggestions for future research on understanding the lived experiences of female medical students experiencing financial stress.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The aim of this qualitative phenomenological research study was to explore coping strategies employed by female medical students experiencing financial stress. The rationale for concentrating exclusively on female medical students was the limited research concerning coping strategies for financial stress among this demographic compared to other genders. Despite the surge in female applicants to medical schools, a trend highlighted by the AAMC (2022), comprehensive research into coping mechanisms tailored to female medical students was lacking, according to my review of the literature. The primary objective of this study was to identify the coping mechanisms employed by female medical students facing financial stress. The insights from this exploration may serve as a foundation for the development to targeted interventions to aid these students in managing stress effectively. This research may clarify an under researched issue within the female medical student community and contribute to the broader scholarly understanding of coping strategies in highly stressful situations.

The conceptual framework for this study consisted of two theories: the adaptation model of nursing and the coping theory. The adaptation model of nursing, developed by Roy (1976), posits that adaptation occurs via a positive response to environmental challenges by utilizing self-reflection, conscious awareness, and choices to create the integration of the human and the environment (see also Callis, 2020). The coping theory, developed by Lazarus and Folkman (1984), defines coping as conscious or unconscious and intentional responses to stress. Individuals solve a problem or regulate a problem

when faced with stress. Coping correlates with problem coping (solving or avoiding the problem) and emotion coping (regulating emotions during stressful situations; Hayden, 2019).

The study's key findings underscore the intricate stressors faced by female medical students, including financial, academic, and institutional challenges, with institutional stress revealing issues of financial support, gender bias, and discrimination. The absence of targeted financial aid programs exacerbates stress levels, impacting academic performance and yielding emotional repercussions such as anxiety and depression. The research suggests that the emotional toll of financial stress can lead to burnout and decreased quality of life. However, the study illuminates female medical students' resilience through coping mechanisms, emphasizing the significance of self-care strategies and responsible financial management. The participants' recommendations highlight the imperative for transformative measures in medical education institutions to foster a supportive, equitable, and nurturing environment (Philippe Fauquet-Alekhine & Erskine, 2023; Last et al., 2022).

The overarching goal of this study extended beyond the confines of the medical education realm. By enhancing the understanding of coping mechanisms employed by female medical students, this research may contribute insight to facilitate the graduation of a higher number of well-adjusted female doctors from medical schools. Moreover, the findings of this study may be transferable to various other disciplines and fields where women encounter highly stressful environments. The research community may contribute to women's holistic support and empowerment in diverse professional spheres through

discussion of the findings, a discussion of the limitations of the study, recommendations for future research, and consideration of the implications of the study. Finally, I will discuss my conclusions.

Interpretation of the Findings

I employed qualitative research design techniques to meet the study objective. Specifically, I adopted the phenomenology approach to collect and analyze the data because it allowed for the firsthand collection of data about the experience of female medical students during their course period through interviews. The approach helped get an in-depth insight into how female medical students go around their day-to-day activities during the course period, how often they experience financial stress, and some measures they undertake to ensure that they effectively cope with these financial stresses.

Analyzing the participants' rich and thick descriptions revealed four themes and 11 subthemes.

Theme 1: Stressors

The findings of this study illuminated the multifaceted stressors experienced by female medical students, encompassing financial, academic, and institutional challenges. Institutional stress emerged as a salient subtheme, showcasing the lack of financial support, gender bias, and discrimination in the academic environment. The participants' narratives highlighted their struggles due to the absence of targeted financial aid programs, leading to heightened stress levels and compromised academic performance. Additionally, overt, and subtle gender biases from faculty and patients created an

unwelcoming atmosphere, impacting the participants' sense of belonging within the medical school community. These included time pressures, tight schedules, being away from home, romantic relationships, poor teaching skills, poor teacher support, poor motivation, loneliness, lack of family support, high self-expectations, parental expectations, personal life events, heavy workload, financial problems, fear of failure, family problems, exam frequency, difficulty comprehending lectures, competition with peers, and attendance requirements. In the course of medical education, female medical students encounter diverse stressors that can be categorized into specific groups, encompassing academic challenges (such as ineffective teaching methods, burdensome workloads, challenges in understanding lectures, frequent exams, and the necessity of attendance), interpersonal and familial stressors (including relationship dynamics, familial conflicts, separation from family, lack of instructor support, inadequate family encouragement, and high personal and parental expectations), psychological pressures (such as insufficient motivation, feelings of isolation, financial difficulties, and fear of failing), and personal life events (Bergmann et al., 2019; Gazzaz et al., 2018; Hill et al., 2018; Neufeld & Malin, 2021; Ragab et al., 2021).

Bergmann et al. (2019), in a study involving 68 medical students from Düsseldorf, Germany, identified emotional exhaustion because of these stressors. Students experienced guilt when academic commitments reduced their leisure and self-care time, resulting in social isolation. Establishing social connections mitigated stress, whereas engaging in part-time work and certain personality traits, such as high conscientiousness, were associated with increased stress and academic pressure. In

contrast, a study by Gazzaz et al. (2018) with Saudi Arabian medical students found that 59.2% of the participants reported high-stress levels. Stress levels were influenced by family size and the presence of psychosocial stressors, with lower exam scores correlating with higher stress. Further, specific stressors, such as dissatisfaction with lectures, frequent exams, practical performance, extensive curricula, disinterest in medicine, and concerns about future exams, were identified as significant. Academic stressors, the number of siblings, and previous exam scores are primary stress-related factors, research shows (Hill et al., 2018; Leombruni et al., 2022;).

Subtheme: Institutional Stress

I delved into the multifaceted experiences of female medical students, highlighting the pervasive challenges they face due to institutional stress, primarily manifested through lack of financial support, gender bias, and discrimination. The absence of targeted financial aid programs exacerbates stress, hindering academic performance and overall well-being. Participants uniformly expressed dissatisfaction with school administration and faculty members' lack of understanding and empathy, amplifying their financial stressors. Notably, the lack of involvement from professors was a recurring theme. PB1, PB2, and PF revealed that professors remained detached from the financial struggles faced by their students. Referencing school faculty, PS said, "No, they do not. They assume that everybody is the same and that things are supposed to get done. You [the student] have to deal with it."

Gender bias and discrimination further intensified female medical students' challenges, creating a hostile learning environment. Participants PF and PN shared

instances of explicit gender bias within the academic setting. PF highlighted the favoritism shown by a professor towards male students, leading to a hostile learning environment for female students. PN further emphasized how, during surgery rotations, there was blatant favoritism towards male students, perpetuating a male-dominated culture within medical education.

In the PRIMES study, Leombruni et al. (2022) assessed perceived stress among students from 12 Italian medical schools, with high stress levels linked to financial difficulties, gender, sexual orientation, competitive environments, and disrupted sleep due to academic demands. Supportive family relationships, a current partnership, and fewer worries about the future emerged as protective factors against stress. Additionally, Hill et al. (2018) evaluated medical students from nine schools in Florida, noting financial pressures, time management issues, study difficulties, excessive workload, health concerns, work-life balance challenges, relationship conflicts, and peer interactions as stress sources. System-level concerns included assessment-related performance pressures, administrative shortcomings in medical schools, and insufficient career planning support. In Sudan, Ragab et al. (2021) found that 31.7% of medical students from six universities experienced significant stress, with financial and psychosocial stressors being prevalent. In terms of coping, most students lacked sufficient recreational time, while substance use was not commonly reported as a coping mechanism, with minimal reports of alcohol, drug use, and smoking. In summary, the PRIMES study, alongside research in Italy, Florida, and Sudan, collectively underscores the pervasive impact of various stressors on medical students, emphasizing the importance of

recognizing protective factors and addressing systemic concerns to enhance students' overall well-being and coping strategies (Leombruni et al., 2022; Hill et al., 2018; Ragab et al., 2021).

Subtheme: Financial Stressors in Medical Education

Financial stressors, a significant subtheme, revealed the burdensome impact of limited resources on students' personal and academic lives. Participants highlighted the pressure of stringent budgeting, sacrifices in social and leisure activities, and the constant worry about loans and daily expenses. PA2 emphasized the importance of budgeting and choosing essentials over luxuries, indicating the need for careful financial planning. This pressure to economize led to sacrifices, affecting their social lives and limiting leisure activities.

This financial strain permeated their academic pursuits, hindering their ability to afford essential study materials, leading to distractions, compromised focus, and, in severe cases, academic setbacks and even dropout. Navigating the world of medical education comes with numerous challenges and financial strain has been highlighted as one of the paramount stressors, particularly for female medical students. Morra et al. (2008) delved into the burdensome impact of limited resources on the personal and academic lives of female medical students. They found that many of them faced difficulties in covering basic living expenses, purchasing essential study materials, and participating in extracurricular academic opportunities due to financial constraints. Notably, these financial barriers were more pronounced among female students from lower socioeconomic backgrounds and those belonging to underrepresented minority

groups. The implications of these findings extend beyond individual hardships, as financial stress is linked to decreased academic performance, higher dropout rates, and diminished well-being among female medical students (Abreu et al., 2022). Research underscores the urgent need for medical institutions to recognize and address the economic disparities that disproportionately affect female students, advocating for more robust financial support and scholarship programs tailored to their unique needs (Moore et al., 2021).

Subtheme: Academic Stressors in Medical Education

Another prominent subtheme emerged due to the rigorous demands of medical education. The high cost of medical education, including expensive textbooks and training resources, added to the burden. Weber et al. (2019) indicated that respondents perceived financial stress as contributing to adverse academic performance. Participants faced challenges in meeting tight deadlines, adjusting to an overwhelming workload, and dealing with the anticipation of future career prospects. PL, PF, and PJ discussed the persistence of academic stressors throughout their medical education journey. PL mentioned day-to-day stressors related to rotations and upcoming exams. PF highlighted the cumulative effect of constant exams and assignments in an accelerated program. PJ pointed out the ongoing academic requirements necessary to complete medical school. Academic stressors were compounded by the pressure to excel, the need to balance coursework, and the anxiety related to exams, often leading to increased stress levels.

Academic stressors in medical education are a significant concern, particularly for female medical students, who may encounter unique challenges due to gender dynamics

alongside the typical pressures faced by all students. The literature suggests that female medical students often report higher levels of stress related to academic performance, with concerns ranging from high skate examinations to the anxiety of clinical competency evaluations (Leshner et al., 2021). It is crucial for medical education institutions to recognize academic performance stressors and create a supportive environment. Addressing the root causes of academic stressors for female medical students is essential not only for their well-being but also for fostering equitable educational experiences (Shi et al., 2022).

Theme 2: Emotional Responses to Financial Stress

The emotional responses of female medical students to financial stress are profound and intricate, significantly affecting their mental and emotional well-being, academic performance, physical health, and social lives. Physical health effects included physical impairment, worsening self-care, pain, problems performing usual activities, poor self-assessed health, and poor health-related behaviors (French & Vigne, 2019). PB2 revealed that financial and academic stressors contribute to overthinking and anxiety, affecting daily activities and study patterns. As a result, students may face difficulty submitting assignments on time, exacerbating academic stress.

The experiences shared by participants underscore the complex interplay between financial stressors and emotions, highlighting anxiety, worry, helplessness, and self-doubt as prominent emotional responses. These emotions, exacerbated by the demands of medical school, impact various facets of students' lives, leading to academic setbacks, social isolation, and even physical health issues. PA1 vividly expressed how financial

stress amplifies her generalized anxiety, leading to panic attacks. She pointed out that this anxiety affects her academic performance by causing delays in her study routine. This suggests a critical relationship between financial stress and mental health, with anxiety as a prominent emotional response. Pisaniello et al. (2019) highlighted high levels of financial stress among medical students that correlated with debt. Debt led to poor academic performance and was associated with poor mental health outcomes.

The financial stress experienced by female medical students is not merely a financial challenge but also an emotional one that affects their overall well-being and academic performance. Female medical students often face significant emotional responses to financial stress, including anxiety, depression, and a sense of overwhelming pressure to succeed against economic odds (Philippe Fauquet-Alekhine & Erskine, 2023). Furthermore, research indicates that the emotional toll of financial stress can lead to burnout and a decreased quality of life (Last et al., 2022).

Theme 3: Resilience and Coping Mechanisms

The findings of this study illuminated the various coping mechanisms female medical students employed to manage financial stress, revealing a nuanced understanding of resilience and adaptability. Despite the unique and challenging stressors faced by each participant, a common thread emerged: the utilization of coping strategies. Abouammoh et al. (2020) outlined that many interns and medical students struggle to deal with stress via healthy strategies for coping. However, this study showed that all 12 participants have been using different coping mechanisms, ranging from financial consciousness and responsibility to seeking professional help and therapy, leaning on social support

networks, and embracing diverse self-care strategies. Their ability to proactively manage financial stress showcased a remarkable resilience, reflecting their determination to navigate the complexities of medical education. Resilience building in medical students appeared to be multifaceted, involving personal, social, and institutional factors that enable students to adapt and thrive in the face of challenges (Ekbäck et al., 2022).

Subtheme: Financial Consciousness and Responsibility

The participants demonstrated a remarkable ability to cope with financial stress through conscious budgeting and responsible financial management. Several participants, such as PF, PM, and PA1, actively monitored their spending and limited unnecessary expenses to reduce the financial burden on their families. Their strategies included budgeting techniques, regular communication with school administrators about financial challenges, and careful consideration of their expenditures. These conscious efforts reflected not only financial responsibility but also a deep sense of gratitude and respect for the sacrifices made by their families.

Financial consciousness and responsibility are critical aspects of wellness for female medical students, given the significant financial investments required for medical education. Female medical students must be equipped with financial literacy skills to navigate loans, budget effectively, and plan for future financial obligations, including repayment of educational debt (Graves et al., 2019). According to Jayakumar et al., 2017 proactive financial planning and education can alleviate the anxiety associated with debt and contribute to a more focused and successful academic experience.

Subtheme: Professional Help and Therapy

Female medical students, who are known to experience elevated levels of stress and a higher risk for depression during their medical education, may benefit significantly from professional help and therapy interventions. Seeking professional help emerged as a prevalent coping strategy among the participants. PN and PJ, for instance, engaged in therapy sessions, leveraging the expertise of clinical social workers and therapists to build self-esteem, manage anxiety, and develop stress management techniques. PJ emphasized the importance of a neutral third party and a supportive social network, highlighting therapists and family's crucial role in her mental health journey. This subtheme underscored the significance of mental health support services in enhancing coping mechanisms among female medical students. Shao et al. (2020) called for efforts to alleviate medical students' depression and anxiety by providing them with educational counseling and psychological assistance. Cognitive behavioral therapy (CBT) is effective in reducing symptoms of anxiety and depression among medical students (Bantjes et al., 2021). Bantjes et al. (2021) emphasized on integrating counseling and psychological support systems into the medical school's curricula to address the unique needs of female medical students, promoting not only their academic success but also their overall wellbeing.

Subtheme: Social Support Networks

Walton et al. (2015) pointed out that social support from peers, family, and mentors has been shown to alleviate psychological strain and enhance the coping mechanism. The participants consistently emphasized the pivotal role of friends and

family in their coping strategies. Participants PL, PP, and PF highlighted the emotional and financial support they received from their families, creating a sense of security, and belonging. The camaraderie within study groups and peer support were crucial in managing stress. This subtheme illustrated the profound impact of social connections in mitigating financial stress and fostering resilience among female medical students.

Support from family and significant others is also indispensable, providing emotional comfort and stability that can offset academic pressures.

Graves et al. (2021) studied that females were likelier to use emotion-focused coping including venting, and self-distraction more often than males. Peer support networks offer a sense of shared understanding and comraderies that can dimmish feelings of isolation and stress. Moreover, mentorship programs that connect female medical students with experienced physicians can provide guidance, encouragement, and role modeling, thus fostering professional identity formation and resilience (Ramana' et al., 2002).

Subtheme: Self-Care Strategies

Self-care strategies played a vital role in participants' coping mechanisms. Quality sleep, nature-based activities' mindfulness, physical exercise, and hobbies were identified as essential stress-relieving practices. PP's focus on planning, budgeting, and meal prepping showcased the importance of structured routines in managing financial stress. PN's emphasis on listening to one's body and engaging in joyful activities highlighted the holistic approach participants adopted to maintain their well-being. Neufeld and Malin (2021) conducted a study to determine coping reactions and the influence of study years

and gender on coping among 400 medical students (53% females) from the University of Saskatchewan, Canada. The overall coping strategies were adaptive among most students.

Adopting self-care strategies were essential for female medical students to mitigate stress and promote well-being. Self-care activities include regular physical exercise, adequate sleep, and mindfulness practices can reduce stress and prevent burnout among medical students (Dyrbye et al., 2015). Furthermore, engaging in hobbies and setting aside time for personal interests are associated with improved life satisfaction and mental health.

Theme 4: Recommendations

The findings of this study provide a profound insight into the recommendations of female medical students regarding coping strategies, gender equity, and inclusivity within the medical profession and education. The theme of "recommendations" emerged as an authentic expression of their experiences and concerns. The participants' suggestions collectively highlight the need for transforming medical education institutions to create a supportive, equitable, and nurturing environment. The life of medical students can be enhanced by examining resilience strategies (Haider et al., 2022).

Subtheme: Emotional Well-Being and Coping Strategies

Participants highlighted the critical role of mindfulness, self-care practices, and supportive networks in managing stress effectively. Recommendations encompassed engaging in hobbies, regular exercise, meditation, spending time in nature, and avoiding toxic influences such as excessive social media use. The emphasis on listening to one's

body, taking breaks, and seeking therapy indicated a holistic approach to emotional well-being. Participants PJ, PN, and PA1 emphasized mental health support, regular therapy sessions, and flexible schedules, underlining the importance of tailored mental health services for medical students.

The emotional well-being of female medical students is a multifaceted issue that requires attention to coping strategies that can mitigate the stressors unique to medical education. Mindfulness and resilience training are among the intervention that support emotional well-being by enhancing coping skills and reducing the symptoms of burnout and depression (Rosdahl et al., 2015). Furthermore, curricular modifications that include wellness programs demonstrate a positive impact on the emotional health of female medical students by fostering a more supportive learning environment (Rosdahl et al., 2015). These strategies will not only benefit individual students but also contribute to a healthier, more empathetic health care workforce.

Subtheme: Student Financial Wellness

Financial wellness is a critical component of overall well-being for female medical students, who often face significant burdens due to tuition and related expenses. Participants PB1 and PB2 outlined comprehensive strategies to alleviate financial stress, ranging from paid internships and part-time positions related to the medical field to financial education and scholarships. Proactive financial counseling, check-ins, and dedicated financial and emotional support offices emerged as essential recommendations.

Participants like PA1 emphasized the importance of financial literacy. Schools could provide resources to help students create budgets, track their spending, and devise

feasible payment plans. Affordable meals, transportation assistance, and reduced interest rates on student loans were proposed measures to ease daily living expenses.

International students faced unique challenges, requiring specialized academic and financial support, including language assistance and tailored mentorship. To address financial wellness, financial literacy programs are recommended to be integrated into medical school curricula, aiding students in understanding and managing their finances effectively (Jayakumar et al., 2017). Budging workshops and debt management counseling can empower female students. Potentially alleviating financial stress and allowing them to focus more fully on their education (F. Ahmad et al., 2017).

Additionally, scholarship programs tailored for female medical students have been suggested to reduce the gender gap in medical education affordability (Leshner et al., 2021). Advocacy for these initiatives by academic institutions can support financial wellness of their students, thereby contributing to a more diverse and equitable medical workforce (F. Ahmad et al., 2017).

Subtheme: Academic Support and Mentorship

In addressing the exigencies of academic pressure on students, participants have propounded a series of critical recommendations to attenuate this burden. Central to these recommendations is the professors should provide clear study strategies, access to educational resources, and insights into exam preparation. Additionally, peer-to-peer mentorship programs, tutoring services, and tailored support for international students were vital recommendations. Professors' involvement in providing study strategies, book resources, and recognition of diverse learning styles could significantly alleviate the

academic burden on students. Participants, including PF, PM, and PN, highlighted the importance of receiving more comprehensive academic guidance from professors. They suggested that professors provide students with clear study strategies, book deals, and insights into exam preparation, alleviating the burden of students seeking out these resources independently. Henderson, Chetty, and Gurayah (2021) recommended timely support for students' personal and academic need.

In response to the distinct academic challenges faced by female medical students, the literature underscores the value of academic support and mentorship programs. These interventions have been associated with improved educational outcomes and reduced stress levels (Gallagher, S. 2023). Peer support groups and mentorship programs specifically tailored for female medical students provide additional layer of academic and social support (Leshner et al., 2021). Hernandez et al. (2021) recommended that medical schools implement structured mentorship programs that pair female students with mentors who can provide guidance, support, and role modeling, thereby fostering a more inclusive learning environment. Advocating for these supportive structures can address the unique needs of female medical students, contributing to their academic success and professional development (Gracia et al.,2019).

Subtheme: Gender Equality

In medical education, gender equality remains a significant concern, with female medical students advocating for policies and practices that ensure equal opportunities and mitigate gender-based disparities. Participants recommended promoting cultural sensitivity and awareness among faculty and peers to create a supportive and inclusive

environment for students from diverse cultural backgrounds. Acknowledging and understanding cultural differences can mitigate isolation and enhance emotional well-being. Participants, such as PA1 and PN, emphasized the necessity of providing equal opportunities for both genders. They advocated for a balanced representation of male and female students in various activities, assignments, and leadership roles, challenging the existing gender stereotypes within medical education.

Raquel Sofia Sandoval et al. (2021) stated that gender biases in the medical field can impact female medical students learning experiences and professional trajectories. The participants in this study recommended the implementation of gender-sensitivity training faculty and the establishment of clear policies against gender discrimination. Such measures are vital for creating an educational environment that acknowledges and values the contributions of all gender equally.

Moreover, fostering gender diversity in medical leadership positions can serve as an inspiration and a tangible goal for female medical students, thereby, empowering them to pursue a wide range of specialties and leadership roles (Leshner et al., 2021). Ensuring gender equality in medical education not only benefits female students but also enriches the medical profession, leading to a more diverse and competent workforce (Raquel Sofia Sandoval et al., 2021).

Conceptual Framework

The adaptation model was a valuable framework for comprehending and addressing the financial stress experienced by female medical students. By systematically evaluating stressors, pinpointing coping mechanisms, implementing targeted

interventions, adjusting the supportive environment, and meticulously assessing the outcomes female medical students adapted to financial challenges while enhancing their overall well-being.

Moreover, within the adaptation model, evaluation stands as a pivotal component. It necessitates regular assessments of an individual's adaptation to financial stress and the efficacy of interventions employed. As recommended by female medical students that medical institutes should track academic performance, self-reported stress levels, and contentment with the available financial resources. Based on the evaluation results, female medical students reported that there is lack of financial and academic support.

Additionally, Lazarus and Folkman's coping theory offered a pertinent framework for grasping and addressing financial stress and coping strategies among female medical students. The findings of this study illuminate the various coping mechanisms female medical students employ to manage financial stress, revealing a nuanced understanding of resilience and adaptability. Health care providers and educators, understanding the unique stressors female medical students face, can support them effectively by acknowledging and reinforcing these coping strategies. Implementing Lazarus and Folkman's coping theory involves providing educational resources and support systems that empower students to employ effective coping mechanisms. These resources may include financial literacy programs, counseling services, and peer support groups, fostering the development of problem-solving skills, emotional regulation, and positive cognitive appraisals.

Limitations of the Study

This study comprehensively described the Understanding of Financial Stress and Coping among Female Medical Students through Lived Experiences. The qualitative nature of the research restricts the ability to establish causality between financial and academic stressors. Moreover, the study relied on self-reported experiences, which might introduce bias and may not encompass the entire range of experiences faced by medical students. To address the potential limitations and enhance the trustworthiness of this study, I utilized a journal to maintain reflexivity and capture any transparent biases that may have influenced the approach and interpretation of the results (Creswell, 2014). I followed Giorgi's (2009) method, which involved collecting the data as the first step. The analysis process then advances until the phenomenon's structure can be restructured from the individual meaning units into significant psychological expressions (Giorgi, 2009). The goal for the sample size was also determined by the richness of data, the complexity of the examination, the delivery of data, and the allotted time for the study (Creswell, 2014). Several limitations must be acknowledged in interpreting the study findings.

Recommendations

The foundation for identifiable themes is solidified through qualitative research, which operates within empirical paradigms. This research proves pivotal in addressing the existing gap concerning the experiences of female medical students. The interview questions strategically focused on critical areas, including stressors, barriers, institutional influence, financial challenges, gender perspectives, coping mechanisms in academic and clinical training settings, and gender and professional development. Future research

endeavors should include comparative studies across diverse medical institutions and cultural backgrounds to advance the field. These studies can explore the nuanced differences in coping mechanisms influenced by factors such as institutional support, cultural values, and socioeconomic conditions.

Additionally, longitudinal studies are essential to understanding the evolving emotional responses to financial stress and their impact on students' mental health, academic trajectories, and overall well-being over time. Interventions such as financial literacy programs, counseling services, and peer support initiatives should be rigorously examined for their effectiveness in mitigating the emotional toll of financial stress on female medical students. Looking toward the long-term impact, undertaking extensive longitudinal research will allow for the continuous assessment of the implementation and effectiveness of these recommendations. This monitoring process is critical in gaining insights into the sustained benefits these policy changes and educational interventions offer to female medical students. Furthermore, exploring the perspectives of key stakeholders, including medical school faculty, administrators, and policy makers, is vital. This exploration will shed light on the feasibility and potential challenges associated with implementing these recommendations, providing valuable insights into the readiness of institutions to embrace transformative change.

Implications

The implications for positive social change outlined in the study present a multifaceted approach to addressing the challenges faced by female medical students. First, there is a pressing need for policy advocacy within educational institutions.

Establishing comprehensive financial aid programs and enforcing anti-discrimination policies are paramount. Educational reforms should focus on integrating gender sensitivity training into curricula, fostering an inclusive and respectful learning environment. A plethora of research has identified gender-based inequities within medical education environments, with female students frequently face discrimination, disparate access to opportunities, and exclusionary conduct (Sukhera et al., 2022). Cultural shifts are imperative, necessitating transformative societal attitudes toward gender roles. Educational institutions can drive this change through awareness campaigns and inclusive policies, integrating open educational resources and online platforms to minimize the cost of study materials.

Furthermore, mental health support services within medical schools require significant enhancement. Burt (2022) stated that it is crucial to cultivate an environment that actively nurtures the psychological well-being of all students, as this can mitigate institutional stress and its associated effects, particularly on females in medical education. Developing comprehensive services focusing on stress management, counseling, and a supportive environment for students facing academic pressure is crucial. Institutions should adopt a proactive approach, ensuring easy access to counseling services and promoting a culture of well-being. Destignatizing mental health help-seeking behavior is essential, alongside providing training to faculty and staff to identify signs of mental health distress.

Financial literacy education must be incorporated into medical school curricula, empowering students with skills to manage finances effectively. The financial aspect is a

significant part of the overall wellness of women pursuing medical studies, burdened by the high costs of tuition and other related expenditures. Incorporating financial education into the medical curriculum is suggested to equip students with the skills to manage their finances more efficiently (Jayakumar et al., 2017). Schools should offer comprehensive financial education, including guidance on budgeting, financial planning, and available resources. Workshops on budgeting and counseling for debt management could empower female students by reducing financial worry, thus enabling them to dedicate more attention to their academic pursuits (Pocklington, 2023).

Cultural sensitivity is pivotal in promoting awareness and understanding among faculty and peers to create a supportive environment for students from diverse backgrounds. Inclusive mentorship programs, especially for female students, can counter gender biases and empower them in their career pursuits. Addressing gender biases and stereotypes requires education for faculty and students, emphasizing the importance of diversity and gender equality. Professors should provide clear study strategies, access to resources, and insights into exam preparation to alleviate the academic burden.

Considering the unique scholastic obstacles confronted by female in medical studies Gallagher, S. (2023) emphasized the importance of academic support and mentorship initiatives. Such programs are linked with enhanced learning outcomes and diminished levels of stress. Support for international students, acknowledging their unique challenges and providing tailored assistance, is crucial. Institutional support systems encompassing financial counseling, mental health resources, and stress management workshops are vital. Ahmad and Meriç (2021) found that the psychoeducational program designed for

stress management yielded positive results, lowering stress levels, and enhancing coping abilities among the experimental group.

According to the current body of research, financial stress is a factor that adds to the total stress experienced by medical students, which could adversely affect their academic success and psychological well-being (D'Souza et al., 2018). Emphasizing family support, encouraging open communication about financial challenges, and fostering peer support networks within medical schools can create a sense of community and understanding among students. These comprehensive strategies advocate for a transformative shift in medical education, promoting equality, inclusivity, and overall well-being among female medical students.

Conclusion

This study has spotlighted female medical students' remarkable resilience and adaptability when confronted with financial stress. The emotional responses of female medical students to financial stress are intricate and multi-faceted, permeating various facets of their lives. This study offers invaluable insights into the intricate relationship between financial stressors and emotions, emphasizing the pressing need for comprehensive support systems within medical education institutions. Despite their manifold challenges, these students employ diverse coping mechanisms, underscoring the significance of financial literacy, social support, professional assistance, and self-care strategies. Their ability to navigate the complex terrain of medical education while managing financial stress is a testament to their determination and strength. The recommendations provided by female medical students reflect their collective aspiration

for transformative change in medical education. These insightful suggestions, encompassing financial education, inclusive mentorship, mental health support, and gender bias mitigation, unequivocally underscore the imperative for comprehensive reforms to nurture an equitable and supportive academic environment for all medical students.

It is incumbent upon medical institutions, policy makers, and society to acknowledge and address the unique challenges female medical students encounter by implementing targeted interventions. By fostering a supportive and empathetic academic environment, addressing financial stressors, and promoting mental health initiatives, we can empower these students to survive and thrive academically, emotionally, and socially. Through collective efforts, we can significantly enhance the well-being of female medical students and elevate their overall educational experience, thus ensuring a brighter future for the health care professionals of tomorrow.

References

- Abdulghani, H. M., AlKanhal, A. A., Mahmoud, E. S., Ponnamperuma, G. G., & Alfaris,
 E. A. (2011). Stress and its effects on medical students: A cross-sectional study at a college of medicine in Saudi Arabia. *Journal of Health, Population and Nutrition*, 29(5). https://doi.org/10.3329/jhpn.v29i5.8906
- Abouammoh, N., Irfan, F., & AlFaris, E. (2020). Stress coping strategies among medical students and trainees in Saudi Arabia: A qualitative study. *BioMed Central Medical Education*, 20, Article 124. https://doi.org/10.1186/s12909-020-02039-y
- Abreu Alves, S., Sinval, J., Neto, L. L., Marôco, J., Gonçalves Ferreira, A., & Oliveira, P. (2022). Burnout and dropout intention in medical students: The protective role of academic engagement. *BMC Medical Education*, 22, Article 83. https://doi.org/10.1186/s12909-021-03094-9
- Ahmad, F. A., White, A. J., Hiller, K. M., Amini, R., & Jeffe, D. B. (2017). An assessment of residents' and fellows' personal finance literacy: An unmet medical education need. *International Journal of Medical Education*, 8, 192–204. https://doi.org/10.5116/ijme.5918.ad11
- Al-Gamal, E., Alhosain, A., & Alsunaye, K. (2018). Stress and coping strategies among Saudi nursing students during clinical education. *Perspectives in Psychiatric Care*, *54*(2), 198–205. https://doi.org/10.1111/ppc.12223
- Association of American Medical Colleges. (2022, December 13). *Diversity increases at*`medical schools in 2022 [Press release]. https://www.aamc.org/news/press-releases/diversity-increases-medical-schools-2022

- Atkins, M. S., Cappella, E., Shernoff, E. S., Mehta, T. G., & Gustafson, E. L. (2017).

 Schooling and Children's Mental Health: Realigning Resources to Reduce

 Disparities and Advance Public Health. *Annual Review of Clinical*Psychology, 13, 123–147. https://doi.org/10.1146/annurev-clinpsy-032816-045234
- Ahmad, T., & Meric, M. (2021). The effect of an online psychoeducational stress management program on international students' ability to cope and adapt.

 *Perspectives in Psychiatric Care, 57(4).http://doi.org/10.1111/ppc.12735
- Bantjes, J., Kazdin, A. E., Cuijpers, P., Breet, E., Dunn-Coetzee, M., Davids, C., Stein,
 D. J., & Kessler, R. C. (2021). Online group CBT for symptoms of anxiety and depression among university students: A pragmatic open trial (Preprint). *JMIR Mental Health*, 8(5). https://doi.org/10.2196/27400
- Bergmann, C., Muth, T., & Loerbroks, A. (2019). Medical students' perceptions of stress due to academic studies and its interrelationships with other domains of life: A qualitative study. *Medical Education Online*, 24(1), Article 1603526. https://doi.org/10.1080/10872981.2019.1603526
- Bermejo-Franco, A., Sánchez-Sánchez, J. L., Gaviña-Barroso, M. I., Atienza-Carbonell,
 B., Balanzá-Martínez, V., & Clemente-Suárez, V. J. (2022). Gender Differences
 in Psychological Stress Factors of Physical Therapy Degree Students in the
 COVID-19 Pandemic: A Cross-Sectional Study. *International Journal of*Environmental Research and Public Health, 19(2), 810.
 https://doi.org/10.3390/ijerph19020810

- Brown, A., & Davis, C. (2018). Financial barriers and higher education access, choice, and success. *The Future of Children*, 27(1), 71–91.
- Burt, C. (2022). Exploring secondary students' wellbeing: How relationships and contextual factors influence wellbeing [Doctoral thesis, Newcastle University].

 Newcastle University eTheses. http://hdl.handle.net/10443/5759
- Callis, A. (2020). Application of the Roy adaptation theory to a care program for nurses.

 Applied Nursing Research, 56, Article 151340.

 https://doi.org/10.1016/j.apnr.2020.151340
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545–547. https://doi.org/10.1188/14.ONF.545-547
- Collins, C., & Stockton, C. (2018). The central role of theory in qualitative research.

 International Journal of Qualitative Methods, 17(1), 1609406918797475.

 https://doi.org/10.1177/1609406918797475
- Creswell, J. W. (2014). A concise introduction to mixed methods research. Sage.
- Creswell, J., & Poth, C. (2018). *Qualitative inquiry and research design*. Choosing among five approaches (4th ed.). SAGE Publications.
- D'Souza, U. J. A., bin Abdullah, A. F., Abdullah, A. C., & bin Jeffree, M. S. (2018). *A guide for addressing stress among medical students*. University Malaysia Sabah Press.
- Dyrbye, L., & Shanafelt, T. (2015). A narrative review on burnout experienced by medical students and residents. *Medical Education*, 50(1), 132–149.

https://doi.org/10.1111/medu.12927

- Ekbäck, E., von Knorring, J., Burström, A., Hunhammar, D., Dennhag, I., Molin, J., & Henje, E. (2022). Training for Awareness, Resilience and Action (TARA) for medical students: a single-arm mixed methods feasibility study to evaluate TARA as an indicated intervention to prevent mental disorders and stress-related symptoms. *British Medical Council Medical Education*, 22(1). https://doi.org/10.1186/s12909-02203122-2
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. https://doi.org/10.1111/j.1365
 2648.2007.04569.x
- French, D., & Vigne, S. (2019). The causes and consequences of household financial strain: A systematic review. *International Review of Financial Analysis*, 62, 150 156. https://doi.org/10.1016/j.irfa.2018.09.008
- Fugard, A., & Potts, H. (2015). Supporting thinking on sample sizes for thematic analyses: A quantitative tool. *International Journal of Social Research*Methodology, 18(6), 669-684. https://doi.org/10.1080/13645579.2015.1005453
- Gallagher, S. (2023). The Impact of Resources and Programs on EOF Students: A Study

 `to Improve On-Campus Support Programs (Order No. 30490191) *ProQuest One***Academic. (2814634014). https://www.proquest.com/dissertations-theses/impact-resources-programs-oneof-students-study/docview/2814634014/se-2
- García, F., Barraza-Peña, C., Wlodarczyk, A., Alvear-Carrasco, M., & Reyes-Reyes, A. (2018). Psychometric properties of the Brief-COPE for the evaluation of coping

- strategies in the Chilean population. *Psicologia: Reflexao e Critica, 31*(1), 22. https://doi.org/10.1186/s41155-018-0102-3
- Garg, S., Chauhan, A., Sharma, D., Sharma, A., & Singh, S. (2022). Coping styles to vitiate the risk of psychological morbidities among pre/para-clinical and clinical undergraduate medical students: A comparative cross-sectional study in India. *Middle East Current Psychiatry*, 29(1), 1-13. https://doi.org/10.1186/s43045-022-00196-y
- Gazzaz, Z., Baig, M., Al Alhendi, B., Al Suliman, M., Al Alhendi, A., Al-Grad, M., & Qurayshah, M. (2018). Perceived stress, reasons for and sources of stress among medical students at Rabigh Medical College, King Abdulaziz University, Jeddah, Saudi Arabia. *BioMed Central Medical Education*, 18(1), 29. https://doi.org/10.1186/s12909-018-1133-2
- Giorgi, A. (2009). The Descriptive Phenomenological Method in Psychology. Duquesne.
- Glenn, C., Caulfield, B., McCoy, M. A., Curtis, J. R., Gale, N., & Astle, N. (2019). An Annotated Bibliography of Financial Therapy Research: 2010 to 2018. *Journal of Financial Therapy*, 10(2). https://doi.org/10.4148/1944-9771.1218
- Grant-Smith, D., & de Zwaan, L. (2019). Don't spend, eat less, save more: Responses to the financial stress experienced by nursing students during unpaid clinical placements. *Nurse Education in Practice*, *35*, 1-6. https://doi.org/10.1016/j.nepr.2018.12.005
- Graves, B. S., Hall, M. E., Dias-Karch, C., Haischer, M. H., & Apter, C. (2021). Gender differences in perceived stress and coping among college students. *PLoS One*,

- 16(8), e0255634. https://doi.org/10.1371/journal.pone.0255634
- Guan, N., Guariglia, A., Moore, P., Xu, F., & Al-Janabi, H. (2022). Financial stress and depression in adults: A systematic review. *PloS One*, *17*(2), e0264041. https://doi.org/10.1371/journal.pone.0264041
- Habib, K. E., Gold, P. W., & Chrousos, G. P. (2001). NEUROENDOCRINOLOGY OF STRESS. *Endocrinology and Metabolism Clinics of North America*, 30(3), 695 728. https://doi.org/10.1016/s0889-8529(05)70208-5
- Haider, S., Ahmed, F., Pasha, H., Pasha, H., Farheen, N., & Zahid, M. (2022). Life satisfaction, resilience and coping mechanisms among medical students during COVID-19. *PlOS One*, *17*(*10*), e0275319.
 https://doi.org/10.1371/journal.pone.0275319
- Henderson, R. M., Chetty, O., & Gurayah, T. (2021). Coping styles and sources of stress of undergraduate health science students: *An integrative review. South African Journal of Occupational Therapy*, *5*(12), 29-38. https://doi.org/10.17159/2310
- Hill, M., Goicochea, S., & Merlo, L. (2018). In their own words: Stressors facing medical students in the millennial generation. *Medical Education Online*, *23(1)*, 1530558. https://doi.org/10.1080/10872981.2018.1530558
- Hoyt, L., Cohen, A., Dull, B., Maker Castro, E., & Yazdani, N. (2021). "Constant stress has become the new normal": Stress and anxiety inequalities among U.S. college students in the time of COVID-19. *Journal of Adolescent Health*, 68(2), 270-276. https://doi.org/10.1016/j.jadohealth.2020.10.030
- Hughes, M. (2021). Students, stress, and the pandemic: An occupational health

- perspective for nursing education. *Journal of Nursing Education*, 60(12), 674-679.https://doi.org/10.3928/01484834-20211004-02
- Italia, S., Costa, C., Briguglio, G., Mento, C., Muscatello, M. R. A., Alibrandi, A., Larese Filon, F., Spatari, G., Teodoro, M., & Fenga, C. (2021). Quality of Life, Insomnia and Coping Strategies during COVID-19 Pandemic in Hospital Workers. A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 18(23), 12466. https://doi.org/10.3390/ijerph182312466
- Jayakumar, K. L., Larkin, D. J., Ginzberg, S., & Patel, M. (2017). Personal Financial Literacy Among U.S. Medical Students. *MedEdPublish*, *6*(1). https://doi.org/10.15694/mep.2017.000035
- Jennings, K. M. (2018). The roy adaptation model: A theoretical framework for nurses providing care to individuals with anorexia nervosa. *Advances in Nursing Science*, 40(4), 370–383. https://doi.org/10.1097/ans.00000000000000175
- Joseph, N., Nallapati, A., Machado, M. X., Nair, V., Matele, S., Muthusamy, N., & Sinha, A. (2021). Assessment of academic stress and its coping mechanisms among medical undergraduate students in a large Midwestern university. *Current Psychology*, 40(6), 2599–2609. https://doi.org/10.1007/s12144-020-00963-2
- Joo, S.-H., Durband, D. B., & Grable, J (2008). The impact of financial stress on college students. *Journal of College Student Retention: Research, Theory & Practice*, 10(3), 287-305.http://doi.org/10.2190/cs.10.3.c
- Kumar, B., Shah, M., Kumari, R., Kumar, A., Kumar, J., & Tahir, A. (2019). Depression, anxiety, and stress among final-year medical students. Cureus, 11(3), e4257.

https://doi.org/10.7759/cureus.4257

- Kuper, A., Lingard, L., & Levinson, W. (2008). Critically appraising qualitative research.
 British Medical Journal, 337, a1035. https://doi.org/10.1136/bmj.a1035
- Last, B. S., Schriger, S. H., Becker-Haimes, E. M., Fernandez-Marcote, S., Dallard, N., Jones, B., & Beidas, R. S. (2022). Economic Precarity, Financial Strain, and Job Related Stress Among Philadelphia's Public Mental Health Clinicians.

 *Psychiatric Services, 73(7), 774–786. https://doi.org/10.1176/appi.ps.202100276
- Lazarus, R., & Folkman, S. (1984). Stress, appraisal, and coping. Springer.
- Lazarus, R., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, *1*(3), 141–169. https://doi.org/10.1002/per.2410010304
- Leombruni, P., Corradi, A., Lo Moro, G., Acampora, A., Agodi, A., Celotto, D., & Siliquini, R. (2022). Stress in medical students: PRIMES, an Italian, multicenter cross-sectional study. *International Journal of Environmental Research and Public Health*, 19(9), 5010. https://doi.org/10.3390/ijerph19095010
- Leshner, A. I., Scherer, L. A., National Academies of Sciences, Engineering, And
 Medicine (U.S., Stemm, I., National Academies of Sciences, Engineering, And
 Medicine (U.S.). Board On Higher Education and Workforce Policy And Global
 Affairs, National Academies of Sciences, Engineering, And Medicine (U.S.).
 Board On Health Sciences Policy, & National Academies of Sciences,
 Engineering, And Medicine (U.S.). Health And Medicine Division. (2021).

 Mental health, substance use, and wellbeing in higher education: Supporting the

- whole student. National Academies Press.
- Lopes, A., & Nihei, O. (2021). Depression, anxiety and stress symptoms in Brazilian university students during the COVID-19 pandemic: Predictors and association with life satisfaction, psychological well-being and coping strategies. *PLOS One*, *16*(*10*), e0258493. https://doi.org/10.1371/journal.pone.0258493
- Manti, P., Mastrogiannis, D., Mantzorou, M., Adamakidou, T., Mantoudi, A., Stefanidou, S., & Timmins, F. (2022). Stress levels and coping strategies among undergraduate nursing students in Greece during economic recession: A cross sectional study. *Nurse Education in Practice*, 60, 103299.
 https://doi.org/10.1016/j.nepr.2022.103299
- Mar, del, Magnavita, N., & Carmen, del. (2023). Adaption to change and coping strategies: New resources for mental health. Frontiers Media SA.
- McCarthy, B., Trace, A., O'Donovan, M., Brady-Nevin, C., Murphy, M., O'Shea, M., & O'Regan, P. (2018). Nursing and midwifery students' stress and coping during their undergraduate education programmes: An integrative review. *Nurse Education Today*, 61, 197–209. https://doi.org/10.1016/j.nedt.2017.11.029
- McLoughlin, E., Arnold, R., Moore, L. J., Slavich, G. M., & Fletcher, D. (2023). A qualitative exploration of how lifetime stressor exposure influences sport performers' health, well-being, and performance. *Anxiety Stress and Coping*, 118. https://doi.org/10.1080/10615806.2023.2246023
- Merriam, S., & Tisdell, E. (2015). Qualitative research: A guide to design and implementation (4th ed.). John Wiley & Sons.

- Mirza, A., Baig, M., Beyari, G., Halawani, M., & Mirza, A. (2021). Depression and anxiety among medical students: A brief overview. *Advances in Medical Education and Practice*, 12, 393–398. https://doi.org/10.2147/AMEP.S302897
- Moore, A., Nguyen, A., Rivas, S., Bany-Mohammed, A., Majeika, J., & Martinez, L.
 (2021). A qualitative examination of the impacts of financial stress on college students' well-being: Insights from a large, private institution. SAGE Open
 Medicine, 9, 205031212110181. https://doi.org/10.1177/20503121211018122
- Moore, M., Yang, D., Raines, A., Bailey, R., & Beg, W. (2022). Intersection of anxiety and negative coping among Asian American medical students. *Frontiers in Psychology*, 13, 929227. https://doi.org/10.3389/fpsyg.2022.929227
- Morra, D. J., Regehr, G., & Ginsburg, S. (2008). Anticipated debt and financial stress in `medical students. *Medical Teacher*, *30*(3), 313–315. https://doi.org/10.1080/01421590801953000
- Neufeld, A., & Malin, G. (2021). How medical students cope with stress: A cross sectional look at strategies and their sociodemographic antecedents. *BioMed Central Medical Education*, 21(1), 1-12. https://doi.org/10.1186/s12909-021-02734-4
- Ogunyemi, D., Clare, C., Astudillo, Y. M., Marseille, M., Manu, E., & Kim, S. (2020).

 Microaggressions in the learning environment: A systematic review. *Journal of Diversity in Higher Education*, 13(2), 97–119.

 https://doi.org/10.1037/dhe0000107
- Onieva-Zafra, M., Fernández-Muñoz, J., Fernández-Martínez, E., García-Sánchez, F.,

- Abreu-Sánchez, A., & Parra-Fernández, M. (2020). Anxiety, perceived stress and coping strategies in nursing students: A cross-sectional, correlational, descriptive study. *BioMed Central Medical Education*, *20*(1), 370. https://doi.org/10.1186/s12909-020-02294-z
- Pascarella, E. T., & Terenzini, P. T. (2018). How College Affects Students: 21st Century Evidence That Higher Education Works. Jossey-Bass.
- Pham, T., Bui, L., Nguyen, A., Nguyen, B., Tran, P., Vu, P., & Dang, L. (2019). The prevalence of depression and associated risk factors among medical students: An untold story in Vietnam. *PlOS One*, *14*(8), e0221432.

 https://doi.org/10.1371/journal.pone.0221432
- Philippe Fauquet-Alekhine, & Erskine, J. (2023). *The Palgrave Handbook of Occupational Stress*. Springer Nature.
- Pisaniello, M., Asahina, A., Bacchi, S., Wagner, M., Perry, S., Wong, M., & Licinio, J. (2019). Effect of medical student debt on mental health, academic performance and specialty choice: A systematic review. *British Medical Journal Open*, *9*(7), e029980. https://doi.org/10.1136/bmjopen-2019-029980
- Pocklington, A. (2023). Women With Student Loans: Relational Impacts on Self, Family, and Work. Ed.D. Dissertations in Practice.

 https://digitalcommons.tacoma.uw.edu/edd_capstones/72
- Ragab, E., Dafallah, M., Salih, M., Osman, W., Osman, M., Miskeen, E., & Ahmed, M. (2021). Stress and its correlates among medical students in six medical colleges:

 An attempt to understand the current situation. *Middle East Current Psychiatry*,

- 28(1), 1-10. https://doi.org/10.1186/s43045-021-00158-w
- Ramanan, R. A., Phillips, R. S., Davis, R. B., Silen, W., & Reede, J. Y. (2002).

 Mentoring in medicine: keys to satisfaction. *The American Journal of Medicine*,

 112(4), 336–341. https://doi.org/10.1016/s0002-9343(02)01032-x
- Raquel Sofia Sandoval, Dunleavy, S., Afolabi, T., Said, J. T., Connor, J., Hossain, A., Bina Kassamali, Tamina Kienka, Srinivasan, M., Cheng, A., Ölveczky, D., & Chatterjee, A. (2021). Equity in medical education: Addressing microaggressions and discrimination on the wards. *Medical Teacher*, *44*(*5*), 551–558. https://doi.org/10.1080/0142159x.2021.2006617
- Ravitch, S. M., & Nicole Mittenfelner Carl. (2019). Qualitative Research. Sage
- Rodriguez Alcantara, R., Barcelata Eguiarte, B. E., Garcia Mendez, M., Bermúdez Jaimes, M. E., & Gonzalez Arratia Lopez Fuentes, N. I. (2020). Examining the mediating role of coping and emotion regulation in stress models in adolescents. *Repositorio Institucional*, http://hdl.handle.net/20.500.11799/109727
- Rohleder, P., & Lyons, A. (2015). *Qualitative Research in Clinical and Health**Psychology. Palgrave Macmillan. https://doi.org/10.1007/978-1-137-29105-9
- Rosdahl, J., Goldhagen, B., Kingsolver, K., & Stinnett, S. (2015). Stress and burnout in residents: impact of mindfulness-based resilience training. *Advances in Medical Education and Practice*, 525. https://doi.org/10.2147/amep.s88580
- Ross, D. A., Hinton, R., Melles-Brewer, M., Engel, D., Zeck, W., Fagan, L., Herat, J., Phaladi, G., Imbago-Jácome, D., Anyona, P., Sanchez, A., Damji, N., Terki, F., Baltag, V., Patton, G., Silverman, A., Fogstad, H., Banerjee, A., & Mohan, A.

- (2020). Adolescent well-being: A definition and conceptual framework. (2020). *Journal of Adolescent Health*, 67(4), 472–476.

 https://doi.org/10.1016/j.jadohealth.2020.06.042
- Salam, A., Harith, A., Abdullah, N., Shan, C., Rahman, A., & Mahadevan, R. (2019).

 Coping strategies among first- and third-year medical students in a Malaysian public university. *Journal of Medicine*, 20(1), 5–11.

 https://doi.org/10.3329/jom.v20i1.38813
- Sattar, K., Yusoff, M., Arifin, W., Yasin, M., & Nor, M. (2022). Effective coping strategies utilised by medical students for mental health disorders during undergraduate medical education-a scoping review. *BioMed Central Medical Education*, 22(1), 121. https://doi.org/10.1186/s12909-022-03185-1
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, *52*, 1893-1907. https://doi.org/10.1007/s11135-017-0574-8
- Shao, R., He, P., Ling, B., Tan, L., Xu, L., Hou, Y., & Yang, Y. (2020). Prevalence of depression and anxiety and correlations between depression, anxiety, family functioning, social support and coping styles among Chinese medical students.
 BioMed Central Psychology, 8(1), 1-19. https://doi.org/10.1186/s40359-020-00402-8
- Shaw, M. K., Chandratilake, M., Ho, M.-J., Rees, C. E., & Monrouxe, L. V. (2019).

 Female victims and female perpetrators: medical students' narratives of gender

- dynamics and professionalism dilemmas. *Advances in Health Sciences Education*. https://doi.org/10.1007/s10459-019-09919-z
- Contributors, W. E. (2023, September 14). *Difference between MD and DO*. WebMD. https://www.webmd.com/a-to-z-guides/difference-between-md-and-do
- Slimmen, S., Timmermans, O., Mikolajczak-Degrauwe, K., & Oenema, A. (2022). How stress-related factors affect mental wellbeing of university students A cross sectional study to explore the associations between stressors, perceived stress, and mental wellbeing. *PLOS One*, *17*(*11*), *e0275925*. https://doi.org/10.1371/journal.pone.0275925
- Stanisławski, K. (2019). The coping circumplex model: An integrative model of the structure of coping with stress. *Frontiers in Psychology*, 10, (694). https://doi.org/10.3389/fpsyg.2019.00694
- Sukhera, J., Goez, H., Brown, A., Haddara, W., & Razack, S. (2022). Freedom from discrimination or freedom to discriminate? Discursive tensions within discrimination policies in medical education. *Advances in Health Sciences Education*. https://doi.org/10.1007/s10459-022-10090-1
- Tahir, M., Yasmin, R., Butt, M., Gul, S., Aamer, S., & Naeem, N. (2022). Exploring the level of academic procrastination and possible coping strategies among medical students. *The Journal of the Pakistan Medical Association*, 72(4), 629–633. https://doi.org/10.47391/JPMA.0710
- Tariq, A., Tariq, N., Jabeen, K., & Naseem, S. (2022). Exploring Coping Strategies For Stress Management Among Undergraduate Medical Students. *Journal of Ayub*

- *Medical College Abbottabad*, *34*(*3*), 478 482.https://doi.org/10.55519/jamc-03-9508
- Farmer, Talbott, E., McMaster, K ,Lee, D., & Aceves T.C. (2022) *Handbook of Special Education Research*, *Volume 1*. Routledge. https://doi.org/10.432419781003156857
- Travia, R. M., Larcus, J. G., Andes, S., & Gomes, P. G. (2020). Framing well-being in a college campus setting. *Journal of American College Health*, 1–15. https://doi.org/10.1080/07448481.2020.1763369
- van der Molen, H. F., Nieuwenhuijsen, K., Frings-Dresen, M. H. W., & de Groene, G. (2020). Work-related psychosocial risk factors for stress-related mental disorders: an updated systematic review and meta-analysis. *BMJ Open, 10*(7), e034849. https://doi.org/10.1136/bmjopen-2019-034849
- Weber, J., Skodda, S., Muth, T., Angerer, P., & Loerbroks, A. (2019). Stressors and resources related to academic studies and improvements suggested by medical students: a qualitative study. *BMC Medical Education*, 19(1). https://doi.org/10.1186/s12909-019-1747-z
- Wojnar, D., & Swanson, K. (2007). Phenomenology: An exploration. *Journal of Holistic Nursing*, 25(3), 172-180. https://doi.org/10.1177/0898010106295172
- Wright-Mair, R., Ramos, D., & Passano, B. (2023). Latinx College Students' Strategies for Resisting Imposter Syndrome at Predominantly White Institutions. *Journal of Latinos and Education*, 1–19. https://doi.org/10.1080/15348431.2023.2180366
- Wurth, S., Sader, J., Cerutti, B., Broers, B., Bajwa, N., Carballo, S., & Audétat-Voirol, M.

- (2021). Medical students' perceptions and coping strategies during the first wave of the COVID-19 pandemic: studies, clinical implication, and professional identity. *BioMed Central Medical Education*, *21(1)*, 620. https://doi.org/10.1186/s12909-021-03053-4
- Zondi, Z. P. (2018). Factors contributing to stress among Students at a selected university, South Africa (Doctoral dissertation). University of Venda. ttps://univendspace.univen.ac.za/bitstream/handle/11602/1132/Dissertation%20-%20Zondi%2C%20z.%20p.-.pdf?sequence=1&isAllowed=y
- Zvauya, R., Oyebode, F., Day, E. J., Thomas, C., & Jones, L. (2017). A comparison of stress levels, coping styles and psychological morbidity between graduate-entry and traditional undergraduate medical students during the first 2 years at a UK medical school. *BioMed Central Research Notes*, 10(1), 93. https://doi.org/10.1186/s13104-017-2395-1

Appendix A: Interview Guide

Introduction

Greetings, my name is Untara Shaikh and I am a doctoral student conducting my dissertation at Walden University. Thank you for participating in this qualitative research interview. The purpose of this study is to understand the experiences and coping strategies of medical students in managing stress, particularly financial stress, during their education. Your participation will contribute valuable insights to the research. Please note that your responses will be kept confidential and used for research purposes only. If you have any questions or concerns at any point, feel free to let me know. With your permission, I would like to begin the interview.

Part I: Background Information

- Q1. How old are you?
- Q2. Which year of medical school are you in?
- Q3. And the name of your University/college?
- Q4. Where is your medical university/college located?
- Q5. What is your marital status right now?
- Q6. Have you been married previously?
- Q7. Do you have children?
- Q8. What is your race of origin?
- Q9. What education you have achieved to date?
- Q10. What year did you graduate with your last degree?
- Q11. What is your employment status?

Q12. What is your yearly household income?

Part II: Stressors, Barriers, and Institutional Influence

- Q13. What are the common stressors experienced by you? (Note to myself—financial, mental, physical, academic, peer, family and work).
- Q6. How do these stressors impact your overall well-being and academic performance?

Part III: Financial Challenges and Gender Perspectives

- Q14. How do you describe your experiences and emotions when you face financial constraints in affording the things you need or want? (Note to myself—books, electronic equipment, clothes, groceries, socialization, and rent).
- Q15. How does the difficulty in affording necessary or desired items impact your academic performance?
- Q16. How do you perceive the financial situations of your peers in relation to your own experiences? To what extent do you perceive similarities or differences?
- Q17. In what ways does facing financial challenges affect the sense of belonging and integration within the university community?

Part IV: Gender and Professional Development

Q18. Are there differences in the treatment and expectations of you by professors or patients compared to your male counterparts? and do these differences impact your educational and professional experiences?

Part V: Coping With Stress in Academic and Clinical Training

- Q19. What coping strategies do you employ to manage stress during your medical education? (Note to myself—stressors: Financial, physical, mental, emotional, family and work).
- Q20. How do professors, staff, and peers influence your coping mechanisms in dealing with financial stress? (Note to myself---role, support, understanding of the professors, staff, and peers).
- Q21. What recommendations do you have for promoting coping strategies and gender equity and inclusivity within the medical profession and education to address the unique experiences and concerns face by you?

Conclusion

Thank you for your participation and valuable insights. Your responses will greatly contribute to our understanding of stress coping and financial challenges in medical education. If there is any additional information you would like to share or any questions you have for me, please feel free to do so.

Appendix B: Verbatim Transcript of Participant Interviews

Female Medical Students' Lived Experiences of Financial Stress and Coping

Qualitative Interview # PF: Verbatim T Researcher	Participant PF
Greetings. My name is Untara	Okay that sounds good I give consent.
Shaikh, and I am a doctoral student	
conducting my dissertation at	
Walden University. Thank you for	
participating in this qualitative	
research interview. The purpose of	
this study is to understand the	
experiences in coping strategies of	
medical students in managing	
stress, particularly financial stress,	
uh during the education. Your	
participation will contribute	
valuable insights to re to the	
research.	
Please note that your responses	
will be kept confidential and used	
for research purposes only. If you	
have any questions or concerns at	
any point, feel free to let me know.	
With your permission, I would like	
to begin the interview.	
How old are you?	I am 21 years old.
Which year of medical school are	2nd
you in?	
Where is your medical university	It's at St., Vincent Island.
located?	
what is your marital status right	I am single
now?	

Qualitative Interview # PF: Verbatim Researcher	Participant PF
Have you been, married before?	No
What is your race of origin?	I am from Pakistan.
What education, have you,	Well, I finished high school and I started two years of college before I applied to med
achieved with your last, to this	school
date?	
What is your employment status?	Just school, no job.
What is your yearly household	I am not sure.
income?	
What are the common stressors	Just school related mostly.
experienced by you?	
Can you tell me a little bit more	Whenever there is an exam or an assignment. Since I am in an accelerated program, it's
about it?	mostly just three to four months of constant Back to back exams, So say stress about
	that.
Any mental strain?	Not really.
How about financial stress?	Financially, no, my parents are able to cover, all of my, fees for school, so I don't have
	to take any loans.
Okay, so how do these, some of	In the beginning, it's not too bad, but I would say towards the end, I start to get no too
the stresses that you said, "the	stressed out. It starts to worry me a lot having to juggle so many classes.
back to back to, studying and	
everything" affect your overall	
wellbeing?	
Okay, and then how does this	I do think in the beginning of the term I perform better as compared to the end. When I
affect your academic performance	start to get a little bit more tired, you can kind of see a little bit of a decline I think, but
then?	um, nothing too major. So uh, it hasn't concerned me, I think.
Okay, how do you describe your	So since my parents do cover for school, groceries is pretty much all I spend any extra
experiences and emotions who	money on. I don't really. I try not to socialize too much, you know, once in a while I
•	
face financial constraints in	guess. After a final or something. But just so, my parents don't have any extra burden.

Researcher	Participant PF
affording the things you need or	try not to spend anything more than I have to. It does mean going out less or having les
want? Like um, if you are on tight	like free time I guess, but we're so busy all the time, it doesn't affect me too much, I
budget and you need to buy or you	think.
need to socialize or get groceries,	
clothes. What do you experience at	
that point?	
Okay, so how about like if you	Books. Luckily we do get access to them, because of a school drive and because of our
have to get some books to study?	school library. They give us those books, so I don't have to spend anything extra for it.
Okay, okay, So how does the	I mean it, there are certain, you know, online programs like You World that you have to
difficulty in affording necessary or	spend extra money on and so for those, I have another sister who does also go to,
desire items impact your academic	medical school with me. So usually what we do is just buy one and then share it. So that
performance?	ends up cutting the cost in half I guess since it's more necessary for both of us, we could
	both use it. So I guess. It kind of just worked out for us in that way.
Okay, okay. And can you describe	Yeah, so UWorld is just like, another website, with questions and, you know, videos to
me? What is UWorld?	help you study. So just an extra pool.
Oh, this is something that is	So it's just, we've been told by, you know, upper classman, that's something very helpfu
important to your preparation for	and um, we will need to succeed. So it's not um, required per se, but it's definitely
exams?	helpful and I think it did help me a lot.
Does it affect your sister also?	Well, actually these websites, they don't really, care, I guess if you're on at the same
While you guys are sharing, how	time. So uh, I the only problem we will have is if I do a practice test and then the answer
does it work, How do you guys,	is already on there, so she can't really do it. Unless rests the whole thing. So that's the
split it like the timings you get	only time we'll have an issue. But um, other than that, we can watch videos at the same
make up or you make a schedule	time and we can do questions. So it doesn't, it's not too bad.
that this is the time that she will	
study or something, how manage	
that?	
Okay, okay, so how do you feel	well, at least with my friends, what we do a lot is just have a big study group sometime
when rest of the students are	do know, order food and I try not to just eat at home and then come, so it doesn't affect
hanging out? Socializing? So how	me too much because not everyone is doing it either. We just kind of study together lik
does it affect your academic	that.
performance?	

Qualitative Interview # PF: Verbatim Transcript Researcher Participant PF Okay, so how do you perceive the I, so you're asking like, how what do I feel about my peers having in their situation? financial situations of your peers in relation to your own experiences? Definitely depends on the person. I do have some friends who are able to just eat out Based on your situation, your financial situation compared to the every single day, they don't have to spend any time grocery shopping and they can study more, so that's really interesting to see, but at the same time, like I do have friends who others, So to what extent do you see that you go they have just don't eat because uh, they don't have the time to go grocery shopping and they just similarities or differences. want to study. So like uh, what I'll do is I'll bring them food or whatever I made or, you know, cause uh, we're friends, so we all just kind of share and try to help each other out. Okay, so like the in finances in From my peers. response, like the differences, paying the fees on time, getting the you as you experience. So w what similarities or differences do you perceive? Yes I will say, I do think my peers do end up getting different websites and tools faster than I would. I'm expected to do more research before I spend my money on something. Because it It is not my own money, it is my parents'. Money. So I, I do more research, see if I really needed it. Whereas my friends, I feel like they're, they are older than me, so they are able, they have their own money so they can just spend something right away and get whatever tools they might need. it does sometimes because uh, my parents will expect me to take, you know, a couple Okay, okay, so does it affect your days or maybe even a week to do my research fully, so I'll just get the resources later. So uh, academic performance by looking at or searching for like I do think in that way it kind of holds me back, but um, other than that, no. deals, does it, is it time consuming and rather, and then it does affect your academic time that you could be studying and you're looking after for these, resources? Okay, okay. In what ways does I'm sorry. Can you repeat that?

facing financial challenges affect

Qualitative Interview # PF: Verbatim T. Researcher	Participant PF
the sense Longing and integration	
within the university community?	
When you are facing these	I don't think so, no, just because our school is uh, very diverse, we have people from
financial challenges, okay, does it	everywhere, so I feel like I see a lot of people who struggle and a lot of people don't, so I
affect that that you do, does it?	don't feel like I'm out of place. We're all just trying to get by, so um, I don't feel too out
Have you have these feelings do I	of place, no.
belong to this medical career or	
this university like that?	
Okay, so even if they have	No, I don't think so. I think I'm very fortunate that my parents can pay it off and a lot of
financial differences, you seem	people can't. So I just kinda try to look at the bright side because it could be worse. You
like to be, that you do belong to	know.
this place. And 2nd thoughts they	
don't come in like, oh why I chose	
medicine, it is too expensive?	
What coping strategies do you	I'd say going for walks a lot, listening to music, just trying to, you know, be distracted
employ to manage the stress	by something else, nothing too much.
during medical education?	
okay, and let's say if you are	Oh, for a, same thing really go to the gym, just try to take uh, myself out of the library
having academic stress So what?	for a little bit, go talk to my friends.
So what coping is there for	
academic?	
Okay.	Yeah
Okay, so how do professors, the	No, I don't think so. No, I've never experienced where my professor, can see that I would
staff, and your peers influence	say my peers more would.
your coping mechanisms in	
dealing with financial stress? Do	
the professors have any support	
system? Do they understand that	
this is your coping? Like, okay, if	
you're behind your assignment, do	
they Understand that, that you are	

Qualitative Interview # PF: Verbatim Transcript

Researcher

Participant PF

problem?

Okay, what recommendations do you have for promoting coping

strategies?

going through some financial

Okay, and uh. This is kind of like the same kind of question, but in a that different situation. Like we are going to put you in that situation, let's say that's you parents are paying for that, but you're still very careful with your expense and your budget, so. Coping strategies within the medical performance and a profession and medical education to address the unique experiences and concerns faced by you. So if a person in your case, like they are being covered financially by parents and still looking out for, books or online things, so what coping strategies would you recommend that recommend in your situation? What would you suggest like uh, authorities should do, like your school teachers? Do you think any coping system they could,

integrate?

For promoting coping, right? I guess it would be nice if your professors told you, you know, it, it'll be okay, just study and try your best. But um, for coping I would just say like go to the gym, just get out of the library. I'm someone who just spends all day at the library, I don't go anywhere else, I'm studying my room, so it's just nice to just go out. Again would just be having a support system, just having friends who I guess are in the same situation, so you don't feel like you're alone.

Let me see, I'm not sure what would be a good message because uh, I think everyone different situations. But if their parents are covering it, then uh, maybe just make it easier to find, you know, deals for books make it easier for you so you don't have to do all the research on your own.

Qualitative Interview # PF: Verbatim T	Participant PF
Okay, are there differences in the	Depends on the professor. I do think I had one professor in the past who just, did not
treatment and expectations of you	care for a woman's opinion and just kind of would openly say, Okay, well, if you won't
by professors compared to your	do well, but the guys will all do well. So it, but other than him, no.
male students?	
Okay, so do these differences	Yes, for sure, I think it's very unprofessional for someone to say that, especially when
impact your educational and	they are your professor supposed to teach you better, but um, I, I do think it maybe just
performance experience,	maybe do better because uh, it kind of aggravates you hearing that, but uh, other than
professional experiences?	that, no.
Okay, so how does it impacted like	Yes, I, I think there is definitely like a favoritism on his part. And it made all the woman
your educational experience? Were	very uncomfortable knowing how he felt. So you kind of just want to speak less in class
you not able to present something	and not have much attention. So I do think it affected that class a lot.
or the grading system or like	
sometimes they just pick, male	
partners to, just to answer, was it	
something like that?	
What do you recommend that for	Well, one thing would be just, you know, professors who do treat women differently,
gender equity?	need to either, you know, be given a warning to stop or just be taken out immediately
	because it's not professional at all. It gives the school a bad look as well, I think. And it
	makes, it does impact the students so.
Okay, so I really appreciate your	I think I'm okay, thank you.
participation and your responses	
will greatly contribute to our	
understanding of stress, coping and	
financial challenges in medical	
education. If there is any additional	
information you would like to	
share or any questions you have	
for me, please feel free to do so.	
You think if there is anything you	I will say I personally I have four siblings, so um, it's not just me and my sister that are,
would like to share about the	you know, being taking account to the financial needs. So it is harder. So that's like

Qualitative Interview # PF: Verbatim Transcript	
Researcher	Participant PF
financial challenges are impacting	another reason why even if I am being covered, I still have to look out for how much I'm
female medical students?	spending. And I Uh, like you said earlier, how, you know, certain professors can make
	females feel less because they favor a man's opinion more definitely takes, makes a big
	difference financially too. Also makes you feel like, you know, you put so much money
	to go to school just to also, still be looked down upon.
Okay, thank you so much.	Thank you.