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A Qualitative Inquiry into Female International Doctoral Students' Challenges and Stressors

Abstract

Objective: This qualitative study explored the challenges and stressors faced by female international doctoral students. **Background**: Student pressures can lead to high attrition and noncompletion of doctoral programs. Using Bronfenbrenner's ecological systems theory, this study connected its subsystems to the stressors these students experience. **Method**: A qualitative phenomenological approach examined the lived experiences of five female international doctoral students at an Illinois research institution. Participants were interviewed based on questions derived from the theoretical framework. **Results**: Challenges were identified across all subsystems. Academic (microsystem and mesosystem) issues included limited skills, time management issues, and language barriers. Psychological (exosystem) stressors arose from high workloads, family commitments, and financial strains. Psychological stressors included headaches, stomachaches, nightmares, and weight loss. Physiological (macrosystem) issues stemmed from cultural expectations and inadequate support for students with children, often leading to stressors such as anxiety, irritability, sleep deprivation, and lack of social support. The advisor and faculty had a critical influence (chronosystem), with concerns over feedback, communication, and encouragement. Conclusion: Female international doctoral students face many obstacles, contributing to higher attrition rates. Addressing these challenges requires dedicated institutional support. **Application**: Higher education institutions should implement targeted support systems to reduce attrition rates among these students.

Keywords: International female doctoral students, PhD students, challenges, stress, academic, psychological, physiological, faculty related, phenomenological

A Qualitative Inquiry into Female International Doctoral Students' Challenges and Stressors

Stress is common across all ages, cultures, and location. It is caused by various challenges but is not always harmful (Kaufman, 2007). The United States attracts many international students for higher education (Altbach, 2010; Sandhu, 1995). According to Le et al. (2016), global collaboration has become a major trend in U.S. higher education. Schmidt and Umans (2014) stated that women have made up over 50% of U.S. graduate program enrollments for almost two decades. Additionally, women account for 44% of doctoral programs, 38% of full-time higher education faculty, and 14% of tenure and non-tenure track faculty. The doctoral journey is demanding, often marked by peer-pressure, constant evaluations, low status, heavy workloads, paper deadlines, financial strains, pressure to publish, and active participation in academic activities like conferences (Kurtz-Costes et al., 2006; Schmidt & Umans, 2014; Tammy & Maysa, 2009).

Doctoral students desire to complete their studies but encounter many challenges and stress that may impede progress (Bireda, 2015). The application process itself can be stressful, with exams to prepare for, documents to submit internationally, and long waits for admission responses (Adyinol, 2013). Even after successful admission, international students encounter additional stressors upon arriving in the United States, The challenges and stress can vary based on gender, with female doctoral students often facing unique obstacles (Leonard, 2001; Raddon, 2002).

All doctoral students face various challenges, but female doctoral students encounter more barriers during their academic journey. The stress levels among female doctoral students are generally higher than among their male counterparts because they often juggle additional

roles, such as caretaking, alongside their studies (Bireda, 2015; Hyun et al., 2006; Oswalt & Riddock, 2007; Stratton et al., 2006; Toews et al., 1997). Research states female doctoral students have a higher attrition rate than male doctoral students, prompting deeper exploration into the underlying reasons (Castro et al., 2011; Mansfield et al., 2010; Marschke et al., 2007; Schmidt & Umans, 2014).

Several studies have identified various challenges and stressors faced by female doctoral students. These include (a) difficulties coping with academic pressure, triggered by negative experiences and a lack of support (Damrosch, 2000; Haynes et al., 2012; Juniper et al., 2012; Kinman & Jones, 2008; Puig-Ribera et al., 2007; Pychyl & Little, 1998; Schmidt & Umans, 2014); (b) organizational culture issues (Lovitts & Nelson, 2000; Rhode, 2003); (c) uncomfortable life events, unsatisfactory faculty-student relationships, and self-efficacy challenges (Bitzer, 2007; Ives & Rowley, 2005; Stubb et al., 2011); (d) difficulty balancing work-family roles, financial obligations, and other responsibilities (Beckman et al., 2010; Haynes et al., 2012; Hubbard & Atkins, 1995; Juniper et al., 2012; Kinman & Jones, 2008; Moyer et al., 1999; Pychyl & Little, 1998); and (e) a lack of guidance which prolongs or disrupts doctoral studies (Bireda, 2015; Brauer et al., 2003; Castro et al., 2011; Smith et al., 2006; Toews et al., 1997). Additionally, some female doctoral students drop out due to late entry into doctoral programs, part-time enrollment, childcare responsibilities, and complex life situations (Chesterman, 2001; Jackson, 2008; Thanacoody et al., 2006; White, 2003).

These challenges can lead to decreased motivation and disrupt academic progress (Ahern & Manathunga, 2004; Bireda, 2015). Insights from the literature review provide context for the issues female doctoral students encounter. Further exploration of the challenges and stressors of female international doctoral students may shed light on deeper complexities and interactions.

This study conducted a qualitative inquiry into the lived experiences of female international doctoral students during their doctoral journey.

Theoretical Framework

Understanding the theoretical and conceptual framework is important to achieving the study's purpose. A framework helps explain, predict, and understand a phenomenon by introducing the theory that addresses the research problem (Swanson, 2013). The theoretical framework that guided this study was the Urie Bronfenbrenner's ecological systems theory. Bronfenbrenner (1994) posited that to understand human development, one must consider the entire ecological system, which comprises five socially organized subsystems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1994; Rus et al., 2010).

The microsystem refers to the direct interactions between individuals and their environment, such as with peers, superiors, faculty members, family, and neighbors.

(Bronfenbrenner, 1994; Rus et al., 2010). For female international doctoral students, this includes academic and professional stressors. The mesosystem refers to the relationships among different settings, such as between parents, the workplace, and the university. (Bronfenbrenner, 1994).

This mesosystem can also contain academic and professional challenges. The exosystem consists of activities that indirectly affect students, like university budget decisions impacting assistantships or faculty sabbaticals affecting education (Bronfenbrenner, 1994). For female international doctoral students, the exosystem encompasses psychological stressors. The macrosystem refers to the broader cultural context, including ideologies, beliefs, religious influences, the economy, and political systems. (Bronfenbrenner, 1994; Rus et al., 2010). This macrosystem can generate physiological stressors. The chronosystem focuses on the time

dimension, such as shifting gender roles, marriage, and evolving family structures. (Bronfenbrenner, 1994; Rus et al., 2010). The chronosystem can influence relationships with faculty. This study examined the factors within these subsystems that contribute to stress for female international doctoral students, focusing on academic, professional, psychological, physiological, and relationship-related stressors with faculty during their studies.

Table 1 describes the relationship between the research and theoretical framework. The framework clearly guides the research and directs the themes on which the research findings are based.

Table 1

Connection of theoretical framework to research findings.

Methods

Research is a systematic process for collecting, analyzing, and interpreting data to describe, predict, or control a phenomenon (Burns, 1977; Williams, 2007). Lincoln and Guba (1985) suggested that the choice of research paradigm sets the intent, motivation, and expectations. Paradigms, such as post-positivist or quantitative, constructivist or qualitative, and pragmatic or mixed methods, influence the purpose behind research (Mertens, 2005). They guide the way knowledge is studied and interpreted. This study used a constructivist approach to set the foundation for the qualitative method applied.

Following the constructivist approach, the general goal of the study was to explore an "in-

depth description and understanding of human experience" (Lichtman, 2013). Qualitative methods are typically used in constructivist research (Bogdan & Biklin, 1998; Burns, 1997; Cohen & Manion, 1994; Glesne & Peshkin, 1992; Mertens, 2005; Silverman, 2000). Hence, the overall approach for this research study was qualitative. Merriam (1988) explained:

Qualitative research assumes that there are multiple realities-that the world is not an objective thing out there but a function of personal interaction and perception. It is a highly subjective phenomenon in need of interpreting rather than measuring. Beliefs rather than facts form the basis of perception. (p. 17)

This study aimed to understand the experiences of female international doctoral students and interpret their stories. An inductive approach was followed, allowing themes and patterns to emerge from participant stories. The specific goal was to "describe and understand the essence of lived experiences of individuals who have experienced a particular phenomenon" (Lichtman, 2013, p.193). Participants were female international doctoral students at a research institution in Illinois. The phenomenon examined was the challenges and stress experienced during their studies. Based on this goal, the approach or methodological approach was Phenomenology.

This phenomenological qualitative study focused on the perspectives of five female international doctoral students in an education program at a research institution in Illinois. Gliner et al. (2009) noted that to understand themes, researchers should observe participants, interview them, or engage with them in the field. This study was guided by Urie Bronfenbrenner's ecological systems theory, which suggests that human development is influenced by different environmental systems (Addison, 1992; Rus et al., 2010). The environmental subsystems examined were the microsystem (academic and professional challenges and stressors), mesosystem (academic and professional challenges and stressors), exosystem (psychological

challenges and stressors), macrosystem (physiological challenges and stressors), and chronosystem (faculty-related stressors). Although the study's findings cannot be generalized to all female international doctoral students, they offer insights and potential learning opportunities. Participants were selected through a convenient sampling method, using the criteria, "Do you identify as an international female doctoral student enrolled in an education program as a full-time or part-time student?" and "Are you able to conduct a face-to-face interview in spoken English."

Data Collection

An individual interview is a method that enables direct conversation with a participant (Lichtman, 2013). This study used a structured interview format, with questions organized by themes derived from the theoretical framework. The interview was divided into sections covering general topics, academic issues, psychological and physiological factors, relationships with faculty, and additional questions (see Appendix A). The questions were designed to explore the challenges and stressors faced by female international doctoral students from various angles. They did not cover all elements of the theoretical framework but did not touch on each system (microsystem, mesosystem, exosystem, chronosystem, and macrosystem). The interview questions were developed specifically for this study, incorporating insights from the existing literature. They addressed academic, professional, psychological, physiological, and faculty relationship stressors.

The study participants were five female international students currently pursuing doctorates in an educational program at a research institution in Illinois. According to Gliner et al. (2009), convenient sampling selects participants based on ease of access. The researchers used their network of female international doctoral students to recruit participants willing to join

the study.

The participants in this study were Keyla, Heather, Stacy, Maria, and Aliya (pseudonyms). They were all between 26 and 30 years old, from Asian countries (China, Japan, Jordan, Malaysia, and Pakistan), with English as their second language. All were enrolled in a doctoral program. Among the participants, all were married except for Aliya. Heather and Maria planned to graduate in 2016, Stacy and Aliya in 2017, and Keyla in 2018. Each participant worked as a graduate assistant: Keyla as a graduate research assistant, Heather as a graduate administrative assistant, Stacy as a graduate teaching assistant, Maria as graduate research and teaching assistant, and Aliya as graduate assistant manager. Their long-term goal was to pursue careers in academia.

Five separate face-to-face interviews were conducted with these selected female international students. This qualitative interviewing method provides an opportunity to gather information through conversation (Lichtman, 2013). The aim was to understand their perspectives as female international doctoral students, and capture their experiences in-depth. Each interview lasted about an hour and was audio-recorded. During the interviews, the participants could take breaks if needed. Notes were also taken to complement the audio recordings.

Fontana and Frey (1994) suggested that a mix of open-ended and closed-ended questions helps gain insightful perspectives from participants. The study used both open-ended and closed-ended questions, focusing on demographic information and other relevant backgrounds. See Appendix A for the interview questions. Open-ended questions allowed participants to provide detailed responses, while closed-ended questions allowed participants to provide detailed responses, while closed-ended questions prompted concise answers. The study followed

Seidman's (2005) 3-step approach to interviewing: exploring the context of the participant's experience, detailing specific experiences, and examining the meaning behind those experiences. This method helped participants reflect on their journey through the lens of Urie Bronfenbrenner's ecological systems theory.

Analysis

Transcription is a key practice in qualitative research (Lichtman, 2013). The audiorecorded interviews were transcribed verbatim, with minor adjustments for grammar. Having
verbatim transcriptions allows researchers to refer back to the data accurately, which helps in
analysis. Transcriptions are crucial because they build theoretical sensitivity, bring researchers
closer to the data, and provide opportunities to review and refine the interview process
(Lichtman, 2013).

The coding process involved several stages. First, coding categories or themes were defined based on the theoretical framework. Then, code labels were assigned to each category, and relevant information was classified accordingly. Codes and sub-codes were assigned to these categories to organize the data. Reliability was tested during this process to ensure consistency. The category coding labels were: selection of school, academic challenges and stressors, professional challenges and stressors, psychological challenges and stressors, physiological challenges and stressors, and relationship with faculty. The coding structure was refined by establishing codes and sub-codes for each category.

After defining categories, codes, and sub-codes, a "Coding Sheet for Interview Transcript" was created to illustrate the coding process This sheet was used to underline specific words and phrases in the transcript, assign line numbers, and enter them into the corresponding cell. To ensure accuracy, inclusion and exclusion criteria were developed to define each category

and avoid overlap. This helped maintain a clear and mutually exclusive coding framework.

Results

This section presents the findings from the study, highlighting the experiences of five female international students during their doctoral journey. The results are organized into the following thematic areas: academic, professional, psychological, physiological, and relationship with faculty.

Academic and Professional Challenges and Stressors

Four of the five participants described their doctoral experience as positive, though they noted it was also stressful. A significant concern was the lack of important academic skills, particularly in time management. Effective time management is essential for doctoral studies due to the heavy course load, which includes assignments, content development, reading, and other writing activities. Participants also identified other concerns such as balancing school and family with English as their second language. Because English was not their first language, they often needed more time for reading and writing, which added to their stress levels compared to their peers.

Stacy:

"It has been a good experience overall. The positive aspect of it was the relationships with people. I was able to get along with the people, students, and faculty and the staff. I found a very positive atmosphere."

Keyla:

"I had multiple challenges, the first challenge, is the balance between family and work. And the second is language, as English is my second language, on reading articles and writing assignments, I had to spend more time. The third is that I do not have any background in workforce education, and I have to learn a lot of basic

knowledge about this area."

Maria:

"I had problems coping with understanding the field because I had to change my field from humanities to workforce education and development."

Another concern among the participants was balancing personal and professional life. All students reported that their supervisors offered little guidance on managing potential conflicts between academic and non-academic demands. The female international doctoral students felt less confident in their ability to balance these multiple commitments. They mentioned their conflicting roles, such as child and parent caregiver, work responsibilities, and part-time doctoral studies, as sources of stress and difficulty in finding balance.

Maria:

"I was afraid of the length of time a doctoral degree takes and the sacrifices I had to make to graduate. I have reduced my social life with friends and family because I do not have free time. The problem of trying to lead my family and be successful in my career is very challenging."

Psychological Stress and Symptoms

Participants reported several concerns about emotional, psychological, and social well-being. These included low self-confidence, stress, lack of motivation, isolation, and strained social relationships. The most common psychological stressor mentioned was stress caused by financial issues, heavy workloads, time pressures, and family obligations. Inadequate funding for supporting their families and research projects was a major source of stress as well.

Heather: "By nature it is stressful because you have a lot of time studying your research

interests and topics of interests, it will take a lot of time out of your hands, and once you start exploring it is like opening these doors in your brain, one thing leads to another. And certain things you need to adjust in class, these are the things I mean about open communication, it eases the stress. I took classes where it is impossible to talk to your teachers."

Keyla:

"The most stressful is actually classwork/homework. Actually, in class, I enjoy the class but at home, I do not enjoy the work."

Stacy:

"I think the negatives have been strongly related to a couple of things: financial stress and worry because I am very dependent on an assistantship which I am lucky to have. Without that, it would have been impossible for me to continue and complete the degree. I do not have any source of funding and I really need this assistantship to continue."

Maria:

"I am a graduate assistant at the university, and I have two children. I usually tired by the time I reach home. After that, I cook and assist my kids with their school work. Doing all these tasks makes me even more tired and neither I will be left with any energy nor any motivation to concentrate and study. This is my daily life. When I think about my doctoral study, I get stressed. But I really want to do it."

When asked about the most common psychological symptoms they experienced, the participants identified headaches, stomach aches, nightmares, fatigue, muscle soreness, and backaches as the prevalent issues.

Heather:

"Headaches, I get a lot of stomach aches because of stress and sometimes because of unfair grading in certain classes and even my blood pressure goes up and down, I feel that fluctuation. I even get nightmares and I do not remember how many times I have dreamt about my professor giving me a bad grade."

Stacy:

"It is not directly, but sometimes I sleep very late or short and it makes me tired and uncomfortable. I do not get time to sleep. I also get horrible back pain."

Physiological

Participants expressed various physiological symptoms, including anxiety, worry, irritability, sleep deprivation, feeling edgy, and lack of social support. Nearly all cited the lack of social support as a significant issue because their immediate family or friends were not nearby.

Heather:

"Anxiety interferes with our ability to think and our ability to solve problems and our ability to figure out our work because a lot of times you are overly stressed about a paper before an exam and because of which we end up failing."

Aliya:

"I feel anxious, worried, irritable at times, I am sleep deprived, I feel edgy and down, and have nightmares at times, and definitely lack of social support because we do not have our family or friends here."

Participants also mentioned their unique home roles as a source of stress, consuming much of their time. They believed in having equal rights and capacities as men, but faced additional responsibilities due to cultural expectations. These tasks included household chores

like shopping, childcare, and earning extra income. They were often expected to attend social activities even when it conflicted with their schedules. Although their husbands were supportive, they did not share these tasks or lacked the skills to do so. This cultural role as caregivers and handlers of every household responsibility was challenging. One participant was concerned about providing adequate financial and emotional support for her children given the sacrifices required by her doctoral journey. While having children and a spouse at home brought joy, these female students felt torn between family responsibilities and their doctoral studies. Some suggested universities could be more family-friendly to accommodate the demands of parenting. One student described the challenge of being a female doctoral student with unique clarity:

Heather:

"Different from males, we females are overburdened by house chores and other social life issues. When one is a mother, the duties are doubled as she, in addition to above-mentioned home-related activities, is expected to take care of her husband and children nutrition, clothing and schooling, etc. I know my male colleagues who are also studying at WED. They do many things in addition to their study to get more money. They can go to their office whenever they want to work on their dissertations. They do not worry about the chores and children and other home-related activities. When I try to compare myself, even though I have the capacity to do many things, I refrain from them as I have limited time to concentrate on my study. Even if I limit myself from other works which could have helped me get some more money, the time I have for my study is very much limited when compared to that of males."

Relationship with Advisor and Faculty

Participants considered their advisors and faculty members as crucial to their experiences as doctoral students. Most students seemed satisfied with their advisors, but some had concerns about the supervision process, including delayed feedback, unclear or unreadable feedback, insufficient guidance, and communication issues. Another concern was faculty sabbaticals, which left some students without supervision for an entire year and even more unresolved concerns. In one severe case, a team sought assistance from outside the department to resolve a significant problem.

Positive examples include:

Keyla: "Yes, my advisor and faculty members are very helpful and mostly available."

Aliya: "The relationship with my advisor and faculty is good. Whenever we do meet, they are supportive and warm. However, they tend to forget the student when we

meet, but they are good. It has been quite positive."

Heather: "They have been and really helpful. My advisor set a timeline and I followed the timeline kept an eye on my grade every semester, he gave me feedback without any hesitation."

Maria: "I like my advisor and we have a good relationship."

Negative examples include:

Keyla: "The advisor always gives me suggestions. However, at times I feel stressful because of communication issues and at times she is unclear about her expectations. Though she understands me well at times she lacks guidance and encouragement."

Aliya: "I had some difficulties because most of the faculty members left in the middle of

the course because of which I had to change my doctoral committee chair twice.

Because of which I ended up being independent and I did a lot of it on my own."

Maria: "The only challenge I had with him is that he takes a long time to give me

feedback and I end up sending him multiple reminder emails, which once irritated

him."

Stacy: "We are learning a lot with the course of study; however, no one in the

department discusses professional development, I feel that there should be a

course on it as we spend several years as doctoral students."

Other concerns regarding advisors and faculty included lack of appropriate guidance, reduced faculty size, and insufficient monitoring and encouragement. One participant mentioned her supervisor did not communicate regularly and showed little interest in her work. She was also informed her assistantship would be terminated in the following semester, with the implication that she was hired based on someone's suggestion. Female international doctoral students reported lower levels of support for research funding, encouragement, and career goals compared to their male counterparts. Despite these challenges, most participants were satisfied with their advisors and faculty. They all desired someone who would facilitate their professional development, take an interest in their work, be considerate of their time and personal lives, and keep them accountable.

Discussion

This study identified several areas of concern experienced by female international doctoral students, illuminating specific challenges that require attention. The findings identified concerns surrounding academic and professional stress, psychological stress, physiological stress,

and issues related to relationships with faculty. Additional challenges stemmed from family commitments, relationship problems, conflicting roles, and lack of encouragement.

Participants saw their supervisors, including advisors and faculty, as one of the most important factors in their professional development and were generally satisfied with the support they received. However, they raised concerns about the quality and timeliness of feedback, as well as the level of guidance and encouragement. While several factors contribute to successful doctoral completion, many researchers agree that close, effective supervision is key to a successful doctoral journey (Grevholm et al., 2005; Lovitts, 2001; Styles & Radloff, 2001; Zainal, 2007). Thus observation makes the quality of research supervision is critical to the journeys of doctoral students.

In line with earlier studies, this study also identified stress, lack of motivation, feelings of isolation, and low self- confidence were common psychological problems (Brauer et al., 2003; Oswalt & Riddock, 2007; Toews et al., 1997). Researchers indicated that female graduate students often face more work and home-related stress than their male counterparts (Hodgson & Simoni, 1995; Mallinckrodt & Leong, 1992). Balancing personal and professional life is a significant source of stress, and students need more support in this area.

Participants reported specific challenges related to their multiple roles, including cultural norms that assign caregiving and household responsibilities to women. Although their husbands were generally supportive, the additional dues added stress. Understanding and addressing the diverse backgrounds and responsibilities of female doctoral students, with the goal of reducing anxiety and stress, could improve student performance and reduce attrition. Researchers have suggested that adequate social support and networks are essential to help graduate students navigate the academic and psychological problems they face during their studies (Castro et al.,

2011; Johnson et al., 2008; Mouton, 2001; Stratton et al., 2006).

Limitations and Implications

This study does not compare international students from different cultural and ethnic backgrounds, treating all participants as part of the broader international student community.

Additionally, it does not evaluate male graduate students, focusing solely on the challenges and stressors faced by female international doctoral students. The research relied on reflective stories gathered from interviews with a small sample of female international students.

Since a convenient sampling technique was used, the study sample is not representative of all female international doctoral students in the United States. Thus, the results cannot be generalized to the entire population, although some common themes may emerge. To expand on this study, further interviews could explore additional topics related to the challenges and stress experienced by female international students face as their academic journey progresses.

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