Invisible Lived Experiences During an Upended Time:

An Exploratory Study of Asian Mothers Who are International Doctoral Students in the United States During the COVID-19 Pandemic

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Abstract

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Abstract:

This exploratory research explores the multifaceted experiences of Asian Mothers who are International Doctoral Students (AMIDS) living in the United States during the COVID-19 pandemic, examining the intricate interplay between motherhood, doctoral student life, and the challenges of living as Asian foreigners in the United States. Employing intersectionality as a grounding framework to analyze the data, the findings are structured around three central themes: Academic dreams and maternal realities during the COVID-19 pandemic, pandemic-induced challenges and opportunities adapting to the virtual shift, and the pandemic's unveiling of anti-Asian racism and xenophobia.

In the first theme, AMIDS faced the pandemic's initial shock, prioritizing family safety and adopting meticulous safety measures, leading to emotional distress and increased domestic duties. Transitioning to virtual learning added to their burden, with unfamiliar curricula and ongoing childcare challenges causing guilt and societal pressures.

The second theme examines AMIDS' adaptation to remote work and learning, presenting both challenges and opportunities. While flexibility was afforded, managing home distractions and virtual advisor interactions posed new hurdles. Despite this, virtual platforms facilitated balancing family responsibilities with academic pursuits.

The third theme delves into the impact of immigration policy changes and rising anti-Asian sentiment, exacerbating AMIDS' fears of deportation and vulnerability to hate crimes. These experiences led some to reconsider their long-term plans, highlighting the need to address systemic biases.

Overall, the study highlights the need for universities to prioritize the foundational needs of AMIDS, recognizing the irreplaceable nature of some non-academic life aspects of the students. Furthermore, it calls for greater awareness and advocacy at both institutional and governmental levels to address the unique challenges faced by this overlooked student population. In conclusion, this study illuminates the resilience and determination of AMIDS in overcoming diverse challenges during the pandemic.

TABLE OF CONTENTS

Acknowledgement

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Dedication

To my beloved children, Madison Kim and Serena Kim, you are my greatest treasures, the light of my life. Your presence has brought immeasurable joy and fulfillment to my world. I am endlessly grateful for the privilege of being your mother. You inspire me to be the best version of myself, and it is my greatest hope that I have made you proud.

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CHAPTER 1. BACKGROUND, PURPOSE, AND OVERVIEW OF THE STUDY

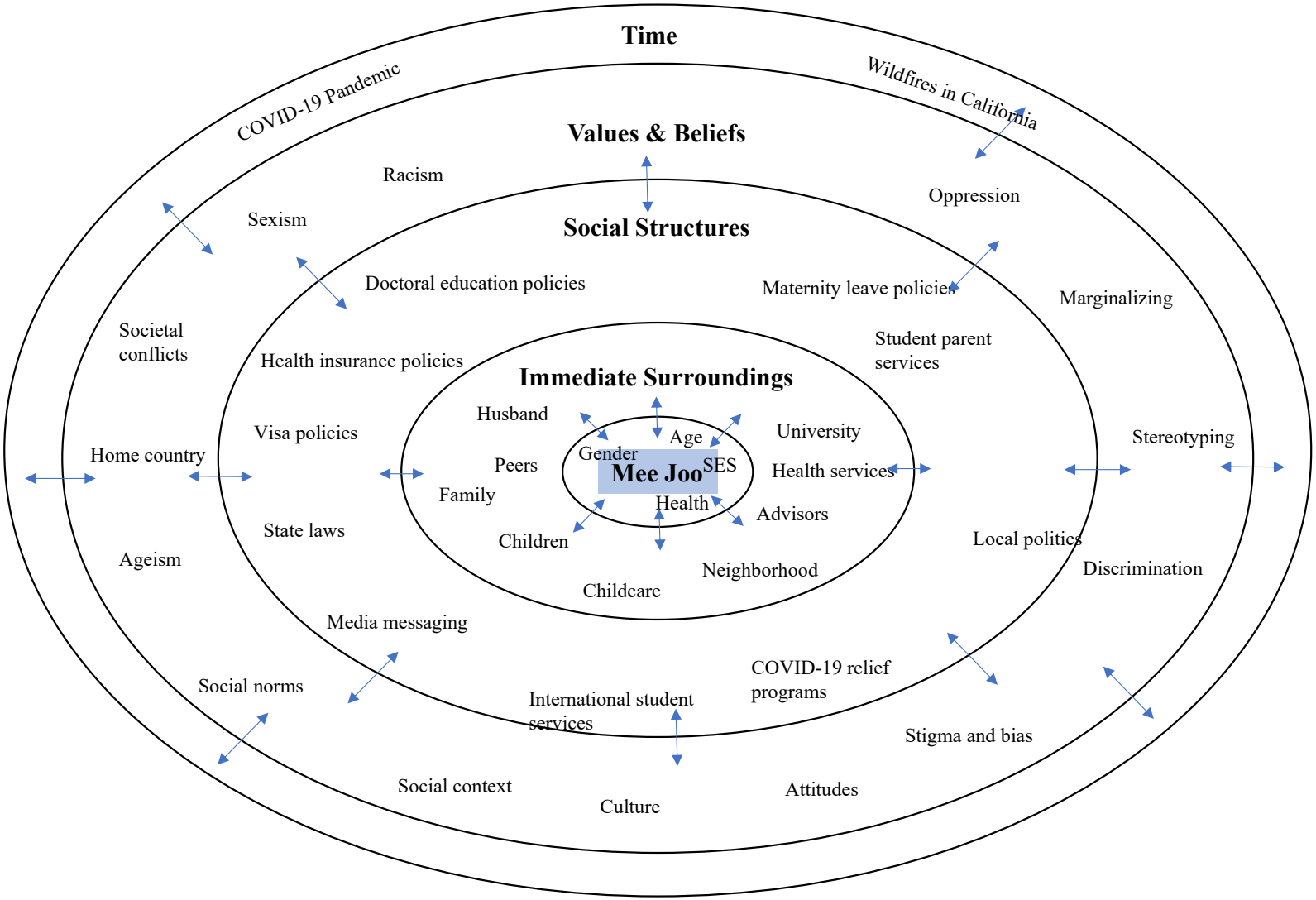
Why Did I Do This Research?

As a Korean immigrant woman, I arrived in the United States in 2009 to pursue a master's degree in education at the University of Virginia, graduating in 2011 as an international student. Now, as a Korean American, married, and a mother of two children, I am in the process of completing a doctoral degree at the University of Washington. I have encountered numerous turning points as a doctoral student who became a mother while in the doctoral program, but the pandemic significantly heightened the difficulty in balancing my pre-pandemic roles and responsibilities with the newly added worries and cautions brought about by the mysterious nature of the pandemic. The pandemic itself, as well as the secondary consequences stemming from it, has made it nearly impossible to pursue anything solely for my own interest, including my doctoral education.

I observed a significant surge in research examining the impact of the COVID-19 pandemic on various aspects of human life worldwide, spanning across different disciplines. This trend extended to the pandemic's effect on doctoral student mothers (Beal et al., 2021; Feinauer et al., 2021; Manze & Fleary, 2021; Oldham & Bradley, 2021; O'Reilly, 2019; Pascale et al., 2021; Willey, 2020), individuals of Asian heritage (Chiu, 2020; Hong, 2020; Gover et al., 2020), and international students (Bonistall Postel, 2020; Dong et al., 2023; Koo, 2021). However, a prevailing limitation across many of these studies is their tendency to offer fragmented perspectives, often focusing narrowly on specific facets. The complexity of my own pandemic experience defied such compartmentalization, shaped by countless variables, including my children's education, encounters with racism and xenophobia, pandemic politics, presidential elections, wildfires in California, and numerous interconnected factors (Figure 1).

Figure 1

Self-Reflection as Asian Doctoral Student Mother Living Through the COVID-19 Pandemic



To the best of my knowledge, there has not been a study that delves into the lived experiences of Asian Mothers who are International Doctoral Students (hereafter referred to as AMIDS) during the pandemic. This exploration began as a deeply personal journey to comprehend how fellow AMIDS, much like myself, navigated the challenges of the pandemic. I wanted to uncover whether their journey was as intricate and demanding as my own. Right from the inception of this project, I experienced a profound sense of relief when listening to stories that resonated deeply with my own experiences – we understood each other. Beyond fulfilling my academic aspirations of earning a Ph.D., this aligns with my quest to find solidarity among peers who share similar experiences and do research that matters to me.

While positivists and quantitative researchers have traditionally aimed to minimize the researcher's influence in empirical inquiry, it is recognized that all research inherently carries an element of subjectivity (Strauss & Corbin, 2014). This consideration is especially crucial in qualitative inquiries. In fact, Zinn (1979) highlighted that researchers from marginalized groups may have an "insider" advantage, obtaining more candid responses and grasping cultural subtleties. The current research project's agenda is self-exploratory and dialectical. Like many participants, I am one of the AMIDS.

The researcher serves as a vital instrument in qualitative research. The participants felt at ease with me, and I am confident they also felt comfortable conversing with me. We shared a unique understanding that could not be shared by other peers. While my story may differ from those of the study participants, my knowledge of American doctoral education, life of Asian doctoral student mothers, and qualitative research methods played a pivotal role in shaping the research design, interview protocol, data analysis, interpretation, identifying connections in the

data, and providing implications. Therefore, my own experiences and perceptions of AMIDS will inevitably shape my interpretation of the acquired data in this inquiry.

While some qualitative researchers aim to minimize researcher subjectivity, others embrace a constructivist approach emphasizing researcher reflexivity – acknowledging biases and assumptions that can impact decisions and interpretations. My approach enables me to embrace my own subjectivity and incorporate it into the research process with care and respect (Charmaz, 2014) as I was not an arbitrary researcher. I lived through the experiences shared by the AMIDS in the study, and we faced and lived the challenges together. After all, I aim to instill a sense of courage in those who are walking a similar path as I am. I was inspired by and encouraged to continue this arduous journey of AMIDS through conversations with fellow AMIDS. I am just beginning to realize that it is from those who are in a similar situation that we can encourage each other. Therefore, it is even more important to share and record our stories.

A Day in the Life of Asian Mothers Who Are International Doctoral Students

Mina, a 33-year-old married international doctoral student from South Korea, found herself in a unique situation as she pursued her Ph.D. at an R1 university in the United States. Mina had heard that once you secure a tenure-track faculty position, the relentless demands of academia often leave little room for starting a family. However, she also knew that waiting until after achieving tenure could pose risks to her biological clock. As a Korean female, she felt compelled to fulfill societal expectations of becoming a mother in her late 20s or early 30s. It was important for her to achieve her career goals while also meeting these societal gender roles, as she could not afford to be seen as "the one who succeeded in her career but failed to fulfill her role as a grown woman."

Determined to ensure she had at least one child, Mina and her husband decided to try for a baby after her first year in the doctoral program. They eagerly anticipated the arrival of their first child, due in mid-March 2020. However, her pregnancy journey was far from smooth sailing. In the first trimester, Mina experienced severe morning sickness, causing her to lose 20 pounds in weight.

In the early days of January 2020, Mina began to hear unsettling reports about a mysterious virus wreaking havoc in her homeland, Korea. As she observed the situation unfold, Mina could not help but notice the stark contrast in responses between the United States and Korea. While her current home in the United States continued with a seemingly normal lifestyle, her family, and friends back in Korea insisted she start wearing masks, especially given her advanced pregnancy. They feared for her health and the health of her unborn child.

Mina's desire to protect herself and her baby was undeniable, but she faced a dilemma. Sourcing high-quality masks, proved to be a challenge. More importantly, she hesitated, acutely aware of the troubling news reports detailing physical and verbal harassment directed at Asians who dared to wear masks in public. Fearing for her safety and the safety of her baby, she chose to remain indoors, venturing out only when essential medical needs arose. With just a week remaining until her estimated due date, Mina had an important doctor's appointment to assess her pregnancy progress. This time, her husband could not accompany her to the hospital due to pandemic restrictions. She felt a deep sense of unease about entering a medical facility that appeared overwhelmed by COVID-19 cases.

Mina parked her car and began the walk towards the hospital building, as always. As she approached the entrance, her path was abruptly blocked by three young men. An eerie feeling washed over her, but she tried to ignore it and continued toward the entrance. However, the three

men persisted, forming an imposing barrier. They taunted her with offensive remarks, repeatedly shouting, "Go back to China! China! China!" Fear gripped Mina's heart, and she worried about getting her pregnant belly kicked. She chose not to respond to the provocation, instead focusing on reaching the hospital entrance. It was a shock to her system to experience such verbal harassment at a university hospital, a place where she had felt the safest for the past 9 months. Though she tried to brush off the incident, its impact lingered, deeply unsettling her.

In mid-March, as the United States began to shut down due to the pandemic, Mina found herself in the delivery room, alone as her husband was not permitted to join her due to safety precautions. She had to wear a mask throughout the entire birthing process. Despite the challenging circumstances, she successfully gave birth to a perfectly healthy daughter. However, after the birth, Mina faced a unique situation. In contrast to the traditional postpartum care rituals in Korea, which limit physical activities to support full postpartum recovery, she had no extended family or support network in the United States to enable her to focus on postpartum recovery. Her initial plan had been to have her parents come to the United States to assist with postpartum care, but travel bans made that impossible.

The pandemic had transformed everything into virtual experiences, allowing her to stay home and breastfeed her newborn in the comfort of her own environment while continuing to fulfill her academic responsibilities. While her research progress slowed, Mina could attend courses and work via Zoom, a flexibility that likely would not have been granted in a pre-pandemic world.

As time passed, Mina and her husband embarked on a steep learning curve in raising a newborn. Their roles and responsibilities in caring for their child gradually became clearer.

However, with the baby growing, they soon realized that their current apartment was no longer sufficient. Mina needed a “room of one’s own” where she could work without distractions.

Additionally, Mina became acutely aware of the need to secure additional healthcare insurance for their newborn, which came at an increased cost. They were surprised to find that even her husband's insurance premiums saw a significant hike due to the pandemic. To cope with rising expenses, including diapers, hospital fees, insurance, inflated living costs, and the impending apartment move, Mina decided to take on extra work hours as a grader. With roles as a Teaching Assistant (TA), Research Assistant (RA), and grader, she worked the maximum allowable hours of 20 per week, as permitted for F-1 visa holders in the United States. However, the income generated was barely enough to cover their essential expenses. Faced with this financial strain, Mina reached out to both her family and her in-laws for loans to bridge the gap. Regrettably, the demands of her various roles left little time for Mina to dedicate to her own research, a challenge she keenly felt.

Mina and her family continued to reside in their one-bedroom apartment. Most days, she would hunker down in the bedroom, closed off from the rest of the apartment, attending Zoom meetings and working. However, as their baby's cries grew more frequent and noise control became increasingly challenging, Mina's husband would often bring their newborn out of the bedroom during her important meetings, ensuring she could participate without interruptions. In normal times, he might have taken the baby on playdates or to the playground, but the pandemic had closed off those options. Instead, he would opt for a less crowded and relatively quiet place—the local grocery store. There, he would leisurely walk the aisles with the baby, allowing Mina to focus on her work.

Mina eagerly awaited the reopening of her university's facilities—the lab, school libraries, and campus—so that she could work outside the apartment. However, it took at least 10 months for her campus to start open while a new challenge arose when she needed to take a lengthy exam for one of her courses. The exam, lasting a daunting 3 to 4 hours, required all students to keep their microphones and cameras on to deter cheating. Mina knew her baby would likely cry or whine at some point during this extended period, and she did not want to disrupt her peers. Also, she felt uncomfortable breastfeeding her child with a camera on. She also felt uncomfortable asking the instructor if she could be excused to breastfeed her child, broadcasting to the entire class. After much contemplation, she reached out to her church pastor, seeking a quiet room within the church where she could take the exam. Gratefully, the pastor granted her request. Yet, the ordeal of securing a suitable space to complete her exam seemed almost comical, a testament to the extraordinary lengths she went to balance her academic commitments with the demands of motherhood.

As Mina continued to navigate the challenging balancing act of being a new mother, the family's breadwinner, and a dedicated doctoral student, she began to experience a heavy burden of self-doubt. She carried an immense sense of guilt, feeling that she was falling short in every role she played. Mina longed to be more available for her daughter, to savor those precious early moments, and to be there for her every need. The demands of her academic pursuits and the necessity of being the family's financial support sometimes made her feel like she was missing out on those crucial bonding experiences. During these emotional challenges, Mina also believed that her academic performance had taken a hit since becoming a mother. The pressure to excel in her doctoral program remained, but the juggling act of parenthood, work, and studies often left her feeling like she was falling short. The weight of these combined pressures had Mina feeling

as though she was not doing anything right, a sentiment that loomed over her daily life and cast a shadow on her aspirations.

As the pandemic continued to unfold, and racial tensions surged with the increased racial crimes against Asians, Mina found herself genuinely fearful of living in the United States as an Asian. A pivotal moment arrived when she saw her daughter's American passport. The question weighed heavily on her mind: Was it worth it to try so hard to remain in the United States, especially when her child would grow up in a nation as an Asian American female? The spa shooting in Georgia and the shocking incident of an Asian female being stabbed in her New York apartment building only served to deepen her concerns.

Mina recognized the validity of her questions and began to contemplate deeply. She knew that if her daughter grew up in Korea, she would never face mistreatment due to her race and ethnicity. Mina herself had always strived to be a law-abiding and contributing member of the United States. She produced high-quality research that contributed to the scholarly community, paid taxes, and adhered to the law, not only because she was a lawful citizen but also out of a desire to avoid any misconduct that might jeopardize her chances of obtaining a Green Card in the future. Nevertheless, as she reflected on her daughter's future and the increasing racial tensions and incidents, she could not help but question whether all her efforts were worth it. This realization weighed heavily on her.

As the world slowly began returning to a semblance of normalcy, Mina and her husband made plans to enroll their now 2-year-old daughter in a daycare. In fact, Mina had placed herself on the waitlist for an early childcare center on campus as soon as she learned about her pregnancy. Yet, when her daughter turned 2, she could not help but wonder why they had not received an offer for a spot at the daycare. Concerned about the delay, Mina reached out to the

childcare center on campus. The administrator explained that there had been a significant surge in requests for infant care due to what they called a "COVID baby boom." However, the larger issue was that the early childcare centers struggled to operate at full capacity due to secondary outcomes such as difficulties in hiring staff members. Many childcare workers hesitated to return to work, especially when no children had been vaccinated.

As Mina looked back on all the events that had transpired during the COVID-19 pandemic, she could not help but feel that she had “barely been living”. She understood that everyone had their own struggles during the pandemic, but she often wondered if her own experiences had to be so arduous and challenging. Reflecting on her journey, Mina recognized that many of the difficulties she encountered existed before the pandemic because the American higher education system had never fully accepted her personal life in doctoral studies. The pandemic exacerbated every challenge she faced before the pandemic. The pandemic unveiled these semi-invisible obstacles, until then, to be obnoxiously visible, pushing her to question the incompatible nature of her doctoral endeavor as a doctoral student mother.

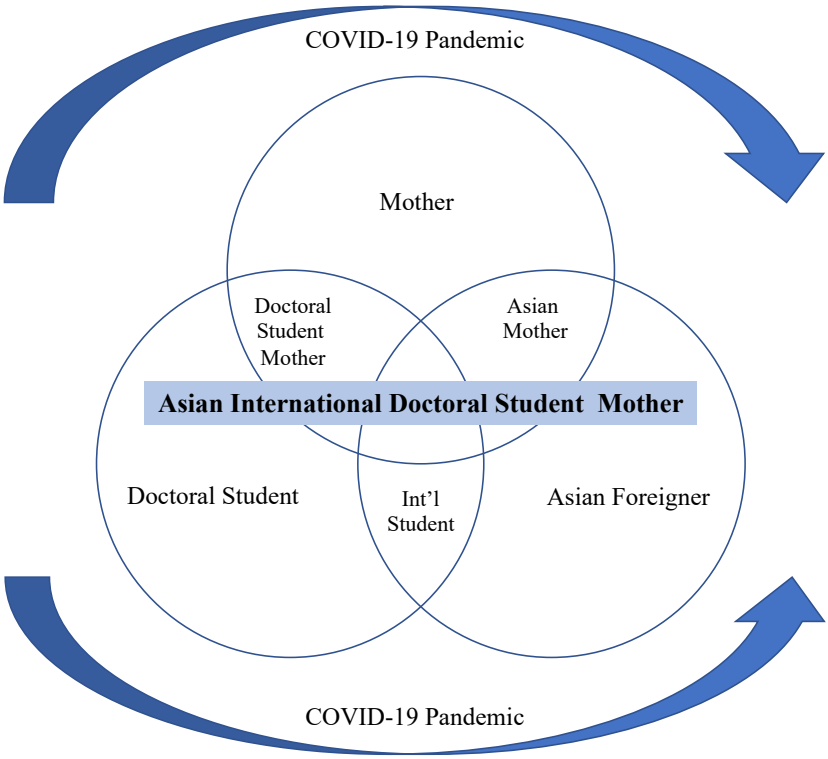
The preceding anecdote about Mina is a composite of AMIDS in the current study which investigated the intricate interplay between the COVID-19 pandemic and the roles of AMIDS in terms of their motherhood, doctoral students, and their status as Asian foreigners. It reflects the very real struggles and challenges that many AMIDS faced during the COVID-19 pandemic. These women navigated a delicate balance between fulfilling their various roles while grappling with isolation, both due to the pandemic itself, the lack of visibility of others like them on campus, and the lack of recognition about them.

Statement of the Research Problem

While acknowledging the recognized challenges faced by doctoral student mothers, individuals of Asian descent, and international students amid the COVID-19 pandemic, no study to date has delved into the experiences of those navigating the intersections of all these aspects, namely AMIDS. This study adopts an intersectional perspective to interpret the data, recognizing that identities cannot be comprehended in isolation or in a mere additive manner but must be scrutinized collectively, as depicted in Figure 2. The present study not only acknowledges the individual components of AMIDS (i.e., mother, doctoral student, and Asian foreigner) but also scrutinizes the intertwined facets between these individual identities (e.g., doctoral student mother, international student, and Asian mother), along with the intersectional identity of AMIDS in the backdrop of the COVID-19 pandemic.

Figure 2

Intersectional Nature of AMIDS



Living as Doctoral Student Mothers

Over the past decade, the landscape of doctorate recipients has undergone a significant shift, with a notable increase in the number of female research doctorate recipients. This shift is reflective of evolving student demographics. Women achieved a milestone by accounting for 58% of all doctorate degrees earned in 2021 within non-science and engineering fields (National Science Foundation, 2023). However, existing literature fails to acknowledge student mothers as integral members of the higher education population, both figuratively and statistically (Noll, Reichlin, & Gault, 2017). This oversight is a crucial limitation that hinders a comprehensive understanding of the challenges and unique perspectives of student mothers within academic settings.

Notably, within the United States context, it is pertinent to note that around one-third of couples with women aged over 35 face challenges in fertility, while only approximately 20 % of women embark on motherhood after reaching the age of 35 (Department of Health and Human Services, 2022). These insights spotlight a significant intersection that numerous female doctoral students grapple with the juncture between their doctoral pursuits and their fertility timeline. The impetus behind this intersection rests upon the looming biological clock, which aligns with Kuperberg's (2009) findings indicating that women enrolled in graduate school are increasingly likely to be mothers of young children.

However, extensive research underscores a concerning trend that women with children exhibit a lower likelihood of completing doctoral programs compared to their male or childless counterparts (National Science Foundation, 2023). This fact underscores the criticality of acknowledging and providing support for the distinct challenges doctoral mothers encounter in their pursuit of academic and career aspirations. As the demands of academic pursuits burgeon,

doctoral student mothers face the intricate challenge of equilibrium. Juggling roles as a full-time graduate student, a graduate assistant, a partner, and a mother, among others, becomes an intricate feat. (Armenti, 2004; Mirick & Wladkowski, 2018; Catalano & Radin, 2021).

The landscape of student mothers is distinct, as they undertake the intricate balancing act of family responsibilities alongside academic commitments. This unique demographic sets them apart from the standard audience catered to by general university student policies, warranting a more tailored and comprehensive support system. As illuminated by Bodkin and Fleming's recent study (2021), the call for family-friendly policies for doctoral students takes on added significance in fostering gender equality and aiding female student parents.

However, the academic realm has long been recognized as an arena that is not inherently conducive to the demands of motherhood. Female scholars often find themselves encountering substantial obstacles upon embracing motherhood (Correll, Benard, & Paik, 2007; Crittenden, 2001; Cuddy, Fiske, & Glick, 2004; Hays, 1996; Mason, Wolfinger, & Goulden, 2013; Ward, 2014). The concept of "academic motherhood" encompasses the juxtaposition of two seemingly divergent roles: that of an academic and a mother. This interplay was aptly articulated by Springer, Parker, & Reid (2009), who highlighted that academia historically champions an unrelenting pursuit of knowledge. Yet, for women academics who assume the mantle of motherhood, the expectations are radically different, entailing adherence to the demanding practice of intensive mothering (Hays, 1996). This practice, which entails a complete emotional and physical commitment to their children, underscores the intricate challenge faced by academic mothers.

The realm of academic motherhood ushers forth a complex interplay between academic responsibilities and the demanding requirements of intensive mothering. This juxtaposition

necessitates a meticulous allocation of attention, time, energy, and resources on the part of women (Springer, Parker, & Reid, 2009). The amalgamation of academic pursuits with motherhood has been likened to "greedy institutions" (Coser, 1974), embodying their insatiable consumption of a woman's resources. However, the challenge extends beyond merely inadequate institutional policies; this marks the preliminary hurdle in a succession of challenges faced by doctoral student mothers after childbirth. Upon the arrival of their children, these mothers encounter a shortage of accessible, high-quality, and affordable childcare options. As noted by Springer et al. (2009), the absence of dedicated child-free time poses a significant impediment to progress on degree completion for doctoral student mothers (p. 337).

Furthermore, doctoral student mothers grapple with a more nuanced predicament, particularly when they lack comprehensive mentorship support from their academic institution (Mason et al., 2013; Pierce, 2005; Rogers, 2018). Numerous research underscores the pivotal role that a positive mentor-mentee relationship plays in students' academic achievements (Grenier & Burke, 2008; Holm, Prosek, & Weisberger, 2015; National Student Union, 2009; Springer et al., 2009; Tillman, 2015). Paradoxically, mentors equipped with a comprehensive understanding of campus motherhood resources remain a rarity within doctoral programs, as underscored by Springer et al. (2009). Moreover, the significance of female mentors for doctoral student mothers cannot be overstated, as they assist in navigating male-dominated academic environments, as highlighted by Grenier and Burke (2008, p. 598). Armenti (2004) even unveiled the scarcity of successful academic mother role models, a factor that previously led generations of academic women to forego motherhood. The dearth of support from experienced faculty who have experienced childbirth and child-rearing potentially reflects the broader inadequacy of institutional support.

Mason et al. (2013) also unearthed a prevailing sentiment among female doctoral students that parenthood is at odds with the academic milieu of their doctoral programs and future career trajectories. Although bolstering institutional support for graduate parents has the potential to enrich universities by attracting and retaining a diverse student body characterized by accomplished mothers (Springer et al., 2009), the reality remains that only a select few universities offer substantive institutional and departmental assistance tailored to this demographic.

In the wake of the COVID-19 pandemic, the latest scholarship regarding doctoral student mothers in the United States accentuates the magnification of preexisting challenges faced by these mothers, coupled with the scarcity of institutional backing extended to them (Beal et al., 2021; Feinauer et al., 2021; Manze & Fleary, 2021; Oldham & Bradley, 2021; O'Reilly, 2019; Pascale, Ehrlich, & Hicks-Roof, 2020; Willey, 2020). However, it is noteworthy that most recent literature overlooks the experiences of doctoral student mothers of color or international graduate student mothers.

Unpacking the Difficulties Encountered by International Students

Over the past few decades, there has been an exponential yet steady increase in the total number of international students in the United States, reaching a count of 763,760 during the 2021-2022 academic year (Open Doors, 2022). Among these students, approximately 35% are enrolled in doctoral studies. While specific data for individual degree types is unavailable, more than half of these international students originate from Asian countries. Notably, about 61% of Asian international graduate students come from East Asian nations, including China, South Korea, Taiwan, Japan, Hong Kong, Mongolia, and Macau (Open Doors, 2022). In a broader context, international students encounter a variety of challenges arising from cultural disparities

(Meloni, 1986; Mori, 2000; Wu, Garza, & Guzman, 2015), limited proficiency in English (Dao, Lee, & Chang, 2007; Sümer, Poyrazli, & Grahame, 2008), and differing learning styles (Coward, 2002; Gebhard, 2010; Godwin, 2009; Zhou, Frey, & Bang, 2010).

Legally, all international students in the United States are bound by student visa regulations that require them to maintain their status in the country. Unlike domestic students, they are not permitted to be part-time students or engage in off-campus employment. Paige (1990) critiqued these regulations as intrinsically discriminatory, contending that international students lack the same flexibility as local students to adjust their enrollment status, reduce coursework, or seek off-campus employment to support themselves (p. 166). Paige (1990) concluded that these restrictions subject international students to significant stress, as any violation of visa terms could potentially lead them to becoming "wards of the state" (p. 166). Numerous other studies, such as Labi, Birchard, and Overland (2008) and Koehl (2007), have also found that the intricate legal navigation of the U.S. visa system plays a substantial role in the stress and depression experienced by many international students.

Moreover, during the tenure of former President Trump, when he declared a national emergency in response to the COVID-19 pandemic and campuses across the country initiated shutdowns, his administration stipulated that international students would not be allowed to remain in the United States if their studies were conducted entirely online. This decision triggered a series of updates to student visa policies in the United States over the subsequent months (Jordan & Hartocollis, 2021). As a result, it is highly plausible that AMIDS experienced escalated stress due to the challenges posed by their international student status while pursuing doctoral education in the United States.

Living as Asian Descent in the United States

As the entire American population adapted to a "new normal" characterized by practices such as social distancing and stay-at-home orders, the Asian American community bore an additional burden of heightened racial tensions. An observable uptick in violence targeting individuals of Asian descent has been noted across the United States since the onset of the COVID-19 crisis (Cabanatuan, 2020; Chiu, 2020; Mallin & Margolin, 2020; Vachuska, 2020). During the pandemic, former President Trump and other prominent politicians further exacerbated the situation by stigmatizing Chinese and other Asians, associating COVID-19 with terms like the "Wuhan virus," "Chinese virus," and "Kung Flu." These actions aligned with a well-established political strategy of portraying Asians as threatening and perilous (Boyer, 2020; Fallows, 2020; Jeung, 2020; Kang, 2020; Rogers, 2020).

Interestingly, despite COVID-19 affecting individuals of all races and ethnicities, Asian Americans were disproportionately targeted by a second epidemic of discrimination (Chiu, 2020). Between March 19, 2020, and April 24, 2020, the Asian Pacific Policy & Planning Council (APPPC), an advocacy group for Asian Americans in the United States, documented 1,500 discrimination cases across 45 states. These incidents encompassed a broad range of behaviors, spanning from verbal harassment and public shunning to physical attacks. Predominantly, complaints centered on verbal harassment, with even children and the elderly experiencing such mistreatment (Hong, 2020). A notable portion of reports, approximately 10%, involved fundamental civil rights violations, including instances of denied service at businesses, exclusion from transportation services, and even workplace harassment (Hong, 2020).

Additionally, Asian international students have encountered a unique set of challenges during the COVID-19 pandemic, including racial discrimination and even physical attacks. This

has been particularly pronounced among individuals of Chinese origin or those from Asian countries who share physical similarities with Chinese people (Gover, Harper, & Langton, 2020; Koo, 2021). Taking a comprehensive view, the COVID-19 outbreak has led to a disconcerting surge in racial discrimination and xenophobic violence against Asian international students, both on and off-campus in the United States (Koo, Yao, & Gong, 2021). As a result, it is highly plausible that AMIDS experienced heightened stress due to the prevalent racism and xenophobia in the United States during the pandemic.

Purpose of the Study and Research Questions

The present study aims to delve into the intricate interplay between the COVID-19 pandemic and the roles of AMIDS in terms of their motherhood, their professional identity as doctoral students, and their status as Asian foreigners. The focal point of this research rests upon a foundational query: What were the lived experiences of AMIDS in the United States during the COVID-19 pandemic?

To comprehensively address this query, the study further delved into three supporting research questions:

1. How did AMIDS navigate the challenges of fulfilling their maternal responsibilities amidst the backdrop of the COVID-19 pandemic?
2. In what ways did the COVID-19 pandemic impact the progression of AMIDS' doctoral education?
3. What were the experiences of AMIDS as they confronted the COVID-19 pandemic as Asian foreigners residing in the United States?

Significance of the Study

This study holds significant importance for both current and prospective AMIDS. It is distinguished by its unique focus on investigating the specific experiences of AMIDS within the United States, a realm that has received limited attention in research. The mere existence of this study provides validation to these student mothers, reassuring them that their often-isolated experiences are not only recognized but shared by others. Notably, during the interviews, participants expressed a profound sense of relief upon discovering that their experiences were being acknowledged and explored by a dedicated researcher. Their enthusiastic engagement underscores the pivotal role of this research as a reference point, for student mothers themselves.

Furthermore, this study stands out as one of the few projects that comprehensively examines the experiences of AMIDS across a wide range of academic disciplines and diverse institutions within the United States. It takes a unique approach by delving into the multifaceted lived experiences of these individuals through an intersectional lens. In contrast to many existing research endeavors that focus primarily on autoethnographic approaches (Chung, 2015; Phan, 2022; Phu, 2020; Zhang, 2021), the findings presented here contribute a complex mosaic of diverse and intricate perspectives on the lived experiences of AMIDS.

Additionally, the findings of this research carry significant implications for university administrators, policymakers, and advising faculty committed to facilitating institutional transformation during and after the pandemic recovery phase. By comprehending and embracing the experiences of a diverse range of student mothers on college campuses, this study offers insights that can guide the development of effective strategies for fostering inclusivity and supporting students with dependents.

Specifically, the study sheds light on the unique challenges faced by AMIDS, offering an opportunity to elevate the visibility of them and address the complex intersectional needs of this diverse demographic within the university environment.

While the current study specifically investigates the lived experiences of AMIDS during the pandemic, the qualitative insights gleaned from their narratives possess a transferable quality. While not statistically representative, the depth and richness of these experiences allow for the identification of common themes and challenges that resonate with a wider population such as doctoral student mothers, Ant-Asian violence for all Asians, and other international students.

Organization of the Dissertation

Chapter Two of this dissertation provides an extensive literature review spanning multiple academic disciplines relevant to the present study. In Chapter Three, I describe the methodology, research design, and procedures for data collection and analysis. The study findings are structured into three distinct chapters. Chapter Four explores how AMIDS navigated the challenges of fulfilling their maternal responsibilities amidst the COVID-19 pandemic. Chapter Five examines how the COVID-19 pandemic impacted the progression of AMIDS' doctoral education. Chapter Six delves into what it was like to live through the pandemic as Asian foreigners in the United States. Finally, in Chapter Seven, I offer a comprehensive study summary, discuss the findings in relation to prior empirical literature, and present a series of recommendations tailored toward policy, practice, and future research endeavors.

CHAPTER 2. REVIEW OF LITERATURE

Changing Student Demographics of American Doctoral Education

In recent decades, doctoral education in the United States has undergone a noteworthy shift, marked by increased gender diversity and substantial growth in the number of international doctoral recipients. This trend is particularly evident in the significant rise of female international research doctorate recipients, with the most pronounced increase observed among those from East Asia. Despite over 50% of Asian female doctoral recipients in the United States being international students, and with their numbers experiencing significant growth, it is surprising to note the limited research conducted on this specific student group.

Research Doctorate Recipients in the United States

The United States has experienced a substantial increase in the number of research doctorate recipients, with a remarkable 59% surge from 1976 to 2021 (Figure 3) (NSF, 2022). Governments globally recognize knowledge as a vital national resource for driving economic growth, fostering innovation, ensuring prosperity, and enhancing international competitiveness (Carnoy et al., 2013; Dill & Van Vught, 2010; Godin, 2009; Kehm & Teichler, 2016; Maheu et al., 2014; Nerad, 2020). Consequently, they leverage doctoral and postdoctoral research education to cultivate innovators capable of contributing to the knowledge economy (Chien & Chapman, 2014; Nerad & Heggelund, 2011). Notably, R1 universities, institutions that prioritize research activities, awarded over 80% of these doctorate degrees, as indicated by the Carnegie Classification (Figure 4) (NSF, 2022).

Figure 3

U.S. Research Doctorate Recipients from 1958 to 2021

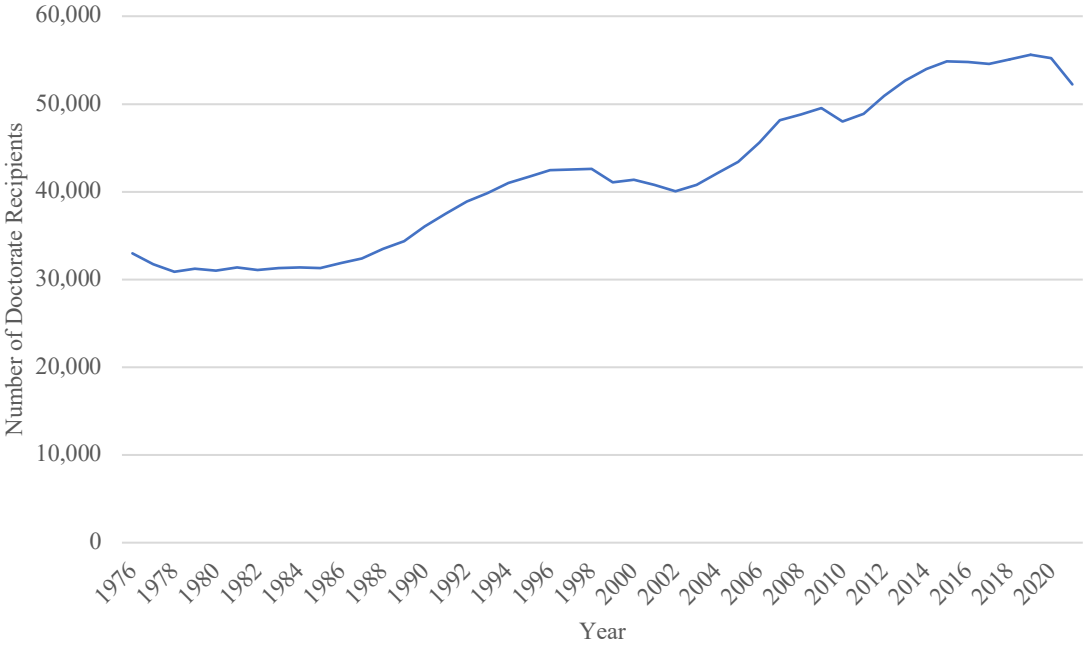
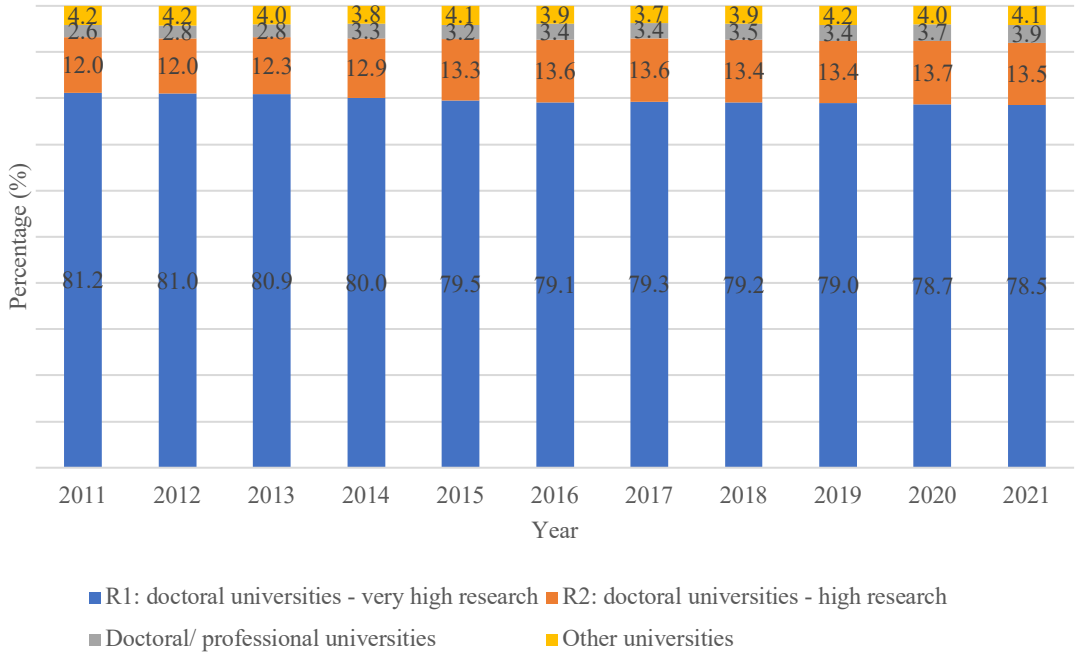


Figure 4

Research Doctorate Recipients by U.S. Doctorate Institutions from 2011 to 2021

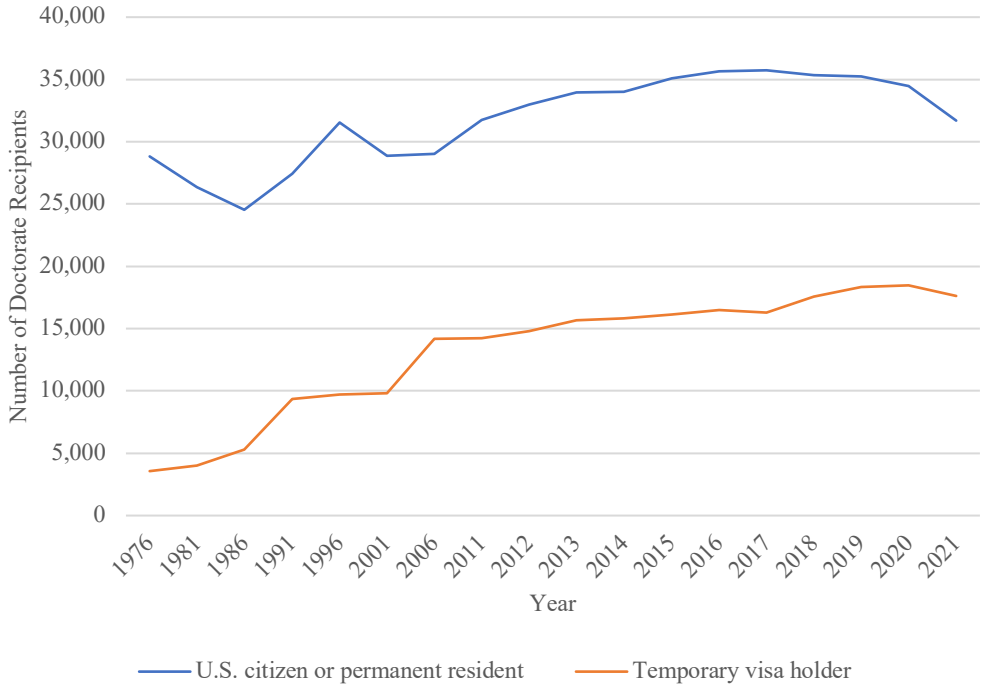


International Students in U.S. Higher Education

In the United States, universities have experienced a continual increase in the enrollment of international students, defined as students who have crossed national borders for educational purposes and are now studying outside their countries of origin (U.S. Department of Homeland Security, 2023). The U.S. government designates individuals admitted into the United States temporarily for educational purposes as international students. These students are considered nonimmigrant, as their sole reason for being in the United States is to complete a program of study at a Student Exchange Visitor Program (SEVP)-certified school. Therefore, international students in the United States pursue a full course of academic or professional study at an SEVP-certified school with an F-1 visa (U.S. Department of Homeland Security, 2023).

Figure 5

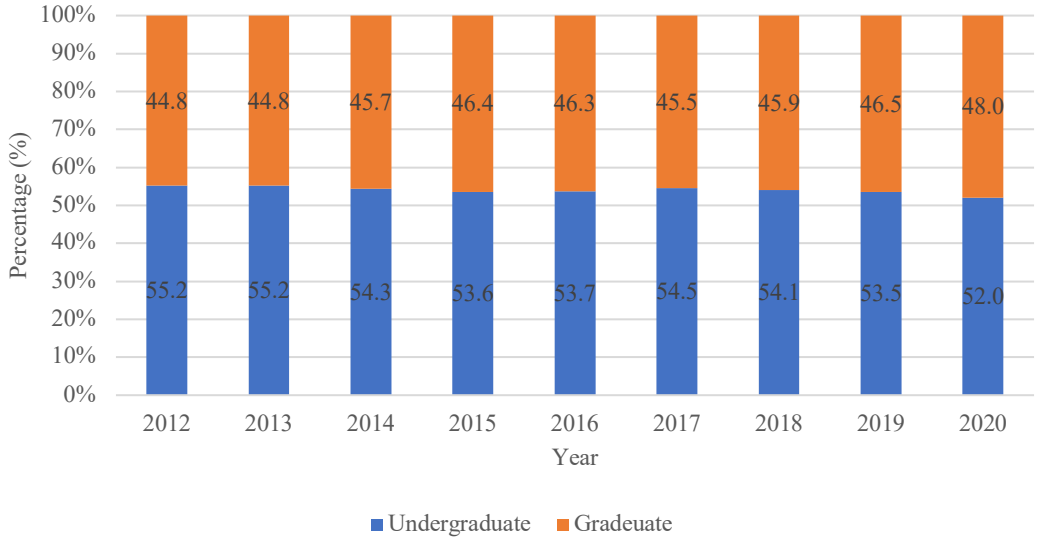
Research Doctorate Recipients by Citizenship Status



Significantly, the number of international doctoral recipients has surged by 418%, while U.S. citizens or permanent residents have experienced a more modest increase of only 9.8% between 1976 and 2021, as illustrated in Figure 5. This substantial gap underscores the evolving landscape of doctoral education, with international students playing a crucial role in enhancing the diversity and research productivity of American universities. The influx of international students into American graduate schools not only contributes economically but also involves them in cutting-edge research, thereby enhancing the innovation and research output of American universities and potentially leading to scientific and scholarly advancements (Nerad, 2004; Bhandari, 2007; de Wit, 2008).

Figure 6

International Students Enrollment in the U.S. Universities from 2012 to 2020



While the proportion of undergraduate international students has historically exceeded that of international graduate students (NSF, 2022), it is essential to acknowledge that the percentage of international graduate students has consistently grown over recent years (Figure 6). For the past 20 years or so, international graduate students have constituted a significant demographic within American universities, particularly those arriving from Asian countries

(Figure 7) (NSF, 2022). More than half of these Asian international graduate students come from East Asian countries, such as China, South Korea, and Taiwan, as demonstrated in Figure 8 and further elaborated in Figure 9 (NSF, 2022).

Figure 7

International Graduate Students by Places of Origin from 2001 to 2021

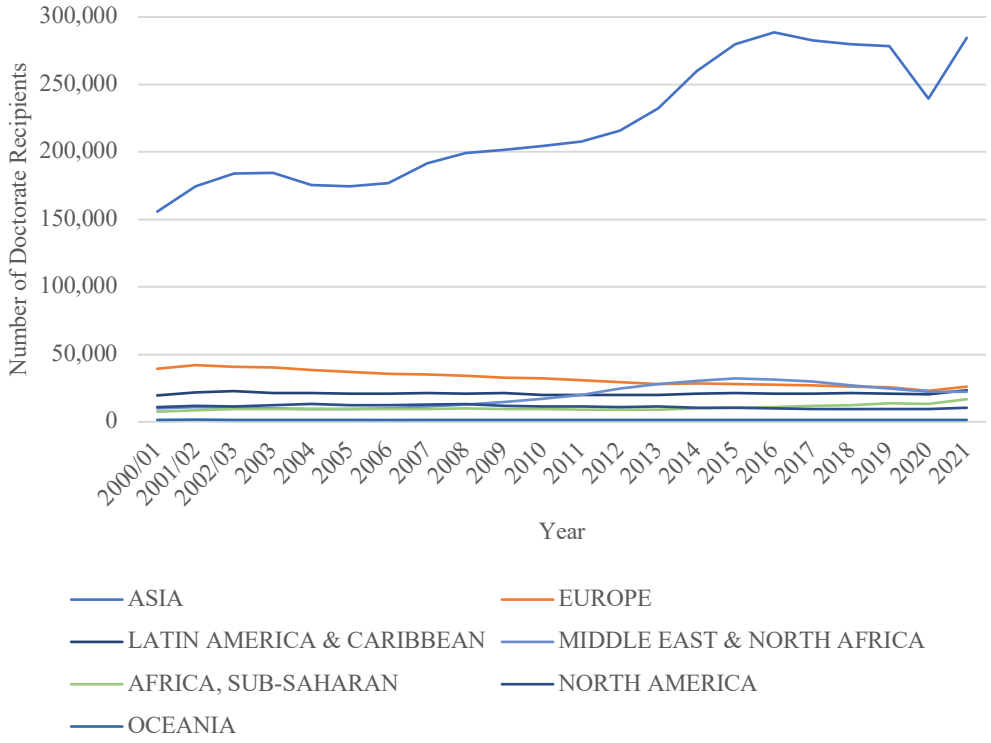


Figure 8

Asian International Graduate Students from 2000-2021

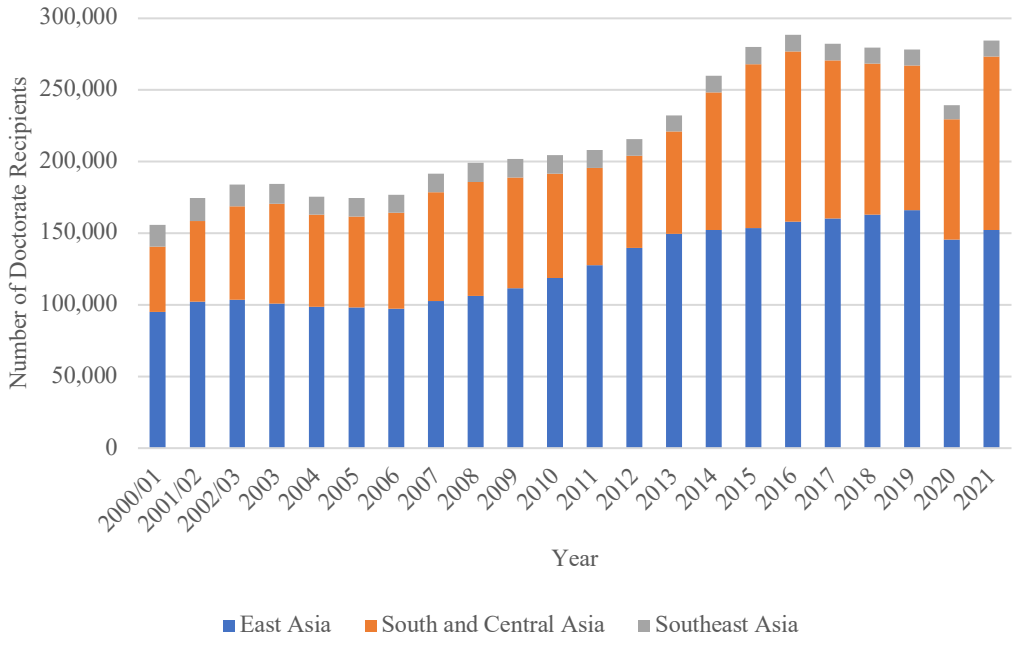
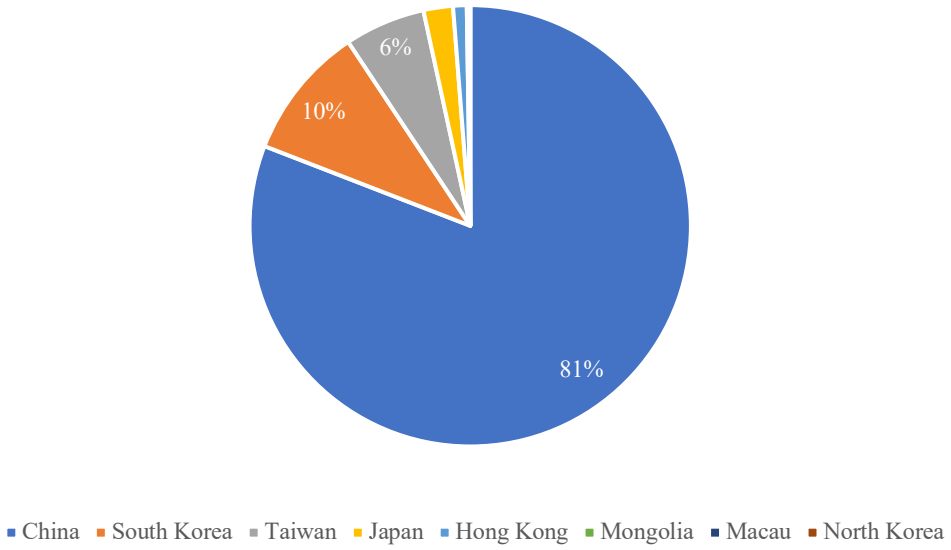


Figure 9

East Asian International Students by Countries of Origin in 2021

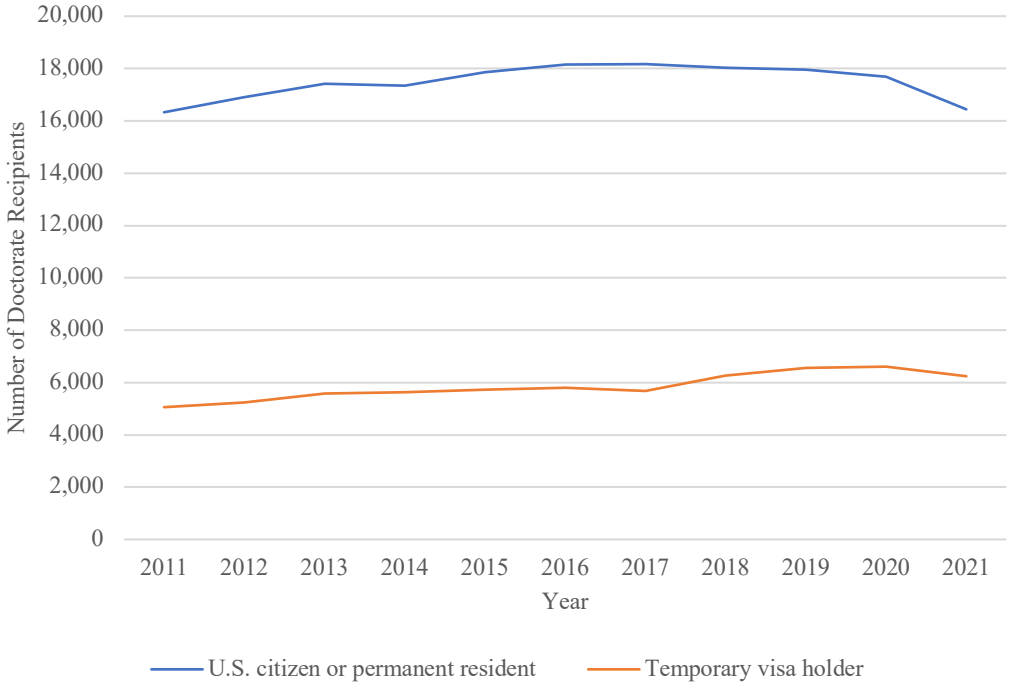


Female Asian Doctorate Recipients in the U.S.

In the 2021-22 academic year, women earned a total of 43,027 doctoral degrees, constituting 54.5 % of all doctoral degrees awarded. Among various fields, women achieved 73 % of doctoral degrees in health sciences and 71 % in education. However, in mathematics and computer science, as well as engineering, women earned only 27 % and 26 % of doctoral degrees (Council of Graduate Schools, 2023). Across different fields, the number of doctorates earned by women increased, with the most significant growth observed in mathematics and computer sciences (10.4 %), social and behavioral sciences (10.3 %), and physical and earth sciences (9.8 %) (Council of Graduate Schools, 2023). The analysis of female research doctorate recipients by race reveals a modest 0.7 % increase among U.S. citizen recipients, whereas the most remarkable growth is observed among female international doctoral recipients, experiencing an impressive 23.4 % increase (Figure 10). This data indicates a rising global appeal of American institutions to female scholars. The evolving demographics of doctoral education in the United States are evident in this notable shift in the academic landscape. However, it is surprising to see how the field has not paid attention to this fast-growing student population in doctoral education in the United States.

Figure 10

Female Research Doctorate Recipients by Citizenship Status from 2011 to 2021



Analyzing the dataset by race, female Asian doctorate recipients in the United States have consistently grown, as shown in Figure 10 (NSF, 2023). While White females are the largest group, the second-largest comprises Asian females. The percent change from 2011 to 2021 indicates a roughly 16 % increase among Asian females, whereas White female doctorate recipients decreased by 5 %. Over 50 % of Asian doctorate recipients were international students for at least a decade (Figure 11). In the past decade, the percentage change marked a 22 % increase among Asian international doctorate recipients, while the increase among U.S. citizens was only 0.7 % (Figure 12).

Figure 11

Female Research Doctorate Recipients by Race from 2011 to 2021

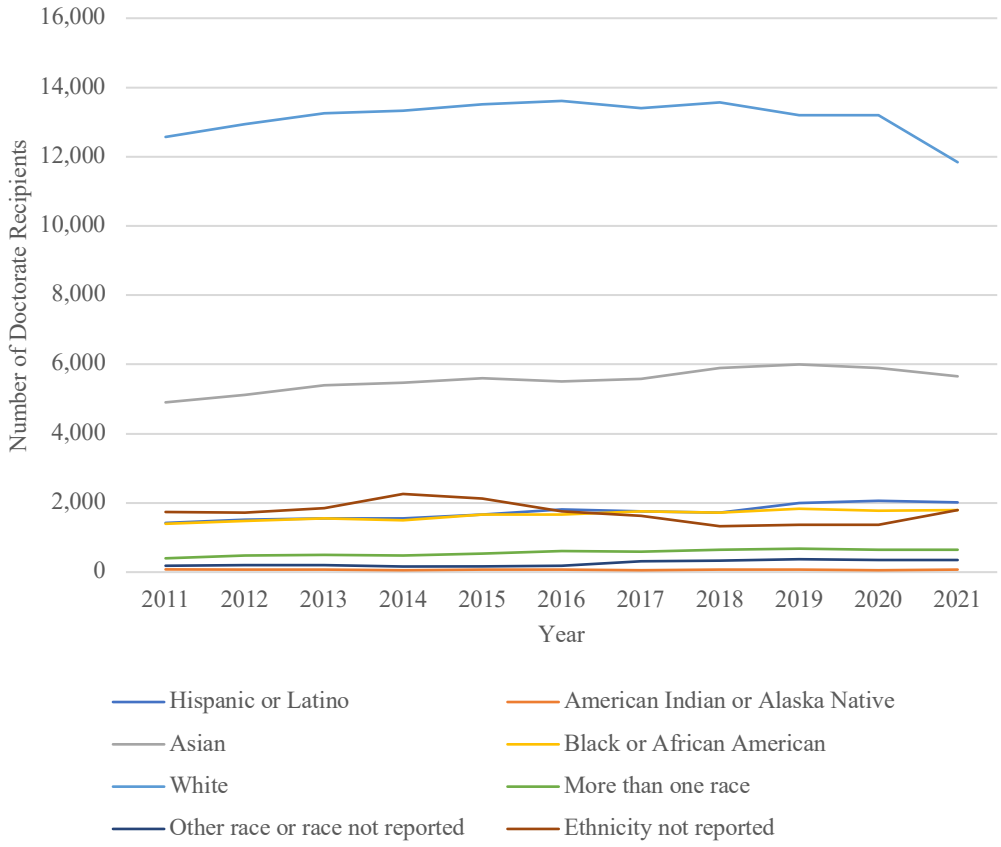


Figure 12

Asian Female Research Doctoral Recipients by Citizenship Status

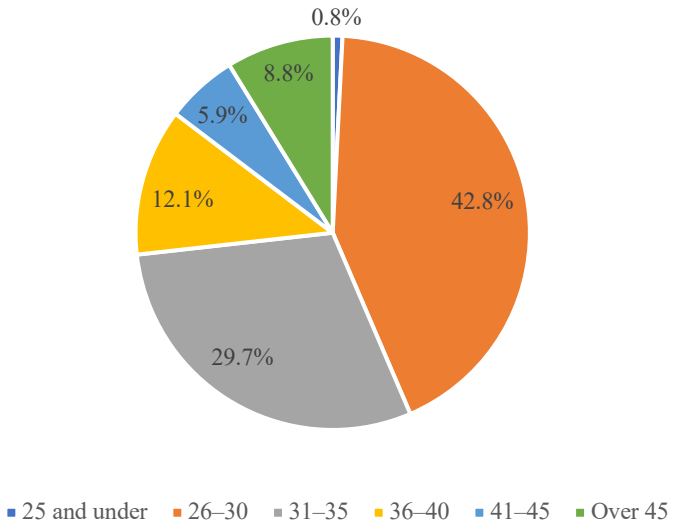
Academic Motherhood and Female Doctoral Students

The term "academic motherhood" encapsulates the juxtaposition of academia and motherhood, two seemingly incompatible scenarios, as noted by Springer et al (2009): “Academics are trained to be monkish in their devotion and slavish in their pursuit of knowledge” (p. 438). Women academics entering motherhood are confronted with the expectation of achieving the perfect or idealized practice of intensive mothering (Hays, 1996), demanding their complete dedication both physically and emotionally to their children.

Academic motherhood sets the stage for a competition between academic work and intensive mothering for women's attention, energy, time, and resources, leading to the characterization of academic work and motherhood as "greedy institutions" (Coser, 1974). Coser (1974) defines greedy institutions as various organized groups or institutions vying for an individual's full attention and commitment (p. 1). This struggle is particularly pronounced during the years of graduate training, a challenge reflected in statistics revealing that the median age for women earning their degrees in the United States is 31.7 years old (NSF, 2023). Notably, 42.8% of research doctorate recipients fall between the ages of 26 and 30, with an additional 29.7% falling within the 31 to 35 age range (Figure 13).

Figure 13

Age Distribution of Female Research Doctorate Recipients



Often, for women, the years of graduate training overlap with pregnancy and parenting young children, presenting mothers in academia with unique challenges (Mason et al., 2013; Casteñeda & Isgro, 2013; Langin, 2021). Therefore, it is safe to infer that many female doctoral students have experienced the intersection of their doctoral education and family planning. New federal data published in April reveals that in 2022, the average age of first-time mothers was slightly over 27, marking a record high for the country and indicating a significant demographic shift (U.S. Department of Health and Human Services, 2024). Some may have even faced the dilemma of choosing between having children and completing their doctoral degrees. The "ticking" biological clock may explain this phenomenon, as revealed in the study by Kuperberg (2009), indicating that more female students are opting to give birth while still enrolled in doctoral programs. Consequently, many female doctoral students find themselves grappling with the decision of whether to prioritize starting a family or completing their doctoral degrees (Mason et al., 2013; Casteñeda & Isgro, 201; Langin, 2021).

Researchers have shown interest in exploring the motherhood experience of doctoral students in U.S. institutions (Cohen Miller, 2013; Grenier & Burke, 2008; Lynch, 2008; Onwuegbuzie, Rosli, Ingram, & Frels, 2014; Perkins, 2011; Tiu Wu, 2013). Similarly, others have delved into the general experience of female graduate students and how they balance their multiple life roles (Dyk, 1987; Kibelloh & Bao, 2014; Lynch, 2002; Shafir, 2005; Younes & Asay, 1998). As numerous studies have suggested (Correll et al., 2007; Crittenden, 2001; Cuddy et al., 2004; Hays, 1996; Mason et al., 2013; Ward, 2014), academia is not considered motherhood-friendly, and academically oriented women often face penalties when they become mothers.

The term "motherhood penalty" denotes the disadvantages and challenges faced by mothers, particularly in the workforce, due to societal expectations and biases. This is evident in various aspects, including, but not limited to, lower pay (Correll et al., 2007), fewer allocated institutional resources (Spalter-Roth, Kennelly & Erskine, 2004), reduced productivity due to gender disparity (McCutcheon & Morrison, 2016), and employment in lower-ranking positions (Armstrong, 2015; United States Census Bureau, 2018, July). The conflicting nature between motherhood and academia results in many women who strive to excel in both roles experiencing the "motherhood penalty" (Armstrong, 2015; Correll et al., 2007; Malone, 1998; McCutcheon & Morrison, 2016; Spalter-Roth et al., 2004; Tiu Wu, 2013). Academics have long felt compelled to conceal or downplay their roles as mothers.

Guilt is a recurring theme among student mothers in doctoral programs, as indicated by various research studies investigating the balance between motherhood and doctoral studies (Malone, 1998; Onwuegbuzie et al., 2014; Brown & Watson, 2010; Perkins, 2011; Tiu Wu, 2013; Giles, 1983; Younes & Asay, 1998). Malone (1998) highlighted conflicts arising when

class and family functions coincided, forcing student mothers to prioritize one role over the other, leading to feelings of guilt and stress. Onwuegbuzie et al (2014) noted negative emotions, including guilt, panic, and disappointment, when participants struggled to meet the expectations of both motherhood and doctoral studies. Brown and Watson (2010) found that female doctoral students experienced guilt when unable to dedicate time to fulfill both family and academic demands, contributing to stress and tension.

Perkins (2011) emphasized the heavy workload and study responsibilities of doctoral student mothers, leading them to miss significant events in their children's lives, fostering feelings of guilt. Grenier and Burke (2008) identified internal and external stressors, such as anxiety, fear, and decision-making pressures related to the dual roles of motherhood and doctoral studies. Tiu Wu (2013) highlighted the increased external and internal burdens experienced by doctoral student mothers, resulting in feelings of guilt and stress. Similarly, Younes and Asay's (1998) study uncovered discomfort, guilt, and loneliness among graduate student mothers, stemming from the demands of academic study on family time.

Inadequate Support for Doctoral Student Mothers

Much literature identifies factors that hinder doctoral student mothers from performing at the same level as their male counterparts. These can be summarized into five perspectives: unofficial maternity leave policies, insufficient financial resources, lack of childcare support, inadequate faculty mentor support, and unrealistic social expectations.

Unofficial Maternity Leave Policies

Most studies in this section focused on graduate student parents. Kuperberg (2009) examined maternity policies for graduate students in the top 20 research universities, as defined by the 2008 report from U.S. News and World Reports. She found that 13 out of 20 research

schools had official school-wide maternity or parental leave policies for their graduate students. In this study, 11 out of 20 schools offered maternity leave to their graduate students, and 4 out of 20 schools extended funding to the graduate students. The statistics indicated that, although 13 of the 20 schools had established maternity leave, less than half provided any financial assistance, such as paid leave, funding, or childcare subsidies.

Similarly, Springer et al (2008) conducted an online survey of graduate program directors from the top 63 sociology departments, as ranked by the U.S. News and World Reports (2007), to investigate the available support for graduate student parents. Their study revealed that most sociology departments have adopted "flexible approaches" to support the needs of graduate student parents in birthing and raising young children. However, this practice was problematic as decisions were subject to individual professors and were implicitly viewed as a "favor" to the students. They found that very few policies existed for graduate student parents, and most accommodations were made on an individual basis.

Some studies explored whether graduate students were covered by the Family and Medical Leave (FMLA) policy. However, a further review of this policy's description led to the belief that it failed to cover graduate student mothers because the majority of graduate or teaching assistants worked only 20 hours per week or less, making most of them ineligible for the FMLA policy (Kuperberg, 2009; Springer et al., 2009).

Insufficient Financial Resources

The availability of financial resources for graduate students has been frequently cited as a critical factor affecting degree completion time (Abedi & Benkin, 1987; Baird, 1993; Bowen & Rudenstine, 1992; Tuckman, Coyle, & Bae, 1990; Wilson, 1965). Research exploring financial aid options available to doctoral students consistently finds that students who must rely on

personal earnings, such as savings accounts or income from off-campus employment, take longer to complete their degrees than students with significant financial assistance, such as fellowships, research assistantships, or teaching assistantships (Abedi & Benkin, 1987; Bowen & Rudenstine, 1992). This finding has serious implications since, in 2000, over 30% of all doctoral recipients reported primarily relying on their own resources to fund their doctoral studies. Furthermore, women were more likely than men to be dependent on personal resources (40.5% versus 25.7%) (Hoffer, Dugoni, Sanderson, Sederstrom, & Ghadialy, 2001).

One significant concern for any parent is healthcare coverage for their children. This concern may be even more pronounced for graduate student parents earning a limited salary. If student health coverage is not readily extendable to dependents for a nominal fee, students may seek paid employment outside of school, which international students are not legally able to do, potentially slowing down or completely derailing degree completion. Therefore, it is essential that dependent health insurance be affordable on the graduate student budget (Doyle, Loveridge, & faamanatu-Eteuati, 2016; Springer et al., 2009).

Lack of Childcare Support

Springer et al (2009) emphasized the critical role of reliable childcare for doctoral student mothers in achieving degree completion, stating, "It is next to impossible to make any progress on degree completion without child-free time to work" (p. 337). While some universities offer need-based financial support for childcare services, the assistance is often insufficient to cover full-time childcare needs. Financial aid for on-campus childcare centers may be limited, and if parents opt for home-based childcare or cannot secure a spot on campus, they may not be eligible for such support.

Certain universities provide childcare subsidies through the U.S. Department of Education's Childcare Access Means Parents in School (CCAMPIS) program. However, a closer examination of CCAMPIS requirements reveals that doctoral student parents are ineligible for this program. CCAMPIS is designed for undergraduate students with financial need who have not earned their bachelor's or professional degrees. The program's restrictions raise questions about whether it allows student parents to choose their preferred type of childcare, such as in-home off-campus or other forms. The lack of adequate childcare support from institutions underscores the challenges faced by student parents, indicating an unfriendly environment within academic institutions. Importantly, international and graduate students may not qualify for CCAMPIS program funds, as the program is specifically tailored to low-income students eligible for Federal Pell Grants (Reichlin Cruse, Richburg-Hayes, Hare, & Contreras-Mendez, 2021).

Subpar Faculty Mentor Support

Numerous studies highlight the pivotal role of a positive mentor relationship in ensuring the academic success of doctoral students (Grenier & Burke, 2008; Holm et al., 2015; National Student Union, 2009; Springeret al., 2009; Tillman, 2015). In their examination of 10 female doctoral students transitioning into motherhood within counseling education, Holm et al(2015) discovered that mentors play a crucial role in creating a supportive environment for these students. However, doctoral programs often lack mentors who are well-versed in campus resources for student mothers, as highlighted by Springer et al (2009). Additionally, Grenier and Burke (2008) underscore the significance of female mentors for doctoral student mothers, aiding them in navigating a predominantly male-dominated environment (p. 598). Armenti (2004) even observed that the scarcity of role models among successful academic mothers led women in previous generations to opt against having children. The insufficient support from

knowledgeable faculty members who have experienced childbirth and child-rearing while pursuing academic careers may be indicative of a broader lack of institutional support.

Unrealistic Social Expectations

Insufficient support from academic institutions and established caregiving policies compels many doctoral student mothers to address the challenge of balancing diverse roles and responsibilities without substantial assistance (Leviten-Reid et al., 2009; Maher, Ford, & Thompson, 2004; Mirick, & Wladkowski, 2018; Pement, 2013; Trepal, Stinchfield, & Haiyasoso, 2014).

The tension between academic work and motherhood is encapsulated as the struggle between "idealized academics and self-sacrificing mother," subjecting women to the conflicting and powerful ideologies and social expectations surrounding their careers and identities as mothers (Springer et al., 2009). Motherhood, for female doctoral student mothers, becomes a phenomenon of competing demands, labeled as "greedy institutions" where energy, attention, time, and other resources are contested between academic work and motherhood responsibilities (Coser, 1974; Spalter-Roth et al., 2004; Leviten-Reid et al., 2008; Trepal et al., 2014). This phenomenon is commonly referred to as "intensive mothering" or "new momism" (Crittenden, 2002; Douglas & Michael, 2005; Hays, 1996).

For doctoral student mothers, deciding to take time away from school or leave graduate school altogether is not always a matter of choice; it is often driven by various constraints, including childcare, financial limitations, a "ticking" biological clock, and personal health considerations (Crittenden, 2002; Douglas & Michael, 2005).

In summary, the challenges faced by doctoral student mothers stem from a combination of unrealistic social expectations and inadequate institutional support, placing them in an

exceptionally daunting and complex situation. Consequently, many doctoral student mothers navigate a series of seemingly insurmountable barriers, making their academic and personal journey exceptionally challenging.

International Graduate Student Mothers' Experiences

International graduate students face distinctive academic and cultural challenges while pursuing their studies abroad (KarKar-Esperat, 2018; Rawlings & Sue, 2013). Beyond the inherent difficulties of being in a foreign country, these students grapple with feelings of isolation, alienation, intense pressure to write and publish, and difficulties in communication with advisors and colleagues (Byram & Feng, 2006; Erichsen & Bolliger, 2011; Rawlings & Sue, 2013). Such challenges contribute to depression and mental health issues among international graduate students (Hyun, Quinn, Madon, & Lustig, 2007; Rawlings & Sue, 2013).

In the realm of scholarship addressing international education and the mobility of international students, gendered identity has received comparatively less attention than topics such as intercultural relations, the acculturation of international students, and their sociocultural adaptations to the host country (Murphy-Lejeune, 2003; Presbitero, 2016).).

Similarly, the emphasis in existing literature has often been on academic transitions to a new learning environment (Heng, 2019; Phan, 2022; Tran, 2008; Wu, 2015) rather than delving into gender-related aspects. Despite the depth and breadth in the analysis of international students' experiences, the unique situations and experiences of international graduate student mothers remain under-researched. As argued by Myers-Walls, Frias, Kwon, Ko, & Lu (2011), the role of graduate students tends to be the sole identity assumed for student mothers, overlooking their other roles as wives/partners, mothers, and daughters.

In fact, “the boundaries separating the home and the workplace, along with the general isolation of international student families” (Zhang, Smith, Swisher, Fu, & Fogarty, 2011, p. 523) keep their parenthood experiences “off the radar screen of higher education and mainstream academic research” (Zhang, 2020, p. 315).

Myers-Walls et al. (2011) found that Asian international student graduate student parents, including student mothers, usually face feelings of isolation, language barriers, and financial and marital difficulties. Being the researcher and the researcher herself, Chung (2015) described her transformation from a “passive, fragile Confucian woman to an active strong mother” (p.26), revealing how the Confucian discourse and ideologies of gender roles and values impacted her life as a student mother in the United States. Phan (2022) contributed to this research area by offering an autoethnographic description of her own transnational maternity performances that were influenced by the values, norms, and traditions of both worlds, meaning her home and host countries.

Alhajjuj’s (2016) doctoral dissertation centered on doctoral student mothers from Saudi Arabia, shedding light on unique stressors they face. These stressors include concerns about raising children in a foreign country, disagreements with spouses on parenting, and the challenge of fitting in with U.S. peers while also struggling to connect with local ethnic communities (Alhajjuj, 2016). Immigration policies, such as the requirement to be a full-time student and the restriction on taking online courses, were identified as incompatible with parenting responsibilities (Alhajjuj, 2016). Moreover, challenges like the inability to find a babysitter who speaks their native language, limited daycare options, and financial stressors added burdens that hindered students’ focus on their doctoral education (Alhajjuj, 2016).

Asian international doctoral student mothers exist at the intersection of multiple social identities, potentially placing them at an increased risk for overall well-being. While various studies have delved into the experiences of Asian international students (Hegiins & Jackson, 2003; Liu, 2009), Asian international graduate students (Lin & Scherz, 2014), or doctoral student mothers (Trepal et al., 2014), only a limited number of studies have explored the experiences at the intersections of all these identities - being a mother, a doctoral student, and an Asian foreigner.

Graduate Students' Academic Experiences During the COVID-19 Pandemic

Research on graduate students' academic experiences during the COVID-19 pandemic has predominantly focused on individual-level impacts. Studies have investigated how students navigated abrupt lab shutdowns (Suart, Nowlan Suart, Graham, & Truant 2021), coped with reduced opportunities for exchanging research work and building networks (Wang & Delaquil, 2020), adapted to the distinctive shift in research design or data collection methods (Barroga & Matanguihan, 2020), and addressed concerns related to scientific misconduct arising from the pressure to produce quick results under time constraints (Dinis-Oliveira, 2020).

Some studies have explored the opportunities that the pandemic presented for graduate students, such as increased funding for COVID-19 related research, additional time for producing and developing research and grants due to more flexible schedules resulting from remote work (Omary, Eswaraka, Kimball, Moghe, Panettieri, & Scotto, 2020), and positive experiences with online learning (Agarwal & Kaushik, 2020). Moreover, there is recognition that the shift to virtual learning and communication during the pandemic has expanded opportunities to recruit participants who were previously hard to reach (Archer-Kuhn, Beltrano, Hughes, Saini, & Tam, 2021; Dodds & Hess, 2020; Noonan & Simmons, 2021; Saberi, 2020).

For international doctoral students, Donohue, Lee, Simpson, & Vacek (2021) identified challenges for those at the thesis writing stage of their candidacy. These challenges encompass difficulties in research design, limited access to resources, increased workload, mental health concerns, and financial strains. Other studies have reported that doctoral students had to navigate disruptions to their dissertation progress, compounded by university cost-cutting measures, graduation postponements, delayed feedback from advisors, reduced communication with peers, and a lack of opportunities to build essential networks for future employment. Deep budget cuts have further hindered doctoral students' employability due to hiring freezes and disruptions in scholarly operations (Le, 2021).

The Social-Political Pandemic in the United States

While most students have undergone academic adaptations during the pandemic, Asian international graduate students have faced an additional social-political pandemic amid the COVID-19 crisis. Since the early days of the pandemic, Asians worldwide have been wrongly blamed for carrying and spreading the COVID-19 virus. This has led to a pervasive culture of anti-Asian racism globally, ranging from verbal insults to hate crimes, particularly against Chinese individuals (Stop AAPI Hate Reporting Center, 2020). In the United States, for instance, anti-Asian hate crimes surged by 164% across 16 of the country's largest cities and counties in the first quarter of 2021 alone (Center for Study of Hate & Extremism, 2021).

The COVID-19 pandemic has created additional barriers and challenges for international students in the United States (Koo et al., 2021; Sahu, 2020). Notably, the United States, along with several other countries, implemented travel bans (Chinazzi, Davis, Ajelli, Gioannini, Litvinova, Merler, Pastore y Piontti, Mu, Rossi, Sun, Viboud, Xiong, Yu, Halloran, Longini, & Vespignani, 2020). While these restrictions likely contributed to slowing the spread of the virus,

international students faced uncertainty about their ability to travel to their home countries and, if they did, whether they could return to the United States to resume their studies.

Looking at U.S. higher education specifically, the discourse surrounding several immigration policies threatened international students throughout the 2020 academic year. For example, U.S. Homeland Security issued a policy banning international students who were enrolling in schools or programs that were fully online from entering the U.S. (United States Immigration and Customers Enforcements, 2020). A presidential proclamation (PP 10043, 2020) specifically targeted Chinese graduate students and researchers from obtaining visas due to their ties (real or perceived) to Chinese military schools (Anderson, 2021; Wong & Barnes, 2020). There was also a tightening of the H-1B visa, as well as threats to cancel the Optional Practical Training (OPT) permit under the Trump Administration (Anderson, 2020, 2021; National Association of Foreign Student Affairs, 2020).

Immigration and visa policies introduced additional stressors, with international students initially restricted from taking a full load of online courses. While the Student and Exchange Visitor Program initially announced an exception to this policy in March 2020, an announcement in July 2020 stated that this exception would not apply to the 2020/2021 academic year (NAFSA, 2020). Although this announcement was later rescinded, allowing international students to stay in the United States even with a full load of online courses (NAFSA, 2020), the uncertainties surrounding immigration policies created additional stress for international students. Overall, irrespective of policy implementation, these measures have generated a discourse of fear and anxiety related to immigration, travel, and visa acquisition, particularly impacting Chinese international students (Tang & Flint, 2022).

The temporary residence and non-citizen status of international students position them outside the traditional framing of migrant populations (Fouron & Schiller, 2001) and may even "marginalize them in a different way from settled migrants" (Durance, 2016, p. 3). In her study, Firang (2020) argued for the inclusion of international students as a vulnerable population during the pandemic due to their temporary immigration status. According to Bilecen's (2020) list of issues that international students, particularly those from China and other parts of Asia, had to cope with, the most prominent ones include disrupted education, financial situations, healthcare concerns, social exclusion, and xenophobic attitudes resulting in racial discrimination and verbal assaults.

However, existing literature has not adequately addressed the challenges posed by vanishing routes and reinforced borders that hindered international students from returning home for education. Many found themselves stranded in locked-down cities, not only worrying about their own safety but also about their family and significant others who lived far away. Their vulnerability didn't solely arise from their non-citizen status in the host country but also from concurrent disadvantaged conditions, such as being alone without family, possibly ineligible for health insurance coverage of COVID-19, and unable to work part-time due to reduced or suspended RAships during the pandemic. These factors magnified their existing problems as international graduate students, including cultural issues, language differences, ethnic minority status, and geographical distance from family in their countries of origin.

Anti-Asian Trope and the COVID-19 Pandemic

The introduction and spread of the coronavirus in the United States have unfortunately been accompanied by an alarming increase in racist attacks and discrimination against Asian Americans. The pandemic has exposed individuals of Asian descent to violent and hostile

discrimination and isolation based on their race/ethnicity and physical appearance. Shockingly, nearly three in ten Asians in the United States have reported experiencing racial slurs or jokes since the outbreak began. According to the Pew Research Center, four in ten U.S. adults agreed that expressing racist or racially insensitive views about Asians has become more common than before the outbreak (Pew Research Center, 2020). Disturbingly, there have been nearly 9,000 incidents of anti-Asian American discrimination reported as of June 2021 (Stop AAPI Hate Reporting Center, 2020). Even the U.S. Federal Bureau of Investigation (FBI) has issued warnings that hate crimes against Asians will continue to rise across the country as the pandemic persists (Margolin, 2020).

These incidents seem tied, at least in part, related to the consistent use of improper terms in referring to COVID-19 as “Kung flu", “Chinese flu”, and “Wuhan virus” by many American political figures, including the former U.S. president Donald Trump (Nakamura, 2020; Rogers, 2020). These stigmatizing and racist labels have influenced public discourse regarding the virus as shown in social media analytics (The Atlantic Council, 2020). The racist rhetoric has been accompanied by increasing racist and xenophobic attacks and discrimination against not only Chinese or Chinese Americans but also the entire Asian population or anyone who looks East Asian (Ma & McLaughlin, 2020; Oung, 2020).

The pervasive "model minority" myth, stereotyping Asian Americans as achieving educational, occupational, and economic success while being well-adjusted (Sue, Sue, Sue, & Takeuchi, 2013), is used to suggest that they do not experience racism or its consequences. However, this myth must be considered alongside the concept of "yellow peril," which refers to White perceptions of Asian immigration as an existential threat to Western values and systems (Kawai, 2005). This ideology has historically fueled anti-Asian policies in the United States,

ranging from the Chinese Exclusion Act of 1882 to the internment of Japanese Americans during World War II (Executive Order 9066), as well as anti-Asian racism and hate crimes (Chen, 2000). The notion of yellow peril becomes particularly relevant in the context of the COVID-19 pandemic, as the use of terms like "Chinese virus" by Trump and others contributes to the perception that the well-being of America is directly threatened by people from China (potentially carrying the coronavirus).

Another anti-Asian racist trope is the "perpetual foreigner," referring to the tendency for Whites to treat Asian Americans as outsiders or as if they do not belong in their own country. This perception has been linked to lower levels of social belonging and life satisfaction (Huynh, Devos, & Smalarz, 2011). Sue and colleagues (2007) identified the concept of feeling like an "alien in one's own land" as one of eight microaggressive themes, highlighting that Asian Americans' experiences of microaggressions differ from those of other marginalized groups. Microaggressions, encompassing brief or subtle behaviors or remarks that convey negative prejudice or hostility toward a marginalized group member, are more commonly experienced by Asian Americans than other minority groups (Hwang & Goto, 2009).

Asian international students, constituting the largest percentage of international students in the United States (Figure 5), also faced increased anti-Asian discrimination during the COVID-19 pandemic. The surge in anti-Asian bias has been associated with a decline in the overall well-being of Asian Americans (Wu et al., 2021), likely negatively impacting the mental well-being of Asian international students as well. While many individuals experienced heightened isolation during the pandemic, feelings of loneliness and isolation may have been particularly pronounced for international students whose primary support system was in another country (Koo, 2021; Koo et al., 2021; Sahu, 2020). Limited interactions with domestic students

and faculty may have also diminished their opportunities to enhance their English proficiency and advance their career goals (Koo, 2021; Koo et al., 2021). All these challenges likely had a negative impact on international students' mental well-being (Koo, 2021a; Koo et al., 2021; Sahu, 2020).

Gap in Student Mother Literature

The emergence of the COVID-19 pandemic has brought far-reaching effects that have touched the lives of millions in ways not anticipated or experienced before. Within this complex global change, it is crucial to recognize the specific challenges faced by vulnerable populations. One such group grappling with the unprecedented disruption caused by the pandemic is international student mothers. These individuals, who embarked on a journey of international education, found their aspirations suddenly halted, and their already significant childcare and domestic responsibilities multiplied several-fold.

Despite the extensive understanding of the challenges faced by doctoral student mothers (Beal et al., 2021; Feinauer et al., 2021; Manze & Fleary, 2021; Oldham & Bradley, 2021; O'Reilly, 2019; Pascale et al., 2020; Willey, 2020), people of Asian descent (Chiu, 2020; Gover et al., 2020; Hong, 2020), and international students (Bonistall Postel, 2020; Dong et al., 2023; Koo, 2021) during the pandemic, there has not been a study investigating students living through the intersections of all those vulnerabilities, namely, Asian mothers who are international doctoral students.

It is imperative to highlight that these women are not only managing the challenges of pursuing advanced education in a foreign country but are also dealing with the profound and unique consequences of the pandemic on their lives and families. The multifaceted demands they face, balancing academic commitments with increased childcare responsibilities, navigating

complex international regulations and travel restrictions, and the sociocultural adjustments inherent in their academic journey, all contribute to the distinctiveness of their experience.

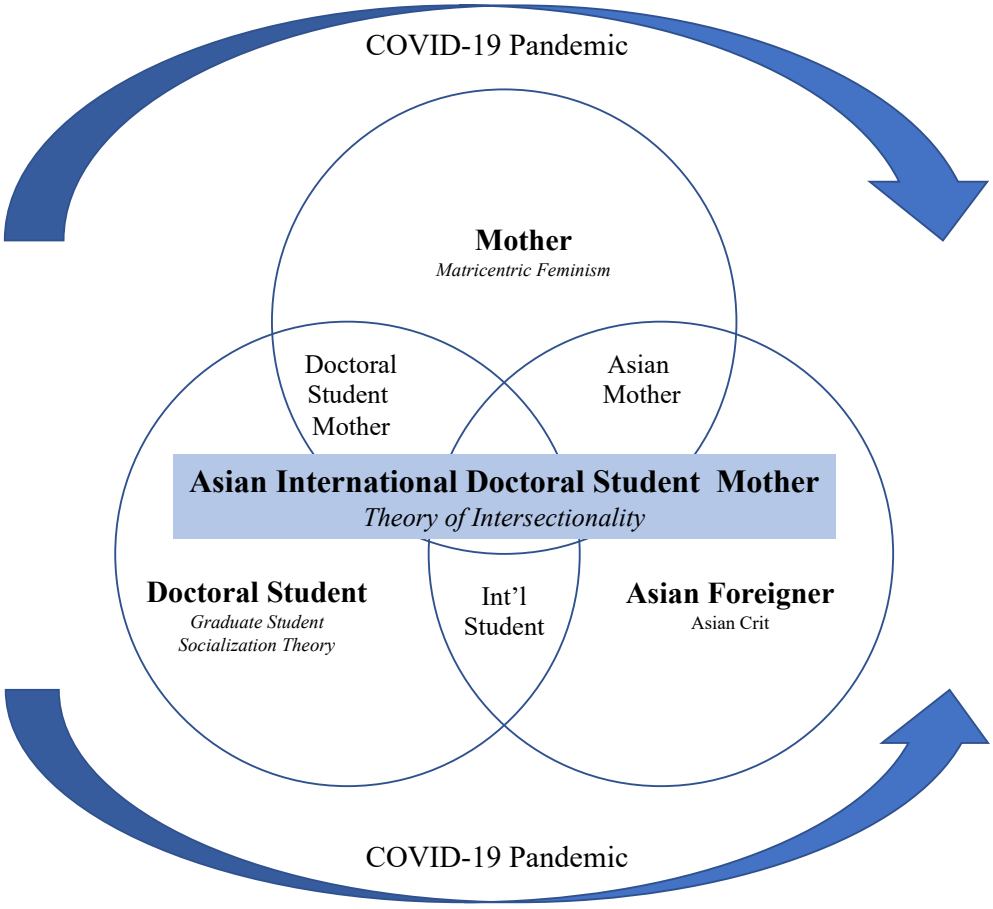
Understanding the intricate challenges faced by Asian international doctoral student mothers during the COVID-19 pandemic is vital, not just from a perspective of inclusivity and equity, but also to inform policies and support systems that can ensure their well-being and success. There is a compelling need for research that delves into the unique experiences and hardships faced by this population, shedding light on their stories, struggles, and resilience in the face of these unprecedented times.

Theoretical Framework

To conceptualize how intersectionality (Crenshaw, 1989, 1991) may shape the lived experiences of Asian International Doctoral Student Mothers (AMIDS) during the pandemic, I developed a conceptual framework to guide my study (Figure 14). The framework posits that the experiences of AMIDS are shaped by overlapping axes of their multiple identities as Asian, international student, doctoral student, and mother. Therefore, the study employed matricentric feminism, graduate student socialization theory, and AsianCrit, placing the major three aspects of AMIDS at the center of analysis while utilizing the theory of intersectionality to understand the layers of interactions between these different aspects. By combining these perspectives, I aimed to navigate the complexities of AMIDS' identity, power dynamics, and socialization processes, ultimately providing a more nuanced and comprehensive analysis of their lived experiences.

Figure 14

Theoretical Framework of the Current Study



Theory of Intersectionality

The concept of intersectionality, coined by Crenshaw (1989), has become a valuable tool for questioning historic, unitary, totalizing, and essentializing categories (Yuval-Davis, 2006). It allows for the theorization of relationships between various dimensions such as gender, race, class, and sexuality. Intersectionality signifies "the complex, irreducible, varied, and variable effects which ensue when multiple axes of differentiation - economic, political, cultural, psychic, subjective, and experimental - intersect in historically specific contexts" (Brah & Phoenix, 2004, p.76). In the context of this study, intersectionality serves as a lens to understand how Asian

International Doctoral Student Mothers' (AMIDS) lived experiences are shaped by their multiple marginalized identities (Yuval-Davis, 1983).

Intersectionality posits that identities cannot be understood in isolation or in additive ways but need to be examined together (Collins, 2015; Crenshaw, 1989, 1991). Intersectional research centers on the voices of marginalized populations but, in its analysis, focuses on the individual and the interlocking systems that influence an individual's experience (Collins, 2015). While Crenshaw's (1989, 1991) original work focused on the intersections of race, gender, and social class, newer definitions of intersectionality have expanded the definition of identity to include other ways of categorizing human populations, including marital status and immigration status, among others (Gopaldas, 2013).

Currently, it is considered vital to study how these aspects intersect and overlap in relation to individuals' roles within a social context. According to Luft, Berger, & Guidroz (2009), an intersectional approach allows researchers to "socially locate individuals in the context of their 'real lives' (p.1), echoing McCall's (2005) argument that an intersectional way of thinking considers how the relationship, connection, and overlap between one's multiple layers of identities created from their past experiences, social relations, and varying power structures accurately reflect their very own lived experiences. Shields (2008) who documented the nature of intersectionality in research explained:

> Intersectionality first and foremost reflects the reality of lives. The facts of our lives reveal that there is no single identity category that satisfactorily describes how we respond to our social environment or are responded to by others. It is important to begin with this observation because concern about intersectionality from a theoretical or research perspective has grown directly out of the way in which multiple identities are experienced. (p. 304).

The theory of intersectionality has been applied in research related to student mothers attending higher education institutions. For instance, Collins (2000) explored the intersection of

motherhood and academia, investigating how the experiences of student mothers are shaped by multiple intersecting identities. Berger & Guidroz (2010) discussed the application of intersectionality as a framework for understanding postfeminist parenting, contributing to the discourse on the complexities faced by student mothers within the academic setting. Grigoryeva (2017) explained the challenges of navigating the intersection of motherhood and academic work, investigating the contradictions and complexities that arise for student mothers and shedding light on their nuanced experiences. Schlesselman-Tarango (2017) complicated traditional notions of balance and "having it all" by exploring how female graduate students, particularly mothers, negotiate their roles in academia and family, adding depth to the understanding of the challenges faced by student mothers. Price and Faddick (2019) focused on the lived experiences of graduate student mothers, providing an in-depth examination of the intersectionality of motherhood and academic pursuits and contributing valuable insights into the multifaceted nature of their experiences.

While specific research papers critiquing the use of the theory of intersectionality for researching student mothers at universities may not be readily available, scholarly discussions on the limitations and challenges of the theory of intersectionality can be found in the broader academic literature. McCall (2005) has contributed to discussions about the complexity and challenges of applying intersectionality. McCall's work, in particular, emphasizes the need for a more nuanced understanding of intersectionality that goes beyond additive models. Collins (2015), a key figure in the development of intersectionality theory, has written about the definitional dilemmas and challenges associated with applying intersectionality research.

Despite existing criticisms of the theory of intersectionality, researchers continue to use it as it offers a framework that allows for the exploration of the complex and multifaceted nature of

identities. It encourages a more comprehensive understanding of how various intersecting factors, such as gender, race, socioeconomic status, and more, influence individuals' lives (Dann & Callaghan, 2019). Consequently, the theory of intersectionality emphasizes the diversity within any group, acknowledging that individuals within a particular category may have different and intersecting social identities (Harris & Patton, 2019). This recognition is crucial for avoiding generalizations and capturing the richness of experiences (Hancock, 2019). By applying an intersectional lens, researchers uncover and highlight inequities and complexities that might be overlooked in a more singular analysis (Collins, 2000; Crenshaw, 1991a, 1991b). This is particularly important for understanding and addressing social inequalities that affect Asian International Doctoral Student Mothers (AMIDS) differently based on their intersecting identities.

Thus, I argue that the use of the intersectional approach is important to study the lived experiences of AMIDS during the time of the COVID-19 pandemic because they are not only students but also temporary migrants, parents, spouses, and mothers, which together make their responses to the social environments and changes due to the pandemic much more heterogeneous and complicated. Using intersectionality as the theoretical lens will prevent categorizing AMIDS through a single, isolated identity as students at the expense of overlooking their other contextualized identities. Moreover, as Arthur (2018) suggested, a key premise of intersectionality is that "some experiences may be more salient at different times and in various contexts" (p.287). This argument is particularly important to this study because it sheds light on how certain roles were experienced more intensely than normally at different times of the global crisis.

Matricentric Feminism: A Feminism for Mothers

Becoming a mother is also 'a fundamental issue for feminism, involving a specific set of psychological processes and psychic changes that are hard to access through available language and discourses,' as suggested by Holloway (2016, p.137). Current research is inspired by feminist thinking and matricentric feminism by O'Reilly (2019). Arguably, matricentric feminism has remained underdeveloped in the field of higher education and is surprisingly overlooked in women's studies and feminist theories as well (O'Reilly, 2019).

Sacks (2017) coined the term "matresence," which means "the transition into motherhood" or "the birth of a mother." The term "matrescence" is similar to the term adolescence, both in spelling and meaning. They both represent a significant transitional period in a woman's life. Sacks (2017) further explained that "being pregnant is like going through puberty all over again: your hormones go nuts, your hair and skin don't behave the way you'd like, and you develop a new relationship with a body that seems to have a mind of its own." Trepal et al (2014) asserted that one of the most overwhelming challenges in a woman's life is the transition into motherhood. The transition into motherhood can bring drastic changes to a woman's life, and the transition may involve different changes in psychological, social, and physical aspects willingly or unwillingly (Bailey, 2001).

Matricentric feminism is a feminist perspective and framework that centers on the experiences and perspectives of mothers and motherhood within the broader context of feminism. It seeks to analyze and challenge societal norms, structures, and inequalities that affect women, with a particular emphasis on the roles and experiences of mothers. Matricentric feminism places motherhood at the center of its analysis. It acknowledges that women's experiences as mothers are complex and multifaceted, and these experiences intersect with other

aspects of their identities, such as race, class, and gender. Matricentric feminism highlights and critiques the "motherhood penalty," which refers to the negative impact that motherhood can have on a woman's career, earnings, and societal perceptions. This perspective advocates for the inclusion and representation of mothers in various spheres of society, including politics, media, and academia. It recognizes the importance of diverse voices and experiences in shaping policies and cultural narratives.

Motherhood is fundamentally a thick, bodily experience that engages ‘sensory’ selves. Lived maternal experiences have arguably remained undertheorized in the field of organization studies. Becoming a mother is an intense embodied experience that often renders a woman vulnerable, stigmatized, or hypervisible in the workplace (Gatrell, 2013; Hennekam, 2016). Research has long shown that female academics continue to battle gendered beliefs and stereotypes in developing sustainable careers (Armenti, 2004; Fotaki, 2013; Johansson & Śliwa, 2013; van Vonderen, Roest, Siew, Walther, Hooper, & Te Pas, 2014; Toffoletti & Starr, 2016). In academia, pregnancy is arguably largely considered unprofessional, and maternal bodies are usually abject (Biehl-Missal, 2015; Gatrell, 2013; Kristeva, 2014; Mäkelä, 2009; Tyler, 2009).

As of my knowledge, specific research studies that explicitly utilize matricentric feminism to study student mothers in higher education might not be readily available. Matricentric feminism, which centers the experience and perspectives of mothers, is a relatively specialized approach within feminist scholarship (O’Reilly, 2019a, 2019b). However, when exploring broader feminist and gender studies literature that might incorporate matricentric perspectives when studying student mothers, scholars who emphasize matricentric feminism often focus on recognizing and valuing the experiences of mothers within various contexts, including higher education. For example, O’Reilly (2019a, 2019b) provided foundational

insights into matricentric perspectives that could inform research in this area, while Stone's work (2007) may not exclusively focus on student mothers in higher education, but it examines the choices women make regarding their careers and families. Stone's research considers the challenges faced by women in balancing motherhood and career aspirations. Reynolds (2009) is known for her work on maternal feminism. While her focus may extend beyond the realm of student mothers in higher education, her perspectives on the intersections of motherhood, feminism, and academia may offer valuable insights for researchers interested in matricentric feminism within educational contexts.

While matricentric feminism provides a valuable perspective that centers the experiences of mothers, it is not without criticism. Critics argue that a matricentric focus may exclusively center on the maternal perspective, potentially neglecting other important aspects of women's lives, such as their roles as professionals. This singular emphasis may oversimplify the complex identities of student mothers. Matricentric feminism has been criticized for essentializing the experiences of motherhood, assuming a universal and fixed definition of what it means to be a mother. This essentialism may overlook the diversity of experiences within the category of "mother." Matricentric feminism often centers on biological motherhood, potentially excluding non-biological or adoptive mothers. Critics argue that this focus may contribute to the invisibility of certain mothering experiences, limiting the theory's applicability to a broader range of individuals. Critics also argue that matricentric feminism might portray mothers primarily as victims of societal expectations and structures, potentially overlooking the agency and empowerment that women can experience in navigating their roles as both mothers and students.

Despite existing criticisms around matricentric feminism, as matricentric feminism places the experiences of mothers at the forefront, it acknowledges the experiences of mothers better

than any other existing theories. For AMIDS, this approach can provide a lens that prioritizes their roles as mothers and explores how motherhood intersects with their experiences as doctoral students and individuals navigating their various roles. Also, matricentric feminism, while focusing on motherhood, does not necessarily reduce women to a singular identity (O'Reilly, 2019a, 2019b, 2021). It allows for an exploration of the complex and intersecting identities of AMIDS, acknowledging the nuances of their experiences as both mothers and scholars. Matricentric feminism can help contextualize motherhood within cultural dynamics and aid in understanding how cultural expectations, norms, and values shape the experiences of AMIDS (O'Reilly, 2019a, 2019b, 2021). Cultural stigma and expectations around motherhood can be significant for AMIDS. Thus, matricentric feminism provides a space to address and analyze these factors, shedding light on their holistic experiences of navigating caregiving responsibilities, emotional challenges, and support systems while pursuing advanced degrees.

Graduate Student Socialization Theory

Weidman, Twale, and Stein (2001) developed a framework for the socialization of graduate students, which focuses on how doctoral students are introduced to the academic norms of research and scholarship. The theory highlights the significance of social interaction between students and faculty, as well as collegiality among faculty members, in creating a supportive environment for doctoral study. The theory affirms the importance of social interaction among both students and faculty as well as collegiality among faculty for creating a supportive climate for doctoral students. The theory suggests that successful socialization results in positive outcomes, such as academic success, professional development, and a strong sense of belonging within the academic community.

The theory identifies several stages graduate students go through during their socialization process. These stages typically include pre-entry, entry, student-faculty interaction, and the dissertation (Weidman et al., 2001). AMIDS in the current study were in various stages suggested by the theory. Students are exposed to the program's culture, norms, and expectations throughout different stages. For example, the entry stage can be a critical time for students as they adjust to the demands of doctoral education. Additionally, the dissertation stage also applies as AMIDS in the study were amid dissertating when they are supposed to work closely with their advisors and committees, culminating in successfully completing their research projects. Eventually, the theory emphasizes the concept of "embeddedness," which refers to how doctoral students become integrated into their academic and professional communities. The more embedded students are, the more likely they are to persist in their programs and succeed in their academic and professional pursuits.

While the graduate student socialization theory provides a framework for understanding the process through which individuals become acclimated to the academic and professional norms of their disciplines, it is not without criticism. For example, critics argue that socialization theories may oversimplify and homogenize the graduate student experience (Nerad, 2020a, 2020b, 2020c). Not all students within a program or discipline have the same background, goals, or experiences, and a one-size-fits-all approach may overlook individual diversity. The theory may carry implicit assumptions about what constitutes success in academia (Nerad, 2020a, 2020b, 2020c). Critics argue that these assumptions can reinforce certain norms and expectations, potentially marginalizing individuals who do not conform to traditional measures of success. Additionally, the socialization process can perpetuate power dynamics and hierarchies within academic institutions (Nerad, 2020a, 2020b, 2020c). Critics contend that

socialization theories may not sufficiently address issues related to power differentials, exclusionary practices, and the reproduction of academic hierarchies. Similarly, some criticize the theory for presenting a static or linear view of the socialization process (Nerad, 2020a, 2020b, 2020c). Critics argue that these models may not capture the dynamic and evolving nature of graduate students' experiences as they progress through their programs.

AsianCrit

The application of AsianCrit, an extension of Critical Race Theory (CRT), to study the identity of AMIDS as Asian foreigners provides a robust theoretical foundation. Critical Race Theory, originating in law, focuses on how the legal system perpetuates the dominance of Whites in society and centers race in its analysis. The tenets of CRT, including the commonplace nature of racism, interest convergence, the social construction of race, differential racialization, intersectionality, and anti-essentialism, offer a comprehensive framework for understanding racial oppression.

In the context of education, scholars like Ladson-Billings and Tate (1995) have extended CRT to analyze racial inequality in schooling. AsianCrit, as a branch of CRT, specifically addresses the experiences of Asian individuals, recognizing the importance of understanding how race operates in education to sustain or challenge inequality.

By employing AsianCrit, this study acknowledges the significance of race and identity in shaping the experiences of AMIDS. It provides a lens to explore how systemic racial dynamics impact the lives of Asian international doctoral students, emphasizing the need to recognize and amplify their voices within the broader discourse on educational inequality.

The emergence of specific critical race perspectives, such as LatCrit, TribalCrit, and AsianCrit, underscores the need for nuanced analyses that focus on the racial injustices faced by

distinct ethnic and racial groups. While CRT provides a broad understanding of how race functions in society, these specialized perspectives delve into particular communities' unique challenges and experiences.

LatCrit, for instance, directs attention to the injustices faced by Latinos, addressing issues like language, immigration, ethnicity, culture, identity, and sexuality (Solorzano & Yosso, 2001; Valdes, 1998). TribalCrit centers on racism specific to indigenous people, highlighting concerns like assimilation, sovereignty, self-determination, and the significance of tribal philosophies and traditions (Brayboy, 2005, 2021). Similarly, AsianCrit was developed to provide a conceptual framework that centers on the racial realities of Asian Americans, acknowledging the need for a specific focus on this community (Chang, 1993; Iftikar & Museus, 2018).

Asian critical scholars, within the framework of AsianCrit, highlight the unique aspect of racism faced by Asian Americans, particularly related to nativism. Despite over 150 years of history in the United States and anti-racism efforts, Asian Americans are often excluded from the collective memory of what constitutes an American (Chang, 1993; Iftikar & Museus, 2018). The racial discourse in the U.S. tends to be constructed around a Black-White dichotomy, leaving Asian Americans as "perpetual foreigners" or "forever foreigners," reinforcing the notion that they are not considered authentic Americans. This perspective sheds light on the challenges Asian international doctoral students may face in the U.S. educational system (Teranishi, 2002).

Asian critical scholars have actively contested the racialization imposed by the model minority myth, which portrays Asian Americans as a homogeneous group characterized by success, hard work, law-abidance, and compliance (Chang, 1993; Lee, 2005). Despite appearing complimentary, the model minority myth obscures the long history of oppression and resistance experienced by Asian Americans. It further denies the existence of contemporary racism against

Asian Americans, oversimplifies the diverse and complex struggles within the Asian American community, and pits Asian Americans against the struggles of other people of color (Chang, 1993; Lee, 2005; Wei, 1993).

The efforts of Asian critical scholars, as part of the AsianCrit framework, highlight the importance of dismantling stereotypes like the model minority myth to foster a more accurate and nuanced understanding of the experiences and challenges faced by Asian Americans. This critical perspective is particularly relevant in the context of the racial dynamics Asian international doctoral students may encounter while pursuing advanced education in the U.S.

Racialization involves attributing specific traits to racial groups, and in the case of Asian American women, this can manifest as stereotypes depicting them as quiet, deferent, conforming, or as the stereotype of "dragon ladies" that is associated with emasculation (Hune, 2020; Hune & Nomura, 2020). AsianCrit, as an extension of Critical Race Theory, incorporates the concept of Asian American racialization, known as Asianization. This tenet of AsianCrit explores how racialization impacts individual identities and the experiences of Asian Americans (Museus & Iftikar, 2013).

Furthermore, AsianCrit explicitly integrates intersectionality as a key tenet. Intersectionality, developed by Crenshaw (1989), emphasizes the need to unpack the complexities faced along multiple axes of identity, including race, gender, language, immigrant generation, and class. By incorporating intersectionality, AsianCrit provides a valuable analytical tool for understanding, interpreting, and challenging the representation and inclusion of Asians in education. It allows for a critical analysis of the intricate relationship between Asian American lives and broader issues of oppression and racism (Chang, 1993; Museus, 2013; Teranishi, 2002).

In the context of studying Asian international doctoral students, adopting the AsianCrit framework becomes essential for delving into the multifaceted dimensions of their identity, experiences, and the intersecting factors that shape their educational journey.

While AsianCrit offers a valuable framework for understanding and critiquing power dynamics, identity, and representation within Asian contexts, it is not without criticisms. Critics raise concerns about potential essentialization of Asian identities and experiences, suggesting that the framework could inadvertently contribute to the homogenization of diverse Asian cultures, overlooking internal variation and differences.

Additionally, similar to other critical theories, AsianCrit may face criticism for not adequately addressing gender and intersectionality. Some argue that there may be a need for a more nuanced exploration of how gender intersects with other social categories within the AsianCrit framework. This critique emphasizes the importance of considering the diverse experiences and challenges faced by individuals at the intersection of various identities, including gender, race, class, language, immigrant generation, and more.

Therefore, while AsianCrit provides a valuable lens for understanding the experiences of Asian international doctoral students, it is crucial to approach its application with a nuanced understanding of the complexities and diversities within the Asian diaspora, considering various intersecting factors that shape individuals' identities and experiences.

While there are criticisms surrounding the use of AsianCrit, there are still compelling reasons to consider employing it as a framework for studying the lived experiences of Asian Mothers who are International Doctoral Students (AMIDS). AsianCrit provides a lens for critically examining power dynamics, which is crucial for understanding the experiences of

marginalized groups. Applying AsianCrit can help uncover and analyze power structures that shape the lives of AMIDS within the United States academic setting.

The theory encourages an intersectional approach, considering the complex interplay of various factors such as gender, culture, nationality, and educational status. This is particularly relevant for studying the multifaceted identities of AMIDS. AsianCrit often emphasizes resistance and empowerment. Studying the experiences of AMIDS through this framework can shed light on how they navigate challenges, resist stereotypes, and actively shape their academic and personal journeys.

It is important to approach the application of AsianCrit with a nuanced understanding of its strengths and limitations, considering the diversity within the Asian diaspora and the intersecting factors that influence individuals' experiences.

While the COVID-19 pandemic is a contemporary issue, this study's analysis highlights the enduring nature of how Asians have been historically situated as a diseased and foreign threat within the United States. Notably, international students in most U.S. higher education institutions are not demographically categorized by their race, which makes their experiences with racialization and racism on campuses less visible. This invisibility can obscure the nuances and complexities of their experiences, particularly when compared to those of domestic students. By further expanding the scope of AsianCrit theory to encompass other key socio-historical factors and contemporary issues, we can gain a more comprehensive understanding of how these factors impact AMIDS' experiences with race and nativity in the United States.

All in all, each of these theories complements one another and has helped me analyze unique challenges, responsibilities, and lived experiences associated with motherhood, studenthood, and living as an Asian foreigner in the United States during an unprecedented

global pandemic, allowing for a more in-depth understanding of how those identities intersect with other aspects of identity. The combination of these theories allows for a holistic approach to understanding identity formation. Simultaneously applying these theories enabled me to identify both the unique challenges faced by AMIDS and the strengths they bring to their academic and personal lives without undervaluing any of those important aspects of their identities. The nuanced analysis helped me avoid oversimplification and acknowledge the complexity of their lived experiences.

CHAPTER 3. RESEARCH METHODS

Methodological Approaches

The present qualitative study investigates the intertwined lived experiences of AMIDS during the COVID-19 pandemic by analyzing interviews conducted with 26 AMIDS who lived through the pandemic in the United States. By focusing on their multifaceted identities rooted in life as mothers, life as doctoral students, and Asian foreigner identity, I explore how these interconnected aspects of different roles and identities influenced their lived experiences during the COVID-19 pandemic.

Given the limited knowledge and resources regarding AMIDS in the United States, a phenomenological approach is appropriate for this study. Phenomenology explores participants' experiences within a given context. Phenomenology is a philosophical and research approach that focuses on exploring and understanding human experiences from the perspective of the individuals who live them. Thus, in qualitative research, phenomenology seeks to uncover the essence of a phenomenon by examining the meanings people attribute to their experiences (Creswell & Poth, 2016). Phenomenological research is concerned with the lived experiences of individuals. Researchers seek to understand the essence of a phenomenon by exploring how individuals perceive, interpret, and make sense of their experiences. Data collection in phenomenological research typically involves in-depth interviews with participants. Open-ended questions are used to encourage participants to share their experiences in their own words. The goal is to elicit rich and detailed descriptions. To elaborate, phenomenology entails a methodical delineation of categories of lived experiences based on experiential narratives (Kuiken & Miall, 2001, p. 1).

Consequently, employing a phenomenological research approach was well-suited for addressing the following research questions:

1. How did AMIDS navigate the challenges of fulfilling their maternal responsibilities amidst the backdrop of the COVID-19 pandemic?
2. In what ways did the COVID-19 pandemic impact the progression of AMIDS' doctoral education?
3. What were the experiences of AMIDS as they confronted the COVID-19 pandemic as Asian foreigners residing in the United States?

Research Design

Research Setting

As more than 80% of research doctorates are awarded by Carnegie Classification group R1: doctoral universities (very high research activity) in the United States (NSF, 2022), I deliberately recruited AMIDS only from R1 universities. Given the decentralized approach of the federal government in handling COVID-19 policy responses, with significant decision-making power delegated to state governments, each state tackled the pandemic uniquely. To capture possible variations due to local political climate, I aimed to recruit interviewees from R1 universities in four different regions (Northeast, Midwest, South, and West) across the United States (Table 1). This strategic approach allowed me to gain insights into how universities and their local communities navigated distinct public health regulations during the pandemic and how these regulations, along with local contexts, influenced AMIDS in varying ways.

Table 1.
AMIDS by Regions and States

Regions	States	*n*
Northeast	Massachusetts	1
	New York	4
Midwest	Michigan	2
	Minnesota	3
	Ohio	1
	Wisconsin	1
South	Georgia	4
	Texas	1
West	California	3
	Washington	6
Total		26

Purposeful Participant Selection

Participant Recruitment Methods. Upon obtaining IRB approval, I employed three distinct avenues to identify potential interviewees, outlined as follows:

- Facebook groups dedicated to Ph.D. student mothers, such as "Ph.D. Mamas" and "Dissertation Mamas"
- Graduate student parent support groups and international student organizations within R1 universities across the United States
- Student parent support centers at R1 universities, if available

To effectively reach the target audience, a recruitment flyer was posted on the Facebook pages of the identified student organizations (see Appendix A). Particularly noteworthy is the fact that the student mothers' groups on social media exhibited the most favorable response rate among the three outreach sources. My extensive outreach extended to 78 R1 universities, encompassing engagement with their respective student parent support groups and international student organizations. This comprehensive outreach initiative was initiated at the beginning of 2022.

While considering research methodologies, the notion of snowball sampling was a constant consideration, given no readily available data on this student group, as universities are not mandated to collect such data. Although initial seeds in snowball sampling are in theory randomly chosen, in practice this is difficult if not impossible to carry out. Therefore, as a practical matter, initial seeds in snowball sampling tend to be chosen via convenience sampling. Like other non-probability sampling methods, the major drawback of snowball sampling is sampling bias; that is, the danger that the sample ultimately obtained is not 'representative' of the larger population from which the sample was drawn. In snowball sampling, the sampling composition is heavily influenced by the choice of initial seeds, and the method, in practice, also tends to be biased towards favoring more cooperative as opposed to randomly chosen subjects and those that are part of larger personal networks (Heckathorn, 1997, 2002). Luckily, the utilization of the snowball sampling technique was ultimately unnecessary. This was primarily due to the higher number of potential interview candidates, surpassing the intended count for inclusion in the research project.

Identifying Potential Participants and Purposeful Sampling. The QR code on the recruitment advertisement (refer to Appendix A) led those who were interested in participating in the in-depth interview to a preliminary questionnaire (Appendix B). A total of 53 self-identified Asian international doctoral student mothers responded to the online preliminary questionnaire from mid-January 2022 to mid-March 2022, and the following criteria helped me with purposive sampling (Merriam & Tisdell, 2015). The current study was open to student mothers who met all the following criteria:

- Full-time international doctoral students holding F-1 or J-1 visas at R1 universities in the United States

- From East Asian countries such as China, South Korea, and Taiwan
- Identify herself as a mother (including biological, step, foster, and adoptive)
- Has been enrolled in the doctoral program for more than one academic year
- Has been enrolled in the doctoral program at any point during the COVID-19 pandemic

Research participants who were permanent residents or citizens of the United States, who came from countries other than East Asian countries, who did not have children, who had spent less than a year in the doctoral program, or who were not currently enrolled in a doctoral program were excluded from the study. The decision to restrict interview participation to doctoral students in their second year or beyond served the purpose of mitigating potential stressors linked to acclimatization to new environments and early program withdrawals. The primary objective underlying the recruitment of interview participants was to encompass a diverse range of AMIDS, accounting for varied demographic backgrounds, as well as academic characteristics and experiences. This approach aligned with the exploratory nature of the current research.

Final Interview Participants. Ultimately, a total of 26 AMIDS were successfully recruited as interview participants, and Table 2 in the document provides a snapshot of their basic demographic information. The study encompassed AMIDS from all four regions and ten states across the United States.

Table 2.

Demographic Information of AMIDS in the Study

Code	Nationality	State	Age	Academic Discipline	PhD Start Year	Expected PhD End Year	# of Children
SM01	Korea	Washington	33	Public Policy and Management	2017	2023	1
SM02	Taiwan	California	38	Education	2018	2023	2
SM03	China	Minnesota	40	Education	2019	2025	3
SM04	Korea	Georgia	34	Nursing	2018	2022	1
SM05	Korea	Wisconsin	33	Social Welfare	2021	2026	2
SM06	Korea	Georgia	35	Nursing	2020	2024	2
SM07	Taiwan	Washington	31	Law	2021	2023	2
SM08	China	New York	29	Education	2017	2022	1
SM09	Korea	Texas	26	Aerospace Engineering	2019	2024	1
SM10	Korea	California	28	Mechanical Engineering	2019	2023	1
SM11	Korea	Massachusetts	31	Public Health	2021	2026	1
SM12	Korea	Minnesota	35	Education	2018	2023	2
SM13	Taiwan	Washington	31	Economics	2016	2022	1
SM14	Korea	Ohio	28	Education	2021	2025	1
SM15	China	Minnesota	25	Education	2020	2025	1
SM16	Korea	Michigan	34	Mechanical Engineering	2017	2023	1
SM17	Korea	New York	36	Speech & Hearing Sciences	2018	2024	1
SM18	China	Georgia	39	Education	2020	2024	2
SM19	Korea	Michigan	33	Business	2016	2023	1
SM20	Korea	Washington	41	Education	2012	2020	1
SM21	Korea	New York	34	Social Works	2017	2022	2
SM22	Korea	Georgia	35	Climate Sciences	2015	2020	2
SM23	Korea	California	29	Psychology	2016	2023	1
SM24	China	Washington	36	Education	2020	2025	1
SM25	China	New York	32	Education	2016	2023	1
SM26	Taiwan	Washington	47	Law	2019	2024	2

Notably, all the AMIDS originally hailed from East Asian countries (Table 3). The average age of the recruited AMIDS was 33.96 years, with an age range spanning from 25 to 47 years. Each participant self-identified as a mother. On average, the age of these children was 4.53 years, ranging from 3 months to 18 years, at the time of the in-depth interviews. It is important to note that the average age of these children was approximately 2.53 years old when the initial wave of the pandemic unfolded in March 2020. Excluding the older children of SM26 (i.e., who were 15 and 18 years old), the remaining 33 children were all 8 years old or younger. There was also a good mix of AMIDS who became a mother before the doctoral program and those who became a mother after they started their doctoral programs (Table 4). For example, two AMIDS were pregnant during the pandemic. Within the group, diverse marital arrangements were evident, with all participants residing with their partners in the United States, except for four AMIDS (i.e., SM11, SM14, SM24, and SM26).

Table 3.

AMIDS by Nationalities

Nationalities	*n*
Korea	16
China	6
Taiwan	4
Total	26

Table 4.

AMIDs by Mothering Status

First Time Becoming a Mother	*n*
Became a mother before doctoral program	14
Became a mother after starting doctoral program	12
Total	26

AMIDS were also found at diverse academic stages, spanning the entirety of doctoral education in the United States (Table 5). Among the participants, 18 AMIDS had initiated their doctoral programs before the onset of the COVID-19 outbreak. In contrast, 8 of them embarked on their doctoral studies after the occurrence of the pandemic, typically during the fall semester/quarter of 2020.

Table 5.

AMIDS and Ph.D. Academic Stages

Academic Stage	*n*
Working on coursework requirement	7
Completed doctoral courses	4
Completed qualifying exams	2
Advanced to candidacy	11
Defended dissertation	2
Total	26

The enlisted AMIDS displayed a diverse spectrum of academic disciplines and stages. Out of the participants, 20 were affiliated with non-STEM disciplines, whereas 6 were pursuing studies in STEM disciplines (Table 6). For the current study, nursing was categorized as STEM because The U.S. Bureau of Labor Statistics and the Higher Education Research Institute at UCLA categorize "Health Professions" as part of the STEM category, encompassing disciplines such as nursing. Among the AMIDS involved in the study, 20 were undergoing education in the United States for the first time, while the remaining 6 had prior experiences of education in the United States before commencing their doctoral programs.

Table 6.

AMIDS and Academic Disciplines

	Academic Disciplines	*n*
Non-STEM	Business	1
	Economics	1
	Education	9
	Law	2
	Psychology	2
	Public Health	1
	Public Policy	1
	Social Welfare	2
	Speech-Language Science	1
STEM	Engineering	3
	Climate Science	1
	Nursing	2
Total		26

To ensure the study's success, it was imperative to cast a wide net when recruiting a diverse group of AMIDS. This approach served a dual purpose: first, it led to a deeper and more comprehensive understanding of AMIDS, and second, it enabled the exploration of nuances and variations that might have been overlooked in a more homogeneous participant group.

Data Collection Procedures

Following IRB approval from the University of Washington-Seattle Human Subjects Division, the recruitment process was conducted entirely online through platforms like Facebook and email. The procedure involved potential participants submitting a preliminary questionnaire, through which eligibility screening was performed. Potential interview participants who met the inclusion criteria were subsequently contacted via email to coordinate suitable dates and times for the Zoom interviews. Prior to the interviews, participants were provided with a password-protected Zoom interview invite. As a token of appreciation for their contribution, each participant received $50 in cash or Amazon gift cards.

Compensation for Interviewees

Providing higher-than-average monetary compensation was a deliberate choice for several compelling reasons. First and foremost, AMIDS represents hard-to-reach populations in American universities, often comprising non-dominant student groups. This makes recruitment challenging, given their busy schedules juggling childcare duties, work, and schooling. Secondly, offering adequate compensation underscores our commitment to treating research participants fairly by acknowledging the value of their time, expertise, and personal information.

Additionally, since the current study involves the disclosure of personal information, the enhanced compensation serves to motivate participants to be more candid and forthright, thereby yielding more accurate and valuable data. Last but certainly not least, I specifically requested an uninterrupted hour for the interviews, allowing participants to arrange help or support for their children during that time. To facilitate this, the compensation included a babysitting fee, in addition to the participant compensation. This arrangement ensured that participants could fully engage in the interview without distractions.

In-depth Interviews

Between February 3rd and March 21st of 2022, I conducted interviews with a total of 26 AMIDS using the Zoom platform. For these interviews, I designed an interview protocol featuring semi-structured open-ended questions (Appendix C). All interviews were recorded both in video and voice formats via Zoom. On average, each interview lasted approximately 75 to 90 minutes. Subsequently, these interviews were carefully transcribed into either English or Korean.

Each interview commenced by addressing their journey to the United States for doctoral education, acting as a foundational point for delving into their motivations and experiences as international doctoral students in the United States. The interview questions were thoughtfully

designed to encompass conceptual themes drawn from the theoretical framework of the current study. For instance, in exploring how AMIDS navigated the challenges tied to fulfilling their maternal responsibilities amid the pandemic, I posed questions such as:

- What specific aspects of motherhood presented greater challenges in your lived experience since the pandemic?
- Were there any facets of being a mother that you found positive since the pandemic?
- What support was valuable to you as a student and mother during this period?

To gauge the pandemic's impact on the progression of AMIDS' doctoral education, I inquired about aspects like:

- How do you believe the pandemic has negatively influenced your doctoral education in a general sense?
- What changes did you observe within your discipline due to the pandemic?
- Did the pandemic yield any positive effects on your doctoral education?

In understanding how AMIDS faced the pandemic as Asian foreigners in the United States, I explored questions such as:

- How did your experience as an Asian individual living in the United States evolve during the pandemic?
- Did you encounter any instances of fear or apprehension as an Asian person amidst the pandemic?
- In what manners did your racial identity influence your lived experiences throughout the pandemic?

Careful attention was given to designing interview questions to actually help me answer research questions and reflect on the true intention of the interview questions (Table 7).

Table 7.

Research Questions and Corresponding Interview Questions

Research Questions	Interview Questions	Interview Intentions
1. How did AMIDS navigate the challenges of fulfilling their maternal responsibilities amidst the backdrop of the COVID-19 pandemic?	• In what ways do you believe being a mother influenced your doctoral education during the COVID-19 pandemic? • How did you navigate the additional challenges that arose from being a mother during the COVID-19 pandemic? • Could you share how you tackled the specific concerns related to your international student status in the United States throughout the pandemic?	These question prompts participants to reflect on the influence of pandemic on their mothering duties, particularly in the context of the pandemic. These questions directly delve into participants' strategies and responses to the additional obstacles brought about by the pandemic. Their responses can shed light on the ways in which motherhood intersected with their academic pursuits as well as their Asian race.
2. In what ways did the COVID-19 pandemic impact the progression of AMIDS' doctoral education?	• In your role as a doctoral student, how do you perceive the pandemic's impact on your doctoral education overall? • Could you elaborate on how your academic discipline was influenced by the pandemic? • What are some instances where the pandemic had positive effects on your doctoral education? • Conversely, what were some instances where the pandemic had negative effects on your doctoral education?	These questions aim to gather a comprehensive overview of how the participants view the pandemic's influence on their entire doctoral education endeavors. It encourages participants to provide a holistic assessment of how their academic journey was shaped by the pandemic. They encourage participants to share insights into changes, challenges, and adaptations that occurred within their discipline due to the pandemic's disruptions.
3. What were the experiences of AMIDS as they confronted the COVID-19 pandemic as Asian foreigners residing in the United States?	• How did you actively address concerns related to your racial identity during the pandemic? • Did you experience any apprehensions about your international student status at any juncture of the COVID-19 pandemic? If yes, could you elaborate on those concerns and how you navigated them?	Participants can reflect on their experiences as Asians and how their temporary visa status impacted their experiences during the pandemic. This question encourages them to discuss any specific actions taken to navigate challenges related to their race and temporary foreigner status.

Consistency was maintained across interviews by employing the same semi-structured interview protocol. However, participants were also encouraged to digress from the set questions, enabling them to share stories, introduce novel ideas, and provide additional meanings. Throughout the process, I also pursued subjects that held significance to the individual participant (Merriam & Tisdell, 2015).

Reflections on Zoom Interviews

Although conducting interviews through Zoom was not initially part of my plan, the evolving COVID-19 restrictions led me to a pivotal decision: either forgo the qualitative study or swiftly adapt to a virtual interview data collection method. Given the pandemic's prolonged presence into its second year, the latter option proved prudent. In fact, the Human Subjects Division at the University of Washington-Seattle was very supportive of conducting Zoom interviews, aligning with the circumstances. The decision to embrace Zoom interviews was influenced by significant advantages, as previously highlighted in reports (Archibald, Beltrano, Hughes, Saini, & Tam, 2019; Gray, Wong-Wylie, Rempel, & Cook, 2020; Oliffe, Kelly, Gonzalez, & Yu Ko, 2021). However, there remains a wealth of unexplored knowledge concerning effective practices for virtual interviews.

One common feedback I received after the interviews was that AMIDS felt a high level of comfort, which enabled them to share unprompted revelations. They indicated that they found solace and, at times, were pleasantly surprised by the sense of upliftment they experienced after conversing with me. They felt that they were “being understood”. Some even likened the interview experience to attending an online therapy session. What became evident was the profound therapeutic value that virtual connections through Zoom provided. Many participants

appeared to derive intrinsic therapeutic benefits from discussing their lived experiences during the pandemic through these interviews and “let everything out with no filters.”

Most participants conducted their interviews from the comfort of their homes, a setting necessary for tending to their young children. Given that most of these children were not attending school during that time, the Zoom interview emerged as not only the most convenient but also the most feasible option for these student mothers to engage in the interviews. The beauty of Zoom lay in its ability to seamlessly accommodate breastfeeding, attending to children's needs post-nap, and fostering a sense of ease that allowed participants to candidly share their experiences and emotions from their living rooms, kitchens, and home offices. While it is important not to exclusively attribute participants' candidness to Zoom, it was unmistakably evident that conducting interviews in their homes offered a unique comfort level, enhanced movement, and a degree of visual control, all promoting a freer exchange. It is worth noting that these advantages, although present in in-person interviews, were further streamlined by Zoom, reducing formality, and alleviating the logistical challenges participants might face in hosting physical interviews.

Zoom offered participants the option to turn off their video or exit the conversation with a simple click, providing them with an added layer of autonomous control. Another pivotal advantage of Zoom interviews was their capacity to transcend geographical boundaries, enabling us to swiftly connect with AMIDS from various universities across the United States. In contrast, conducting in-person interviews would have confined me to recruiting student mothers within a 2-hour driving radius, thereby limiting both the sample size and the diversity that our present study successfully embraced. The overarching goal of this exploratory study was to collect abundant data from a wide spectrum of AMIDS across the United States. This encompassed

diverse academic disciplines, attendance at both public and private universities, varied experiences of living in the United States, and diverse origins from different East Asian countries. Zoom interviews enabled us to cast a wide net to achieve this objective. Furthermore, it's essential to acknowledge that in-person interviews across the United States come with substantial direct and indirect costs, often tied to researcher travel. In contrast, the current study achieved cost savings while expanding its recruitment reach and inclusivity. This enabled conversations with diverse participants residing across various locations in the United States. Instead of allocating funds for researcher travel, I was able to provide higher monetary compensation for the interview participants. This efficiency translated into nimble rescheduling and completion of interviews via Zoom, which likely contributed to reduced participant attrition.

Of course, some Zoom interviews faced challenges due to internet connectivity issues, leading to occasional disruptions in the audio and video quality. While most interviews took place in private settings, external factors such as mail deliveries and background noises remained present, albeit to a lesser degree when participants wore earphones. Despite these minor inconveniences, Zoom's extensive reach and adaptability enabled me to engage with a considerably larger number of AMIDS than initially expected, overcoming geographical barriers that might otherwise have rendered them unreachable.

Data Analysis Procedures

Data analysis in phenomenological research involves a process of thematic coding to identify patterns and themes within participants' descriptions. Researchers may engage in a process called "eidetic reduction" to distill essential themes and meanings from the raw data. As phenomenological research aims to provide a rich and detailed description of the phenomenon under investigation, this description goes beyond surface-level observations to capture the

essence of the experience. Additionally, researchers may offer interpretations that shed light on the deeper meanings of the phenomenon. The reporting of phenomenological research emphasizes rich and thick descriptions that convey the nuances, emotions, and contexts of participants' experiences. This detailed reporting is intended to provide readers with a deep understanding of the phenomenon. Phenomenological research often seeks to uncover the essence of a phenomenon. The essence represents the fundamental nature or core meaning that is shared among individuals who have experienced the phenomenon. The concept of epoché, or bracketing, helps researchers approach the essence without imposing preconceived ideas.

To meet these purposes and goals of phenomenological research project, the interview data underwent analysis through the method of interpretative phenomenological analysis. Interpretivism seeks to comprehend individuals' situations through their descriptive experiences, preserving their individual perspectives and contexts (Sipe & Constable, 1996). As described by Smith and Eatough (2007), interpretative phenomenological analysis involves a two-stage interpretation process, often referred to as a "double hermeneutic." In this approach, the participant endeavors to comprehend their own world, and subsequently, the researcher seeks to comprehend the participant's process of understanding their own world (Smith & Eatough, 2007, p. 36).

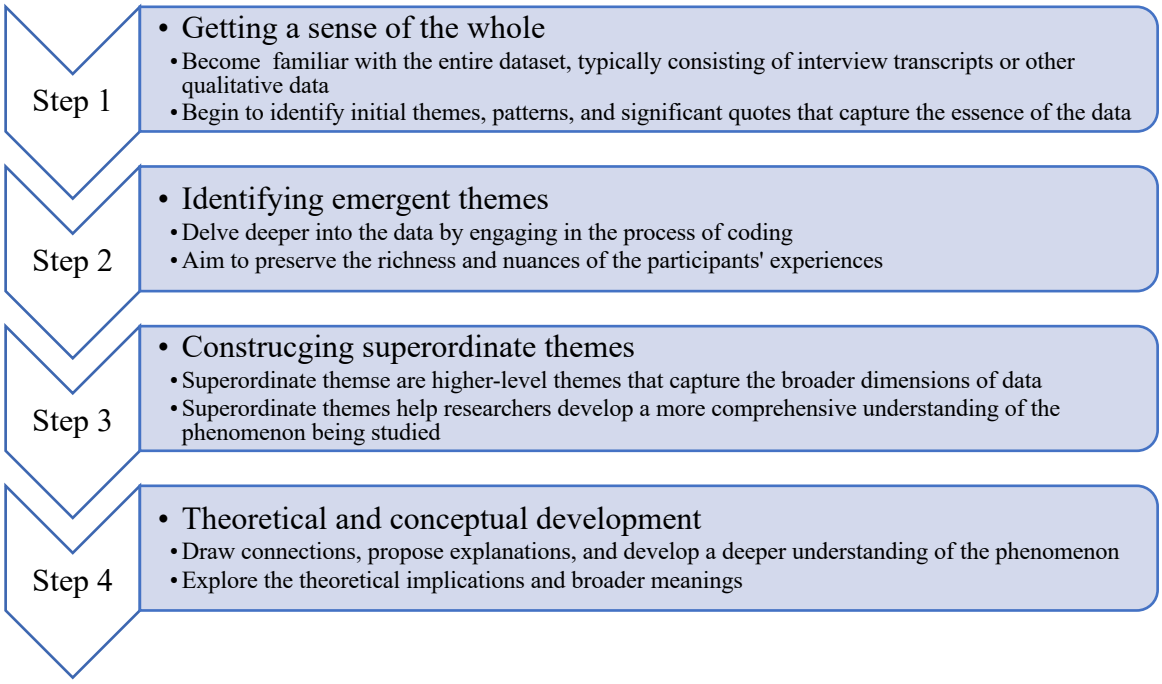
Interpretative Phenomenological Analysis

In the process of data analysis, I employed Dedoose, a software designed for data coding, to assign codes to individual words, phrases, sentences, and even entire paragraphs. These codes were initially derived from the research questions, existing scholarly literature, and the conceptual framework. The present study adhered to the four-stage data-analysis framework for interpretative phenomenological analysis (IPA) proposed by Storey (2007). IPA is a qualitative

research approach that focuses on the in-depth exploration of personal experiences and the meanings individuals attribute to those experiences. While the specific steps and procedures may vary slightly depending on the researcher's interpretation, Lewis, Lloyd, and Farrell (2013) have outlined a comprehensive IPA process that researchers often follow (Figure 15).

Figure 15.

Interpretative Phenomenological Analysis Process (Lewis, Lloyd, & Farrell, 2013)



The initial analysis stage entailed a comprehensive review of the transcripts, with the goal of identifying central concerns, recurring patterns, and notable instances of construction and rhetorical significance that shaped the emergent themes (Storey, 2007, p. 52). Constrained by limited funding, I had to strategically prioritize cases that offered the greatest time savings, leading me to opt for transcription services for interviews with potential difficulty in automated transcriptions. For interviews in which thick English accents posed challenges for automated transcription, a professional transcriber was enlisted through Rev.com. Interviews featuring participants SM13, SM15, SM18, SM24, SM25, and SM26 were transcribed by a human

transcription service through rev.com. Furthermore, since Zoom did not provide automated transcription for languages other than English, interviews conducted in Korean and exceeding 1 hour (i.e., SM16, SM17, SM19, SM20, SM21, SM22, SM23) were transcribed by a skilled Korean transcriber hired through fiverr.com. Outsourcing transcription services significantly aided in timesaving, especially given the extensive 40^{+} hours of interview data. While automated transcription proved reasonably accurate, the overall precision improved markedly with human transcription.

The remaining interviews conducted in English were automatically transcribed generated via Zoom. The quality of the automatically generated transcriptions was good enough to work with, but as they were not in the best state, I utilized this as an opportunity to revise the interview recordings and transcripts in revised verbatim, capturing participants' words and expressions. The first step of getting a sense of the whole was achieved through revising three different types of transcriptions I had on hand, a crucial step for preserving the nuances and subtleties of participants' language. During this step, I immersed myself in the data through repeated readings and engagement with the transcripts. This process, known as familiarization, helped me become deeply acquainted with the content and context of each participant's narrative.

Subsequently, cleaned transcripts armed with their prior notes and distinctive phrases were revisited to construct the themes. Upon transcription finalization, the data analysis progressed through a series of sequential steps, encompassing reviewing, memoing, and coding to identify emergent themes. This systematic approach culminated in the identification of a collection of emergent themes. Moreover, drawing upon participants' own narratives helped with incorporating "theoretical constructs to analyze the phenomenology" (Storey, 2007, p. 55) to

discern and label these themes. This step laid the foundation for aligning the collected data with the research objectives and facilitated the exploration of pertinent themes.

Then, I structured a hierarchical framework for these codes, establishing categories that conceptually unite them. This intricate process necessitated several activities, including data comparisons, code and category adjustments, and at times, code or category elimination. The systematic hierarchy of data facilitated the recognition of broader, discernible patterns or themes (Table 8). Once the emergent themes have been identified, the researcher proceeds to discern connections between initial themes, culminating in the amalgamation and incorporation of related themes to construct superordinate themes (Storey, 2007, p. 57). Superordinate themes are higher-level themes that capture the broader and more abstract dimensions of the participants' experiences. These themes represent overarching concepts that link and connect the lower-level themes identified in the earlier stage. Superordinate themes help researchers develop a more comprehensive understanding of the phenomenon being studied (Lewis, Lloyd, & Farrell, 2013).

Additionally, IPA involves both individual case analysis and cross-case analysis. Individual case analysis ensures that the unique aspects of each participant's experience are understood, while cross-case analysis identifies commonalities and variations across participants. The goal is to work towards developing a coherent and compelling narrative that captures the essence of the phenomenon under investigation. This narrative should reflect the participants' perspectives and the interpretations made by the researchers. Much attention was paid to developing a coherent and compelling narrative that captures the essence of the phenomenon under investigation.

Table 8.

List of Themes, Categories, Codes, and Sub-codes

Themes	Categories	Codes	Sub-codes
Motherhood and AMIDS	Increased domestic work	Childcare	School closure
			No familial support Gender strain
			"Only moms can do"
		Homecare work	No eating out
			Sanitization increase
			Increase in new pandemic norms
	Support from husbands	Support in domestic work	Childcare support
			Homecare support
		Lack of support	Insufficient support with emotional labor
		Limitations as foreigner	"Zombie" visa
			Gender role conflict
			Increase in sense of responsibility
	Useful support	Institutional support	Available but not applicable
			Available but have no time
		Individual support	Support from friends
Doctoral education and AMIDS	Academic performance	Positive aspects	Work from home advantage
			Better work-life-balance
			Participation for virtual conferences
			Normalizing motherhood
		Negative aspects	Difficulty in focusing
			Less engaging virtual conferences
			Lack of efficiency in Zoom meetings
			Time poverty
	Useful support	Institutional support	Available but not applicable
			Available but have no time
	Doctoral education	Impact on research	Advisor change
			Impact on data collection
			Research topic change
			No access to research sites
	Institutional support	Support from school	Lack of support from department
		Support from faculty	Flexibility
			Accepting personal aspects of students
Asian racism and AMIDS	Increased violence against Asians	Experienced racism	Verbal attack
			Precautionary actions
		Aware of racism	Media exposure
			Precautionary actions
	Useful support	Institutional support	Available but not applicable
			Available but have no time
	Useless support	International student support	"We are here for you"
			No intersectional support offered

Finally, the researcher arranges the overarching themes alongside their respective sub-themes and illustrative quotations, substantiating their findings with ample evidence. In this final stage, the focus shifts from the data itself to the development of theoretical and conceptual frameworks. I aimed to draw connections, propose explanations, and develop a deeper understanding of the phenomena under investigation. This stage involves a more interpretative and abstract analysis that moves beyond the immediate content of the data to explore the theoretical implications and broader meanings (Lewis, Lloyd, & Farrell, 2013).

Limitations

There are several limitations in the proposed study that warrant attention. Firstly, this study is context-bound. The participants chosen for this research project exist within their own unique political, cultural, economic, geographic, and other contexts. As a result, the findings of this study cannot be generalized to a broader population of AMIDS. However, the study was designed with the intention that the insights gained from the analysis would be valuable to other AMIDS, their spouses and partners, faculty advisors, and university leaders who aim to understand a student group that may not be as prominently represented in diversity and inclusion discussions and may be facing unique challenges.

The second limitation is the absence of a comparison group. The lack of a comparison group prevents direct comparisons between East Asian international doctoral student mothers and those who do not come from East Asia or are not international students. Therefore, any findings derived from this investigation must be interpreted with caution. This study primarily aims to provide an exploration and description of the experiences of some AMIDS during the pandemic in the United States.

A third limitation concerns the absence of control for AMIDS' socioeconomic status and family backgrounds. These factors could significantly impact the mindset of these doctoral student mothers. While AMIDS in this study needed to meet academic requirements to qualify for top research doctoral programs, their upbringing in countries where women may not necessarily be encouraged to pursue the highest level of academic endeavor could influence their motivations. Socioeconomic advantages or a family background that values equal opportunities for female scholars could affect their success rates.

The fourth limitation arises from the focus on AMIDS engaged in heterogeneous marriages. Existing literature indicates a more equitable division of domestic labor in partnerships with homogenous backgrounds compared to those with heterogeneous backgrounds. While the intention was not to solely include those in heterogeneous marriages, the recruitment process did not actively seek to encompass a diverse range of marital and partnership arrangements. As a result, the findings related to spousal support could be skewed towards AMIDS engaged in heterogeneous marriages.

Lastly, conducting individual interviews at a single point in time presents a limitation. Due to time constraints with the interview participants, the depth of understanding of AMIDS' perceptions regarding various institutional factors influencing their experiences during the entire span of the COVID-19 pandemic is restricted. Multiple interviews at different time points would have allowed for a deeper investigation of emergent themes. However, considering the busy schedules of AMIDS during the pandemic, conducting a single in-depth interview at one point in time was deemed necessary to encourage high levels of participation.

CHAPTER 4. FINDINGS

Finding 1. Academic Dreams and Maternal Realities During the Covid-19 Pandemic

The first finding provides a critical examination of the response to the initial research question, which explores how AMIDS managed their maternal responsibilities amidst the challenges posed by the COVID-19 pandemic. Throughout the interviews, a clear pattern emerged, indicating that fulfilling their roles as mothers was the most significant challenge for AMIDS during the pandemic because "quitting" mothering was not an option. Compounding these challenges was the noticeable lack of ways to delegate tasks or secure adequate support to share the burdens due to the pandemic.

In the study, AMIDS often expressed their unwavering commitment to motherhood, emphasizing that being a mother is an essential and non-negotiable aspect of their lives, as the following quote demonstrates:

> While I might juggle and let go of various commitments, motherhood remains non-negotiable. I've consistently reminded myself that I could potentially halt my pursuit of a Ph.D. at any juncture, yet the role of a mother is irreplaceable. (SM06)

AMIDS' role as a mother takes precedence over other commitments in their lives. The significance of motherhood in their lived experiences and the choices they are willing to make was well articulated throughout the interviews.

The challenges faced by AMIDS during the pandemic were further compounded by the closure of schools and childcare facilities, a situation that persisted for a substantial period during the pandemic. Therefore, the findings for this question are organized into three different phases, reflecting how public schools and childcare facilities operated during the pandemic. All parents in the U.S. have faced a widespread lack of accessible childcare alternatives, particularly at the outset of the pandemic (Igielnik, 2021). With daycare centers and schools closing or

reducing their services, many parents found themselves in the position of providing home-based care for their young children (Garbe, Ogurlu, Logan, & Cook, 2020; Goodnough, 2020). This shift from established childcare routines to full-time at-home care was a significant adjustment for both parents and children. It required parents to not only balance their work or other responsibilities but also to effectively become full-time caregivers and educators. These role changes often came with additional stress, as parents juggled their own work responsibilities while tending to their children's developmental needs. This challenging dual role led to significant lifestyle changes, as many parents had to find creative ways to ensure their children's well-being and development while managing their own daily obligations (Igielnik, 2021).

For the current study, AMIDS found themselves in distinct scenarios because of the pandemic's timing: a few gave birth during the pandemic's inception, necessitating them to navigate the challenges of the newborn phase amidst the pandemic's onset, while others became pregnant amid the ongoing pandemic. For example, the early stages of motherhood, particularly during the newborn phase, pose a myriad of challenges. These include the potential onset of post-partum depression (An, Chen, Wu, Liu, Deng, Liu, & Guo, 2021), grappling with sleep deprivation (Smith & Saleh, 2021), encountering breastfeeding difficulties (Li, Fein, Chen, & Grummer-Strawn, 2008), managing post-partum recovery (Kanotra, D'Angelo, Phares, Morrow, Barfield, & Lansky, 2007), and navigating various other issues (Barkhuus, Bales, & Cowan, 2017; Stern & Bruscchweiler-Stern, 1998).

Recognizing the extensive array of transitions and changes that mothers typically undergo in the early stages of nurturing their children, while concurrently adjusting to their role as mothers, constitutes an integral facet of comprehending their experiences throughout the pandemic period. Consequently, the interpretation of the pandemic's impact and their journey as

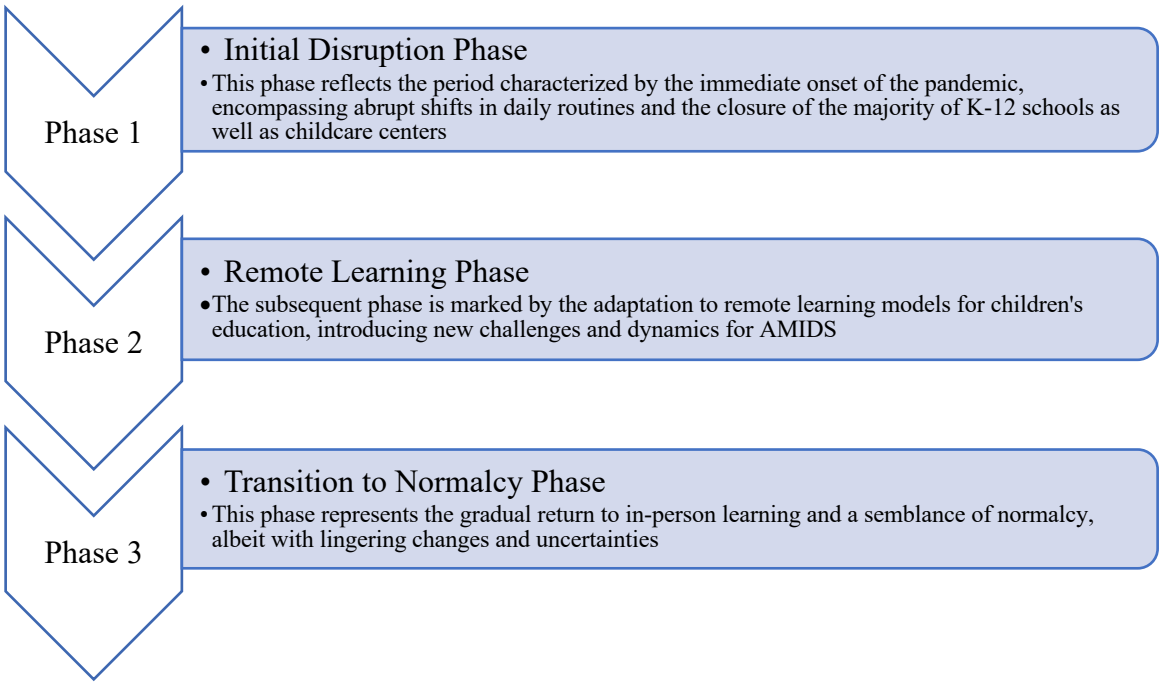
mothers was profoundly influenced by the age of their children and the accessibility of childcare, as well as the stage of motherhood they found themselves in. The round-the-clock nature of maternal responsibilities was be physically and emotionally taxing, leaving parents with minimal respite. Additionally, maintaining a consistent routine for infants and toddlers, who thrive on predictability, was particularly challenging amidst the unpredictability of the pandemic's disruption.

Three Different Phases During the Pandemic

To gain insights into the experiences of AMIDS throughout the pandemic, an in-depth data analysis was conducted, which categorized the information into three distinct temporal phases of the pandemic. This approach was necessitated by the striking observation that the lived experiences of AMIDS exhibited significant variations based on the operational status of their children's schools. As a result, the data analysis was purposefully structured around these three distinct phases of the pandemic; (1) initial disruption phase, (2) remote learning phase, and (3) transition to normalcy phase. Each offers a unique lens through which to view their challenges and adaptations (Figure 16). This multi-phase analysis framework provides a comprehensive perspective on the nuanced responses and adaptive strategies employed by AMIDS as they navigated the ever-evolving landscape of the pandemic's impact on their multiple roles.

Figure 16

Three Phases of K-12 Schooling During the Pandemic



Phase 1. Initial Disruption Phase

At the onset of the COVID-19 pandemic, the majority of AMIDS within the study were grappling with the task of comprehending the nature of the virus and formulating strategies to safeguard their families from potential infection. In this early phase, the concept of "protection" revolved around the objective of preventing viral transmission. This entailed avoiding any form of exposure to the virus and consequently necessitated stringent isolation measures, completely insulating themselves and their families from external interactions.

> I told myself absolutely no COVID for us. I shall not catch the virus. I will not let anyone in my family get sick. Because I was so scared of the virus. So, I restricted every aspect of our lives. We isolated ourselves from the rest of the world. (SM23)

The burden of safeguarding everyone from the virus took a significant toll on the mental well-being of AMIDS. The imperative of avoiding virus exposure translated into refraining from in-person interactions, which in turn heightened feelings of isolation.

Fear of Death. Compounded by the absence of close family support, the AMIDS experienced a heightened sense of vulnerability. Their thoughts often revolved around the worst-case scenarios, even extending to preparations for emergencies as dire as death. The confluence of these factors contributed to a heightened level of emotional distress among AMIDS.

> I thought about many things at the beginning of the pandemic. In the beginning, there were no vaccines, right? So, I thought… if I die from COVID-19 or if my husband dies, who will take care of my baby? I thought about things like this very seriously. If I had some kind of familial support here, I don't think I need to worry about those things. I needed to think in detail in terms of who would find out that my husband and/or I died so my child wouldn't die because of being left alone and starve to death. I mean, honestly, who would know how we are doing? (SM04)

SM04, who welcomed her first child at the pandemic's inception, harbored heightened concerns about the well-being of her baby. She grappled with the worry of who would ensure her child's safety if either she or her husband fell ill from the virus, or even worse, passed away, leaving their child alone in their residence. The uncertainty surrounding the contingency plans for her child's care in the event of a severe emergency was a significant source of stress and anxiety for some AMIDS like SM04.

While the intensity of fear concerning the virus varied among AMIDS, a common thread emerged: every AMIDS harbored apprehension about their children falling ill due to the virus. To safeguard their children from potential harm, all AMIDS, except for one (SM01), made the choice to keep their children at home for at least the initial six months of the pandemic. This decision translated into an escalated load of domestic responsibilities and childcare duties, all while grappling with social isolation form the external world.

The Ultimate "Worrier". For most AMIDS, their primary focus revolved around safeguarding their families from illness, often leading them to envision distressing scenarios in their minds. This role as defenders and protectors transformed AMIDS into ultimate "worriers."

Given the limited understanding of the virus's nature (including its potential lethality and mode of transmission), coupled with the absence of an imminent vaccination solution, their primary recourse became to fret and prepare for the absolute worst-case scenarios.

Ordinarily, individuals seek to alleviate or mitigate their worries through preparation. However, AMIDS in this study did not feel prepared. As an illustration, SM04's sentiment of unpreparedness was underscored by her inability to stockpile as much food as she would have preferred. The inherent challenges of their situation hindered their ability to enact the level of preparation they deemed necessary.

> I could not binge shop to store up foods to freeze like average Americans were doing. My fridge in the apartment is just not big enough to store that much food. But regular Americans have 2 fridges and a big freezer in their garage to store food for months. I heard from the news that people binge shop to store up to 6 months of food. But for me? I can store up to maybe 3 weeks' worth of food. So I felt underprepared. (SM04)

These instances vividly illustrate the deep-seated fear that gripped AMIDS at the pandemic's onset, akin to bracing for an enigmatic battle. Their fear was intrinsic, stemming from their unrelenting commitment to ensuring their family's well-being. This dedication translated into an intensified need for self-reliant preparation and meticulous planning, as they navigated uncharted territories.

One prevalent method AMIDS adopted in safeguarding their families involved meticulously sanitizing grocery items. Dr. Jeffrey VanWingen, a family physician based in Michigan with 20 years of healthcare experience created a YouTube video to help people grocery shop safer and get take-out food safer during the COVID-19 pandemic. In the video, he presents various methods of how to unpack and sterilize food safely using methods that are already in use by medical professionals to protect patients during surgery. At the beginning of

the video, Jeffrey VanWingen states, "And I'm going to help you adapt those techniques to decrease your risk of contracting coronavirus."

He states, “We have a dilemma in society that we need to eat to live, but we also need to get that food,” from his pleasant, cream-colored kitchen. “And that getting of food is now risky.” Then he proceeded to show us how to disinfect our groceries. He separated his countertop into a “clean side” and a “dirty side.” He swabbed his chicken stock with sanitizing wipes. He plunked his produce in a soapy bath in the sink (Figure 17). In the beginning of the pandemic when everyone was in fear, the video was a global sensation and made more than 26 million views worldwide.

Figure 17

YouTube Video by Jefferey VanWingen, MD

Note. From a YouTube video created by Jefferey VanWingen, MD., 2020, explaining how to properly sanitize grocery items (https://www.youtube.com/watch?v=TKx-F4AKteE)

All AMIDS were fully aware of the video and several mentioned about the video and How they adopted his cleaning practices for safety. This practice underscored their unwavering determination to undertake every possible measure to shield their loved ones from potential exposure.

> Whenever I went grocery shopping, I literally prepared as if I am going into a war. I wore two masks for double protection and a pair of latex gloves. And in the very beginning of the pandemic when we knew nothing about the virus, I would come back home from grocery shopping and I won't touch anything, leave everything in the kitchen, run to the restroom, put all my clothes in the laundry hamper, and take a shower. Once cleaning myself up, it is then I would come back to the kitchen and sanitize everything I bought from the grocery shopping. It sounds crazy, I know… but I did that for months. And I know I was not the only one. There was this viral YouTube video by a doctor on how to sanitize grocery items. (SM22)

Even prior to the pandemic, AMIDS were recognized for experiencing time constraints due to their multiple roles (Springer et al., 2009). With the advent of the pandemic, the introduction of supplementary tasks like planning and researching about the virus further exacerbated the time constraints AMIDS faced. These newly added domestic responsibilities significantly augmented the time spent on household chores during this period.

It is noteworthy that SM22 was not an isolated case in adopting precautionary measures such as sanitizing every grocery item during the height of the pandemic. This practice was emblematic of the broader sentiment shared among AMIDS. Their collective actions highlighted their commitment to going above and beyond, even under elevated time pressures to keep their family safe.

> Yeah… whenever we are back home from outside, we shower, remove all clothes, and wash them immediately. That is a lot more laundry than pre-pandemic days. That's a lot more than what I used to do pre-pandemic. And they add up quickly. (SM07)

Self-Sufficient Living. The prevailing insecurity stemming from the virus's enigmatic nature prompted AMIDS to allocate more time to domestic tasks that were once occasionally outsourced. A striking illustration was their increased involvement in cooking meals, surpassing their prior practices. The hesitation to order takeout stemmed from the uncertainty surrounding external food sources.

> We did not eat out at all. I cooked all three meals every day. It was really scary to eat out. For example, we went to Chick-fil-A once, and I thought what if the person preparing my

> food didn't know he/she contracted the virus and packed my food? I couldn't stop worrying about that, so I hadn't eaten out since then. My Chick-fil-A meal was just not worth all that worry and anxiety. It was just too stressful to think about possibly getting exposed to the virus. I would rather cook. It's crazy to think back on how much I cooked during that period. I don't think I have ever cooked that much food in my entire life. (SM22)

A similar paradigm was observed concerning childcare options. In regular circumstances, AMIDS would have readily available on- or off-campus childcare facilities. However, the pandemic drastically altered this landscape, rendering these conventional options unavailable. The closure of most K-12 schools and childcare centers across the United States in response to the pandemic eliminated this choice for AMIDS.

> I don't think I would have sent my kids to school even if their schools remained open in the beginning of the pandemic. Also, if I catch the virus here in the United States, not in my home country, I have no one or family members to help me out. Right? Of course, I can ask for help from my friends but asking for help from my friends just feels different. What concerns me the most is that we are on our own and need to take care of everything, which is the biggest source of stress. So, I just told myself, don't get sick from the virus; do everything you can to not get sick. And this meant no daycare for my child. (SM04)

AMIDS caring for multiple children often opted to keep their older child at home, even when childcare centers were accessible. This decision stemmed from concerns about the possibility of their older child contracting the virus and subsequently transmitting it back home.

> Yeah, we didn't send our older daughter to any kind of childcare center because we feared she would bring the virus home to the newborn. My concern was not only about COVID-19 but also everything that often circulates at childcare facilities like flu, hand foot mouth, and pink eye. And going to hospitals for any reason during the pandemic just didn't feel good to me. So we chose to keep our older child at home too. (SM07)

Despite the availability of daycare for her older child, SM07 who welcomed her second child shortly after the pandemic's outbreak, and she hesitated to utilize this option due to concerns that her older child might contract various illnesses and potentially expose the newborn to sickness, potentially leading to hospital visits.

Consequently, several AMIDS chose to forgo sending their older children to childcare centers, leading to an added burden of childcare responsibilities for these already overwhelmed individuals.

Secondary Impacts of COVID-19 Pandemic. AMIDS expressed apprehension not only about the potential of their children contracting the virus from childcare centers but also about the implications of quarantine measures that would be necessary in the event of an infection. The challenges of seeking support while being infected carried significant weight for AMIDS. In essence, the consequences of contracting the virus stood out as a crucial concern, representing a dimension that AMIDS were determined to avert.

> There is no way I would have sent my child to school. And it was so hard. It was so hard to work, study, and take care of my newborn, and I could see my husband just withering over time as a full-time caregiver. So, I thought about working with a nanny. But when you think about it, nannies go back to their homes and might bring the virus back to our homes, she will carry on with her daily routines and might expose us to the virus and give it to us. So, I was unsure if working with a nanny was a good option either. Also, there are so many things I need to take care of if any of us get sick, which really stressed me out. (SM04)

SM04 vividly illustrates the cascading impact of contracting the virus, revealing the heightened chaos it ushers in. Her narrative highlights her unique challenges during the pandemic, amplified by her solitary status without readily accessible support systems to depend on during emergencies. Her comments provide a stark glimpse into the profound sense of isolation she grapples with while strategizing for potential emergencies and grappling with the unpredictable nature of the virus. The sentiments shared by SM04 encapsulate the deep-seated aloneness that characterizes her experiences, underscoring the distinct vulnerabilities AMIDS faces in her circumstances.

> Thankfully, I am very familiar with the medical terms and the nature of it, but I have no problem understanding medical conversations. I just don't want to bring my baby to a hospital in a situation like then. We have medical insurance, but I still don't understand

> how to navigate the insurance policies, I am not entirely sure how it works. It's so complicated, and I just have a very hard time understanding insurance. I study nursing, but it's still hard to grasp how insurance works in this country so just the fact that I need to check what will work and what will not work with my insurance, and which hospital will take my insurance was overwhelming. I feel overwhelmed with needing to take care of things of that nature. So just not wanting to deal with those consequences really increased my overall fear during the pandemic. It's not the fear of getting sick from COVID-19, but rather the things I need to take care of on my own if I were to get sick was a major source of stress and anxiety for me. (SM04)

Another significant source of stress emerged from the unfamiliarity with the intricacies of the health insurance system in the United States. Originating from East Asian countries with nationally subsidized and publicly funded healthcare (Goodman & Kwon, 1998), comprehending the mechanics of the highly privatized health insurance landscape in the United States proved to be an exceedingly challenging task for numerous AMIDS. Despite the mandatory requirement for international students to acquire insurance plans before arriving in the United States, many lacked sufficient education about the workings of these plans, the range of benefits available to them, and the methods to navigate the complex hospital systems in the United States.

Challenges in Seeking Support. As for seeking assistance from their family members, the pandemic presented a formidable obstacle. Typically, AMIDS could rely on their families back home, with the possibility of family members flying over to the United States. However, the travel restrictions the United States and their home countries imposed prevented this avenue. Many East Asian countries implemented stringent COVID-19 policies for travelers from overseas, making it nearly impossible for AMIDS to access familial support in the early stages of the pandemic.

> Taiwan had really strict quarantine rules, so even if they came to the U.S., returning to Taiwan was still quite complicated. For example, when they return to Taiwan, they must quarantine at a government-designated hotel. Quarantining at the hotel for 14 days is too much for my old parents. They must do PCR testing two to three times every day during the mandatory quarantine. I don't know if I want them to, I don't think I want them to go

> for that. And, it's still risky to come here and contract the virus for immune-compromised people. (SM02)

SM02, who gave birth to her second child in the initial stages of the pandemic, found herself in a complex situation. She required assistance with her postpartum needs and caring for her older child, especially as his daycare remained closed during the pandemic's onset. While reaching out to her parents in Taiwan for help was a consideration, stringent travel restrictions enforced by the Taiwanese government proved overwhelming, particularly due to her parents' pre-existing health vulnerabilities.

This confluence of factors made it exceptionally challenging for AMIDS like SM02 to secure any form of family support during the pandemic, despite their desperate need for assistance.

> Even if my parents could take a few weeks of break from their work, they need to quarantine upon arrival in Korea, meaning they can only afford to stay one week here with us, and I just don’t think it’s worth it. We need to think about mandatory quarantine time once they go back to Korea as well. (SM16)

SM16 encountered a situation akin to SM02, where her parents could not travel to the United States to provide post-partum support. The pandemic stripped away several resources that could typically be supported through family assistance or financial means. Childcare, dining out, and food delivery were unavailable services during this period. Consequently, AMIDS were often left to manage a heightened domestic workload, encompassing childcare, household maintenance, and other domestic responsibilities, with limited external support. The phrase "barely living" aptly encapsulates the situation that many AMIDS found themselves in, shouldering these additional burdens with minimal assistance during the pandemic, leaving them no space to live their personal lives.

Phase 2. Remote Learning Phase

Following the initial months of heightened anxiety, K-12 schools across the United States began implementing online learning alternatives for their students. In this new educational landscape, AMIDS were tasked with assuming the role of their children's teachers to facilitate children's virtual education. A routine day in the lives of AMIDS closely resembled the sentiments expressed by SM14 in the following remarks.

> Well, the focus was more on my daughter when everything turned online. I will prepare breakfast for my daughter, and I will help her log into her virtual classroom to check in with her teacher. I would sit next to her and help her with her class during her Zoom classes. I helped her with things like finding certain materials and answering her questions when she did not understand her teacher. When she finishes one virtual session, she will take a break and I will be like her friend in the classroom and play with her. Once the break is over, she will get back to her Zoom session and I will be there with her as a teacher. I will take note of what her homework is since she is too young to keep track of these things. We will do homework together and I will upload her work to the virtual classroom since she can't do all those technical things on her own. It is quite difficult for an 8-year-old to do that job. We will talk about what needs to be done by tomorrow's class and be done around 4:30 pm. We would eat dinner and take a little rest and put my daughter to bed and me and my husband will work on our own studies. (SM14)

Becoming a Teacher. The technological demands placed on young children oftentimes exceeded their capabilities, prompting AMIDS to participate alongside their children throughout the virtual classes actively. Their involvement encompassed assisting with technology usage, navigating materials, and aiding with homework. In other words, the virtual schooling options meant that AMIDS now had to step into the roles of preschool, kindergarten, 1st grade, or 2nd grade teachers.

> I think my daughter received a laptop when everything turned virtual. All classrooms were held virtually, and the teachers gave us a schedule. For example, that schedule clearly laid out what time kids should wake up and need to turn on the laptop and log in. When there were no virtual classes, she was instructed on what websites to go to and do what. But she was a 1st grader. She can't do that on her own. So that instruction was basically for me. I would sit next to her and go through all these things with her, but it was hard because I myself had virtual classes, and oftentimes her classes would overlap with mine so I would sit in one corner of the room and my daughter would be on the

> other corner so I am literally on stand-by to support her while I am listening to my own lecture. Crazy. Can't believe we did that for one full year. (SM14)

The availability of a virtual learning option for children was undoubtedly appreciated and crucial for the education of children during the pandemic. However, the extent of involvement required from AMIDS came as a surprise. They found themselves deeply engaged in their children's virtual learning experiences, often needing to sit through entire virtual classes alongside their children. This level of active participation was unexpected and further accentuated the multifaceted challenges that the pandemic imposed on AMIDS, merging their roles as caregivers and educators in ways they had not anticipated.

> So back then I needed to keep my younger one quiet while my older one was doing her virtual learning and I needed to work too. So, it was a total mess, chaos, or shitshow to say the least. I made almost no progress in my own research, and in fact, I needed to defend my research proposal, but really, I couldn't do anything for my work. I was doing the bare minimum for my research assistantship. So, I mean it was mentally a lot to handle, and when my husband went to his school, kids were all over me and asking for something all the time. My older one needed something during her virtual class, and I couldn't quite figure out what she meant by that. So, she had this package with her learning materials for math, art, and everything, which needed to be organized. If she were at school, she might not understand what exactly she needs to pull out from that folder, but she can ask her teacher, or she can look at her peers and naturally figure out which material needs to be pulled out because the class was held virtually, she had no idea what needs to be out so I needed to do that for her. It's not like she understands exactly what she needs to pull out from the folder and can explain what it is for me to help her. She really did not know what needed to be pulled out so I remember how I used to sit right next to her on the floor with my younger child entertaining him so he does not cry and disturb my older one and I tried to focus and listen to her teacher and pull out exactly what she needs and hand it over to her during her class. I attended the kindergarten with my child. (SM21)

SM21 faced the challenge of tending to her two children, aged 3 and 6, when virtual classes were initiated for her 6-year-old. Instances like this exemplified the challenges inherent in this new educational landscape, where AMIDS were compelled to divide their attention between educational support and childcare responsibilities. On days like this, SM21 found it nearly impossible to dedicate time to her own work.

Supporting American Schooling as a non-American Mother. Mothers in the United States found themselves as makeshift teachers when schools shuttered (Garbe et al., 2020). Essentially, this added responsibility of teaching became nearly universal for all types oof parents. However, a distinct aspect emerged among AMIDS in the current study – a profound sense of "learning" as they navigated motherhood in a cultural context foreign to their own upbringing. Notably, AMIDS, coming from different educational systems abroad, expressed challenges in supporting their children's education within the American school standards. This dynamic resulted in a unique form of education for AMIDS themselves, as they grappled with unfamiliar curricula and expectations while assisting their children in virtual classrooms.

> There were things my kid needed to do after her virtual class, but I didn't exactly understand what was expected. I never schooled in the United States before my Ph.D. program, so I was unsure how to explain certain things to my child. For example, my daughter needed to upload some kind of writing assignment. She needed to spell something, and as a 1st grader she didn't get it right, so I corrected her. I thought I was helping her by correcting her spelling. However, it turns out that she was expected just to "sound the word out", meaning she was not expected to spell out a word correctly. But I didn't know that, and I helped her to spell things correctly which caused confusion to my child, and she hated it, but I really thought I was helping. That's how I was educated in Korea. Getting the answer right was what was expected of me, and I thought it was the same here. The teacher kindly explained to me a "sound it out" activity, and I then understood what was going on. I felt like I needed to re-learn kindergarten while sitting through my daughter's virtual classes. For that reason, I felt inadequate to support my child and felt nervous because I wasn't really sure if I was really helping my kid or not. So, I couldn't really engage in my own work while she was taking the class because I needed to understand what she was doing and what she needed to do. I really needed to listen to the class. (SM21)

While assisting her 6-year-old child who had begun kindergarten in a virtual setting, SM21 realized that she was essentially re-learning the fundamentals of kindergarten education in the United States. What became evident was the disparity between her own upbringing in a different educational system and the distinct expectations placed on her daughter's education in the American K-12 education. While not inherently challenging to support her

kindergartener's learning needs, SM21 recognized the necessity of closely engaging with her daughter's virtual classes to grasp American kindergarten expectations. This entailed attentive participation in the virtual sessions provided for her child. AMIDS could not just work during kids' virtual classes and step in and out. The challenges persisted as her daughter progressed to the 1st grade, with SM21 feeling the heightened expectations associated with this grade level.

> Helping her with homework was also hard. When she moved up to the 1st grade, more was demanded of her than when she was in kindergarten. I was unsure how much help I needed to offer my kid. I wanted her to do well at school, and I thought she needed my help, so I jumped in to offer her as much support as possible. The school and the teachers expected that from me as well. However, I was not offered any support or tools for my 1st-grade child. I think supporting children's virtual schooling might not have been too difficult for average American moms because they went through schooling themselves, but for me, it was a lot more difficult than I expected as a non-American mom. (SM21)

SM21 astutely highlighted a significant presumption that seemed to pervade – the assumption that all mothers possessed a foundational understanding of the American schooling system. This assumption left her feeling overwhelmed and questioning why there was not any form of assistance provided to aid her in effectively supporting her child's learning journey. This realization weighed heavily on AMIDS, who initially believed they were aiding their children, only to discover that their efforts were potentially generating more confusion. Given the considerable time and energy required to support their children's virtual learning, many AMIDS found themselves drained and lacking the necessary vitality to dedicate to their own doctoral studies. This situation was disheartening and demoralizing to them.

> What the teacher asked my child to do virtually was not something my young daughter could handle independently, so I just needed to sit next to her and go through the classes together. The thing is my kid wanted to play after each activity. I needed to have her sit and go through her materials together, and it's not like I had so much time

> on my hands to do my own work either. And I was tired after sitting through entire classes with my child so I literally had no energy left for my own work, so it was just a vicious cycle. (SM14)

While virtual schooling was provided, with AMIDS essentially needing to fully participate in these classes alongside their children, these mothers encountered notable disruptions in their own work schedules. The substantial support they had to offer their children's virtual education often led them to question whether they might have been better off without any virtual learning provision for their children.

> Because her kindergarten was offered virtually, it was so hard. I may have been better off with no virtual schooling because I needed to sit through her classes, and she always had homework that needed my assistance. I was just thrown into my child's virtual classroom. (SM21)

Thus, AMIDS held ambivalent feelings regarding the virtual schooling of their children. While they found solace in the fact that their children could receive an education amid the pandemic to meet educational needs, the extent of assistance required from AMIDS made virtual education nearly impractical.

Phase 3. Transition to Normalcy Phase

As the global understanding of the COVID-19 pandemic deepened, and vaccinations became accessible to individuals aged 18 and above, many AMIDS expressed a desire to have their children return to in-person schooling. Despite harboring concerns about the complete safety of such a decision, AMIDS recognized the necessity of childcare to enable them to progress with their academic pursuits.

> I hesitated at first, but I decided to send them to school because I honestly could not work with my children at home. It was impossible. I would ask my children to keep their masks on vigilantly at school and wash their hands often and explain to them what can be done to prevent them from catching the virus. But I knew sending them back to school was the best option and I wanted to utilize all resources available for me to use. So, I risked them getting sick to send them back to school. (SM06)

While AMIDS continued to prioritize their children's health and well-being, they also recognized the pressing need for childcare to carve out dedicated time for their own educational endeavors. Moreover, AMIDS were acutely aware of the diminished opportunities for their children's social and emotional development during the height of the pandemic. They acknowledged that such developmental aspects couldn't be solely provided within the confines of their homes.

> My husband and I were having a discussion of whether to send our children back to school or not. Eventually, we decided to. Because we just needed our time to work. Yeah and also we want our children to fit into society to learn how to speak in English and to learn how to play with other kids. Because they never went to any childcare due to the pandemic. So we wanted them to like to step out to the world, to see other children, see what other children are learning and doing. (SM07)

Lack of Stable Childcare. The scenario similar as shared above was only applicable to those fortunate enough to have secured a spot from the extensive waitlists of early childcare centers. For AMIDS with newborns or children under the age of five, alternative measures became necessary, including arrangements like nanny sharing or even inviting their own parents to the United States. The pervasive shortage of childcare options during the pandemic compelled them to explore other solutions (Goodnough, 2020).

> My university does have on-site early childcare centers that are considered good, but their waitlists are ridiculously long. The priority usually goes to siblings of children who are already at the center, then the children of faculty that the university is trying to recruit and retain, then children of university staff, and then students like me. So, in my case, I put my child on the waitlist when I found out I was pregnant, so that was in March of 2020, so it's been more than 2 years now, but when I called them recently, they said that there are about 600 children waitlisted which is ridiculous. The center said there might be a spot opening around February or March, so I waited for that spot to open, but the surge from Omicron shut those childcare centers down, and the centers were struggling to hire teachers. So, they sent me an email saying that they could not guarantee anything and would get to me when they could. I was dumbfounded, and I could not just sit around and wait for something to open, so I started looking for a nanny and had her come three days a week, Monday, Wednesday, and Friday at first. But I needed to secure more time, so I changed to four days a week, Monday, Tuesday,

> Thursday, and Friday, which became too expensive. So, I switched to a nanny share. So, securing any kind of childcare arrangement has been a major struggle. (SM10)

SM10, who welcomed her first child during the pandemic, vividly conveyed the arduous journey she undertook to secure reliable childcare. Yet, her sentiments were far from uncommon among AMIDS. On-site childcare centers are notorious for their persistent waitlists (White, 2014), and given that university students typically hold the lowest priority for enrollment, only AMIDS (namely, SM01, SM03, and SM07) managed to secure spots for their children in such on-campus centers. Additionally, it is noteworthy that childcare options for children under 2 years old are even scarcer, as many facilities offer very limited availability for newborns and infants.

Turning to alternatives like nanny sharing posed its own set of challenges, including increased financial burden and the potential vulnerability of being left without backup care in case the nanny was unavailable. Consequently, several AMIDS resorted to inviting their own mothers back home, taking advantage of the gradually relaxing travel regulations not just in the United States, but also in their home countries. This allowed for a temporary solution to the childcare predicament.

> My child is waitlisted everywhere, but nothing came up. So, I hired a babysitter for a month. But my mom could come and stay with us for three months. But I could not hire anyone when my mother left us. I signed contracts with nannies at two different times, but they all canceled their appointments. Not having a stable childcare system is just so stressful. A few days ago, I purchased tickets to fly back to Korea so my mother can take care of my baby while I finish my dissertation and seek jobs. And then in the summer, my mom will again come with us to the United States for three months. I mean securing any kind of newborn is nearly impossible. So stressful. (SM19)

SM19 became a mother for the first time amid the pandemic. Her university often hailed as a pinnacle of support for parenting students, failed to secure her an infant care spot at its esteemed on-site childcare center. As a result, SM19 had to rely on her mother's

assistance for childcare. While it is heartening that some AMIDS could have their mothers travel to the U.S. to care for their children, this arrangement is inherently transient due to the typical three-month limit of visitor visas granted to these visitors. This situation underscores the profound challenges these AMIDS faced in establishing any form of stable childcare. Despite the university's reputation for supporting parenting students, the limited availability of newborn childcare options when the world was moving towards normalcy cast a shadow on SM19's experience.

All the individuals who were pregnant, had newborns, or had preschool-aged children found themselves waitlisted for on-campus childcare centers. Simultaneously, they were diligently exploring off-campus childcare alternatives. However, at the time of the interviews, none had managed to secure a childcare spot. This state of uncertainty weighed heavily on AMIDS, causing significant distress. The lack of a guaranteed childcare arrangement translated into a profound sense of insecurity, as their ability to pursue their educational aspirations hinged on having reliable childcare.

Impact of Secondary Outcomes of the Pandemic. Despite the increased availability of childcare options compared to the earlier stages of the pandemic, along with the reopening of schools, the persisting childcare-related challenges remained unresolved. Emerging secondary outcomes of the pandemic, including teacher shortages, elevated childcare costs, and newly implemented COVID-related policies such as quarantine rules, reintroduced uncertainties into the lives of student mothers and their children. For instance, the recurrent disruptions caused by the designation of children as "close contacts" were frequent occurrences once they resumed in-person schooling.

> My younger one was recently categorized as a close contact. He had a fever and when I received a phone call notifying me that his friend had just tested positive for covid, I

> thought he had it too. We got him tested, and thankfully he tested negative, so he just needed to get better and quarantine for a week or so and return to school. Also, there was a period, where all his friends at school tested positive. Well over half of his class had covid. He was once again categorized as a close contact and needed to quarantine. Also, once the school started, the bus drivers started getting sick so there were no school buses which was chaotic. So, the schools delayed their opening for quite a long time. Because they could not hire any bus drivers during the peak of the pandemic who could substitute the sick drivers. This happened several times throughout the year when kids' schools started to open. (SM21)

The rollout of vaccines for children lagged those for adults, and even more so for children under five years old. Consequently, despite society gradually returning to a semblance of normalcy, schools continued to operate under the shadow of COVID-19 due to the delayed vaccination of children. Since vaccines for children were the most recent to be introduced (Howard, 2022), the protocols for close contact remained in effect for an extended period. Additionally, the cascading effects of the pandemic, such as staff shortages, became a prevalent issue, exerting a considerable impact on the stability of children's schooling (Cain, Natay, Patton, & Price, 2022; Faheid, 2021).

> There was so much uncertainty. For example, sometimes their teachers got covid. And there were no substitute teachers to take charge of my kid's classroom. So, she needed to attend a different class offered at different times. As a result, she attended different classes pretty much every week because almost all the teachers and staff at her school took turns getting sick from Covid. Everything was already difficult for her as she was new to this country and her English was not great. Also, there was one time when some of their classmate got Covid so when their classmate got Covid, we had to stay and quarantine for ten days as close contacts. And so, it's so unstable. (SM07)

The vaccination rollout for children, especially those under the age of five, lagged that of adults. Consequently, despite society making gradual strides towards normalcy, K-12 schools remained ensnared by the specter of COVID-19 due to the delayed vaccination schedule for children. The belated availability of vaccines for children resulted in the continuation of protocols for close contacts for an extended period. Moreover, the pandemic's ripple effects,

including staff shortages, emerged as a prevalent concern, significantly disrupting the stability of children's education (Cain, Natay, Patton, & Price, 2022; Faheid, 2021).

> One time, one of the children in my kid's classroom tested positive for Covid, and my kid was considered a close contact. So, I stopped my work and got there as soon as I could, and when I picked up my child, they asked me to keep her quarantined for at least a week because the children were not vaccinated then. So that was hard. We were stuck at home, and she was given a bunch of worksheets to work on her own without any virtual options as all schools were taking place in person. But these worksheets were not something she could work on her own. So, I needed to be her teacher yet again. (SM14)

Although AMIDS were relieved to send their children back to school, they were not exempt from various COVID-19 protocols. Instances of frequent home quarantines emerged, further complicated by the absence of virtual schooling options since all classes were conducted in person. Given that the average age of the children among the student mothers in this study was 4.5 years old, these youngsters were not self-sufficient in handling their educational tasks. Consequently, the student mothers prioritized their children's educational requirements over their own.

Mom Guilt. With an increasing number of AMIDS opting to send their children back to school amid the ongoing pandemic, a sense of guilt emerged. While AMIDS acknowledged the necessity of providing their children with age-appropriate educational environments for social and emotional growth, they were also driven by the need for their children to be at school to do their own work. However, sending their children to school during the pandemic introduced a complex dilemma of potentially exposing them to COVID-19. While even before the pandemic, many parents relied on schools not only for education but also for childcare while they worked, the virus amplified the perceived risk of compromising their children's health in the pursuit of their own productivity. As a result, numerous AMIDS grappled with the decision to send their children back to school while simultaneously being acutely aware of the health risks involved.

> First of all, I am concerned for not only my health but also my child's, so there were some points during the pandemic, especially when hearing cases of breakouts in daycares, or schools where I would maybe feel a bit guilty about sending him to daycare because there were definitely parents who are definitely be pulling them out, and like creating like a learning pod or doing like a nanny for their children, but we weren't really at a point where we could afford like a private nanny or we didn't really have like very close neighbors who would do like a pod system. So, I felt guilty for sending my son to school during the pandemic. (SM01)

AMIDS often experienced a profound sense of guilt when making the decision to send their children to school, potentially exposing them to the risks of the virus, all in the pursuit of advancing their academic careers. This internal conflict, where their roles as mothers conflicted with their career aspirations, ignited a strong sense of "mom guilt." Moreover, these feelings of guilt were not solely tied to the pandemic or the virus; they were a consistent undercurrent in the lives of student mothers for various reasons.

> As I started pursuing my Ph.D., I am not paying enough attention to my child. I feel like I am not monitoring my daughter's behavior and manners as a mother because much of my attention and focus is poured on my research and I just don't have enough time or energy, so I just don't have enough time to take care of my daughter. Sometimes, I will see how my daughter treats other children in her classroom and be shocked to hear what she says around them or how she behaves around them. I blame myself for not doing a good job raising her and for not paying more detailed attention to her for such odd behaviors. I feel like it is all my fault. (SM14)

SM14 is raising her 8-year-old daughter alone in the United States while her husband resides in Korea for work. This situation places her in the position of being the sole caregiver for her daughter, as well as pursuing her doctoral education. Despite her efforts, she often feels that what she can offer her child falls short. This sentiment is further amplified when comparing herself to other mothers in the neighborhood who are not working or only work part-time, allowing them more time for their children.

AMIDS like SM14, burdened by feelings of guilt for not adhering to traditional notions of being a "good mother," in their own home country often grapple with the choice to prioritize

their academic pursuits. This sense of "mom guilt" is frequently rooted in the time constraints all AMIDS in the study faced. On the other hand, in some scenarios, AMIDS found themselves amidst a social circle primarily composed of full-time mothers who were not working. This situation made them feel that their children might be excluded from certain opportunities since they could not fully participate in the activities of the full-time mothers' group due to their academic commitments.

> There are nine Korean mothers around me, and only myself and one more mom work, and the rest are full-time stay-at-home mothers. Even though these full-time mothers often asked me to do things together in the afternoon, I did not take my children to those activities because I needed to work those hours. So eventually, it makes it hard for all of us to mingle together. I feel bad for my kids and worry they might miss out on some things among their friends because of me. I feel guilty very often. I often write about this on my Facebook or Instagram, actually. I write, “I feed them, dress them, and raise them, but why do I feel so guilty? Why do I feel so sorry for my children?” I’d ask myself. This is a very Korean way of thinking and feeling about motherhood because not everyone around me feels this way, like how I feel guilty as a mom. The biggest source of the guilty feeling is the idea of some children having full-time mothers who are there to be fully present to help their children discover and work on their potential, unlike me. I don’t think I can be a full-time mother, but I wonder if I need to spend more time with my children and an increased level of interaction will bring about more opportunities for my children to expand their potential. I fear making the mistake of essentially not offering more to my children than I am supposed to as a mother. I am working towards building my career now, and I know that the crucial period for my children is coming up, but what if I miss that window of opportunity that will significantly benefit my children because I pursue my academic career? I am afraid I am trading those opportunities for my children with my academic aspirations. (SM22)

SM22 is a mother of two children aged 4 and 7 years old, and her journey in the doctoral program commenced after the birth of her older child. As a member of a Korean church and a network of highly educated Korean mothers, SM22 often encounters contrasting viewpoints. Some of these fellow Korean women caution her about the potential drawbacks of being a full-time career woman while raising children, suggesting that such a path could close essential opportunities for her young children's growth, while she is surrounded by American colleagues who pursue strong career while being parents.

Despite raising their children in the United States, many AMIDS' nurturing approaches and philosophies remain deeply rooted in their home countries. This context could contribute to the strong feelings of guilt they experience.

> I cried a lot. I know I kept my child longer than I would have if there were no COVID-19, but when my kid was sent to daycare and suffered quite a bit to adjust to the new setting, I just broke into tears. For example, her daycare teachers would send me photos, and I could tell my daughter cried a lot from her watery eyes and swollen eyelids. She was too young to verbalize her needs, and I felt terrible, I kept saying 'I am sorry' to my baby whenever I picked her up. I think I am very Korean in this way. It's like we have different standards to abide by when it comes to living as a woman and a mother. I don't know why I do this since I lived here for so long, but I don't compare myself to American mothers when it comes to motherhood. I compare myself to average Korean moms. I heard that Korean mothers usually keep raising their children full-time until these children can attend kindergarten, or they wait until the children turn 3 years old, but I can't do that. I don't know how those Korean mothers do that either. So, I wonder if I am putting my child at risk by not spending enough time to form a loving relationship. Am I putting my child through misery by sending her too early to a daycare? I just felt so much guilt. (SM23)

SM23 welcomed her first child into the world during the pandemic. Despite dedicating considerable time to caring for her newborn and making only minor progress in her doctoral studies, she experienced intense feelings of mom guilt when she ultimately decided to enroll her child in daycare. What's intriguing is her comparison of her mothering practices to Korean standards, even though she has been residing in the United States for over 10 years. This self-comparison sheds light on the pervasive influence of Korean cultural norms, especially the prevalent trend for Korean women to halt their careers and assume the role of full-time caregivers (Oh, 2018). For SM23, reconciling her pursuit of a full-time academic career with Korean mothering ideals has proven challenging. The cultural expectation of prioritizing caregiving responsibilities often clashes with her academic ambitions, leading her to question her identity as a "good" mother. This resonates with similar feelings experienced by Chinese student

mothers in the study, reflecting the broader impact of cultural norms on their experiences of mom guilt.

> Three is the age when everyone back in China sends their children to a kindergarten. So here we have Pre-K. We have K, but my whole mindset, as I said is anchored to my peers back in China. Because she was born there, and she was raised the first two years there. And 95% of my mom friends are from China and in China. So right now, my peers are mostly those moms in China. So, I anchor to that, and then everyone gets to go to kindergarten when they're three years old. So, my daughter will start attending preschool this summer. (SM24)

SM24, a Chinese student mother, participated in the study when her daughter turned two years old. Like SM23's reference to Korean mothering norms, SM24 also highlighted her reliance on the mothering trends and practices prevalent in China, her home country. Her social circle drove this inclination, comprised mainly of friends back in China, and her experience of giving birth and raising her child there.

AMIDS leaned on the mothering practices and traditions from their home countries rather than adapting to American norms. This underscores the complexity of their experiences, as they navigate and balance two distinct cultural norms, one from their home countries and another from their current residence in the United States.

Findings 2. Adapting to the Virtual Shift: Pandemic-Induced Challenges and Opportunities

The current chapter delves into the repercussions of the virtual shift induced by the COVID-19 pandemic. While experiences varied based on factors such as academic disciplines, current academic stage, commencement year of their Ph.D. journey, and types of advisors, all AMIDS in the study encountered the dual nature of virtual working and learning during the pandemic. On one hand, virtual working and learning offered valuable opportunities that significantly aided AMIDS in juggling their multiple roles. Conversely, the blurring of boundaries between professional and personal spheres posed a substantial challenge.

Consequently, the outcomes elucidated in this chapter primarily center on the implications of the virtual learning and work settings that were established in response to the pandemic, shedding light on how technology impacted the intricate interplay of various roles and environments of AMIDS as they navigated their doctoral journeys amidst the pandemic. The findings underscore the need to harness the potential of these novel learning and working modalities in a manner that allows student mothers to fully leverage a newfound aspect of their academic journey.

Academic Characteristics of AMIDS

To fully grasp the impact of the COVID-19 pandemic on the academic trajectories AMIDS in the current study, it is imperative to view them in the context of their roles as doctoral students in the center. The study encompassed a cohort of 26 AMIDS enrolled in doctoral programs within R1 institutions, distinguished as Doctoral Universities with Very High Research Activity, situated across the United States. AMIDS majored in STEM and non-STEM academic disciplines (Table 9). Among these participants, 18 embarked on their Ph.D. journeys before the pandemic, spanning from 2012 to 2019, whereas 8 student mothers commenced their doctoral pursuits after the advent of the pandemic in March 2020 (Table 10). It is noteworthy that 20 doctoral students were experiencing life in the United States for the first time, whereas 6 student mothers possessed prior familiarity with living in the United States from their childhood (Table 11). The participants exhibited a diverse range of family configurations: 14 student mothers were already mothers before initiating their doctoral studies, while 12 assumed motherhood after commencing their Ph.D. endeavors (Table 12). Moreover, 14 AMIDS within the study gave birth to their first or second child amidst the pandemic. AMIDS in the current study were at different academic stages of their doctoral programs (Table 13).

Table 9.
Academic Disciplines of AMIDS in the Study

Academic Disciplines	*n*
STEM	6
Non-STEM	20
Total	26

Table 10.
Ph.D. Starting Time of AMIDS in the Study

Ph.D. Starting Time	*n*
Began Ph.D. education Pre-pandemic	8
Began Ph.D. education Post-pandemic	18
Total	26

Table 11.
First Education Experience in the United States of AMIDS in the Study

First Education Experience in the United States	*n*
Yes	20
No	6
Total	26

Table 12.
Birthing Time of AMIDS in the Study

Birthing Time	*n*
Became a mother before a doctoral program	14
Became a mother after starting a doctoral program	12
Total	26

Table 13.
Academic Stages of AMIDS in the Study

Academic Stages	*n*
I am working on coursework requirement	7
I have completed my doctoral courses	4
I have completed my doctoral qualifying exams	2
I have advanced to candidacy	11
I have defended my dissertation	2
Total	26

Within this study, AMIDS originated from an array of educational backgrounds, thereby offering a tapestry of experiences. Despite these individual distinctions, collective themes emerged as a focal point: adeptly maneuvering the dual responsibility of motherhood and scholarly pursuits amidst the pandemic. Their narratives converged around the shared endeavor of charting a course that enabled them to seamlessly balance their roles as mothers and their identities as aspiring academics. This pursuit involved navigating the intricacies of advancing their doctoral degrees with tenacity, irrespective of the degree of progress, whether substantial or incremental.

"It Took a Pandemic": Adapting Work and Study Dynamics

The transition to virtual learning and remote work posed a significant challenge for the academic community. Adapting to this new virtual reality demanded much time and effort. Many AMIDS have candidly expressed that they felt they expended a substantial amount of time simply grappling with the changes brought about by the pandemic, especially in terms of adjusting to virtual modes of doctoral education. The challenges were not limited to familiarizing themselves with the technology associated with virtual work, but they also had to learn how to effectively operate from home and manage their time without succumbing to the distractions of a home environment.

> There was nothing inconvenient for me at the very beginning of the pandemic. I was writing my dissertation anyways so I just thought I could just focus and continue writing. And after a couple of weeks we would all be back to normal. But now looking back I wasted so much time then. It was hard to use my time efficiently from home because I had never done that before the pandemic. There was no systematic approach on how to navigate work and study in a situation like this, so we were all lost. Working from home was distractive. (SM16)

As the pandemic's persistence exceeded initial predictions, the realization gradually dawned that remote work was becoming the norm. For AMIDS who took part in this study, the

pandemic began to take on the dimensions of a double-edged sword. On one edge, they valued the opportunity to work from home to care for their families and minimize their exposure to the virus during an unprecedented crisis. Yet, on the other edge, they were acutely aware of the challenges that this novel working arrangement presented. From finding a dedicated workspace to securing uninterrupted blocks of time for focused work, they were navigating uncharted waters, facing challenges no one had anticipated amid a global pandemic.

Amid the intricate challenges of upholding her academic commitments while tending to a newborn and safeguarding her family's well-being during the pandemic, SM04 discerned a paradoxical silver lining. She acknowledged that the pandemic, despite its difficulties, had singularly provided the opportunity to work remotely, a privilege that enabled her to pursue her academic pursuits while handling familial responsibilities. This novel paradigm of remote work not only facilitated her seamless post-partum transition in her doctoral journey but also helped normalize working from home.

> Taking courses virtually was so nice as a pregnant student. Because I didn't have to go to the campus and fear getting exposed to the virus. Also, virtual lectures after giving birth were nice because I could breastfeed my newborn whenever I needed to. I am unsure where I could have lactated on campus if I needed to be back at school in person. Virtual courses were the reason why I didn't need to delay my progress in taking required courses. The flexibility of virtual learning was tremendously beneficial. I have so much more flexibility and ownership over my time as a student mother with a young child thanks to virtual working and learning. (SM04)

SM08 was pregnant and embarking on the challenging journey of both doctoral coursework and teaching responsibilities during the pandemic. However, the shift to remote learning and work gave her a sense of relief and flexibility that would have been elusive in a pre-pandemic world. This arrangement allowed SM08 to synchronize her doctoral classes and teaching duties within a remote framework.

> As I was pregnant, I was worried about exposure to the virus because nobody was quite sure how a baby would be affected if a pregnant woman contracted the virus during pregnancy. I thought pregnant women might be more vulnerable to getting sick since our bodies are probably working so hard to raise a baby inside, so I didn't want to go to the campus during a pandemic. So, I was glad that I could continue working through teaching online. Previously, I only taught in person, and teaching in person can take a lot of time to prepare for and do the in-class activities. I was allowed to offer both synchronous and asynchronous ones. So, I found offering an asynchronous lecture easier because I could record my lecture ahead of time. All I need to do is answer the questions and hold office hours virtually in a synchronous manner so that saves a lot of time for me. (SM08)

For SM11, amid the tumultuous circumstances, the virtual learning environment emerged as a crucial lifeline. As an international student and a new mother, SM11 recognized the immense value of this remote setup. It enabled her to continue her academic pursuits without the typical setbacks that often accompany postpartum recovery and newborn care.

> Even if I gave birth in the middle of the semester, I didn't miss a single class thanks to virtual lectures. This is all thanks to the COVID-19 pandemic. If there were only in-person lectures like pre-pandemic I know for sure I would have missed at least 2-3 weeks of school for post-partum recovery and that would have been devastating for my education. Thanks to virtual classes, I could avoid going to campus because most classes were recorded, and I could re-listen to the parts that I didn't get it first time. Sometimes during an in-person lecture, I would miss some parts or not understand for whatever reasons, I just needed to move on. But with the recorded lectures I could rewind and watch it again. My academic journey did not slow down at all, and I am so thankful for that. And I really like that. I thank COVID-19 for that. (SM11)

The flexibility offered by virtual learning not only allowed her to cater to her own well-being but also offered the freedom to tend to her newborn's needs while pursuing her studies. The ability to breastfeed comfortably, without the constraints of a physical classroom, added an unexpected layer of convenience and empowerment to her experience. The virtual infrastructure not only optimized her time management across multiple roles but also alleviated the emotional burden of feeling physically vulnerable during her pregnancy.

> One thing I liked about COVID-19 is the virtual lectures. I could take all the courses I needed to take virtually, and now I only have one more course to take. The pandemic didn't slow me down. In fact, it helped me to stay on track. Now that we are kind of used

> to living with COVID and Zoom is widely used, things are done via Zoom rather than needing to do everything in person. So, I don't have to be on campus all the time, and even the office hours I need to hold via Zoom as per university rules so I can use my time more efficiently. (SM09)

The pandemic brought about unexpected changes for SM21, as she needed to relocate to a completely different state due to her husband's new job in a new state. This move was a pivotal moment for her, especially considering her ongoing dissertation work and her aspirations of securing an academic position. However, the paradigm shift towards virtual work was a crucial facilitator for SM21's transition. In stark contrast to the challenges her peers faced before the pandemic, SM21 experienced a relatively smooth relocation process. The ability to work virtually meant that she could seamlessly continue her role as a research assistant and make consistent progress on her dissertation, all while adjusting to her new surroundings.

> For sure there were many difficult aspects about the COVID-19 pandemic, but I really appreciated the increased trend to work remotely and actively utilizing virtual tools like Zoom. I had meetings with my advisor via Zoom and continued to work with minimal disturbance after I moved to a different state. So, the fact that we are more accepting of remote work and that brings more flexibility to me and I really like that about what the pandemic brought to me. So I relocated to Ohio in July of 2020 for my husband's job. When I look at other students who needed to relocate pre-pandemic their progress in their research became significantly slower because everything needed to happen in person. But when I moved, we were all used to working virtually and conducting research meetings via Zoom. I experienced almost no negative impact on my research. I could meet anyone at anytime through Zoom. Also I could easily present my research findings at virtual conferences and I liked that a lot. I almost feel like it should have been like this before the pandemic. It took a pandemic to make all this happen. (SM21)

Additionally, thanks to the prevalence of remote work, SM21 was able to secure a post-doctoral position in another state, an opportunity that she could wholeheartedly embrace while working remotely. This marked a significant achievement, one made possible by the evolving landscape of virtual work. The new normal not only supported her dissertation journey but also

propelled her into a promising post-doctoral role, underlining the transformative power of adaptability and virtual work in academic pursuits.

The embrace of virtual learning and remote work emerged as a transformative lifeline for all AMIDS in this study. With the constraints of time ever-present in their lives, the transition to virtual platforms brought forth a newfound sense of control and flexibility over their time. This shift not only preserved their academic progress during the pandemic's turbulence but also reinforced the unwavering determination of AMIDS to pursue their educational goals. The value of virtual learning extends beyond time-saving measures. It symbolized an avenue of agency, granting AMIDS the ability to structure their days in a manner that was conducive to both their academic commitments and familial responsibilities. In the realm of academia, where time is often a rare and precious commodity, the virtual environment opened doors for these AMIDS to allocate their time with a sense of ownership previously unattainable.

It is important to acknowledge that while the transition to virtual learning offered respite, it did not eliminate all challenges entirely. The balancing act between academic pursuits and caregiving responsibilities remained intricate. Yet, crucially, none of the AMIDS in this study were confronted with a complete halt to their academic journeys. This was an essential distinction, particularly considering that many were mothers of young children who demanded constant care, especially considering daycare and school closures during the pandemic. In the face of heightened domestic duties and childcare burdens thrust upon them by the pandemic, the virtual realm paradoxically empowered AMIDS. It took a global crisis to unlock flexible and viable pathways for them to fulfill their familial obligations while doggedly pursuing their educational aspirations. The transformative potential of virtual learning materialized not only in

the preservation of academic progress but also in the reinforcement of the resilience and determination that define these student mothers' journeys.

From Convenience to Complexities: The Dual Nature of Virtual Learning

While virtual learning brought about significant advantages for AMIDS, it was not without its shortcomings. As the pandemic endured, the complexities confronting AMIDS were further magnified by the constraints associated with virtual learning and remote work. Although virtual workspaces facilitated convenient engagement with advisors and peers, the depth and quality of interaction frequently left AMIDS unsatisfied.

> My classes were held remotely for the first semester in my program. When I first met my cohort in person in real life after several months of virtual learning, it was so nice, and it saddened me that my semesters have gone by virtually and I missed all these wonderful interactions with them, I could have had due to the pandemic. When you do courses virtually many things remain the same, but the quality and the nature of the discussion are just not the same. It is not as active, vibrant, and real. The energy was not there. This semester is the first time I experienced what it's like to be in a real discussion with others in the same space. It was so good! (SM06)

SM06 commenced her doctoral journey in Korea, undertaking virtual courses for her first year of the Ph.D. program. She readily acknowledged the advantages of embarking on her doctoral endeavor virtually in Korea, which allowed her to enroll her children in daycares, accommodate her husband's fresh career pursuit, and tap into readily accessible family assistance when needed. However, upon arriving in the United States after the first year of the program and engaging in face-to-face interactions, she felt a pang of sadness for the time lost and the potential dialogues and feedback she might not have had the opportunity to engage in person if there was no pandemic.

Some AMIDS conveyed their discontentment regarding the caliber of their engagements with advisors, noting that these interactions tended to be markedly more formal and necessitated extensive preparation which would have been unnecessary before the pandemic.

> There are limitations for sure. I needed to set up virtual meetings via Zoom even with small matters, which I would typically ask easily when I walk by my advisor's office. I used to just poke my head in and casually check in with some minor questions with him you know. But now everything has become more formal because I need to set up a meeting regardless of the size or the weight of the issues. So, it makes me more nervous because I need to be more ready and make sure that it won't be felt as a waste of time. When I used to work in person and do face-to-face meetings, we discussed and came up with solutions together, but now I feel like my advisor just waits for me to come up with a solution and have him validate that solution. So even if we have meetings via Zoom, it doesn't feel like things are 100% clear. This means I feel like my access to my advisor has become more inaccessible and difficult in some sense. I think twice or more and ask myself if I really need to meet him and if I am ready. Is this something that I really need his help with? Am I ready to answer his questions and offer solutions? I ask myself. (SM12)

Casual conversations and interactions of a similar nature were exceedingly scarce, if not entirely absent, at the height of the virtual realm. The transition to remote work and virtual advising during the pandemic has introduced supplementary challenges for AMIDS in the field of engineering. A notable increase in their workload has been observed, primarily attributed to the requirement of conducting research and seeking guidance through virtual platforms like Zoom. The absence of in-person engagement has posed challenges in swiftly addressing straightforward inquiries or engaging in collaborative efforts with colleagues in the lab. These interactions, which could have promptly resolved research or academic concerns in the pre-pandemic norm, have been hindered by the pandemic-induced virtual working norms.

> My research involves coding, and it's my first time coding so everything was new to me. Before the pandemic, I asked my peers in the lab whenever I had questions, but I couldn't do that anymore when the pandemic shut down the campus. It used to only take a second to get answers to my questions, but now I have to write those questions in an email, and my English is limited so I need to write what exactly I am trying to ask in good enough English so my friends can actually understand my question and send to them and wait. Before the pandemic, I was sitting next to my peers and coding, and I could just show him/her my screen and see what I was doing wrong, but now I must capture my screen and point out where I am stuck, write the questions elaborately, and send it to my peers and wait. It's just so much more complicated! The same applies to my interaction with my advisor. I had weekly Zoom meetings with him. Zooming for meetings was too annoying so we just started doing in-person meetings regardless of how bad the pandemic was. Engineering students share screens, not only one but several screens at a time to

> show each other several different data sets photos, and research papers and switch from screen to screen and show each other but when I was zooming with my research team and advisor I needed to make presentation slides that compiled all the captured images from my different screens so my team and advisor can see everything in one screen because you can only share one screen on Zoom. That's a lot of work! It took up so much of my time. And that frustrated my advisor too. (SM09)

Although the advantages of a virtual work environment have been evident and substantial, its effects have been less favorable for AMIDS within specific academic disciplines. In certain instances, the virtual format has led to increased workloads and operational inefficiencies that are challenging to ignore, as exemplified by the experience of SM09.

Impact on Doctoral Research

As the pandemic unfolded, a notable number of AMIDS found themselves directly grappling with its repercussions on their dissertation research. When queried about the specific research-related aspects through which the pandemic had adversely influenced their doctoral journey, a considerable majority cited challenges primarily in areas like data collection, shifts in advisor dynamics, and alterations to their conference presentation opportunities (Table 14).

Table 14.
Impact of the Pandemic on Dissertation Research Activities

Dissertation Research Activities	*n*
Regarding needing to switch advisors	
I needed to change my research advisor	4
I needed to change members of my dissertation committee	1
I needed to change my dissertation topic	3
Regarding data collection	
I needed to delay data collection timeline	7
I was unable to secure a travel visa	3
I needed to change type of data collected	4
I was unable to access research site	4
Regarding conferences	
I was unable to present findings at professional conferences	7

Changing Advisors and Chain Effects. Although virtual work environments offer substantial advantages to students, research has indicated that older faculty members encountered difficulties in swiftly transitioning to virtual platforms, which in some cases led to their falling behind. Advisors of the AMIDS under investigation were not immune to this trend. Consequently, a considerable proportion of AMIDS found themselves contending with the premature retirement of their advisors, necessitating adjustments to their dissertation committee compositions (Table 15).

Table 15.
Academic Stages of AMIDS and Advisors' Retirement

Student Mother Codes	Academic stage when advisors retired
SM03	Completed taking all the courses
SM10	All but dissertation
SM13	All but dissertation
SM21	All but dissertation

These substantial shifts had far-reaching ramifications for the academic journeys of AMIDS, engendering a consequential chain reaction that rippled through their educational pursuits.

> Before my advisor abruptly retired, he told me he felt like he was teaching to the wall and received no responses from his students. Also, he is not necessarily the most technically savvy person you know as he is eighty-something. For example, one day my advisor was not aware that he was fully muted, and he had been lecturing for the first 20 minutes. He didn't know that he was muted, and no one was responding. He said, "Quiet class today." and we said "Dr. Dr! You didn't hear us" and he didn't check on the chat box. He was not checking his emails because he was lecturing, he just kept lecturing until he realized he was muted. So, this is ironically a tech issue. This is a new age for him to get adapted to, but he said he no longer enjoys teaching and that he is leaving." (SM03)

The adoption of Zoom technology, though designed for user-friendliness, presented a substantial learning hurdle for those who were not already well-versed in technology before the pandemic. This difficulty was particularly pronounced among senior faculty and staff members,

who encountered less streamlined teaching experiences that even hastened early retirements. This trend of retirements had a domino effect on the academic landscape, impacting not only these faculty members but also their students. AMIDS in this study were not exempt from encountering parallel challenges stemming from this technological transition.

> I have two co-advisors, one of whom is the principal investigator of my research lab. He is an old man and as the pandemic panned out, he thought about retiring earlier than planned. It was hard for him to teach online as he is 85. And he became completely deaf when the pandemic took place. Think about it… it's so hard for a deaf person to do meetings via Zoom. Even if he gets a transcription and follows the meeting or we tried to hand him a meeting note it is just so hard for him to follow the meeting. He was always social and never missed in-person meetings, but the pandemic prohibited him from doing all that. So, he decided to retire early. This all happened very fast and suddenly. The pandemic expedited his retirement. I lost one of my advisors. It was such sudden news for me, but I understand why he is doing what he is doing. But it is an abrupt change for me and looking for one more committee member during the pandemic is not the easiest thing to do with limited in-person interactions. (SM10)

While technology proved indispensable in enabling individuals to continue working during the pandemic, it inadvertently left a substantial portion of the population struggling to fully participate in the new virtual environment. This disparity also extended to older faculty members within universities. The challenge arose from how these senior professors' decisions to depart from the university were precipitated by circumstances that caught AMIDS off guard. Such abrupt retirements were likely not anticipated by the faculty members themselves, and the university may not have been adequately prepared to handle such sudden departures either. Consequently, the unforeseen impact of these faculty members' abrupt retirements reverberated directly onto AMIDS, who found themselves needing to bridge the resulting gaps largely on their own.

> I had to change my advisor during the pandemic. My previous advisor decided to retire early during the pandemic. She told me the news when I was preparing my proposal defense. I felt abandoned especially considering that we were living through the pandemic. I knew I needed to get a new advisor right away, but it was in the middle of the pandemic, and I moved to a different state so I couldn't really meet the potential new

> advisor either, so I was overwhelmed. If one of the committee members could be my academic advisor, it meant I needed to get a new committee member, and that seemed trickier in a situation when everything is done virtually. (SM21)

When deciding on a suitable advisor for a doctoral student, one of the pivotal considerations is aligning research interests between the advisor and the student. Given that all AMIDS who encountered the early retirement of their advisors were well advanced in their doctoral journeys, the task of identifying advisors with closely matching research interests became even more challenging for them. This endeavor proved to be particularly daunting in a virtual environment during the pandemic.

> My advisor said he would retire next year, but he retired last year, so he retired earlier. I reached out to the whole department and as the whole department is short-handed, looking for a new person was so hard. The department is hiring, but the hiring process is slow, taking longer than expected. Students in my department don't have enough faculty to be mentored. One advisor has so many students under her supervision umbrella. And then students don't have much connection with them, even though we have connections, it is not in person. We usually would meet online that lack genuine interactions. So, some of us doctoral students slow down academically or even our writing takes a long time for everything. So those are the things that I feel negatively impacted because my advisor retired early, and my department is completely short-handed. And I didn't realize how one faculty retiring would affect everyone so negatively at that point, but the full circle of impact showed slowly but surely. I was so focused, I knew what I was doing, and I was expected to finish my program, but now I don't know anything. I must change topics. So that's another joint effect. Changing advisors brought a change in research topics. I get it. I understand how difficult it must have been for my advisor to keep working and decide to retire. But the students were just left alone to deal with the massive consequences. (SM03)

The retirement of the primary advisors for AMIDS was already a difficult development for AMIDS to come to terms with. However, compounded by the institution's lack of preparedness to address such matters, a clear chain reaction was set in motion, leading to the early retirement of faculty members and yet posing yet another hardship for AMIDS.

Impact on Data Collection

The effects of the pandemic on AMIDS differed based on the research methodologies they employed for their research. Individuals who utilized simulation models or conducted analyses on secondary data experienced fewer negative repercussions than those who required in-person data collection at their research sites. This distinction arises from the fact that the former group did not necessitate physical presence at their research locations for data gathering.

> My research is simulation-based, so I only need my laptop. So, I was never in a situation where I was locked out of the lab, or anything like that pandemic did not cause much chaos for me. (SM16)

> I was conducting my research using secondary data analysis, so the pandemic did not impact me. It is so common for doctoral students to recruit patients and collect primary data from them, as many nursing projects do and my peers who needed to collect their own data experienced a significant delay due to the pandemic. But I was doing secondary data analysis anyway, so it didn't matter. (SM04)

> I already have the data set. I can work from home and analyze the data set. I think the people who were most disrupted were those who needed to collect data in the classrooms or similar qualitative data. So, the pandemic didn't affect me much. (SM02)

Most AMIDS were tasked with personal data collection, encompassing observation, interviews, and in-person testing and their data collection process was substantially disrupted by the emergence of the COVID-19 pandemic, which introduced new constraints via school closures and stringent visitor policies. As a result, many AMIDS encountered major challenges in acquiring data for their dissertation research projects.

> My research interest is in the elementary school setting so I needed to be at the school sites and collect data in person, but I couldn't do anything due to the pandemic. I needed to observe students' interaction with each other and record the learning progress of these students, and that was just not possible. Conducting classroom observation via Zoom was not possible. I know these teachers are already overwhelmed trying to teach virtually so there was also part of me that didn't want to bother them. I felt that hesitation and I wanted to maintain a good relationship with those teachers, so I decided not to collect the data and postpone until I could be at school sites in person. (SM12)

What SM12 shared resonated as a prevailing experience among AMIDS in this study. A significant portion of AMIDS, who had previously accomplished the defense of their research proposals prior to the pandemic and were on the cusp of initiating data collection found themselves compelled to either temporarily halt or modify their data collection methodologies to adhere to their anticipated graduation timeline.

The impact of the pandemic prompted several AMIDS to recalibrate their research focus due to delays in data collection. An illustrative instance is SM25, who made the decision to depart from her initial intent of conducting qualitative interviews – a methodology rendered impractical under pandemic constraints, has pivoted towards a secondary data analysis, drawing from an existing dataset provided by her advisor. This strategic shift was undertaken to ensure the completion of her Ph.D. in a timely manner. Faced with the prospect of potential financial and career repercussions stemming from a failure to meet the anticipated timeline, SM25 opted to take this "pragmatic" approach.

> Originally, I was thinking of researching parenting styles in bi-cultural families. It is a topic that is very close to me as I am a Chinese woman married to a White American man and now, we have a bi-racial child. But that requires collecting data face-to-face with bi-cultural families. However, I decided to use my advisor's secondary data instead, which I participated in the data collection, so I know the data well. But we already did many things with that data. So, it's kind of hard to squeeze out some new topics from it. However, I decided to still use that data because the data is already there. With the pandemic, meeting and interviewing these families was not the most COVID-friendly thing to do. But it was not like I could wait to collect data in person either. So, I needed to graduate so using my advisor's data set was the best option for me. I don't need to go out to collect it. And I know once I finish the proposal, I can start to analyze it right away. If I do this, I can graduate on time. (SM25)

In the case of SM25, resorting to the analysis of her advisor's extensively studied dataset was not her preferred trajectory. Nonetheless, constrained by limited funding avenues and a steadfast aspiration to finish her doctoral journey without unwarranted delays, she found herself compelled to utilize her advisor's well-explored dataset. Adding to this, the COVID-19 pandemic

prompted a shift for AMIDS who engage in qualitative research. They were required to modify their approach, substituting in-person interviews with virtual ones to interact with research participants, deviating from their initial plan of face-to-face interviews due to pandemic-induced constraints.

> Looking back, I don't think all the changes were bad, but there were a lot of changes to take care of. I used to do a lot of qualitative research work, and I did all that in person by meeting people face to face. And now I need to do all that through Zoom, which I like. I will continue to collect my interview data via Zoom even after the pandemic. I might design a study to do experiments virtually and consider more methodologies that could be done remotely. (SM10)

SM10 opted to gather her interview data by utilizing Zoom for conducting interviews. Despite her initial concerns about the potential negative impact of virtual interviews on data quality, her experience proved otherwise. This revelation motivated her to contemplate integrating various research methods suitable for the new virtual working and learning landscape. This newfound perspective has emboldened her as a researcher, inspiring her to explore alternative approaches for accumulating data in her future research endeavors.

Conversely, some AMIDS decided to proceed with virtual interviews, yet they remained unconvinced that the quality of these interviews could match in-person interactions.

> For one of the papers in my dissertation, I was planning to do a lot of interviews in Korea in person, but everything just kind of changed to virtual interviews due to the pandemic. Actually, it saves a lot of time, money, and energy having to travel. But then also like the personal connections, I think that you're able to get more from face-to-face interviews. So there are pros and cons to it. Another positive, I would say is the ability to conduct research remotely. So, for me, I haven't started my dissertation interviews yet, but they'll be happening this year, and I expect to be able to do them a lot quicker in a shorter amount of time than if I would have had to travel physically. (SM01)

For AMIDS, the virtual method of conducting data collection proved to be appealing due to its time and cost-saving benefits. Additionally, the convenience of not having to leave their

homes, especially with their children, alleviated the need for extensive planning and made the virtual approach more enticing.

Some AMIDS seized the pandemic as an opportunity to delve into new research topics linked to the pandemic. This inclination was notably evident among those in the earlier stages of their doctoral journey, in contrast to more advanced student mothers who were less likely to pivot their research in response to the pandemic.

> I think the pandemic expanded what can be studied related to the pandemic. The pandemic helped me to think more about things I never thought of before. For example, one of the projects that my advisor is conducting now is the impact of mask-wearing on children's learning. Would it impact their speaking ability or understanding ability? I am part of the project, and I was always interested in child development and how public policies affect children but now I get to think even further about variables like how the pandemic can affect all of this. I don't have the data, but I get to think about these fun things and get new ideas. I love that energy and the new opportunities that the pandemic brought out for researchers to think more about. (SM05)

AMIDS who commenced their doctoral education amidst the pandemic regarded the exceptional circumstances as an inherent aspect of their academic journey. In contrast, those who were deeply engaged in their dissertation research when the pandemic emerged faced a profound mix of unexpected perplexity and substantial disruption, demanding substantial adjustments in their schedules and priorities.

Virtual Conferences

A commonly discussed aspect of virtual education during the pandemic was the emergence of virtual conferences. Among the participants in this study, seven AIMDS could not present their research at conferences due to conference cancellations. Nevertheless, those who did engage in virtual conferences recognized the convenience they offered. AMIDS frequently contend with logistical challenges like childcare and travel arrangements. Virtual conferences

effectively addressed these concerns, allowing AMIDS to engage without worrying about leaving their children with their partners.

> Before COVID-19, I went to conferences until I was pregnant, but once the baby was born, I couldn't just leave my child with my husband. So, I stopped attending when my son was born. My husband wouldn't be able to take care of the baby on his own. I thought about bringing my family to the conferences, but it was too expensive to do so. Thus, I just did not go to the conferences once my child was born. (SM12)

Virtual conferences held since the pandemic have notably diminished the obstacles to AMIDS' participation, particularly due to their roles as mothers. All participants acknowledged that they were uncertain about leaving their children solely under the care of their husbands, making the reduced barriers of virtual conferences particularly beneficial to them.

> I am sure that virtual conferences affect the attendance of mothers with young children. So, I have found that accessibility to conferences, has really gone up and I can just pop into those conference sessions whenever I can while feeding my daughter, or walking my dog, I can just kind of do it parallel with the everyday tasks I had to do in my household. So, accessibility and time management, like flexibility in managing my own time have really gone up when it comes to attending and presenting at virtual conferences. So that was one positive aspect, like the barriers to participating in conferences have decreased significantly. (SM01)

> I presented my paper at a virtual conference, and I will be presenting one more at a virtual conference in August. I appreciate the virtual conferences because I don't know what I'd be doing if the conferences were held in-person as a mother. Can my husband take care of my baby 24 hours? I don't think so and that doesn't make sense. So, I like the virtual conferences and I am thankful my activities around conferences did not need to pause during the pandemic. (SM10)

Nonetheless, despite the lowered barriers to participation, the level of satisfaction with virtual conferences did not match the initial enthusiasm for the opportunity. For instance, while many AMIDS acknowledged the convenience of virtual presentations or participation, they also expressed a sense that the virtual format offered fewer advantages than in-person conferences. Thus, while the obstacle of conference engagement was lessened, the overall quality of their conference experience came under scrutiny.

> Well, I know some conferences are moving online through virtual platforms. So, I did try to participate, but the thing is, with the baby at home, he always interrupted me. So, I could concentrate for 15 minutes maximum if I'm lucky. That's it. Every time after a session, I feel like I didn't understand anything. Like I was there but not there at the same time. (SM25)

Numerous AMIDS in the study encountered challenges in obtaining a dedicated physical space and uninterrupted time to fully immerse themselves in virtual conferences. Paradoxically, they could participate in the conference digitally, yet their presence was often fragmented due to their responsibilities in caring for their young children.

> All conferences were held virtually. I submitted papers to over ten conferences, and they were all held virtually. And these virtual conferences were not designed to be enjoyed fully. I felt so tired from much Zoom fatigue. Sitting in front of the screen for a long period of time, I could not focus well throughout the conference. Virtual conference is like a double-edged sword. It is so nice that I could stay home with my child, but it is so easy to be distracted. So whenever my baby cried I would run out and play with him and come back to the session afterward so I wasn't able to fully focus, you know. I wish the virtual conference option can remain, but I hope there can be a way to be more engaging. (SM04)

Moreover, virtual conferences provided limited opportunities for interactive discussions and genuine networking, which were considered evident drawbacks by many AMIDS.

> I do not like the virtual conferences. Because the thing is they gave each presenter a room. People who are interested in your topic, put a code in to join your room. I did have some people in my room, but it was just really weird. You want to network in a conference, right? Networking with people online was really weird. Some people don't want to turn their cameras on, so you don't even know who you are talking to. Due to the novelty of virtual conferences, the flow of the format was not as smooth as traditional in-person conferences, posing a challenge for participants. Such a bummer. (SM25)

> You know when you meet and talk to people in person you create this bond through networking with people in your field, but there's no such thing in a virtual setting. I didn't know how to network with people through Zoom at a virtual conference. Also, people were easily irritated by some minor technical flaws. For example, the moderators who usually keep track of time at the sessions were just not professional enough so the entire flow of these virtual conferences, and you could tell that people who joined these rooms were annoyed and lost the motivation to do anything further. My experiences at the virtual conferences were not as seamless as I'd hoped them to be. (SM12)

Certain AMIDS in the study perceived virtual conference participation as less academically rigorous than in-person conferences, raising questions about the overall standard for presentations accepted at these virtual events.

> I loved not having to travel without my children to attend conferences. I could participate the virtual conferences but lacked opportunities to network with people in my field at the virtual conferences. I also felt like it is so easy to add a line in your CV that you presented something due to so many virtual conferences that struggled with low paper submission. I wanted to experience a lot through these conferences, and I didn't gain much so that was a huge disappointment. You are basically staring at the monitor so I thought I will be better off if I just search the article and read it. You know you go to a conference and learn about some presentation skills too and feel the energy from real people? None of that could be achieved through virtual conferences. (SM06)

Consequently, some AMIDS regarded the virtual conferences held during the pandemic as more of a practice run rather than a fully immersive academic conference experience.

> I've only experienced one in-person conference in my Ph.D. program and the pandemic happened. I always dreamed of networking with scholars at a conference when coming to the U.S. to pursue my Ph.D. but that did not happen yet. So, virtual conferences were taken more lightly and used to practice for future in-person conferences. There was no discussion about my findings in the paper when I presented my paper virtually. So, I got no feedback. (SM04)

In conclusion, although virtual conferences offered enhanced accessibility for AMIDS to participate, the overall effectiveness and quality remained uncertain.

Unexpected Push to Normalize the Personal Aspects

Amidst the pandemic, the struggle to harmonize childcare duties with work commitments was intensified, driven by the fusion of professional personas and personal responsibilities within the realm of remote work. In the virtual landscape, where work was predominantly executed, an inadvertent fusion of individual lives unfolded. The ubiquity of platforms like Zoom inadvertently ushered everyone into each other's homes.

> Before the pandemic, I found working with my advisor to be like working with someone so distant yet close as well if that makes any sense. I didn't talk about my personal things, and he didn't ask me about it either. I never asked about his personal life. I didn't know if

> I could. He never talked about his personal life, and he never asked how I was doing before the pandemic. The pandemic made me share my personal life with my advisor and the same thing happened to my advisor. I saw his cat roaming around and my kids had to join my meetings sometimes. And he started to ask me about my child during the pandemic, and I asked him about his cat. (SM20)

Motherhood assumes a paramount role in the lives of student mothers, encompassing the intricate navigation of academic ambitions and childcare obligations. Paradoxically, prevailing scholarly discourse tends to disregard the personal facets of graduate students, often omitting them from dialogues with their mentors. However, the pandemic's arrival prompted a pivotal realization among AMIDS that their faculty advisors were not impervious to the pandemic's direct and indirect consequences, effectively dispelling any pedestals. Their advisors suffered to balance work and life as well. This revelation underscored the advisors' vulnerability to pandemic-induced strains, a dimension seldom disclosed to their students. They were all just humans trying to live through the pandemic. Evidently, the pandemic transformed the student-advisor dynamic, dismantling the perception of advisors as distant figures and elevating them to shared human experiences.

> I don’t think my relationship has become easier and more comfortable with my advisor from living through the pandemic, but I learned that my advisor suffers too and that he is only a human trying his best to keep his job and his family safe during this scary time. For example, my advisor has four children, and everyone got COVID-19 in the beginning of the pandemic. The oldest child is still suffering from panic attacks as a side effect and needs to go for counseling sessions for a long time. I could see how my advisor was barely hanging in there and suffering both physically and emotionally. I would not have known about that personal situation if there had been no pandemic. There were moments when I felt a little embarrassed as well. His wife is also a faculty at my university, and they got into a fight during the Zoom meeting, and I could hear everything. They were speaking in Italian, so I didn’t understand a word they were saying to each other, but I could tell the words from them were not good. That happened more than three times during the pandemic. I observed my advisor fighting with his spouse. I felt sympathy for him. Moments like this made me realize that he is only trying to do his job and that he is only a human who is also trying his best during this difficult time. I was suffering, but he was suffering too. We were all suffering. (SM22)

Witnessing their advisors' pandemic-induced challenges fostered a sense of comfort among student mothers in the study, emboldening them to candidly share their own adversities. This collective experience induced by the pandemic unveiled the universality of grappling with professional and personal hardships. Importantly, this vantage point also shattered the facade of flawless invulnerability often attributed to faculty members, unveiling their genuine struggles amidst the pandemic.

> During the pandemic, I realized it became more acceptable for people to talk about personal difficulties in formal situations like meetings or formal work settings. I see my professors with kids running around in the background, and they say “Sorry, I couldn't meet this deadline, because my son was at home.” And just seeing those professors struggle, I felt okay if they're having that much difficulty, I feel validated that I can talk about this too. So, seeing their experiences, I mirror that into my conversations with my committee and say “I'm sorry I've been pretty slow, this weekend and making any progress because my son was at home.” Just seeing that it's okay and it's socially accepted to be a mother was like really helped me to kind of put that out as a reason that I didn't get to do so much work. (SM01)

Creating an environment of permission and safety allowed AMIDS to express themselves openly about their personal lives, enabling them to comfortably discuss the challenges of juggling motherhood and childcare responsibilities amid the pandemic.

> Because we work from home, we see each other, not just as one identity, but we see all the other roles we have. Sometimes my kid would come to my Zoom call because she had to sit next to me and there was no one giving me a hard time or awkward gestures about having my children on the call with me. And I feel like people are also recognizing that, you know, we're not only students, but we might also have other identities, and they appreciate and understand that. I don't think anyone complains when someone has to take a child on the call, and that's not professional, or I think people are just so used to having to shout in the background or, and then just think that's part of life now, which I thought that's, um, a good direction. No one is being, um, looked down on or penalized because they must take care of their family. It’s part of a big part of your life, you know? (SM02)

In essence, utilizing Zoom technology unexpectedly unveiled the personal dimensions of both AMIDS and faculty members. From the AMIDS’ standpoint, Zoom humanized their faculty advisors, offering an opportunity to help faculty members comprehend the impact of their

additional roles during the pandemic on the student mothers, as they were also experiencing similar challenges.

> If it weren't for the pandemic, I would not have been so straightforward to my committee members saying I couldn't do this because of my son. Yeah so, I think the pandemic and seeing everyone else struggle in the same way with parenthood and with like their visa problems as an international student, being emotionally burdened because of all the racism… Seeing everyone else going through the same thing and it being okay to voice those in our space was really helpful. Like getting myself to express what I never got to do before the pandemic. (SM01)

The transition to virtual work during the pandemic led to a more widespread recognition and appreciation that professionals, including faculty members, have personal lives that encompass various roles, such as parenthood. This shift in perspective wasn't limited to faculty understanding their students' multidimensional lives, but also prompted AMIDS to acknowledge that their advisors are individuals navigating an unprecedented global epidemic, just like themselves.

Finding 3. From Awareness to Amplification: The Pandemic's Unveiling of Anti-Asian Racism and Xenophobia

The third research question investigates the experiences of AMIDS as they confronted the COVID-19 pandemic as Asian foreigners in the United States. Within this study, these student mothers faced two significant challenges: firstly, shifts in visa policies, and secondly, the heightened occurrence of racism and xenophobia against Asians. Numerous participants shared their perspectives that the pandemic exacerbated instances of xenophobia and racism against Asians in the United States, leading to adjustments in their daily lifestyles.

Impact of Changes in Immigration Policy and International Students

On July 7, 2020, the Trump administration introduced a new policy with substantial repercussions for international students aspiring to study in the United States. This policy stipulated that visas would not be granted to international students enrolled in U.S. institutions operating exclusively online (ICE, 2020). Interestingly, this announcement coincided with a period when educational institutions, businesses, and organizations predominantly shifted to online operations due to safety concerns. This policy was just one of several strategies employed by former President Trump to advance his immigration agenda, leveraging the pandemic and the imperative to protect the nation from health threats as a rationale. As a result, countless international students found themselves ensnared in a challenging situation, grappling with concerns regarding their safety, financial stability, and the pursuit of their educational aspirations.

Specifically, the new policy had a direct impact on international students who were already residing in the United States and enrolled at universities that had chosen to adopt fully online instruction before the commencement of the semester. For these students, the policy

mandated their departure from the United States. The response to this policy was swift, with Harvard University and the Massachusetts Institute of Technology (MIT) leading the charge and garnering support from more than 200 other academic institutions (Hartocollis & Jordan, 2020). This united front challenged the new policy's requirement that students exclusively engaged in online coursework either return to their home countries, transfer to programs offering in-person classes, or face the threat of deportation (ICE, 2020) The universities attended by AMIDS in this study also actively joined the efforts to contest the policy, which sought to bar international students from remaining in the United States. This collective pushback culminated in a significant development on July 14, 2020, when the Trump administration revoked the changes to the immigration policy (ICE, 2020). Nonetheless, even after this reversal, the international student community continued to grapple with heightened levels of anxiety and uncertainty.

All 26 AMIDS in the current study held either F-1 or J-1 visas. Among them, 24 held F-1 visas, and the remaining 2 held J-1 visas. These visa categories were subjected to abrupt shifts and changes due to the abovementioned policy alterations. One of the primary objectives of the research question was to investigate the experiences of AMIDS in the United States amid the shifting immigration policies during the pandemic, as implemented by the Trump administration. The findings of the study revealed that while AMIDS were already cognizant of their foreign status even prior to the pandemic, the sudden and profound changes in immigration policy profoundly unsettled them, intensifying their concerns about their legal standing in the country. The modifications to immigration policies were ultimately rescinded after a week. Nevertheless, AMIDS continued to grapple with a lingering sense of anxiety, apprehensive about the possibility of their status being jeopardized due to factors beyond their control.

> I felt really anxious. I was constantly asking myself, now what is going to happen? Do I need to go back to Korea? Immediately? Or can I wait, and see? Will I be deported if I

> wait? I was not able to do anything when I heard the news. I was here perfectly legally, and I felt like an illegal foreigner. (SM23)

One participant, SM23, had been residing in the United States for the past 13 years but had never encountered such insecurity about her legal status until July 7th, 2020. The constant anxiety she experienced paralyzed her and raised serious contemplations about the necessity of returning to Korea.

Table 16
Concern Over Managing Immigration Status

Managing immigration status and visa issues has been a concern for you since the COVID-19 pandemic.	*n*
Not at all	3
To a small extent	12
To a moderate extent	3
To a large extent	3
To a very large extent	4
Not applicable	1

The extent of concern and insecurity among AMIDS varied, but a substantial majority of them (22 out of 26) conveyed apprehensions regarding the handling of their immigration status and visa-related matters amid the pandemic (Table 16).

> When Trump was still in office, he had done several things to try to limit visas for foreigners. And then I was always like, is it F or J? Which visa category is he trying to mess up this time? And so that was like constant, pressure point for me. I was here legally but I felt like some aspect of my being is illegal and unlawful. Very distracting and stressful. (SM02)

AMIDS in this study exhibit a robust understanding of the prerequisites necessary to uphold their legal status as temporary residents in the United States. They are well-versed in the specific criteria they need to meet to sustain their studies and stay in the country within the bounds of the law. For instance, every AMIDS in this study consistently registered as a full-time student each semester at their respective universities to guarantee adherence to their international student visa status. AMIDS diligently worked to fulfill the essential requirements for maintaining

legal temporary residency in the United States. Nevertheless, they encountered a deeply unsettling dilemma when they realized that despite being registered as full-time students, the exclusive online delivery of their courses could potentially result in deportation. This realization induced considerable anxiety, as it placed them in an exceedingly challenging situation. At that juncture, all courses were being conducted online due to the pandemic, plunging them into a state of uncertainty and unease regarding their legal status in the United States.

> Oh yes, it was always in my mind. When the discussion around possible changes was made for student visas, I felt very anxious. I thought about how I had just renewed the apartment lease agreement and how that would be financially detrimental if I needed to leave the U.S. Just thinking about visa stressed me out a lot. (SM09)

Even after reversing the visa policy change, a lasting feeling of insecurity continued to affect AMIDS. Despite the easing of travel restrictions in both their home countries and the United States, many hesitated to return home, apprehensive about potential difficulties in re-entering the United States. Even for those who contemplated returning to their home countries to seek essential assistance with childcare from family members, the fear of potential revocation of their visa status without their consent led some AMIDS to abandon the notion of traveling to their home countries during the pandemic.

> I did think about going back to Korea, but I was worried that we wouldn't be able to re-enter the U.S. I mean the fact that the Trump administration once considered kicking out all international students in the U.S. is enough to make me feel insecure about not being able to re-enter the country again. What if any immigration policies changed during my stay in Korea? I am not leaving. No way. (SM09)

> I wanted to know whether I should visit Korea since the Trump administration attempted to push out international students from the U.S. Even if I visit Korea what if I cannot re-enter the U.S. for some reason? I felt like my re-entry to the U.S. could be blocked. I got an extension to my current visa and what if I cannot get any more extensions when I re-enter? Those questions did have obvious answers before what Trump did, and after seeing how he could shake up the system, I was not sure of anything. I was here fully legally, but Trump made my presence to be something potentially illegal. (SM16)

The actions of the U.S. government showcased the potential for their legal status to be revoked within a matter of days and AMIDS felt threatened and experienced decreased sense of security regarding their student visa status. The Trump administration's actions materialized a scenario that had previously existed only as a distant theoretical concern in the minds of AMIDS. As a result, a considerable number of AMIDS in the study expressed feelings of anger, stemming from a perceived sense of helplessness and the significant ramifications brought about by changes to visa policies. These alterations were perceived as overly complex and unjust, particularly considering that AMIDS had legally entered the United States with the support of their universities and had not engaged in any unlawful activities. Despite abiding by all legal requirements, AMIDS learned that a government decision had the power to nullify the legality of their once lawful temporary visas, leaving all student mothers deeply unsettled.

> I have to admit that I was pretty pissed off. International students like me are one of the most vulnerable student groups and I just thought it is really unfair and that I will eventually need to do things that the U.S. government forces me to do despite the fact that I have done and proven all aspects of my life upon their request to attain my legal status here in the United States. It was so upsetting to see Trump taking advantage of these international students' limited legality in this country for his political goal. (SM14)

Impact of Increased Hate Crimes Against Asians in the United States During the Pandemic

During the COVID-19 pandemic, former President Donald Trump repeatedly employed racist and xenophobic language to refer to the virus, labeling it as the "China virus," "Wuhan virus," and "Kung flu." Numerous scholars and experts have linked the rise in negative rhetoric, especially from former President Trump to a consistent use of racially charged language when discussing the virus (Nakamura, 2020; Rogers, 2020). This language fostered a false association between the virus and Asians, fueling a surge in anti-Asian sentiment and discrimination. Consequently, there was an increase in hate crimes against Asians, with reports of verbal and physical assaults, instances of vandalism, and harassment (Ma & Mclaughlin, 2020; Ong, 2020).

The national coalition, Stop AAPI Hate, has emerged as a prominent authority in data gathering related to racially motivated attacks during the pandemic, encompassing incidents ranging from verbal taunts to physical assaults. Between March 19, 2020, and June 2021, the coalition reported a total of 9,081 incident reports, with 4,548 incidents occurring in 2020 and 4,533 in 2021 (Stop AAPI Hate, 2020). The scapegoating of individuals of Asian descent based solely on their race has been a persistent issue since the coronavirus was first reported in China (Jeung, 2020).

Among the 26 AMIDS who participated in the study, 24 were found to have been directly or indirectly impacted by the recent escalation of hate crimes against Asians in the United States (Table 17).

Table 17.
Concern Over Increased Violence Against Asians in the United States

Increased violence against Asians in the United States has been a concern for you since the COVID-19 pandemic.	n
Not at all	2
To a small extent	7
To a moderate extent	9
To a large extent	4
To a very large extent	4

The incidents of hate crimes against Asians that occurred in the United States, frequently cited by the student mothers, are documented in Table 18.

Table 18.
Examples of Hate Crimes Against Asians Frequently Mentioned by the AMIDS

Month and Year of the Incident	Place of the Incident	Description of the Incident
January, 2021	San Francisco, California	84-year-old Thai American man was killed by being forcefully pushed to the ground in a daylight attack
February, 2021	Oakland, California	91-year-old Chinese American man shoved to ground in a daylight attack in Chinatown
March, 2021	San Francisco, California	70-year-old Chinese American woman brutally attacked on a busy street
March, 2021	Atlanta, Georgia	A brazen shooting took the lives of six women of Asian descent at three spas
May, 2021	New York City, New York	Two Asian women were attacked and struck by a hammer in the head
January, 2022	New York City, New York	Asian woman pushed in front of oncoming train at Times Square Station
February, 2022	New York City, New York	A Korean American woman followed and was fatally stabbed in her Chinatown apartment

Indeed, as evident from Table 17 and substantiated by many AMIDS in the study, hate crimes directed towards Asian women attracted significant attention. This likely resonated deeply with AMIDS due to the identification of elements of their own identities with the victims. This personal connection could have intensified their emotional reactions and heightened their sensitivity to the issue. The targeting of Asian women in hate crimes not only directly affected the victims but also left a profound impact on the wider Asian community, including AMIDS. Consequently, these incidents acted as poignant reminders of the widespread hate crimes against Asians in the United States, imprinting a lasting mark on AMIDS' encounters and perspectives.

> I was emotionally insecure for a long time. There were so many hate crimes against Asians, right? Thankfully, I never experienced one myself, but I admit that I was even afraid to go out as an Asian person. The victims of hate crimes looked like me. The victims from the spa shooting in Georgia were Korean immigrants like me. They were mothers like me. They were Asian women living in the United States like me. And it

> might just be my personality but those crimes I heard felt like my own. I felt like those terrible hatred incidents were happening to me. (SM20)

The surge in racially motivated hate crimes had a profound impact on the majority of AMIDS in this study, instilling a heightened sense of fear. At the beginning of the pandemic, these student mothers found themselves grappling with the complex political connotations and symbolic implications linked to wearing masks. Given that many East Asian countries had adopted a more vigilant stance to mitigate the spread of the COVID-19 virus (Rich, Einhorn , Dahmer, & Eliassen, 2020; Ruwitch, 2020; Yip, 2020), AMIDS in this study sought guidance from their home countries and embraced precautionary strategies, including mask-wearing.

Although AMIDS were eager to follow preventive measures like wearing masks, they were confronted with a sense of vulnerability due to the charged atmosphere surrounding masks (Khane, 2021) and the initial association of the virus with China within the United States. The politicization of mask-wearing exacerbated their concerns as they navigated a complex terrain of public health directives while simultaneously grappling with racial stereotypes and biases. This created a complex predicament for AMIDS, as they aimed to safeguard their health while being acutely aware of the societal and political undertones tied to mask-wearing during the pandemic.

> I remember how people were just so against the idea of wearing masks in public in the United States. I was worried that people would think I was sick from COVID-19 if I wore a mask as Asian, and I saw videos of random people attacking Asians with their masks on at grocery stores, and on the street, all the time. So, when I was flying, I was really scared as I wore a mask during my travel. I wanted to keep wearing my mask while traveling, but as an Asian woman traveling alone, I didn't feel safe. I remember that feeling of fear quite vividly. Nobody said anything, but I was so scared that somebody would attack me. I lived in the United States for a long time as an international student and never felt this level of fear of being an Asian. (SM19)

The experience of SM19, who has resided in the United States for over 11 years, offers a poignant illustration of the profound impact of the pandemic on the safety and security perceptions of Asian women.

The account of SM19 serves as a revealing window into how the pandemic has reshaped safety and security perceptions for Asian women in the United States. The escalation of racial tensions and the association of the virus with specific ethnicities have triggered a profound transformation in their daily lives. This shift has prompted AMIDS to reconsider and adjust their behaviors and routines to mitigate potential risks. The pandemic has thrust into the spotlight the intricate interplay between public health concerns, racial biases, and individual safety for individuals like SM19, fostering an environment of uncertainty and trepidation.

> I never thought I will experience anything related to racially motivated crimes but I kept getting alerts sent by the university about these racial incidents on campus. If things like that can happen on my campus, I thought even worse things could take place outside the campus. I felt unsafe. In the beginning of the pandemic, I did see people pulling up their masks whenever they walk past me. Maybe it's just me but I felt that people were guarding themselves against me because I am Asian, because I was considered a virus carrier in the United States. (SM16)

At SM16's university, a substantial international student population constituted approximately 17% of the overall student body, with 40% of graduate students being international, contributing to a diverse campus environment. However, the mounting visibility of racially motivated incidents being reported on campus significantly impacted SM16's sense of security. Even innocuous actions like individuals adjusting their masks without any racial intent were tinged with the backdrop of hate crimes, causing SM16 to feel increasingly unsafe in her surroundings.

While most participants did not directly encounter physical or verbal racial attacks, a shared sentiment of unease and apprehension was prevalent among them. This sense of discomfort prompted AMIDS to take a range of precautionary measures to protect themselves from potential racist incidents that they had either heard about, read, or observed in their environment.

The prevalence of racially motivated crimes during the pandemic exerted a deep psychological impact on AMIDS, fostering an atmosphere of heightened vigilance and concern. Their collective experiences and the resultant sense of insecurity underscore the profound influence of the broader social and racial climate on their daily lives and overall well-being. Consequently, AMIDS were compelled to adopt proactive steps to safeguard themselves amidst an environment where they perceived an escalated risk of encountering discrimination or prejudice.

> I jog regularly at a trail near the university, and I started to feel that many runners I encountered felt nervous about my physical presence there. I started to feel awkward and uncomfortable. I don't know how to describe it, but I felt weird eye contact. I felt so uncomfortable, and the same kind of thing was felt when I was doing my grocery shopping. I felt like people were so aware of my presence there. I felt like people were thinking, 'Oh, you are the source. You are the resource that the virus is from.' I knew I was not to be blamed for anything and no one blamed me for anything either but with the gazes or the awkward moments, their behavior, it made me feel unsafe. So, we left the U.S. I can go see a doctor for medical sickness but, like the hatred, the hate crimes, if something happened to me or my kids, oh, my God, I didn't know how to deal with that so I decided to leave the United States. (SM26)

The experience of SM26 serves as a poignant illustration of how the subtle yet deeply ingrained effects of racism and anti-Asian sentiment during the pandemic can profoundly affect individuals. Although she did not encounter explicit racist actions or hear racial slurs directed at her, SM26 keenly sensed charged gazes from others, laden with racist connotations. She internalized the assumption that people around her might associate her, as an Asian individual, with being the source of the virus. This internalized racism, coupled with the widespread anti-Asian rhetoric and sentiment prevalent in the media, had a profound impact on her sense of safety and overall well-being.

The accumulation of such experiences, the perpetual feeling of being under scrutiny, and the prevailing atmosphere of racial tension and discrimination became overwhelmingly

distressing for SM26. Even without directly experiencing explicit racism, the weight of the subtle yet persistent prejudice was enough to compel her to pack up and leave the United States. SM26's decision underscores the profound emotional toll that racism and anti-Asian sentiment can exact on individuals, motivating them to make consequential life choices in response to a hostile environment. Her experience accentuates the significance of recognizing and addressing the cumulative impact of racism, even when it manifests in less overt forms, as it can significantly influence the lived experiences and decisions of those who endure it.

> In the beginning, when I hear about those hate crimes against Asians I was scared to step outside my home. So I expected to experience something unpleasant at one point. Honestly, it wasn't too bad but there were a couple of times when a person could have just walked past me in the grocery aisle but the person took a long way instead, so I thought he did that to keep his distance from me, an Asian who might be carrying the COVID-19 virus. (SM14)

A common thread interweaving the experiences of many AMIDS who did not directly encounter explicit racially motivated harm is their interpretation of otherwise ordinary behaviors through a lens of wonder and unease. They often found themselves pondering whether people were deliberately moving away from them due to their being perceived as carriers of the so-called "virus," or if individuals were simply pulling up their masks because of their Asian ethnicity. Although the motivations behind these actions remained enigmatic, AMIDS consistently felt that these behaviors might be reactions to their presence as Asian individuals.

This heightened sense of scrutiny and the uncertainty surrounding the intentions of others vividly underscore the impact of the prevailing anti-Asian sentiment during the pandemic. AMIDS' tendency to interpret seemingly mundane actions through a racial lens is a testament to the all-encompassing influence of racial tension and discrimination on their everyday interactions and perceptions. Despite not personally experiencing overt racism, the weight of

societal stereotypes and biases led these student mothers to question their belonging in their surroundings and to remain constantly vigilant about the reactions of those around them.

This type of interpretation for uncertain threats emphasizes the psychological toll that racial tension can exact on individuals, as they navigate an environment where their mere existence as Asian individuals might give rise to misunderstandings and discomfort from others. The cumulative impact of these interpretative experiences underscores the urgency of addressing and dismantling systemic biases and prejudices, as they persistently affect the lived experiences and perceptions of those who find themselves subject to them

Becoming Victims of Racially Discriminatory Attacks

In this study, a subset of the sample consisted of five AMIDS who bravely shared their distressing experiences of encountering verbal attacks based on their race, even within a campus environment that is generally acknowledged for its diversity. These incidents left an indelible impact, inflicting lasting emotional wounds on them. While they were fortunate not to have experienced physical harm, the verbal assaults had a profound and enduring effect on their overall well-being.

Particularly noteworthy is the account of SM04, who faced discrimination on three separate occasions during her pregnancy. One particularly distressing incident unfolded while she was en route to a campus hospital for a routine check-up and she was subjected to the offensive phrase "go back to your country," precisely in front of the university hospital. Such distressing incidents serve as potent reminders of the enduring challenges and racial biases that can persist, even in environments that ostensibly prioritize diversity and inclusivity.

> To give you a context, the rhetoric around the COVID-19 virus was so tightly related to all the negative perceptions of Asians in Georgia. One day, I was walking towards a hospital for a regular prenatal check-up, and I was right in front of the hospital building to enter, and three or four people walked towards me and said, “Go back to your

> country!" right before me. I was terrified. A thing that I only heard from the news just happened to me. Things of a similar nature happened to me three times during my pregnancy all on campus. I experienced that around March 2020, and I was genuinely scared that one day my unborn child would be physically harmed. So, after my third verbal assault, I thought about flying back to Korea, but I was too pregnant to do so. The COVID-19 pandemic was hard because I tried not to get sick from the virus by isolating myself as much as I could. However, fearing the safety of myself and my baby from vicious racially motivated crimes was even harder because I was not quite sure how to prepare myself for that. That was just a dark period for me. (SM04)

SM04's narrative about her journey as a pregnant AMIDS during the pandemic sheds light on the compounded challenges she confronted. The pandemic, beyond being a health crisis, introduced layers of stress and uncertainty, particularly given her distinctive circumstances. Her status as a pregnant woman, an international student, and an Asian individual added intricate dimensions to her experiences, amplifying the pandemic's impact on both her personal and academic life.

In a parallel incident, another AMIDS in the study recounted a distressing occurrence wherein she faced a verbal attack during daylight hours while strolling near her on-campus residence with her newborn child in a stroller. This incident starkly illustrates how the pervasive climate of racism and anti-Asian sentiment during the pandemic extended to targeting Asian individuals, even encompassing mothers with infants, in environments that might be presumed safe, like on-campus premises.

> I never thought in my wildest dreams that I would experience anything like this on my campus as I used to think my university is very liberal and diverse. One time, I went out to take a walk with my newborn in her stroller to take a walk around the on-campus housing area, and all of a sudden, I heard someone saying "Kon ni chi wa" and laughing at me. Someone from the balcony was screaming racially derogatory terms. I was dumbfounded and couldn't say anything at that time. I froze. I should have said "Come out now to face me!" or something, but I was afraid of that person throwing something or harming my baby. I was terrified, to say the least. The amazing aspect of this experience is that this whole incident lingered around in my head for several months and limited me from doing normal daily activities. It also made me wonder if people around me are racists. I now think that the university and the town that I am living in might seem liberal

> and educated on the outside, but they all might be racist deep inside. So, after that incident, I never walked to that part of the campus again. (SM23)

SM23's encounter with a racially charged verbal attack is deeply unsettling, particularly due to her extended tenure as an international student in the United States without prior incidents of this nature. The suddenness of the attack left her bewildered, struggling to come to terms with what had transpired. Adding to her distress, her dissertation research's focus on traits related to racists introduced an additional layer of emotional complexity, leaving her both upset and potentially torn about how to heal and move on from the experience.

Similar to other AMIDS who have faced racist incidents, SM23 found herself paralyzed when the racist incident took place. The shock of the event and concerns for her safety might have contributed to her inability to respond immediately. Such incidents not only impact individuals on a personal level but also prompt reflections on the university's overall atmosphere of safety.

> On a different occasion, a cyclist chanted “China! China! China!” to me on an empathy road where I was taking a walk with my baby. After those incidents that literally mocked me for my Asian presence, I felt like people at restaurants and grocery stores were staring at me because I am Asian you know. I felt weird in my surroundings, and I used to feel just fine before those verbal assaults. I look at my school with a new perspective now. In fact, I look at this city and state differently. I feel like people here must be a lot more racist than I have ever imagined. (SM23)

The occurrence of this incident within a California university recognized for its diversity in all aspects led SM23 to question the beliefs and attitudes of those around her. Encountering such an attack within a seemingly inclusive and diverse environment can evoke feelings of vulnerability and betrayal, as institutions like universities should ideally cultivate an atmosphere of mutual respect and inclusivity.

Another student mother recounted experiencing verbally offensive comments from individuals while engaging in her daily activities with her children, such as taking them to a playground.

> I had somebody tell us to "Go back to your country". And because I was out with my children without my husband, I was so scared. I felt anxious and worried about my children's safety. Since those incidents, I never felt entirely comfortable being out. I was not afraid to get sick from the virus, but I was scared to get hurt either physically or mentally, or both due to my skin color. For the first time in my life, I wanted to live in a place where I can literally feel safe in my own skin. (SM06)

Experiencing offensive remarks while simply engaging in routine activities with her children underscores the insidious nature of racism and discrimination, even in seemingly mundane settings. These incidents not only affect the targeted individual but also erode the sense of safety and belonging within the broader community, where everyone should ideally feel secure and comfortable being themselves.

> When there was the spa shooting in Atlanta GA, that town is not too far away from where I live. It is near the Korea town in Atlanta and just realizing how close I was when the shooting took place really stressed me out. It is not like the incident made me realize that I can't live in the U.S. anymore, but it made me think why it is not okay for me to feel unsafe in my own skin. I never felt unsafe in my own skin living in Korea and now I feel unsafe. It truly is heartbreaking. (SM06)

The series of events and experiences that SM06 faced during the pandemic had a profound impact on her perspective, prompting her to contemplate what it would be like for her children to grow up in the country. As someone who aspired to pursue an academic career in the United States after completing her doctoral degree, this introspection carried significant weight in her decision-making process.

Growing up in Korea, where she never had to confront racism or xenophobia, SM06 found herself grappling with how to navigate such challenges in the United States, particularly when it came to safeguarding her children. The idea of her children facing unfair treatment solely

based on their race, something beyond their control, deeply troubled her. The determination to shield her children from such unjust treatment and ensure their well-being led SM06 to question whether pursuing an academic career in the United States was the right path for her family. The fear of potentially exposing her children to racial prejudice weighed heavily on her decision-making process.

"Racist assault will happen to me at some point, I should be ready at all times"

Certainly, the precautionary safety measures taken by the majority of AMIDS in the study since the onset of the COVID-19 pandemic underscore their heightened awareness and preparedness for the potential of encountering racially motivated hate crimes. Their proactive stance towards personal safety suggests that they view these crimes as an imminent threat, one that is constantly looming and could become a reality any given moment.

> Now I know that discrimination is everywhere, and Asian hate is real. I know that some kind of racist assault will happen to me at some point, during my time in the U.S., thus be ready at all times. (SM07)

The study's findings indicate that regardless of whether AMIDS personally experienced racially charged discrimination or not, a significant portion of them adopted precautionary measures to ensure the safety of themselves and their children throughout the pandemic (Table 19). These measures were not limited to virus prevention but also encompassed strategies aimed at shielding themselves from potential hate crimes. In essence, these student mothers found themselves grappling with a dual pandemic – one centered around the COVID-19 virus itself and the other involving the pervasive threat of pandemic-induced discrimination.

Table 19

Precautionary Safety Measures AMIDS During the COVID-19 Pandemic

AMIDS	Precautionary Safety Measures
SM02	Used English instead of Cantonese in public places to her mixed-race children. She feels safer when going out with her White husband.
SM04	After being verbally attacked during her pregnancy, she limited going out.
SM06	After experiencing verbal attacks in public places such as playgrounds, she moved to a city with more Korean population.
SM07	Always go out with a whistle around her neck.
SM08	She considered moving to a city for her husband's job but decided not to after observing frequent hatred crimes against Asians in the city.
SM09	Bleached her hair blonde to disguise herself as White female
SM13	After being verbally attacked on a big street, she limited going out.
SM16	She did not open her curtain insider her home and did not go out alone. Eventually decided to go back to Korea during the peak of the pandemic.
SM17	After observing numerous hatred crimes taking place in New York City, she limited her outings.
SM18	She observed a Chinese flag defamed at a local park so she limited going out and never went outside without her husband.
SM19	She made sure to lock all the doors, close the curtains, and limited going out alone.
SM20	Felt depressed and emotional after hearing about the spa shooting in Atlanta and limited going out alone.
SM22	She was shaken up by the spa shooting in Atlanta and limited going out alone.
SM23	After getting verbally attacked on campus she stopped taking walks alone with her baby.
SM24	She would not go to places alone unless the area is known to be safe. She educated her elderly father about the unsafe areas and what to do in case of emergency.
SM25	Did not go to a brand new place unless her White husband accompanied her and their newborn baby. She limited going out.
SM26	Limited going out but eventually flew back to Taiwan with her children.

The study's findings highlight that nearly all AMIDS significantly restricted their activities during the COVID-19 pandemic, focusing solely on essential tasks like grocery shopping and hospital visits. Conducting non-essential activities such as leisurely walks or shopping was accompanied by stringent safety measures and thorough planning. This heightened

caution stemmed from a genuine fear of encountering xenophobic or racist incidents, underlining the significant impact of discrimination-related concerns on their daily lives.

> I didn't go out for walks when there were so many hate crimes against Asians all over the United States. (SM09)

> I barely went outside because I was really scared of racists. I didn't even go out to get my groceries. (SM16)

Several AMIDS shared that they began avoiding solo outings, a behavior that they previously had no reservations about before the pandemic. Instead, they opted to have their spouses accompany them when venturing outside, and in some instances, they even refrained from going out altogether due to heightened fears and safety concerns.

> I didn't go out alone. I could have taken a bus or just walked everywhere before the pandemic, and I consider my neighborhood and city safe, but I just decided not to walk around until things calm down or until I feel safe again as an Asian woman. (SM16)

> Yeah, I don't go out alone. Sometimes I must, and when that's the case, I'm very aware of my environment. And then I also avoid going to some of the areas that are known to be unsafe. I would schedule things early during the day and not take a bus late. (SM24)

The experiences of AMIDS in interracial marriages, who are married to White males (i.e., SM02, SM20, and SM25), shed light on intricate and multifaceted dynamics involving safety and perceptions of protection. Though some may have hesitated to openly discuss it, these student mothers acknowledged feeling a greater sense of security when accompanied by their White husbands, attributing this heightened security to the racial identity of their partners.

> As much as I hate saying this, I definitely feel safer when I am with my big White husband. He is also a foreigner, but it doesn't matter because he is White. I feel that, and even in this very diverse environment that I live in, you know, where we have so many different kinds of people, not only in terms of race, but also in all kinds of aspects, social status, race, gender identities, nationalities, political views, and others, it is truly mind-boggling that I still do not feel safe enough. (SM02)

SM02 is married to a White British man who was previously enrolled in a doctoral program at the same university. She grappled with acknowledging her feelings, as she was

concerned about potential racial bias in admitting that she feels safer with her White husband. Nevertheless, she openly shared her experience of a heightened sense of security and safety when her White husband is present.

During the pandemic, SM02 found herself puzzled by the emergence of racially charged on-campus incidents reported by her university, considering that 69% of its student body consists of students of color. The university is in California, known for its value in diversity. This contradiction left her confused, especially since she had never experienced such a heightened sense of insecurity during her nine years of living in the United States, even while residing on campus.

Furthermore, SM02 revealed that she deliberately opts to converse in English when in public with her mixed-race children, despite their fluency in Mandarin. At home, she communicates with her children in Mandarin.

> The other thing is that if I feel insecure in certain settings, I will definitely speak in English to my children. My children are bilingual. When I feel insecure, and I want to illicitly tell surrounding people that I'm part of this community, to implicitly mark that I'm not an outsider, I will speak in English to them. It sounds pathetic, but I needed to feel less intimidated. (SM02)

Opting to speak in English to her mixed-race children, even though they understand Mandarin, was a precautionary measure employed by SM02. It was her way of signaling to others in the vicinity that she is an integral part of the community, aiming to transcend being solely perceived as Chinese and potentially associated with being a carrier of the virus. Through this linguistic choice, she implicitly aimed to establish her connection to the broader community, mitigating potential racial biases or stereotypes.

The sentiment of feeling more secure in the presence of White husbands was a recurring theme among AMIDS engaged in interracial marriages to White husbands. For some of these

student mothers, having a White husband brought about a sense of safety, potentially attributed to perceived protective factors associated with their partner's racial identity.

> If we go to a place we have never been to, I hope my husband is with me. Because he is White, which makes me look better. I know this is racist too. But I would not take my child alone to a place we have never been to. Yeah. I hate to say that, but that's just truth about how I felt during the pandemic. (SM25)

SM25, an AMIDS from China, met her White American husband in the same doctoral program. Before the pandemic, she had not personally encountered any instances of racial discrimination on campus. However, she did witness undergraduate students using racial slurs towards her peers, which left her uneasy and concerned about the possibility of being subjected to similar racially charged incidents.

During the pandemic, SM25's pregnancy added an additional layer of concern. Safeguarding her own well-being and that of her unborn child became her top priority. The combination of feeling more vulnerable due to her pregnancy and witnessing racial slurs on campus intensified her sense of caution and anxiety.

In response to the climate of unease, some AMIDS in the study took proactive safety measures by carrying pepper sprays or whistles around their necks. These self-defense tools acted as both a form of protection and a way to enhance their overall sense of security while navigating their daily lives. The decision to carry these items demonstrates their heightened awareness and concern regarding their safety amidst the backdrop of racially charged incidents and anti-Asian sentiment during the pandemic. By having these tools readily accessible, they aimed to empower themselves and be better prepared to respond to any potential threats or unsafe situations.

> I bought a whistle. So, whenever I go out, I just put a whistle on my neck. Yes, every day. One day, my older daughter asked ‘Mommy what’s that? Why are you wearing that?’ And I told her ‘Oh if something happens to mommy, I can use the whistle and call

> for attention if I need help'. And she remembered this. So, whenever I go out both of my daughters will say 'Mommy don't forget your whistle. Because if dangerous things happen, you can use that whistle'. (SM07)

One of AMIDS, SM09, took a significant and drastic step in response to the fear of racially motivated crimes. She made the decision to bleach her hair, aiming to alter her appearance in a way that might allow her to pass as a white person. Her hope was that this alteration in physical appearance would provide her with a heightened sense of protection from potential discriminatory incidents. This drastic measure illustrates the deep impact of the prevailing racial tensions and the lengths to which some individuals felt compelled to go to mitigate their vulnerability in the face of discrimination.

> I never thought of doing such a thing before the pandemic. But when the Covid-19 virus was called the Wuhan virus, it made me think that we all look like Chinese. To all non-Asians, we are all just Asians or all Chinese to them. So, I bleached my hair to not look like an Asian. If I wear a baseball cap and mask up, nobody can tell what I am. One day, I was scared to get attacked when grocery shopping. So, I bleached my hair hoping I 'd look like a Caucasian instead of Asian. (SM09)

SM09's decision to bleach her hair serves as a poignant illustration of the extreme measures individuals may resort to coping with the prevailing climate of racial prejudice and xenophobia. It also underscores the profound psychological toll that racism and discrimination can exact on individuals, driving them to make significant changes to their identity in an attempt to shield themselves from potential harm. Moreover, SM09's admission that she had never taken such extreme precautions before underscores the unprecedented and distressing impact of the pandemic's racial climate on her sense of safety and belonging in the United States.

Changes in Future Plans

The changes in immigration policies significantly impacted AMIDS, primarily triggering feelings of insecurity regarding their current legal status and potential re-entry into the United States. This situation also prompted them to reassess their aspirations for seeking permanent

residency in the country after completing their Ph.D. studies. While it is generally desired by international doctoral students to remain in the United States for academic career advancement (Borjas 2000; Jasso, Rosenzweig, & Smith, 2000; Mazzarol & Soutar 2002), whether aiming to stay in the United States or pursue positions globally, the policy alterations coupled with the prevailing climate of uncertainty made AMIDS question the viability of their long-term plans in the United States. Despite the nation's reputation as an appealing environment for raising a family (Flynn, Feild, & Bedeian, 2011), AMIDS observed an ongoing struggle to reconcile the level of insecurity experienced by legal residents in the United States.

Unfortunately, the pandemic afforded these student mothers an actual experience of what it means to live as Asians in the United States. It concretely highlighted the reality of being perceived as "perpetual outsiders," showcasing the pervasive impact of racial prejudice and discrimination. Due to their encounters during the pandemic, numerous AMIDS reconsidered their intentions to permanently settle in the United States. The instability and unease stemming from visa policy shifts and racial tensions prompted them to review their future plans and explore alternatives that might offer a stronger sense of security and belonging.

> For the first time, I asked if I wanted to settle in the United States after observing such terrible happening to Asians during the pandemic. Is it worth it? I didn't do anything wrong, and people didn't do anything to me, but I feel criminalized for things that I didn't do. I thought about these kinds of questions hard. I don't have a green card yet, and I'd like to attain one soon. Still, honestly, I wondered if pouring so much effort and investing so much of my mental strength while everything I do is geared towards contributing to this country made me wonder if it's worth even try for a green card. The pandemic and the politics proved that we are not welcome here even if we do everything, they ask us to do their way. (SM19)

SM19 perceived the escalating violence against Asians and the racial tension experienced as an Asian individual in the United States as profoundly unjust, considering she had not caused any harm to the country. AMIDS in the study had achieved their accomplishments through hard

work and dedication, surmounting numerous obstacles to reach their goals. However, when confronted with racism and xenophobia, they felt a deep sense of helplessness, as though they were grappling with deeply ingrained issues beyond their individual control.

AMIDS arrived in the United States as lawful visa holders, fulfilling all the visa requirements stipulated by both the U.S. government and the universities they aspired to attend. Despite their legal status, they were faced with the harsh reality of American racism and xenophobia, which proved challenging to navigate as individuals. This experience left them feeling like foreigners in a land where they might not find the expected support or protection, despite their legitimate status in the United States.

Raising Asian American Children as Asian Mother

Indeed, the issue of xenophobia and racism in the United States not only impacted AMIDS individually but also reverberated through their roles as mothers to Asian children. Many of these AMIDS had children who were either born in the United States as American citizens or arrived in the country at a young age and grew up as Asian Americans. As mothers, they grappled with an additional layer of stress and uncertainty, further complicating their already challenging situation.

The fear of potential harm or discrimination targeting their children heightened their sense of vulnerability and unease. They not only had to manage their own feelings of insecurity but also shoulder the responsibility of shielding and nurturing their children in an environment that appeared hostile toward Asians. This intricate scenario added to their stress and uncertainty, amplifying the complexity of their circumstances.

> I always knew I was a foreigner here, but for the first time during this pandemic, I felt like I was studying in a foreign land as a person who does not belong here even though I am here legally. It is like I am wearing very nice clothes that I paid good money that I worked hard for and thought it suit me well and that I deserved but as I wear them more

> the clothes just do not feel good on me. It is not too uncomfortable that I cannot keep wearing them, but it is uncomfortable enough to bother me I don't want to take them off because I worked hard to get them. Also, as I just became a mother to an Asian American child, I felt like I was not ready for what my child's life would be like as an Asian American child. I also realized that the things that my Asian American friends told me about their lack of sense of belonging in the United States are all true. Although I am a foreigner in this land, my children are Americans. I realize this aspect is much more complicated than I have ever imagined. I never had to feel like I did not belong growing up in Korea, but I am afraid that my children might always feel like they don't belong here because they are Asians. I feel devastated. I feel sad. (SM04)

A substantial number of AMIDS in the study expressed a lack of confidence in raising Asian American children as foreign Asian mothers in the United States. They felt ill-equipped to navigate the deeply rooted history of racism and xenophobia against Asians in the country. What particularly troubled them was the fact that before coming to the United States, they themselves had not experienced the feeling of not belonging in their own place of residence. This absence of personal experience left them uncertain about how to support and guide their children through similar challenges effectively. The complexity of addressing racism and xenophobia against Asians in the United States was evident to these student mothers. They recognized these issues as deeply ingrained societal problems that could not be swiftly or easily resolved.

The study's findings underscore that AMIDS were profoundly distressed by the prospect of their children growing up as "perpetual foreigners" in the United States. The onset of the COVID-19 pandemic acted as a catalyst, bringing the racism against Asian people into sharper focus and elevating the issue to the forefront of their awareness. Concerns about their children's well-being and the fear of them being consistently viewed as outsiders further magnified their distress.

> Okay, I am a foreigner, so I get it. I am not saying that wrongful treatment of Asians here is acceptable, but I get it. It's not right, but I can brush it off because visa status wise, I am a foreigner, but my baby is an American who was born here. She is an American. As a mother, just the thought of my child getting hurt just because of her race infuriates me. I didn't grow up here, but there is a good chance that my kid will, and if so, it made me

> wonder if growing up in the U.S. as a minority will be worth it or not. What kinds of things can I tell and do to protect or help her? I am at a loss. It makes me think that my child probably will never feel a strong sense of belonging growing up here and I started paying more attention to Asian American issues and why their sense of belonging might mark low in the United States. I am just accepting the fact that we will always be a foreigner. So, now, I think returning to my home country is the right thing to do. (SM04)

A substantial number of AMIDS arrived in the United States with the aspiration of establishing permanent residences and securing academic positions. Nevertheless, their experiences of witnessing the unfiltered manifestations of racism and xenophobia during the pandemic compelled them to reassess their initial aspirations. Several AMIDS, such as SM04, SM06, SM07, SM08, and SM26, opted to revisit their plans for settling down in the United States, or in some cases, even altered their goals entirely. They contemplated returning to their home countries, driven by the desire to safeguard their children from growing up in an environment characterized by injustice and discrimination.

> When I first came to the U.S. to pursue my Ph.D. program, I had a goal to live in the U.S. post-graduation. In my first year, my desire to do so was 100 out of 100, but since I became a mom with the onset of the pandemic, it reduced to 50. With the pandemic and frequent crimes against Asians now, I think that I must go back to Korea as soon as I complete my Ph.D. When I think about my career, it is so much better to remain in the U.S. but when I think of my physical safety and the feeling of being a perpetual foreigner that my daughter and I will live with makes me wonder if it is all worth going through all those terrible things just to remain in the U.S. and my answer is leaning towards no. (SM04)

In conclusion, the unexpected and frequent changes in immigration visa policies by the Trump administration during the early stages of the pandemic exerted a profound impact on AMIDS within this study. These policy shifts induced feelings of vulnerability among AMIDS, despite their possessing legal visa statuses in the United States. Furthermore, these changes prompted them to reevaluate their plans following graduation, driven by concerns about the potential for their Asian American children to mature within an environment characterized by xenophobia and racial bias. Moreover, the observation of the surge in racism and xenophobia

against Asians during the pandemic compelled these student mothers to carefully consider the repercussions of such discrimination on their children's sense of belonging within the United States. This dynamic impelled them to prioritize the well-being of their children and actively seek methods to safeguard them from the painful consequences of discrimination as they navigate their growth as Asian Americans.

CHAPTER 5. SUMMARY, IMPLICATIONS, AND CONCLUSION

Summary of the Study

The purpose of the current study was to discover and describe the lived experiences of one of the most invisible and the least studied student populations at American university campuses, namely Asian mothers who are international doctoral students (AMIDS) during the COVID-19 pandemic. Thus, the central research question that provided the foundation for the framework of this study was, what was the lived experience of AMIDS in the United States during the COVID-19 pandemic? Three additional research questions were explored:

1. How did AMIDS navigate the challenges of fulfilling their maternal responsibilities amidst the backdrop of the COVID-19 pandemic?
2. In what ways did the COVID-19 pandemic impact the progression of AMIDS' doctoral education?
3. What were the experiences of AMIDS as they confronted the COVID-19 pandemic as Asian foreigners residing in the United States?

As very limited attention has been paid to student mothers of color and international student mothers during the pandemic, this study fills a critical gap in the literature, by providing an in-depth understanding of how AMIDS lived through the unprecedented pandemic in the United States.

The theoretical framework that guided the design and execution of the study consisted of four components: three theoretical perspectives that justify the investigation of the student population that lives with three distinct but inter-related aspects and one theoretical component that provides a theoretical foundation for analyzing the intersectional nature of AMIDS and their lived experiences. First, matricentric feminism (O'Reilly, 2019a, 2019b, 2021) was used to guide

the understanding of a mother's life as mothers are distinct from the category of women. Second, graduate student socialization theory (Stein & Weidman, 1989, 1990) was used to acknowledge that graduate students undergo socialization processes across academic program goals, faculty expectations, and student peer culture for successful entry into a professional career. Thirdly, Asian Critical theory (Iftikar & Museus, 2018) was used to analyze, interpret, and understand the complex relationship between Asians living with broader issues of oppression and racism. Last but not least, theory of intersectionality (Anthias & Yuval Davis, 1983) was used to encompass multifaceted insight into the lived experiences of AMIDS during the COVID-19 pandemic as different aspects of an individuals' social identity, such as gender, race, and social class, intersect at every level of individual experiences.

An exploratory qualitative research design (Delamont, 20212; Strauss & Corbin, 2014) was utilized to explore the lived experiences of AMIDs during the COVID-19 pandemic. Specifically, due to limited knowledge and resources concerning AMIDS in the United States, the phenomenological study method was particularly useful in examining a focal phenomenon with a particular context (Creswell & Poth, 2017). Thus, the study aimed to generate an in-depth understanding of AMIDS' lived experiences during the COVID-19 pandemic. A total of 26 AMIDS attending R1 universities across the United States were purposefully selected and interviewed to investigate the research questions. Data collected from the preliminary questionnaire, as well as institutional documents, were analyzed.

Summary of the Findings

As each theory help depict each aspect of the AMIDS, findings were organized around carrying out their mothering roles, doctoral student lives, and living as Asian foreigners during the COVID-19 pandemic from the data analysis.

Findings 1. Academic Dreams and Maternal Realities During the COVID-19 Pandemic

At the onset of the COVID-19 pandemic, AMIDS faced challenges comprehending the virus and protecting their families. Their primary focus was preventing viral transmission by isolating themselves from the external world. This intense fear for their families' safety took a toll on their mental well-being, leading to heightened emotional distress and constant worry about worst-case scenarios. To safeguard their children, they kept them at home for at least the initial six months of the pandemic, leading to increased domestic responsibilities and social isolation. As an ultimate “worrier”, AMIDS adopted meticulous practices like sanitizing groceries to protect their families. These student mothers faced time constraints due to their multiple roles and, with the pandemic, added new responsibilities like researching the virus, significantly increasing their domestic workload. The fear of their children contracting the virus, coupled with concerns about the consequences of infection, led them to avoid sending their children to childcare centers. This decision put more strain on their already overwhelmed lives. AMIDS resorted to self-reliance to protect their families. They faced challenges in finding support due to limited resources and external restrictions.

After the initial shock of anxiety with the onset of the COVID-19 pandemic, K-12 schools in the United States switched to online learning. This change required student mothers to take on the role of their children's teachers to facilitate virtual education. They actively participated in their children's virtual classes, assisting with technology, materials, and homework. For many, this transition meant becoming primary and assistant teachers for their young children. The technology demands exceeded the children's capabilities, leading AMIDS to actively support their children throughout virtual classes. This involvement was unexpected and added to the challenges the pandemic had brought into their lives.

Additionally, AMIDS re-learned American school standards by navigating unfamiliar curricula and educational expectations via their children's virtual classrooms. Supporting their children's education revealed a gap between the student mothers' upbringing in different educational systems and the American K-12 education standards. Thus, AMIDS mothers had to closely engage with their children's virtual classes to understand and meet American expectations. Many felt overwhelmed and questioned why they didn't receive more assistance in supporting their children's learning. Supporting children's virtual schooling was more challenging for AMIDS than for average American moms because of their different educational backgrounds.

Once vaccines became available to those aged 18 and above, the world was gearing up to get back to normalcy. However, as the lack of stable childcare options was a significant issue during this period, AMIDS faced difficulties in securing a spot for their children. Some resorted to alternatives like nanny sharing or inviting their own parents from their home countries to help with childcare. However, these solutions often came with their own challenges, including financial burdens and the potential vulnerability of not having backup care. Despite the reopening of schools, new challenges emerged due to secondary outcomes of the pandemic, such as teacher shortages, increased childcare costs, and COVID-related policies like quarantine rules. Children being categorized as "close contacts" and the delayed vaccination of children led to recurrent disruptions in their schooling.

Regardless of which phase AMIDS were in, AMIDS also grappled with a sense of guilt. They felt torn between the need for their children to have educational and social opportunities and the potential health risks involved when not sending them to school. These feelings of guilt were further compounded by societal expectations and their cultural backgrounds, which often

emphasized the role of mothers as caregivers. Additionally, the cultural norms of AMIDS' home countries influenced their parenting decisions. AMIDS often compared themselves to the practices of mothers in their home countries, even when residing in the United States. These cultural influences added complexity to their experiences as they navigated between two sets of norms and expectations.

In summary, AMIDS faced significant challenges related to childcare and education during the pandemic, with their decisions influenced by cultural norms, societal expectations, and the need to balance academic pursuits with motherhood. The study sheds light on the complex and often conflicting factors that academic mothers with school-age children navigated during the COVID-19 pandemic. In other words, AMIDS' role as a mother took precedence over other commitments and is irreplaceable in their lives. The significance of motherhood in their identity and the choices they made was well articulated in the current study.

Findings 2. Adapting to the Virtual Shift: Pandemic-Induced Challenges and Opportunities

In this study, AMIDS came from diverse educational backgrounds, resulting in a rich tapestry of experiences. However, despite these individual differences, common themes emerged centering around effective ways to balance the responsibilities or motherhood and academic pursuits during the pandemic and the impact of virtual working and learning environment that was actively adopted since the pandemic.

The transition to virtual learning and remote work during the COVID-19 pandemic presented significant challenges for AMIDS. They had to adapt to this new virtual reality, which required time and effort to overcome the hurdles of technology and learning how to effectively work and study from home. Initially, many AMIDS thought the pandemic would be short-lived, but as it persisted, they realized that remote work and learning were becoming the new norm.

This presented both opportunities and challenges. While remote work allowed them to care for their families and reduce virus exposure, it also brought difficulties such as finding a dedicated workspace and managing distractions at home.

Despite these challenges, virtual learning offered transformative potential. For many AMIDS, it provided flexibility, allowing them to continue their education while managing family responsibilities. They could attend classes virtually and work from home, which was particularly beneficial for pregnant students and those with newborns. The asynchronous nature of recorded lectures also allowed them to revisit and review material at their own pace, enhancing their learning experience. The shift to remote work was equally beneficial, offering flexibility and efficiency. Virtual meetings and research collaboration became the norm, reducing the impact of relocating for family or academic opportunities. Virtual conferences and presentations also became more accessible, supporting AMIDS in their academic pursuits. On the other hand, AMIDS felt that interactions with advisors became more formal and required extensive preparation when conducted virtually. The ease of casual conversations and interactions suffered during the pandemic.

The pandemic had a significant impact on doctoral research. Some AMIDS had to change advisors as their advisors retired early during the pandemic. Finding new advisors with matching research interests became challenging, give then advanced stage of their doctoral journey. The pandemic affected data collection methodologies, with in-person data collection becoming challenging due to school closures and visitor policies. Some AMIDS had to modify their research methods or postpone data collection.

While the challenges of balancing family and academic responsibilities persisted, virtual learning and remote work allowed AMIDS to maintain their educational progress. The flexibility

and adaptability of these approaches reinforced their determination and resilience in pursuing their academic goals amidst the pandemic.

Findings 3. From Awareness to Amplification: The Pandemic's Unveiling of Anti-Asian Racism and Xenophobia

During the COVID-19 pandemic, the U.S. implemented immigration policies that had significant effects on AMIDS. The policies initiated by the Trump administration sought to bar international students enrolled in U.S. universities operating exclusively online from receiving visas, leading to concerns about their safety, financial stability, and educational aspirations. These policies were met with opposition from most R1 universities, eventually leading to their reversal only after one week. However, AMIDS continued to grapple with anxiety and uncertainty about their legal status.

AMIDS found that these policies caused a profound sense of insecurity among them. They were concerned about their legal status, fearing potential deportation, despite being fully compliant with visa requirements. Even after the policy reversal, they remained anxious about the possibility of changes in immigration policies during their stay.

In addition to immigration policy changes, the rise of hate crimes against Asians during the pandemic had a significant impact on AMIDS. Former President Trump and other prominent politicians' use of racially charged language in reference to the virus led to increased anti-Asian sentiment and discrimination. Hate crimes, both physical and verbal, became more prevalent, and AMIDS, even if not directly targeted, experienced heightened fear and insecurity. The study revealed that AMIDS often felt uncomfortable and unsafe, especially while wearing masks, as they feared being perceived as carriers of the virus or experiencing racially motivated incidents.

The increased scrutiny and unease within the community led to a heightened sense of vulnerability that some participants decided to leave the United States due to these concerns.

A group of AMIDS in the study shared their distressing experiences of encountering verbal attacks based on their race in a campus environment, where they all used to feel the safest. These incidents had a lasting emotional impact on them, leaving them with enduring wounds, even though they didn't experience physical harm. These experiences raised questions about the racial biases and challenges that persist, even in diverse and inclusive environments. The COVID-19 pandemic exacerbated the situation, with some students feeling unsafe and worried about their and their children's safety. As a result, most AMIDS adopted precautionary measures to protect themselves and their children from potential hate crimes. They restricted their activities, carried self-defense tools like pepper sprays, and some even made drastic changes to their appearance, like bleaching their hair, to avoid being targeted.

The uncertainty caused by changes in immigration policies and the rise in anti-Asian sentiment during the pandemic led many AMIDS to reconsider their long-term plans in the United States. They worried about raising their Asian American children in an environment marked by racism and xenophobia and questioned whether staying in the country was worth it.

In summary, this study highlights the profound impact of racism and discrimination on AMIDS during the COVID-19 pandemic. It sheds light on their challenges, their efforts to protect themselves and their children, and their reconsideration of future plans in the United States. The study illustrates how immigration policy changes and racial tensions during the pandemic had profound psychological effects on AMIDS, impacting their daily lives and decisions, even when not directly experiencing overt racism. It emphasizes the need to address

systemic biases and prejudices that persistently affect the experience and perceptions of individuals subject to them.

Healthy Living Tree Metaphor of Doctoral Student Education

During the interviews, it became evident that the role of motherhood took absolute precedence for AMIDS over other identities, such as doctoral student and Asian foreigner. This prioritization likely arises from the fact that identities and roles like doctoral student and Asian foreigner are optional, while motherhood is an inescapable responsibility. One can choose to quit a doctoral program and opt not to live as an Asian foreigner, since it is their presence in the U.S. that labels them as Asian and foreigner. In their home countries, they are neither Asian nor foreign.

Conversely, motherhood is not a role one can relinquish or reposition through strategic actions. Regardless of geographical location, motherhood remains a constant. In other words, it is my belief that many existing institutional support systems and programs focus primarily on optional aspects of identity. For instance, AMIDS have access to additional writing support as ESL students and receive instructional training for virtual teaching. However, the root causes of the challenges faced by AMIDS during the pandemic were not adequately addressed through those resources.

The study findings indicate that universities need to be the primary support sources for AMIDS, particularly due to their visa status, yet AMIDS often found their institutions unhelpful. Therefore, universities must advocate for their students. It is unreasonable to expect AMIDS to advocate for their parenting status and rights, as they barely have the time nor energy to focus on anything else. Universities should allocate specific budgets for supporting parenting students on campus. A practical approach would be to establish student parent centers, like those at UC

Berkeley, the University of Michigan, and the University of Minnesota. These centers effectively advocate for their parenting students.

Moreover, universities should advocate for improved visa policies that allow international students to work on and off-campus and enable their spouses to participate in economic activities, rather than living with restrictive visas that only permit residence. Other popular destinations for international students, such as Canada, Australia, and the UK, have more flexible visa policies. This is an area where international students have no power, but universities can collectively influence and lobby the U.S. government.

It is surprising that universities are not mandated to collect data on their students' dependents and families, rendering students like AMIDS essentially invisible within their systems. It is crucial to know how many of these students exist, how many children they care for, and the employment situations of their spouses. States like Illinois, Texas, and Oregon are ready to pass legislation to address this, but the rest of the country has a long way to go in terms of institutional data collection. Without such data, AMIDS will remain invisible.

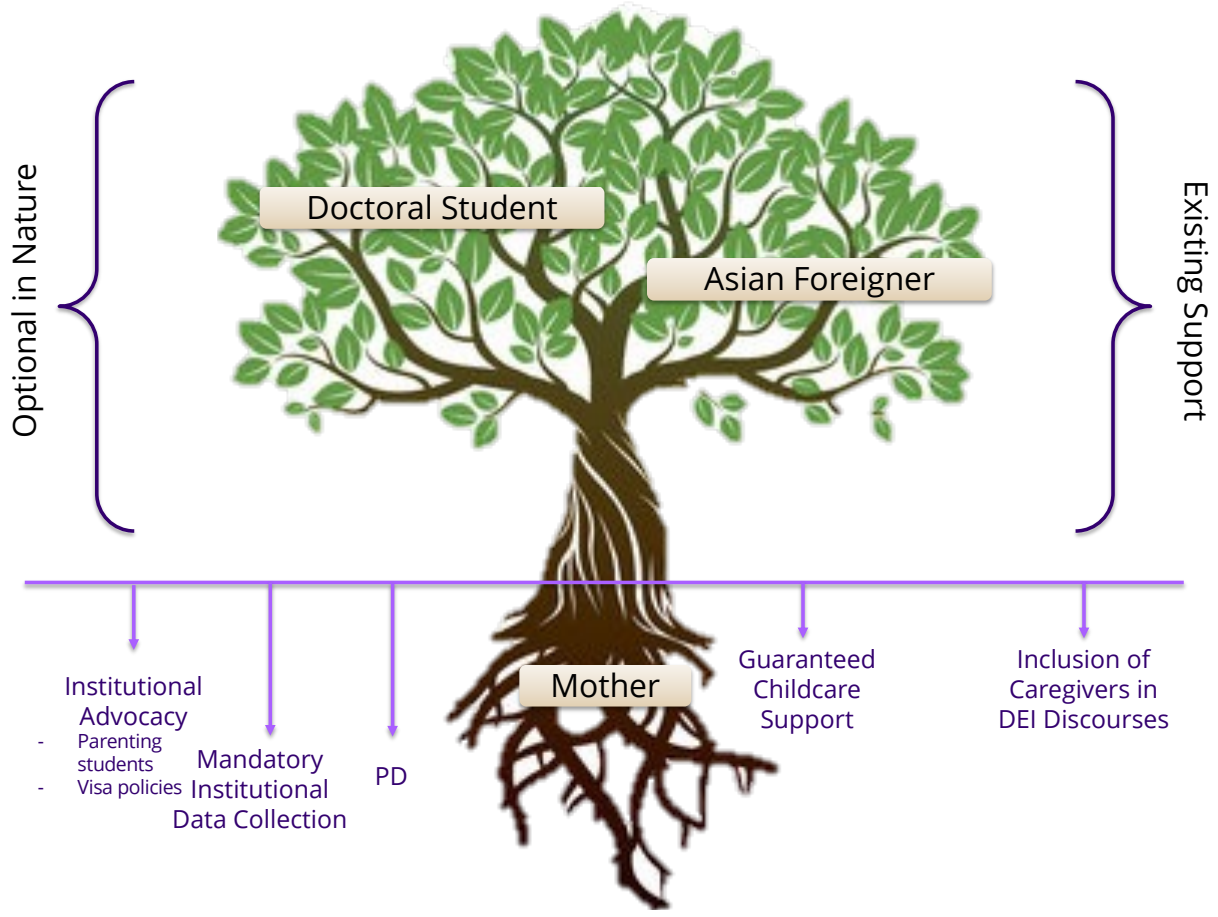
Professional development opportunities for faculty and staff are essential. Faculty need to be aware not only of instructional technology and coaching but also of the various ways to understand their students as "whole persons." Faculty should recognize that their students are not solely focused on pursuing an academic degree but are also living non-academic lives. It is important to help faculty understand life experiences they may not have personally encountered.

Childcare support is an absolute necessity, as highlighted in existing literature, regardless of the pandemic. AMIDS need assurance that they will have access to quality childcare, including a range of options such as full-time care, hourly access, emergency care, and on-demand care.

Inclusion of students with caregiving duties must be integrated into diversity, equity, and inclusion discourses, as caregiving is also culturally influenced. Unless a culture of including students with children is institutionally endorsed and promoted, existing and potential supports will not address the unique aspects of caregiving. Such actions do not necessarily require drastic measures. For instance, events should be scheduled at times that do not overlap with children's pickup times, families should always be welcomed, and designated spaces where children can come on campus should be provided. These gestures demonstrate that universities are aware of this population.

Figure 18.

Healthy Living Tree Metaphor of AMIDS



Such implications can be best illustrated using the metaphor of trees (see Figure 18). Just as it is crucial to care for the roots to ensure healthy plants, we often focus instead on trimming the branches and the overall appearance of the plants. We tend to judge a plant's health by its colors or flowers, forgetting to provide a larger pot for growing roots or to aerate the soil to maintain root health. This analogy applies to AMIDS and all students on campus. Institutions must prioritize maintaining the health of students' foundational needs, as well as their outward achievements. When the roots are well cared for, trees grow faster and healthier, resulting in fewer problems in the future.

Implications for Institutional Practices

AMIDS in this study found they were minimally supported by their departments and institutions or supported with things that were not the most urgent needs of AMIDS. Not surprisingly, the recommendations were not specifically confined to living through the pandemic but to successfully completing their doctoral education with or without an unprecedented pandemic.

Address the Urgent Need for Reliable Childcare

Regardless of the range of different experiences AMIDS lived through, every single of them mentioned the most urgent need to secure reliable childcare during their studies. All AMIDS in the current study experienced high levels of distress and anxiety due to the absence of childcare during the peak of the pandemic and not being able to secure reliable childcare when we were all going back to some sense of normalcy. There were mainly three aspects of childcare that all AMIDS desperately needed help with. It is important to note that AMIDS were aware that there probably was nothing that their respective universities could have done during the

pandemic. Thus, their recommendations around childcare were more centered around difficulties they faced when universities were returning to some sense of normalcy again.

A Guaranteed Childcare Support. A guaranteed spot at a good quality childcare facility either on or off campus is urgently needed. What usually happened with AMIDS in the current study was that even if they would prefer to have their child attend an on-campus childcare facility, they were at the lowest priority for its ever-long waitlist for enrollment as on-site childcare facilities give the highest priority to children of siblings or alumni family, that of faculty, staff, low-income students, and the rest it was rare for children of AMIDS to have successfully enrolled in on-campus childcare option. Considering the unique circumstances of AMIDS not having any familial support nearby, let alone within the United States, it might be worth an effort to revise the priority system at on-campus childcare facilities. Most childcare centers on campus apply priority categories that dictate the order in which families receive a slot from the waitlist. For example, on-campus childcare centers prioritize faculty, staff, and community members over student parents. In addition to students' parenting status, centers may have additional priority factors determining when families receive a lot. Those categories can be set internally (i.e., from the center or institution) or externally (i.e., from funding sources, such as Head Start). Additional priority categories can include veteran status, income level, whether the family has a sibling already being served by the center, undergraduate/graduate student status, and homelessness, among others (Cruse, Richburg-Hayes, Hare, & Contreras-Mendez, 2021). The current study proves an urgent need to include international student status as one of the priority categories when offering an open slot at childcare centers to student populations like AMIDS.

Availability of Diverse Childcare Options. As universities were starting to open up their campuses to their students and have themselves moving towards normalcy, it became an urgent need for AMIDS to find an hourly or part-time childcare option. Most of the time, AMIDS did not feel comfortable about hiring a babysitter because the cost associated with doing so was a bit too high for their very restricted student stipend income that barely covers living costs for themselves. AMIDS needs childcare support to provide varying intensities of services, including full-time care (i.e., full day and full week), part-time care (i.e., either part-day or part week, sometimes varying days), and nontraditional hour care (i.e., evening weekend, hourly, drop-in, or back-up care). This complexity and diversity of services needed by AMIDS was emphasized, especially as we are all moving towards the endemic and retrieving some sense of normalcy again.

After all, AMIDS, in fact, all student mothers probably want to know that their children are taken good care of at a quality childcare center while they are aware. Childcare centers must adhere to various legal, safety, and accreditation regulations, along with quality caregivers to qualify for what AMIDS meant by "quality childcare centers." If that aspect of mothering life is not taken care of, the rest would not matter.

Better Financial Support for Graduate Students with Children

Financial Support to Include Dependents. Every AMIDS in the study had wished for better financial support. Nationwide, graduate students are paid at (or only slightly above) the poverty level and on average make only $35,000 per year- barely meeting the $15 per hour rate representing a minimum wage in most parts of the country. At this salary level, most graduate students are rent-burdened, paying significantly more than one-third of their monthly income on housing. This situation can lead to housing instability and possible homelessness (Fang,

McMahon, Miller, & Rosenthal, 2021). For international graduate students who have come to the United States from other countries, the risks of financial instability are even more extreme. International students may be required to pay higher tuition or healthcare costs while their visa statuses disallow spouses from working to bring in additional income. International students also may not apply for public assistance for fear of jeopardizing their future immigration prospects as noted by few AMIDS or not eligible as non-Americans. The graduate student stipend is designed to support a single student, not their dependents as well.

A higher stipend for students with families is much needed for international students. As seen from AMIDS in the current study, most came to the United States with a student visa called F-1 which offers F-2 for their spouses. F-2 has notorious nicknames such as “zombie visa” or “corpse visa”, as it literally only allows the spouses of F-1 visa holders to only breath and prohibits them from working or even volunteering in the United States. Thus, it has been observed that AMIDS in the study were financially struggling to utilize services such as babysitters that were available for them to use. For example, even if they were willing to utilize a babysitter service that was middlemaned by the university, she could not utilize the babysitter service because she found it too expensive with her restricted income. When the graduate student stipend is primarily designed only to support the graduate students themselves to live on a minimum wage, it is impossible for AMIDS to support not only their spouse but their children as well. Thus, institutional support for international students and their families is a necessity considering the nature of F-2 visa.

Additionally, health insurance for international students’ family members should be provided by the universities. For international graduate students with dependent families, the costly nature and inadequacy of many health insurance plans, including the university’s, leaves

them to make difficult decisions regarding their finances and health, such as opting for cheaper, less adequate insurance plans or no plan. Often, in the case of average American graduate students often have full-time working spouses who can have their family members with healthcare insurance or ask other family members and oftentimes are not officially required to have health insurance. In case of international students, as F-2 holding spouses cannot legally work in the United States, they must depend on F-1 holding international students to purchase the student healthcare insurance plan. Considering how expensive health insurance is and as international students are required to be ready with healthcare insurance, it has become a major source of headache and financial struggle for AMIDS.

As a result, the anxiety of not knowing how their children and spouses will be getting much-needed medical attention was also a major source of anxiety. One of the AMIDS had to get their children vaccinated from a free clinic and hope that nobody will get seriously sick and has not seen a dentist for years now because it was simply too expensive for her to bring her children to the dentist's office with no medical insurance. Also, considering how their home countries are known to offer better nationally managed health care insurance, it was one of the factors that was not well considered when deciding to come to the United States. Again, as the graduate student stipend is only designed to offer student insurance plans for the corresponding student, the financial burden of purchasing extra insurance plans needed for the rest of the family members lies on the student. As a result, I have seen AMIDS needing to take up loans from their family members back home or take up extra working hours to earn more to support their livelihood which interferes with their academic endeavors.

Official Paid Maternity Leave. As international students, none of the AMIDS in the study were able to take a formal paid maternity leave as F-1 visa holders need to be registered

full-time throughout the academic year except during official school breaks during the summer to maintain their legal status in the United States. In other words, international students must remain full-time status to maintain their legal status in the United States regardless of maternity status. Thus, a lot of them tried to calculate their due date to be during the summer break to allow themselves enough time for postpartum recovery while not causing any legal issues in terms of their legal status in the United States as international students. Thus, planning to give birth at the early stage of the summer break is ideal for international student mothers for several reasons: (1) as student mothers can legally take a break from regular semesters student mothers do not have to worry about staying registered during the summer break, (b) allow ample time for post-partum care. However, pregnancy often cannot be designed accordingly.

If AMIDS were "lucky" enough to have an advisor who understands the special circumstances of international students and their visa restrictions and conditions, their advisors would allow AMIDS to take maternity leave while registered full-time as graduate student workers which would have AMIDS get paid and remain fully registered like what a formal maternity leave does for American students. If not lucky, international students will need to be terminated from their current graduate student worker position, pay for their full-time tuition out of pocket, which is always more expensive than average American students, and search for graduate student assistantship positions again upon returning which is also not guaranteed.

Additionally, in Asian culture, postpartum cultural practices are referred to as "doing-the-month," a ritualized time after birth giving underpinned by the ancient East Asian yin-yang philosophy. According to tradition, giving birth breaks the yin-yang balance and is considered a transient illness. To restore this imbalance, East Asian postpartum mothers typically stay home for one to three months while being fully cared for by their mother or mother-in-law (Vo &

Desai, 2021). AMIDS in the study who were pregnant at any point during the pandemic also kept the post-partum culture in mind and tried to modify their work schedule to minimize the negative impact on their doctoral education. The lack of formal maternity leave for international students has proven to be a major source of stress for many AMIDS.

Some universities do offer maternity leave to their doctoral students who are working as university employees, but for international students, not all can work that way. Thus, it is important to minimize the financial struggle as well as the time for the student mothers to heal properly after giving birth.

Acknowledgment of Academic Motherhood

AMIDS needed to feel comfortable about identifying themselves as mothers. That was it. They thought, above all, their advisors' encouragement and sympathy towards their difficulties in managing their caregiving aspects as mothers helped them the most and will help them the most moving forward. There were mainly three types of quests made in this line of thinking.

Working with Motherscholar and/or Fatherscholars. AMIDS who worked with faculty member who is also a motherscholar or fatherscholar showed exceptional satisfaction towards their advisors for the level of compassion and solidarity. As discussed in chapter five the working from home trend has forced the students and the faculty to get to know the personal aspect of studentship and faculty hood. There were two types of faculty in this. There were parenting or caregiving faculty advisors who were genuinely suffering to live through the pandemic as much as the AMIDS did. There was a faculty who was not personally living through the caregiving pandemic but was very good at putting themselves in AMIDS' shoes and was willing to recognize the difficulties that AMIDS was going through.

In the case of faculty members who were living through the pandemic as a caregiver in any capacity struggled throughout the pandemic just like AMIDS. AMIDS observed their advisors getting into heated arguments with their spouses during the Zoom meetings, they heard their advisor sharing how their children contracted COVID-19 and their kids are suffering with side effects of panic attacks at random points of the day, getting sick from the virus themselves, struggling to take care of their young children while needing to do a lecture virtually, and so on. Listening to those struggles unintended, and observing these situations via Zoom has made AMIDS feel secure about their struggles and share them with their advisors. I don't think faculty intentionally tried to share their personal sides, but it just happened, and the AMIDS felt that now they have room to get their difficulties validated. For example, they saw their advisors struggling to meet deadlines because they were busy caring for their young children.

Working with Sympathizing Faculty. AMIDS who worked with faculty member who were willing to put themselves into AMIDS shoes was exceptionally helpful. These were oftentimes faculty members who already went through the life stages that AMIDS are going through now or who didn't live the life stages that AMIDS are living through at the moment but put extra compassion and sympathy towards AMIDS, giving AMIDS safe space to be themselves. Faculty members who went through these life stages that the AMIDS were going through knew how difficult it is to carry multiple roles as mothers, students, and spouses because they went through it or they were observing similar things happening to their own children. These faculty members typically helped AMIDS with navigating resources available to AMIDS on and off campus. For example, flexibility to do virtual meetings when AMIDS's children were napping or sending their students links to student parent resources on and off campus.

When asked what is the most urgently needed, most of the AMIDS mentioned that they want compassionate advisors who can accept them for who they are without judgment. AMIDS was not asking for sympathy but for an institutional ambiance that accepts other identities of students that are not academically related to be accepted as what it is. The reason behind that was they knew they could somehow work out the financial burden (taking up more on-campus teaching jobs, asking for financial help from family members, asking their parents to fly over to the United States to help out with childcare, or in an extreme case, send their child over to their parents in home country) but the sympathy and compassion from their faculty is not something that they can change or comfortable asking for. Also, being recognized for their hardships due to personal aspects gave AMIDS an extreme level of freedom to be themselves, to suffer, to overcome, and to share that with others, and not feel completely isolated.

Professional Development on Academic Coaching. As graduate students typically choose their advisors based on research fit, or advisors admit doctoral students based on this fit, it is crucial for all faculty members to consider the non-academic aspects of advising. Graduate students, like anyone else, have lives outside academia. This is especially significant in light of the increasing number of nontraditional students (Offerman, 2011). Faculty must be prepared to support students with diverse backgrounds, cultural perspectives, and life experiences.

Thus, providing faculty with professional development opportunities to incorporate coaching into their academic advising practices can be highly beneficial. By integrating coaching into their advising methods, advisors can better address the complete student experience (McClellan & Moser, 2011). Coaching explores the roles of meta-awareness and intuition in individuals, fostering self-management and boundaries. It encourages students to reflect on and pursue a wide range of goals, interests, and passions as a whole person (Bettinger & Baker,

2014). Coaching also focuses on building rapport, attentive listening, identifying themes in a student's intentions and experiences, observing their responses, and offering clear and constructive feedback. These coaching skills can help faculty better understand and engage with their students not only as academic persons but also recognize their intersectional lives outside the academia.

These professional development opportunities will enable faculty to identify situations that are not necessarily teachable but coachable. In doing so, institutions should offer professional development opportunities that help their faculty take a holistic approach to mentoring their students. This approach recognizes and addresses the diverse needs and experiences of graduate students beyond their academic pursuits.

Institutional Data Collection

Universities need to collect data on students' caregiving data as well as data on dependents and their families. Although progress toward greater data collection of student parent status has been made lately, many universities in the United States are not required to regularly collect and report on students' parental status and the age of their children. American universities need to regularly collect and analyze data on the parental status of all enrolled students, including additional variables such as age and number of children, students' marital status, and family income, among other information. These data can be used to disaggregate student performance data further, facilitate research on effective interventions to promote student parent success and inform the provision of services targeted to the student groups that need it the most. Additionally, collect data on students served by campus childcare centers or on-campus childcare center wait lists to track outcomes like persistence, degree attainment, and time to degree, and to lend insight into the scope of demand for campus-based services.

Institutions with demonstrated demand for on-campus childcare should explore ways to increase supply, especially for student parents with low incomes, such as through applications to CCAMPIS partnerships with Head Start, student government funds and/or student fees, and enhanced in-kind support. In other words, states need to require higher education institutions to regularly collect and report on students' parental status and the age of their children. Such information may be obtained upon application to an institution or class registration each term. Universities cannot support their students without understanding who they are, and data collection can be a great starting point.

Family-Friendly Institutional Culture

Family-friendly campuses refer to colleges with institutional cultures, programs, policies, and structures that are intentionally inclusive and supportive of students who are pregnant and parenting. Family-friendly campus support strategies offer resources to everyone who is parenting, including faculty, staff, and students. Recent publications have emphasized the importance of promoting supportive and inclusive campus cultures for pregnant and parenting students, as feelings of safety and comfort lead to better student mental health and well-being and increase retention and degree attainment (Contreras-Mendez & Cruse, 2021).

Best practices from existing American universities such as the University of California-Berkeley, Ohio State University, University of Michigan- Ann Arbor, and the University of Minnesota- Twin Cities include student health insurance policies that offer an affordable family-level coverage option, student health and counseling providers who are trained to understand and work with students facing complex challenges and family issues, and priority enrollment of access to services for pregnant and parenting students. An increased focus on family friendliness

in outreach and recruitment, financial aid, student activities, and classroom policies, can also lead to more inclusive campuses.

Eventually, family-friendly campuses not only provide direct support for students with children but also promote inclusion, belonging, and academic success. By promoting family-friendly and student-parent supportive campus cultures, colleges are also more likely to competitively recruit and retain pregnant and parenting students, bolstering their enrollment, retention, graduation rates, and overall assessment scores, in addition to creating more welcoming campuses.

Dedicated Support Hubs for Parenting Students

Institutions lacking dedicated support hubs have observed student mothers taking voluntary initiatives to rally for increased support from universities. However, it is important to acknowledge that these student mothers often lack the time and energy to sustain these efforts. Hence, it becomes imperative for universities to step up and streamline their support mechanisms. They should connect the existing institutional support in favor of student mothers. Universities can start by benchmarking efforts from other institutions that effectively support their student parents. Based on my research, institutions like the University of Michigan-Ann Arbor (i.e., Center for Education of Women^{+}), the University of Minnesota-Twin Cities (i.e., Student Parent Help Center), Ohio State University (i.e., Office of Diversity and Inclusion), and the University of California-Berkeley (i.e., Student Parent Center) have established student parent support offices or similar initiatives. These institutions offer on-campus childcare options, financial support, maternity leave, and more.

By establishing a centralized hub for parenting students, student mothers will not have to chase the much-needed support when they are already burdened with their numerous

responsibilities. This office can advocate for their rights to enhanced support and integrate the existing institutional resources. For instance, many AMIDS have expressed the need for various types of support. Still, they often lack the time to seek out this assistance. Even when they attend events and seek support, they find that these resources are usually designed for typical American college students, resulting in fragmented support from different sources. For instance, AMIDS often receive emails from the international student office offering networking or academic support. However, these services tend to be centered around undergraduate international students, making it difficult for AMIDS to relate or find common ground. AMIDS feel out of place in such scenarios, as they do not believe they can get the necessary support from an office primarily designed to support undergraduate international students. For AMIDS, the initial approach often involves piecing together various on-campus services initially designed for the majority students. However, they soon find themselves exhausted by the effort required to access the essential support they need, ultimately leading them to give up on seeking that support.

Given the limited time and multiple roles that AMIDS juggles, it is crucial to offer them the precise support they need. This is where personnel or, even better, an exclusive office designated for parenting students on campus can be incredibly helpful and supportive for AMIDS.

Theoretical Implications

The study employed the concept of intersectionality (Crenshaw, 1991a, 1991b) to illustrate the intersecting nature of the lived experiences of Asian International Doctoral Student Mothers (AMIDS) during the COVID-19 pandemic. The use of an intersectional approach successfully explored the lived experiences of AMIDS during the pandemic because it captured various aspects of their identities as temporary migrants, mothers, spouses, and doctoral students.

These aspects made their responses to the social environments and changes due to the pandemic much more heterogeneous and complex. Using intersectionality as the overarching theoretical lens prevented the categorization of AMIDS through a single, isolated identity as students at the expense of overlooking their other contextualized identities.

When exploring the first research question regarding how AMIDS navigated the challenges of fulfilling their maternal responsibilities during the pandemic, the study employed matricentric feminism (O'Reilly, 2019a, 2019b, 2021) to understand AMIDS' experiences, focusing on their roles as mothers and their motherhood. Utilizing matricentric theory in the study of AMIDS during the COVID-19 pandemic provides a comprehensive understanding of how their experiences were shaped by their identity as mothers, cultural and societal influences, and the challenges of balancing multiple roles. This research effort expanded the use of the theory in the field of higher education and adult education, as previous studies rarely employed matricentric feminism to understand entities with mothering roles.

The graduate student socialization theory (Weidman at al., 2001) was used to understand the second research agenda, which aimed to understand how the pandemic impacted the progression of AMIDS' doctoral education. This theory provides a framework for understanding the social and cultural processes through which graduate students are socialized into their academic and professional roles. The findings illustrated how AMIDS managed role conflict as they balanced their roles as doctoral students and shed light on the challenges they faced and the strategies they employed to harmonize multiple identities. Additionally, the theory allowed for investigating the role of advisors and peer networks in the socialization process. It revealed how these support systems (or lack thereof) contributed to the academic and professional development of AMIDS, especially during the pandemic when social interactions were

constrained. The theory was also employed to analyze the impact of the shift to online learning during the pandemic and helped assess the challenges AMIDS encountered in adapting to virtual education and the implications for their socialization into the academic community.

AsianCrit (Chang, 1993; Museus, 2013; Teranishi, 2002) offered a theoretical framework for studying AMIDS' identity as Asian foreigners in this study. As AsianCrit emphasizes the intersectionality of identities, such as being Asian, foreigners, mothers, and doctoral students, the theory allowed for a nuanced examination of how these intersecting identities influenced the experiences of AMIDS as Asians during the pandemic. It helped to understand the complex interplay between race, nationality, and perpetual foreigner status in their experiences. AsianCrit also helped to focus on exposing and critiquing structural inequalities and racism, providing a lens to examine discriminatory and prejudiced experiences that AMIDS have encountered during the pandemic.

Utilizing these theories in an intersectional manner was crucial for studying the lived experiences of AMIDS during the COVID-19 pandemic for several reasons. Firstly, the theories recognize that individuals possess multiple intersecting identities, such as mothers, doctoral students, Asians, and foreigners. These various identities clearly influenced their experiences during the pandemic, and the current study showed that understanding these intersecting identities is essential for a comprehensive analysis of AMIDS' experiences.

Secondly, the theoretical framework of the study acknowledges that people within the same broad category (i.e., student mothers) can have vastly different experiences based on other intersecting identities and social contexts. By considering the intersection of identities, the study successfully captured the diversity of experiences within the AMIDS, which may include

variations in cultural background, nationality, family dynamics, and academic disciplines, and the unique challenges that AMIDS faced due to the combination of those intersecting identities.

Thirdly, the theoretical framework helped uncover and address systemic inequalities and discrimination. It provided a framework to examine how the convergence of multiple identities may have exacerbated discrimination or bias. It also helped in tailoring interventions, resources, and support mechanisms that consider the unique challenges posed by their intersecting identities.

In conclusion, it was necessary to utilize a theoretical framework involving four different theories to gain a holistic understanding of AMIDS' experiences as it was essential to examine the whole person with all their intersecting identities. Focusing on a single identity may have led to a one-dimensional view that does not capture the full scope of their experiences.

Implications for Future Research

There are several notable strengths of this study. One significant strength is its focus on AMIDS, a population that is often overlooked and understudied. The findings from this study represent the first qualitative research that specifically addresses the experiences of this group during the pandemic, shedding light on their unique challenges. The significance of the findings from this study lies in its comprehensive exploration of the multifaceted experiences of AMIDS. These individuals navigated complex identities as Asians, foreigners, doctoral students, and mothers during the pandemic. Unlike previous studies that may have focused on a single aspect of student experiences, this study explores the intersectional nature of AMIDS. By delving into the unique challenges and perspectives of AMIDS, the study uncovers the intricacies and subtleties of their lived experiences, emphasizing the importance of viewing students as whole persons with multiple contexts and identities.

While the pandemic may be a once-in-a-lifetime event, the study highlights the ongoing struggle of Asian international students in the United States and illustrates how a lack of effort to understand these students will continue to affect the quality of their daily lives and educational endeavors. Addressing the positioning of these students and finding ways to better support AMIDS, as well as the ever-diverse student population at American universities, becomes imperative as we recover from the aftermath of the pandemic.

While the current study offers valuable insights into how universities can foster success for AMIDS, it has several limitations. As the study involves only a few universities in the United States, the findings and conclusions must be interpreted cautiously. While the diversity of the sample suggests that the intersectional lived experiences of AMIDS are diverse and contextual, the sample does not allow for the conclusions to be applied across a substantial number of AMIDS throughout the United States. Therefore, to make such universal conclusions, future inquiries should focus on expanding the sample to include a substantial number of institutions as well as AMIDS from various regions of the United States.

Another limitation of the research design was the exclusion of American doctoral student mothers and other international doctoral student mothers not from East Asian countries. The samples currently involved in the study allow the conclusion that several common lived experiences are shared among AMIDS. Still, it does not allow one to conclude that these experiences are unique to AMIDS, as other types of doctoral student mothers were not included in the study. As mentioned earlier, it is possible that any of the aforementioned lived experiences of AMIDS could be found in other doctoral student mothers' experiences, but it cannot be conclusively determined. Thus, future research should include comparison groups of doctoral student mothers so that such assertions can be made.

Closing

With the increasing number of female doctoral students in the United States and the promotion of higher education for women worldwide, it is fair to anticipate that more and more female doctoral students will face the challenge of balancing motherhood during their doctoral journey. As we emerge from the tunnel of the COVID-19 pandemic, it is vital not to forget the experiences of student mothers and reflect on what worked, what did not, what support was needed, and how we can better support one of the most overlooked student populations on campuses.

Living through the pandemic was tough for everyone, but it should not have been so challenging that someone felt "barely living." When one reaches that point, something is seriously amiss. I am confident that AMIDS who participated in this study will earn their Ph.D. degrees, even without the ideal level of institutional support. They are determined, hardworking, and intelligent, having already overcome significant resistance and difficulty as Asian international students pursuing doctoral education at top universities in the world. So, why is it worth investigating this small, often silent, student population?

Because not being seen carries significant consequences. When you feel like you are not remembered, or you do not see people like you in certain positions, you know you will have to work harder to succeed. This has profound implications for how they navigate the academic world. Such issues lead to substantial challenges for student mothers and result in higher dropout rates. Doctoral student attrition rates are high in North America, with statistics indicating that 40% to 50% of students leave their programs (Litalien & Guay, 2015). Research shows that women with children are less likely to complete doctoral programs than their male or childless counterparts (National Science Foundation, 2023). Therefore, it is crucial to acknowledge and

support the unique challenges that doctoral student mothers face in achieving their academic career goals.

Having conducted this study, I am deeply convinced of the extraordinary resilience and determination displayed by AMIDS in overcoming a wide range of challenges. Their ability to conquer obstacles, regardless of their nature or characteristics, has brought them to their current positions. They have chosen not to settle for comfort or stability but to challenge themselves by pursuing advanced academic degrees while embracing motherhood in a foreign country.

During the unforeseen global pandemic, AMIDS exhibited remarkable strength even with minimal support. It is concerning that universities might underestimate this student population due to their quiet determination and lack of overt calls for help. It is important to recognize that their resilience, determination, and inherent grit should not be a reason to leave them unsupported. These women faced substantial hardships, different from those of typical students. Their unspoken struggles should not be mistaken for an absence of hardship. They silently carried the weight of significant challenges, and their resilience does not diminish the reality of their experiences, even if they did not vocalize them. Universities should not mistake their quiet strength for self-sufficiency because invisibility and not being really listened to is not a natural state for anyone.

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Appendix A. Interview Participant Recruitment Material

AMIDS PROJECT

HOW ARE YOU LIVING THROUGH THE COVID-19 PANDEMIC?

Looking for interviewees who meet all the following criteria:

- An international student from East Asia holding F-1 or J-1 visa
- Has been pursuing a Ph.D. during the COVID-19 pandemic
- Mothers

$50 gift card provided for sharing your experiences for a1-hour interview on Zoom.

If interested, submit the survey using the link or the QR code:

https://forms.gle/CyUYMrqppNcqo1gQA

If you have any questions, please contact MJ Kim at mjk5ad@uw.edu

Appendix B. Preliminary Questionnaire

Hi! Thank you for taking the time to fill out this survey. My name is MJ Kim, and I am a doctoral candidate at the University of Washington's College of Education. I am looking for **Asian international Ph.D. student mothers in the United States.** I am interested in what your lived experiences have been during the COVID-19 pandemic. Please help me identify the interview participants by taking this short survey.

If you are eligible and indicate interest in talking to me, you will be contacted to participate in a single 60-minute interview via Zoom within the next two months. **I will provide $50 you can use for arranging childcare/babysitting for an uninterrupted interview.**

If you have questions about this research study, please email mjk5ad@uw.edu. If you have any questions about your rights as a research subject, please get in touch with the University of Washington Human Subjects Division: (206) 543-0098.

Demographic Information

1. What is your name (Last, First)?

2. How old are you?

3. What is the email address that you use most frequently?

4. What is your current gender identity?
☐ Woman
☐ Man
☐ Nonbinary
☐ Prefer not to answer
☐ Other:_____

5. Which categories best describe you? *(Select all that apply)*
☐ Hispanic, Latinx, or Spanish
☐ American Indian or Alaska Native
☐ Asian
☐ Black or African American
☐ Middle Eastern or North African
☐ Native Hawaiian or Other Pacific Islander
☐ White
☐ Other:_____

6. At which university are you pursuing your Ph.D.?

7. Where are you currently living (country, state, city)?

8. What is your citizenship status in the U.S.?
☐ U.S. Citizen
☐ U.S. Permanent Resident (i.e., Green card)
☐ International Student (i.e., F-1 visa or J-1 visa)
☐ Other:_____

9. What is your country of origin?

10. What is your current marital status?
☐ Married, living with a spouse
☐ Married, but not living with a spouse
☐ Divorced, separated, or widowed
☐ Single
☐ Other:_____

11. Is this your first time being educated in an English-speaking country?
☐ Yes
☐ No

12. What is your first language?

13. How long have you been in the United States?

Education Information

14. Are you currently pursuing a doctoral degree?
☐ Yes, I am a full-time doctoral student
☐ Yes, I am a part-time doctoral student
☐ Yes, but I am currently on leave (please explain why)
☐ No, I am no longer pursuing a doctoral degree (please explain why)
☐ Other:_____

15. When did you start your Ph.D. program (semester/quarter, year)?

16. When do you expect to finish your Ph.D. program (semester/quarter, year)?

17. What is your field of study?

18. Please check all that apply to you:
☐ I have completed my doctoral coursework
☐ I have completed my doctoral qualifying exams
☐ I have advanced to candidacy
☐ I have defended my dissertation
☐ Other (please explain)

19. Which of the following have been sources of financial support for your doctoral program? (Check all that apply)
☐ Fellowship, scholarship
☐ Dissertation grant
☐ Teaching assistantship
☐ Research assistantship
☐ Other assistantship
☐ Loans (from any source)
☐ Personal savings
☐ Personal earnings during graduate school (other than sources listed above)
☐ Spouse's, partner's, or family's earnings or savings
☐ Employer reimbursement/assistance
☐ Foreign (non-U.S.) support
☐ Other, please specify: _____
☐ None of the above

Family Information

20. Are you a mother?
☐ Yes, I am a biological mother to my child(ren)
☐ Yes, I am a stepmother to my child(ren)
☐ No, I am not a mother. [Skip to Q. 27]
☐ Other (please explain)

21. When did you become a mother for the first time?
☐ I was a mother before I started my doctoral program
☐ I became a mother after I started my doctoral program
☐ Other (please explain)

22. Please list your children's age.

	Child #1	Child #2	Child #3	Additional children
Current age				

23. Does your child(ren) live with you 100% of the time?
☐ Yes
☐ No (please explain)

24. How is your child(ren) usually cared for? Please check all that apply.
☐ On-campus childcare center
☐ Off-campus childcare center
☐ Babysitter/ Nanny
☐ My significant other cares for my child(ren)
☐ Other family members care for my child(ren)
☐ Friends care for my child(ren)
☐ Other (please explain)

25. Did your childcare arrangement change during the COVID-19 pandemic?
☐ Yes (please explain how)
☐ No

26. Sometimes our children have disabilities or health concerns that require special attention and care. For example, my child has severe food allergies that require attention from medical specialist. If applicable, please describe such concerns of your children. Examples might include learning disabilities, autism, physical or sensory disabilities, chronic illnesses, psychological disorders, and others.

27. Are you responsible for caring for other adults (age 18 and over)?
☐ Yes
☐ No

28. How many adults (age 18 and over) do you care for?

29. Is there any person who lives with or stays with you that helps you out with your family or other responsibilities?
☐ Yes
☐ No

30. Do you have anybody you can ask for help in case of emergency?
☐ Yes
☐ No

Background Information

31. What is the highest educational attainment among your parents/guardians?

	Parent/Guardian 1	Parent/Guardian 2
Less than high/secondary school graduate	☐	☐
High/secondary school graduate	☐	☐
Some college	☐	☐
Associate's degree	☐	☐
Bachelor's degree	☐	☐
Master's degree (e.g., MA, MS, MBA, MSW, etc.)	☐	☐
Professional degree (e.g., MD, DDS, JD, Dmin, PsyD, etc.)	☐	☐
Doctoral degree (e.g., PhD, DSc, EdD)	☐	☐
Unknown	☐	☐

32. Which of the following best describes your social class when you were growing up?
☐ Low-income or poor
☐ Working-class
☐ Middle-class

☐ Upper-middle or professional-middle
☐ Wealthy
☐ Other:_____

Impact of COVID-19 Pandemic

33. In which of the following research-related ways was your doctoral education negatively affected by the COVID-19 pandemic? (Check all that apply)
☐ I needed to change my dissertation topic.
☐ I needed to delay data collection timeline.
☐ I was unable to secure a travel visa.
☐ I needed to change my research advisor.
☐ I needed to change type of data collected.
☐ I needed to change members of my dissertation committee
☐ I was unable to present findings at professional conference.
☐ I was unable to access research site (e.g., field site, archive, etc.).
☐ Other, please specify: _____

34. Rate the extent to which the following factors have been a concern for you since the COVID-19 pandemic. Choose one each rows.

	Not at all	To a small extent	To a moderate extent	To a large extent	To a very large extent	Not applicable
Increased caring responsibilities as a mother	☐	☐	☐	☐	☐	☐
Securing reliable childcare	☐	☐	☐	☐	☐	☐
Physical health problems	☐	☐	☐	☐	☐	☐
Increased violence against Asians in the United States	☐	☐	☐	☐	☐	☐
Emotional/ mental health problems	☐	☐	☐	☐	☐	☐
Managing immigration status and visa issues	☐	☐	☐	☐	☐	☐
Instances of biases and	☐	☐	☐	☐	☐	☐

discrimination based on national origin						

Closing Question

35. Finally, if you are open to talking to me for a single 60-minute interview via Zoom within the next two months with a $50 childcare subsidy, please check the box below.

☐ Yes, I am available to talk to you. Please contact me via the email address I provided.

☐ No, I am not available to talk to you. Please do not contact me.

Appendix C. Interview Protocol

Student Code:

Date:

Hi! I am so excited to meet you talk to you today. I want to talk about how you are living through the COVID-19 pandemic as an Asian international doctoral student mother in the United States. I am also a doctoral student mother of a 4-year-old girl and a 7-year-old boy, so consider our time together as having a coffee chat with a fellow doctoral student mother. We are literally in the same boat!

Our conversations will be recorded, which will allow me to listen better to you during our time together. Everything you say will be kept confidential. I will use pseudonyms for all identifiable information. Please feel free to share your thoughts as honestly as possible since your candid responses will help me understand your experience. Please know that you do not have to answer any questions you do not feel comfortable answering. Do you have any questions so far? *[Wait for a few minutes. If any questions are asked, answer them before moving on.]*

Great, shall we get started? I will start recording. *[State the date and time of the interview.]*

[Understanding the Informant]

1. Can you tell me a bit about yourself?

a. Probe: How long have you been here, and why did you choose to come to the U.S. for your Ph.D.? *[Refer to Q15 in the preliminary survey]*

b. Probe: Tell me about your research. What do you want to do with your Ph.D.? Why is it important to do your research?

[Let the interviewee talk and have them warm up.]
c. Probe: Have you ever lived in the United States (or overseas) prior to coming to the U.S. for your Ph.D.?

2. Can you tell me about your spouse? When did you get married and what motivated him to move to the U.S. with you? What does he do? Where is he from?
[Refer to Q10 in the preliminary survey]

a. Probe: How does your spouse support your doctoral education? How supportive is he of your doctoral education?

b. Probe: How was he affected by the pandemic? Did some of his roles in the house change since the pandemic?

c. Probe: How was he during the pandemic in terms of supporting you with increased housework and childcare duties? In what ways has he been supportive in fulfilling your different roles and vice versa?

[Explain Study Context]

So, I am interested in exploring how being a mother, being an Asian person, and being an international student pursuing doctoral education in the United States during the COVID-19 pandemic. I want to know more about what our experiences have been like as Asian international doctoral student mothers. Our voices, the voices of Asian international student mothers, are never told and heard and I want my research to help other Asian international doctoral student mothers like us. That's where I need your help with. I am basically collecting all types of stories and thoughts on what it is like to be an international doctoral student mother during the pandemic. So please help me make our stories more visible.

[General Influence of the COVID-19 Pandemic]

3. Oh my goodness, I can't believe it's been two years living with the pandemic, but I remember so vividly how I was asked to pick up both of my children as soon as an official public health order was announced in the middle of March in 2020. It was actually my birthday. And that's when I realized that the COVID-19 is "here." What about you? Can you tell me how the COVID-19 became apparent to you?

a. Probe: What were some of your immediate concerns? Why?

b. Probe: What did you do to address those immediate concerns? Who did you reach out to for help? *[Examples can be from advisors, mentors, school offices, friends, family, and others.]*

4. As a doctoral student, how do you think the COVID-19 pandemic negatively affected your doctoral education in general? What did you do to address those negative impact on your education?
[Refer to Q32 and Q33 in the preliminary survey]

a. Probe: How was your discipline affected by the pandemic? For example, Do you think it was affected differently compared to other disciplines such as STEM (or non-STEM)? Why or why not?

b. Probe: Did your department or faculty offer some support to address these influences the pandemic had on your education?

c. Probe: I see that you are funding your education through various sources and did your financial situation change at all during the pandemic?
[Refer to Q18 in the preliminary survey]

d. Probe: Did your expected graduation date change due to the pandemic? If so, why?
[Refer to Q15, Q32, Q33 in the preliminary survey]

e. Probe: Did your post-graduation plan change due to the pandemic? If so, why?
[See if the reasons for the change in post-graduation plan is directly due to the pandemic]

f. Probe: Was there anything positive about pursuing doctoral education during the pandemic? Please elaborate more.

5. I remember my university shutting down the campus indefinitely when COVID-19 hit Washington state. What were some of the immediate actions that your university took when the COVID-19 hit? And how did those institutional actions influence your life as a doctoral student?
[Ask about chain effects. For example, if the student lost access to her office, did she have a hard time securing a quiet space to do her research?]

a. Probe: How satisfied or dissatisfied were you with the institutional actions taken up by your university since the COVID-19 pandemic? Why do you think so?

b. Probe: How about your city and state? How satisfied or dissatisfied were you with how your city and state reacted to the pandemic? For example, there has been a varying spectrum of debate in terms of masking and at one point I felt quite awkward not to put on a mask but also was concerned that people would view me as the one with virus as there was an active discussion about the origin of the virus. How was the sentiment around masking in your state?
[Ask about how getting different information not only within the U.S. from their home countries. See if they were making sense of the situation utilizing different types of information.]

[Motherhood]

6. Tell me about your child(ren). When did you become a mother?
[Refer to Q20 – Q26 in the preliminary survey.]
[Share my story with the interviewee if she seems interested in hearing or to build a rapport.]

a. Probe: How old are your children and how are they taken care of? Did your childcare arrangement change during the pandemic? If so, how?

b. Probe: How did COVID-19 change your childcare setting at all? What did that change mean to you as a student mother pursuing doctoral education? For example, schools in San Francisco were completely online for almost a year and I personally did not feel safe to send my younger daughter to her preschool, so we were all at home from the March 2020 to July 2021. It was only from the end of August 2021 that both my children were able to attend schools. And even then, we needed to keep our kids home from time to time as close contacts for at least two weeks at a time. What about you? Were there things like this you needed to deal with?

c. Probe: What aspect of being a mother made your lived experience more difficult since the pandemic? Why? Can you elaborate a little?

d. Probe: What aspect of being a mother did you like since the pandemic? Can you elaborate a little?
[For example, I like how I get to spend more time with my children, and I also appreciate more people noticing that what mothers are going through is a lot and that the pandemic only accentuated it.]

7. Let's talk about how being a mother to your children influenced your doctoral education during the COVID-19 pandemic. I see that you have (number of children) whose ages are (age of children). What is it like to be a mother during the pandemic while pursuing your doctoral education?
[Refer to Q21- Q26 in the preliminary survey]

a. Probe: What became your primary concerns as a doctoral student mother of young children since the COVID-19 outbreak? Can you elaborate more?

b. Probe: Did the type of your concerns change over time as we move along with the COVID-19 pandemic?

c. Probe: Other than caring for your children, what about being a mother impacted your doctoral education during the pandemic?

d. Probe: What kind of support helped you as a student mother during the pandemic? How did you address some newly added barriers from being a student mother since the COVID-19 pandemic?
[Ask about a different level of support; institutional, departmental, advisor, mentors, peers, and others]

[Race]
[Make sure to know about some of the crimes against Asians in the state or the city that the respondent is living in to use for follow-up questions if needed.]

8. When you first came to the United States as an international doctoral student from Asia, how did you feel? For example, for me, I am not the very few Asians in the lecture. I was part of the dominant majority in Korea and then when I first came to Virginia for my master's I realized I am "Asian". What about you? Did you have a similar experience or such sort?

a. Probe: How did you feel about living here in the U.S. as Asian before the pandemic? Can you elaborate a little?

9. There have been numerous publications that illustrate an explosive increase in physical and verbal attacks against people of Asian descent in the United States since the pandemic. News around hate crimes against Asians were all over social media and national news. I saw images of Asian grandmother being pushed on the broad daylight in my neighborhood in San Francisco and a guy being beaten on New York subway. And when those hate crimes against Asians in the U.S. happened in a row at one point during the pandemic, I received several text messages from my friends from all over asking how I am doing and feeling. I was thankful for their care but at the same time felt offended in unexplainable way. And in that sense, race did affect me quite a bit during the pandemic. What about you? Were you aware of those incidents of hate crimes against Asians in the United States? Did they alarm you? Why or why not?
[Refer to Q9 and Q34 in the preliminary survey]

a. Probe: Have you experienced any level of fear because you are Asian during the COVID-19 pandemic? Or maybe you never experienced any level of fear, but do you know anyone around you who did? Can you elaborate more on it?
[Refer to these examples if the interviewee has a hard time thinking of anything; feared someone might threaten or physically attack me and/or my family, people acted as if they were uncomfortable around me and/or my family, been subject to racial slurs or jokes, someone remarked they should go back to my home country, someone made a remark that me and/or my family are to blame for the coronavirus outbreak…]

b. Probe: In which ways, if any, have your Asian race impacted your academic performance both directly and indirectly during the pandemic?
[Refer to these examples if the interviewee has a hard time thinking of anything; interfered with your academic or professional performance, decreased the likelihood that you will complete your current degree program, increased your concerns about your personal safety, affected your mental health, interfered with your relationship with your peers…]

c. Probe: What did you do to address some of your concerns related to your Asian race during the pandemic?
[Ask about a different level of support; institutional, departmental, advisor, mentors, peers, and others]

d. Probe: Have you ever talked about your feelings related to this matter to anyone?

[International student status]
10. The other aspect I want to talk about today is your international student status and its influence on you during the COVID-19 pandemic. For example, I remember in the beginning of the pandemic, there was such chaotic confusion amongst international student communities regarding student visas as the Trump administration kept saying that all student visas will be canceled if international students register for online courses. So constant tweets and emails from the international student office were apparent for at least a few weeks. I want to know if any aspect of being an international student affected you at any point during the pandemic. In other words, were you at any point during the COVID-19 pandemic concerned about your international student status? If so, can you elaborate on what you were specifically worried about?
[Refer to these examples if the interviewee has a hard time thinking of anything; the potential for problems at the U.S. Port of Entry, the impact of online/remote classes on my F-1 or J-1 status, obtaining a travel signature on my I-20 or DS-2019, renewing my visa…]

a. Probe: Where did you get information related to your student visa policies and found most helpful? Why or why not?

b. Probe: What are some strategies you considered when there had been constant changes made on student visa policies by the Trump administration in the earlier stage of the COVID-19 pandemic? Why?

c. Probe: Do you think the concerns you mentioned earlier are better now that the Biden administration is in? Why or why not?

d. Probe: Were there any other concerns, apart from visas, that you needed to live through because you are an international student? Did those concerns you just talked about influence your doctoral education either directly or indirectly? Why or why not?

e. Probe: What did you do to address your concerns rooted in the fact that you are an international student during the pandemic?
[Ask about a different level of support; institutional, departmental, advisor, mentors, peers, and others]

[Intersection of Motherhood, race, and international student status]
11. So far, we talked about how your lived experiences as a mother, your race as Asian, and your international student status were impacted by the COVID-19 pandemic. And I am curious if one aspect influenced you more than the other aspects during the pandemic? For instance, if we were to line up these three aspects from the biggest impact to the least impact what would it look like? Why do you think so?

a. Probe: Can I interpret that the aspect with the biggest impact represents an area that you probably needed the most support of any kind?

b. Probe: If so, what kind of support do you wish you had from your community, faculty, department, or university, family, friends, spouse, or others? Please elaborate.

c. Probe: Would your order look different if I specifically asked you to put them in order of how much influence when there was no COVID-19? Why or why not?

12. What kinds of supports did you found helpful during the COVID-19 pandemic as an Asian international doctoral student mother?
[Refer to these examples if the interviewee has a hard time thinking of anything; did your university provide financial aid specifically for international students who are not typically eligible for federal or state financial aids and grants? Did your advisor offer you any extra support? Were your mentors more flexible with you in terms of deadlines and other obligations?]

a. Probe: What were some institutional supports (in other words, provided by your graduate school and/or university) offered to students like us during the COVID-19 pandemic that you did particularly find helpful? And vice versa?

b. Probe: What were some supports from different individuals, such as faculty, mentors, peers, offered to students like us during the COVID-19 pandemic that you found particularly helpful? What about vice versa?

c. Probe: What kind of support of any kind do you wish you had to better support you through the COVID-19 pandemic as an Asian international doctoral student mother? Why do you think so?
d. Probe: I hope we don't have to go through a global pandemic like this in the future, but if we do, what needs to be done to better support international doctoral student mothers based on your experience so far?

[Closing Questions]

13. We talked so much about so many things of what it means and what it is like to live through the pandemic as Asian international doctoral student mothers in the U.S. I wonder how vocal you were about your concerns and needs to your university, faculty, and staff? Or even to your spouse, your colleagues, peers, and others. Have you ever talked about your unique needs as international doctoral student mothers? Why or why not?

a. Probe: I am not used to speaking up or requesting specific things that I need from my advisor or anyone in general. I think it is my Korean upbringing to keep things quiet and try to figure things out on my own. And that applied for my doctoral education before and after the pandemic. What about you?

b. Probe: What do you think made you hesitate to ask more support or assistance? Why or why not?

14. Did your post-doctoral career plan change due to the COVID-19 pandemic? If so, how? Why or why not?

15. Is there anything you want to add about your experience as an Asian international doctoral student mother that we have not yet talked about?

a. Probe: If you were me, what aspects of Asian international doctoral student mothers would you be interested in researching?

16. Can you think of anyone who might be interested in talking to me?

Thank you so much for sharing your thoughts and experiences with me. I wish we had more time as I have enjoyed talking with you! Please feel free to contact me if you think of more things to share or have any questions.

Appendix D. Exploratory Study of the Spouses of AMIDS

How did the husbands influence the lived experiences of AMIDS during the pandemic?

While the primary focus of the research was not explicitly on the spouses of AMIDS, it became evident that their role was a significant factor influencing the lived experiences of these student mothers during the pandemic. Initially, the study aimed to explore the academic and personal challenges faced by AMIDS, but as data was collected, the critical impact of spousal support emerged as a recurring theme. The spouses, particularly those who had relocated to the United States and were living with AMIDS, played a pivotal role in their ability to manage the dual demands of doctoral studies and motherhood. This was especially true for the five husbands who, due to visa restrictions, were unable to work and instead took on the role of full-time caregivers. Their involvement alleviated some of the childcare burdens, allowing AMIDS to dedicate more time to their academic pursuits. Additionally, the presence of a support system within the household became even more crucial during the pandemic when external support networks were limited. Therefore, while the study did not initially set out to examine the influence of spouses, this section elaborates on how spousal support influenced the AMIDS.

Demographic description of the husbands of AMIDS

All AMIDS in the current study were engaged in heterogeneous marriages. Twenty-two of them were cohabiting with their husbands in the United States, while four were in long-distance relationships because their husbands continued working in their home countries. Out of the 22 husbands who came to the United States to support their wives, five were unemployed and living as full-time fathers, serving as the primary caregivers for their children due to visa restrictions that prevent them from working. Understanding the husbands' roles provided deeper

insights into how they supported AMIDS and explained the variations in the types of support AMIDS received from their husbands, influencing their lived experiences (see Table 1).

Table 1.

Demographic Information of Husbands of AMIDS

AMIDS Codes	Race	Nationality	Country of Current Residence	Visa Type
SM01	Asian	Korea	Co-habiting in the U.S.	H1B
SM02	Caucasian	United Kingdom	Co-habiting in the U.S.	J-2
SM03	Asian	China	Co-habiting in the U.S.	F-1
SM04	Asian	Korea	Co-habiting in the U.S.	F-2
SM05	Asian	Korea	Co-habiting in the U.S.	F-2
SM06	Asian	Korea	Co-habiting in the U.S.	F-2
SM07	Asian	Taiwan	Co-habiting in the U.S.	J-2
SM08	Asian	China	Co-habiting in the U.S.	H1B
SM09	Asian	Korea	Co-habiting in the U.S.	F-2
SM10	Asian	Korea	Co-habiting in the U.S.	OPT
SM11	Asian	Korea	Korea	N/A
SM12	Asian	Korea	Co-habiting in the U.S.	H1B
SM13	Asian	China	Co-habiting in the U.S.	OPT
SM14	Asian	Korea	Korea	N/A
SM15	Asian	China	Co-habiting in the U.S.	F-1
SM16	Asian	Korea	Co-habiting in the U.S.	H1B
SM17	Asian	Korea	Co-habiting in the U.S.	J-1
SM18	Asian	China	Co-habiting in the U.S.	F-2
SM19	Asian	Korea	Co-habiting in the U.S.	J-1
SM20	Caucasian	United States	Co-habiting in the U.S.	Citizenship
SM21	Asian	Korea	Co-habiting in the U.S.	H1B
SM22	Asian	Korea	Co-habiting in the U.S.	EB-2
SM23	Asian	Korea	Co-habiting in the U.S.	J-1
SM24	Asian	China	China	N/A
SM25	Caucasian	United States	Co-habiting in the U.S.	Citizenship
SM26	Asian	Taiwan	Taiwan	N/A

“**Just the two of us.”**

AMIDS in the study had no support from their families during the pandemic due to travel bans, quarantine policies from both the United States and their home countries, varying levels of vaccination availability, and complex quarantine regulations. Consequently, it was essential for AMIDS to receive practical support from their spouses to "survive" the pandemic together. Their

spouses became their only support system during this challenging time. The husbands assisted with childcare, cooking, and provided AMIDS with the time and space needed to focus on their academic work.

> Actually, I am surprised by how involved he is. When I gave birth to our first child, I just really worried about how I was going to handle everything moving forward for all the stuff going on and graduate on time. I'm trying to finish my dissertation and publish and get a job and take care of the baby. And his support really mattered in my life. So, I think his support made my life easier for sure. He is a really good cook as well. He is willing to do more household work for us, and I really appreciate that. (SM08)

The majority of AMIDS (n=23) in the current study were satisfied with the level of support they received from their husbands. Although the interviews did not delve deeply into how the husbands provided satisfactory levels of involvement, the study provides sufficient data to explain this high level of satisfaction perceived by the student mothers.

Firstly, it is important to note that over half of the spouses of AMIDS in the study had experienced doctoral education themselves. Specifically, 10 husbands had already graduated with a doctoral degree, 2 husbands had previously pursued a doctoral degree, and 3 husbands were either currently pursuing or planning to pursue a doctoral degree at the time of the interviews (see Table 2). For example, 15 out of 26 husbands of AMIDS have experienced doctoral education themselves, which likely made it easier for them to understand the nature and rigor required to pursue a doctoral degree. This shared academic experience likely contributed to a better understanding and support of their wives' academic and personal needs.

Table 2.

Ph.D. Status of Husbands of AMIDS

AMIDS Codes	Ph.D. Status	Place of Husband's Ph.D. attainment
SM02	Used to pursue but quit	At the same university as the student mother
SM03	Currently pursuing	At the same university as the student mother
SM05	Will start next semester	At the same university as the student mother
SM06	Used to pursue but quit	Other university in the United States
SM10	Attained	At the same university as the student mother
SM11	Attained	At a university in Korea
SM12	Attained	At the same university as the student mother
SM13	Attained	At the same university as the student mother
SM15	Will start next semester	At the same university as the student mother
SM17	Attained	At a university close to that of student mother's
SM19	Attained	At a university in Korea
SM20	Attained	At the same university as the student mother
SM21	Attained	At the same university as the student mother
SM23	Attained	At the same university as the student mother
SM25	Attained	At the same university as the student mother

SM02 is married to a British man who spent five years in a doctoral program at the same university before quitting the program. He left his doctoral studies soon after the birth of their first child and was working at a local company at the time of the interview. SM02 shared that her husband takes on an equal or even greater share of childcare and house chores to support her in completing her doctoral education.

> I think he definitely knew how difficult it is to be a Ph.D. student. He probably knows how it's really hard to do what I am doing as a student mother without any support. He knew that raising a child would be hard while being a doctoral student and that I would need to spend a lot of time on my research and everything. And knowing that even though we are Ph.D. students, which means there is not really a time when you can say 'oh, it's 5 pm, my work is done' and just turn off the computer. I think he understood that working in odd hours, and around the clock will happen and that we would need to work on the weekends or I need to work at night sometimes. I need to get on a call or, you know, um, all these things. So I definitely think the face that he used to be in a a doctoral program at the same university was very helpful in having him voluntarily help me out with many things. (SM02)

SM02 shared that her husband understands that the life of a doctoral student can be around the clock, unlike regular office jobs with fixed hours. It is fair to say that these spouses

likely have a deeper understanding of the demands of pursuing a Ph.D. education, which motivates them to provide more support to their wives who are juggling Ph.D. studies with motherhood.

> I do think my husband understands how much work and effort is needed to pursue a Ph.D. I think he is worried that I won't graduate soon because of all the childcare work. So, he tells me to research more and work more and that he will spend more time taking care of our baby. I don't think he can help me more than right now as he is heavily involved with childcare and other domestic chores. (SM10)

SM10's husband earned his Ph.D. a year prior to the interview and was pursuing a postdoctoral position at the same university. Both SM10 and her husband pursued their Ph.D.s from the same department but with different research focuses. He graduated earlier than SM10 mainly due to childbirth and childcare. SM10 shared that he made significant sacrifices in his career by dedicating more time to their child when he should have been focused on publishing for better academic prospects.

The realization that she perceives her husband as unable to offer further spousal support made her feel guilty, considering the societal norms where wives typically handle household responsibilities. While many student mothers in the study appreciated their husbands' commitment to childcare and household chores, they also felt guilty for receiving such extensive support from them.

> My husband actually had an opportunity to do his post-doc at a different university with a really big figure in his field, but he decided to pursue his post-doc at our current university and work at a lab that is less respected so that he can stay here with us. And he is pretty hands-on when it comes to taking care of our kid and I am very grateful for his support. But because I know he made a big sacrifice for me I feel so guilty for not making much progress in my academic endeavor. I feel like I am failing him. Ugh… (SM23)

SM23 married a partner who was also a doctoral student at the same university, majoring in engineering. At the time of the interview, he was a postdoctoral scholar at the same institution.

Throughout the discussion, SM23 expressed regret that she could not support her husband in the same way other wives in the program could. This was primarily due to her husband's limited options for job applications, restricted by SM23's pursuit of doctoral degree at the university, which only let him to consider positions within the same or nearby universities.

SM23 carried a weight of responsibility, fearing that her own choices might inadvertently impede her husband's career advancement. This inner conflict resonates with many AMIDS who wrestle with guilt for not meeting traditional ideals of being a supportive spouse, especially in terms of furthering their partner's career aspirations. The situation underscores the intricate dance of navigating personal ambitions and professional goals within the demanding realms of academia and family obligations. It highlights the multifaceted challenges faced by individuals striving to balance their own pursuits with the needs and aspirations of their partners.

> I know this sounds weird but I feel really bad for my husband. He is giving me the utmost level of support that he can but I am not making as much progress as I should. He should be working more hours and publishing as a post-doc but I feel like he is sacrificing his career for me and I feel really guilty about that. (SM10)

SM10's husband, also an alum of the same university, was pursuing a post-doctoral position at a neighboring institution during the interview. He took an active role in caring for their newborn, aiming to alleviate some of SM10's burdens so she could focus on her doctoral studies. Despite his efforts, SM10 expressed self-doubt, feeling she wasn't fulfilling her role as a supportive wife. She believed she should be prioritizing her husband's academic pursuits, particularly his goal of transitioning to a faculty position, by allowing him more time to focus on publishing papers. SM10 compared herself unfavorably to other wives in her husband's academic circle who dedicated themselves entirely to caregiving, highlighting a perceived failure on her part.

It is worth noting that many previous studies exploring the level of support perceived by academic mothers with husbands show lower satisfaction levels compared to what was observed in this study. This suggests a potential shift in the involvement of husbands in childcare and domestic responsibilities over time. The data from this study could serve as evidence of a trend toward greater equity in gender roles, possibly influenced by efforts in East Asian countries to promote more balanced divisions of labor within households. This underscores the evolving dynamics of gender roles and support structures within academic and familial contexts.

"My husband is so supportive. But I don't understand why I still feel so overwhelmed."

Despite the significant involvement of husbands in childcare and domestic tasks, many AMIDS in the study were perplexed by the limited academic progress they were able to make as doctoral students during the pandemic. Despite receiving considerable support from their husbands, AMIDS still felt overwhelmed and incredibly busy. They desired even more assistance from their spouses, but hesitated to ask for additional support, feeling that their current level of support already exceeded the norm. This dilemma left them feeling conflicted; on one hand, they craved more help to alleviate their workload, yet on the other, they felt guilty or undeserving of requesting it, given the support they already received. This internal struggle highlights the complex dynamics at play within these partnerships, where feelings of gratitude clash with the desire for more equitable distribution of responsibilities.

> Honestly, my husband supports me so much. So I really can't complain about that aspect. I mean he wakes up earlier than I do and take care of our baby until the nanny comes. He spends time with us over the weekends so I can't really ask him to do more as I am not even sure what else he can do to support me. So I don't understand why I feel so frazzled and busy despite all the support I get. I just have so much to take care of in terms of managing my home. Family management. You know what? This is why I am so busy all the time. Being a housewife is a full-time job on its own. For example, I am the one who takes care of things like renewing the contract with our nanny, filing taxes, researching how to get childcare tax credit, looking for daycares, how to keep my baby safe from the virus, educating myself about the safety of vaccines, checking in with daycares to see if

> there are any spots opened up at their facilities, and more. Managing a home is an incredible amount of work. (SM10)

It was intriguing for SM10 to come to the realization that domestic labor encompasses more than just childcare, meal preparation, and laundry. She recognized that managing various aspects of their household, such as handling taxes and educating herself on vaccine safety, also constituted a significant part of caring for her family. And interestingly, these responsibilities were not shared with her husband.

During the interview, when AMIDS discussed their husbands' support, most referred to their involvement in childcare and primary domestic tasks like cooking, cleaning, and grocery shopping. However, not a single AMIDS mentioned their husbands' participation in activities requiring emotional labor, such as planning, communication, and budgeting. This observation aligns with existing research, highlighting a gendered division of labor within households where women often bear the burden of both practical and emotional tasks. This recognition sheds light on the nuanced nature of support within these partnerships, revealing areas where more equitable distribution of responsibilities could be beneficial for both parties.

> I get it. My husband is really involved, and he really does a lot around the house. But I can't help but think that there are things that only mothers can handle. I don't think the role of a mother can be 100% fulfilled by someone else. Even if I get all the support I need, there are things that I must do as a mother so I feel a bit skeptical that external support from others, including my husband, can replace or lighten mothers' load significantly to help mothers work like males. Is there something that can really lighten the mothers' load so much that I can work like my male peers? I don't think so. I don't know what people mean when they are here to help me. Because certain things just need to be done by me. Nobody can really help me. (SM04)

SM04 embarked on her doctoral journey in the United States and welcomed her first child at the onset of the pandemic. In a significant display of support, her husband made the decision to leave his career behind to become a full-time caregiver, assuming responsibility for their child's care, cooking, and household chores. This arrangement allowed SM04 to focus on

her research pursuits, akin to her male counterparts in academia. Despite his contributions, SM04 still found herself grappling with a sense of imbalance in domestic responsibilities. She perceived certain tasks, likely those falling under the umbrella of emotional labor, as inherently hers to manage. This sentiment was echoed by many AMIDS in the study, reflecting a common belief that certain aspects of domestic labor were inherently tied to their role as women. This observation sheds light on the nuanced dynamics of gendered expectations within domestic partnerships, even in situations where traditional roles are ostensibly reversed.

> So we get emails from our kid's school all the time. The emails mention what she will need to bring in. And I don't know why but there are so many special days at my child's kindergarten. For example, today is February 22nd of 2022, right? So, she was supposed to wear a tutu skirt to school. I asked my husband if he will be able to stop by at a store or thrift shop to get a tutu skirt for our daughter. He said it wouldn't matter if she goes to school without a tutu and what's the point of wearing a tutu to school and that's just too silly. But I didn't want my daughter to feel left out on the day so guess what? I shopped around on the Internet and asked other Korean moms if we could borrow one for the day. Things like this take so much time. I think our DNA is just different. The other day there was a week of several different types of days where my daughter was asked to wear different things like a green shirt on Monday, blue socks on Tuesday so on and so forth. I asked my husband to take care of it and my daughter came back home one day crying her gut out because she was the only one not wearing a pajama on a school-wide pajama day. After that day, I just couldn't trust him with things like this anymore. So I don't bother discussing these things with my husband anymore. My Google calendar looks kind of ridiculous with all kinds of schedules, mine, my daughter's , my husband's, and us as a family. (SM09)

SM09 made the significant decision to bring her husband and daughter with her to the United States. Her husband, in support of her academic pursuits, made the sacrifice of quitting his career in Korea to become the primary caregiver for their daughter. He took on many of the visible tasks such as caring for their daughter, particularly handling her needs as a first-grade student. However, the less apparent aspects of childcare and domestic responsibilities, such as communicating with their daughter's teachers, arranging playdates, and scheduling medical appointments, fell under SM09's purview. Consequently, managing family schedules and

navigating school events became SM09's responsibility, showcasing a prime example of emotional labor.

The interviews revealed a pattern where husbands predominantly provided support in areas of domestic chores that were more tangible and visible, often neglecting tasks requiring emotional labor. This disparity in perception was evident, with AMIDS shouldering the burden of managing the family's emotional and mental well-being. Many AMIDS expressed reluctance to address this imbalance for two main reasons: first, they feared potential conflicts that might arise from challenging their husbands to take on more emotional labor, and second, most were not even fully aware of the concept of emotional labor.

This highlights a broader issue of gendered expectations within domestic partnerships, where certain responsibilities are implicitly assigned based on traditional gender roles. The reluctance to address this inequity underscores the need for greater awareness and dialogue surrounding emotional labor within familial relationships. Addressing this disparity could lead to more equitable divisions of labor and foster healthier dynamics within these partnerships.

> I don’t want to talk about more things that my husband can do. Because I know he feels overwhelmed already with the current load. I do not want to fight with him over this and I doubt that he would understand what I am saying. I don’t want us to feel uncomfortable so I am just going to do all the other things he is missing out. He gave up his career and everything back in China to be with me so it’s okay. (SM18)

Particularly noteworthy are the husbands who made the significant sacrifice of leaving behind their stable careers in their home countries to support AMIDS in pursuing their doctoral degrees. Despite the immense support these husbands provided, AMIDS often found themselves hesitant to request a more equitable division of domestic labor. They grappled with a sense of guilt, feeling that they had already asked their husbands to make significant sacrifices by giving up their careers to be with them in a foreign country.

This internal conflict created a barrier for AMIDS in advocating for a fairer distribution of household responsibilities. They felt that asking for more support in managing domestic tasks would further burden their husbands, who had already made considerable sacrifices for their sake. Consequently, many AMIDS resigned themselves to shouldering the majority of emotional and domestic labor, feeling that they owed it to their partners in return for their selfless support.

This dynamic underscore the complex interplay between gratitude, sacrifice, and gendered expectations within these relationships. It highlights the need for open communication and mutual understanding to address disparities in domestic labor and foster healthier, more balanced partnerships.

Feeling responsible for husbands

This situation highlights a multifaceted interplay between feelings of gratitude, the sacrifices made by partners, and entrenched gender expectations within these relationships. The husbands' sacrifice of leaving behind stable careers to support their partners' academic pursuits evokes a deep sense of appreciation from the AMIDS. However, this gratitude can sometimes lead to a reluctance to request further support, as they feel indebted to their partners for their sacrifices.

At the same time, gendered expectations play a significant role, with societal norms often dictating that women bear the primary responsibility for domestic and emotional labor. This expectation can be internalized by both partners, leading to a situation where AMIDS may feel it is their duty to handle these tasks, despite their partners' willingness to assist.

Addressing these disparities requires open communication and mutual understanding between partners. By fostering an environment where both partners feel comfortable discussing their needs and expectations, couples can work towards a more balanced distribution of household responsibilities. This not only alleviates the burden on AMIDS but also promotes healthier and more equitable partnerships overall.

> My husband thought the United States will be more open to having full-time fathers around but he did not see many males like him. It was very rare to encounter unemployed full-time fathers like him and so in the beginning it was kind of a complex for him. He avoided meeting other people for a while. He felt ashamed. I asked him to join some sports club with other Koreans in the neighborhood and introduced him to the husbands of my friends, but he was so resentful. I felt really bad and made me wonder if I had made a mistake of coming here to pursue a Ph.D. I asked if Ph.D. is worth all the trouble that he is going through. This is kind of funny, but the pandemic actually helped my husband so much because all the other males were stuck at home and working from home. So more of other man were visible to him, like he was not the only male at playgrounds, he was not the only male at a grocery store on weekday mornings. It was during the pandemic that he started to feel better about being an unemployed full-time husband. I felt about what he was going through. I did not intend any of these things that we came here for a better future for all of us but there were moments when I doubted about what we were doing here just for me. I needed to protect my husband's ego along with everything else I needed to take care of. And that kind of wore me off and made me wonder if my husband would have worried about hurting my ego if we came to the United States for his doctoral education. I am quite confident that the answer to that question is no. (SM09)

SM09 revealed the delicate balance she navigated in protecting her husband's male ego while also acknowledging his significant transition from a man with a thriving career to a full-time caregiver who relocated to the United States to support her academic journey. This transition undoubtedly posed challenges to his sense of identity and self-worth. SM09 recognized the importance of preserving his dignity and not causing him emotional distress during this profound shift in roles.

Interestingly, SM09 noted that the pandemic played a pivotal role in easing her husband's transition by exposing him to a broader cultural shift towards greater male involvement in domestic chores and childcare. Witnessing more husbands embracing caregiving responsibilities helped normalize his new role, making it easier for him to accept his changed circumstances.

However, despite the gratitude AMIDS felt towards their husbands for their sacrifices, there was a palpable sense of added pressure among those with unemployed husbands. They felt an increased responsibility not only for their own academic success but also for ensuring their husbands' sacrifices were not in vain. This added layer of accountability underscored the weight of their husbands' career sacrifices and motivated them to excel in their academic pursuits.

> Well, this sounds really childish but my husband has not yet finished his bachelor's degree. But I am already pursuing a Ph.D. program, so I can see that he feels intimidated by my academic achievement. (SM14)

Some AMIDS also grappled with their husbands' insecurities surrounding their own academic achievements compared to those of their wives as they embarked on their doctoral education. This phenomenon is supported by existing literature, which highlights the challenges that can arise from traditional gender norms and expectations regarding academic achievement.

Behind these feelings of insecurity lie various factors, but a common thread among these husbands is their visa status. International students pursuing graduate education in the United States typically hold F-1 visas, which are nonimmigrant visas for individuals studying in the country. Spouses of these international students are typically granted F-2 visas, which allow dependent spouses and children to accompany the F-1 visa holder to the United States. However, unlike F-1 visa holders who may work part-time on campus, F-2 visa holders are not permitted to work under any circumstances. This restriction on employment has led to the moniker "Zombie

visa," reflecting the sense of living in a state of limbo without the ability to fully engage in society.

Among the various legal statuses observed among the husbands, F-2 visa holders stand out as the only group unable to pursue employment in the United States. This limitation adds an additional layer of stress and uncertainty for these spouses, potentially exacerbating feelings of insecurity and inadequacy, particularly in comparison to their academically ambitious wives. A more detailed breakdown of the husbands' visa statuses is provided in Table 3.

Table 3.

Visa Types of Spouses of AMIDS

Visa Types	Description of the Visa	Husbands of AMIDS	n
F1	A visa issues to international students attending universities in the U.S. Permitted to work up to 20 hours a week on campus	SM03, SM15	2
F2	A visa issues to the dependents of F1 visa holders. Employment is not permitted under any circumstances	SM04, SM05, SM06, SM09, SM18	5
J-1	A visa issued to authorized individuals to participate in educational exchange programs such as Fulbright. Permitted to work up to 20 hours a week on and off campus during the academic year	SM17, SM19, SM23	3
J-2	A visa issued to the dependents of J1 visa holders. Permitted to work for any employer in the U.S.	SM02, SM 07	2
OPT	A temporary employment that is directly related to an F-1 student’s major area of study	SM10, SM13	2
H1B	A nonimmigrant work visa that allows U.S. employers to hire foreign workers with specialized skills to work in the United States. Permitted to work for any employer in the U.S.	SM01, SM08, SM12, SM16, SM21, SM22	5

The transition experienced by these spouses upon arriving in the United States is particularly significant when considering their successful careers and social status back in their home countries. This adjustment may be especially challenging for individuals hailing from East Asian countries, where traditional gender roles often emphasize male dominance and measure a man's influence by his ability to provide financially for his family. Consequently, the shift from

being primary breadwinners to dependent spouses in a new country can evoke feelings of unhappiness and a loss of status within the family dynamic.

The impact of this transition was keenly felt by AMIDS, who grappled with the emotional toll it took on their husbands. Many described their partners experiencing mood swings and lower self-esteem as they struggled to adapt to their new roles. Interestingly, it is worth noting that AMIDS who were most concerned about their husbands' self-esteem and male ego were those holding F-2 visas, which severely restrict their ability to work in the United States.

The correlation between visa status and concerns about male self-esteem underscores the additional challenges faced by spouses with limited employment opportunities. The inability to contribute financially can exacerbate feelings of inadequacy and undermine traditional notions of masculinity, placing strain on both the individual and the relationship as a whole. This insight sheds light on the intersection of immigration status, gender dynamics, and emotional well-being within these partnerships.

Increased Spousal Conflicts During the Pandemic

Many AMIDS observed a notable uptick in marital conflict during the pandemic, primarily stemming from heightened domestic responsibilities, challenges with childcare, managing teaching duties, and continuing their education, all while being unable to engage in stress-relieving activities. The pandemic exacerbated existing tensions within households as couples navigated the demands of remote work, childcare, and household chores without the usual outlets for relaxation or respite.

The increased burden of domestic chores and childcare, combined with the strain of juggling professional and academic responsibilities, created a perfect storm for marital discord. Couples found themselves overwhelmed by the sheer volume of tasks and responsibilities, leading to heightened stress levels and frayed nerves. The absence of opportunities for leisure or social activities further compounded the situation, depriving couples of much-needed opportunities for relaxation and bonding.

This confluence of factors contributed to a challenging environment where conflicts could easily arise. The lack of outlets for stress relief and the relentless demands of daily life placed a significant strain on relationships, leading to increased tension and disagreements among partners. This underscores the importance of finding effective ways to manage stress and communicate openly within relationships, especially during times of heightened pressure and uncertainty like the pandemic.

> He and I, we were both struggling so much during the pandemic. It's been a lot to handle for just the two of us. So, we just fought a lot more than before the pandemic. He was just so sensitive about little things and there were moments when I was not quite sure what upset him so much. I bet he was wondering why I am so upset all the time. I was easily irritated as well. So, we were fighting constantly. (SM18)

During the pandemic, traditional avenues for stress relief and relaxation became severely restricted, exacerbating the tension between AMIDS and their husbands. Activities that were once readily accessible, such as meeting friends or going out for leisure, became significantly more challenging during the peak of the pandemic. The limitations imposed by public health measures meant that couples were deprived of their usual outlets for rejuvenation and socialization.

As a result, the buildup of tension within households occurred more readily, echoing findings from existing literature on the impact of external stressors on marital dynamics. The inability to engage in activities that typically served as outlets for stress relief meant that couples had fewer opportunities to decompress and alleviate the strains of daily life. Consequently, minor conflicts or disagreements could escalate more quickly, as there were fewer mechanisms in place to diffuse tension and restore harmony within relationships.

> There was no time nor physical space for me to refresh myself and there were moments where I couldn't stand breathing in the same room with my husband. I mean think about it… I was with my husband 24/7 entire pandemic. I was surprised to learn that I could be this upset and annoyed by my husband. I experienced how much further my threshold can be extended. I mean I am amazed at myself. I didn't know I had voices like that. It's like there's rage inside me the whole day, every day. My husband used to say that we are not fighting. He said I am just upset and expressing how upset I am to him and that's not fighting. I mean I get that. I am sure there are things that my husband did that upset me but I also know that I just exploded with things with miniscule significance. I admit it. I was just so stressed out. (SM22)

SM22, pursuing her doctoral degree in one of the Southern states of the United States, found herself in a challenging environment as the state grappled with low vaccination rates and resistance to mask mandates. The resultant high death toll and infection rate deeply affected her community, with several of her church members succumbing to COVID-19. Witnessing these losses firsthand instilled a profound fear in SM22 for the safety of her own family, prompting her to adopt stringent isolation measures for the first half of the pandemic.

During this period of isolation, SM22 felt increasingly dependent on her husband for support, particularly with the additional burden of heightened domestic chores and childcare duties. This heightened reliance, coupled with the stress of the pandemic, placed a strain on their marital relationship and led to numerous conflicts. The lack of independence and the overwhelming responsibilities she faced pushed their relationship to the edge, highlighting the

challenges faced by couples navigating the unprecedented circumstances brought about by the pandemic.

> We were all cooped in a small apartment and stressed out generally with the fear of catching covid, adjusting to the new learning environment, taking care of our daughter, cooking three meals plus snacks all day every day. I wish I had one hour to myself. That one hour would have made a difference but I had nothing to myself during those days. So we just fought a lot. (SM14)

While the project did not centrally focus on how husbands influenced AMIDS during the pandemic, it is reasonable to infer that the cumulative impact of various stressors, coupled with the inability to find outlets for tension relief, likely contributed to frequent spousal conflicts. Enduring an unprecedented pandemic alongside a supportive husband presented both blessings and challenges, as they navigated the complexities of keeping themselves safe while facing the realities of the virus.

Living through such uncertain times with a supportive partner meant having someone to lean on for safety and emotional support. However, it also brought forth a unique set of challenges. The inability to engage in typical social activities and the constant fear of contracting the virus heightened tensions within households. This dynamic created a paradoxical situation where husbands became both allies in the fight against the virus and potential sources of conflict due to the stresses of pandemic life.

In essence, the pandemic amplified the complexities of marital relationships, blending elements of support and strain into a nuanced and challenging experience. Couples found themselves relying on each other for safety and companionship while also grappling with the pressures and uncertainties of the pandemic era.