Title
Socialization Experiences of Doctoral Student Mothers: "Outsiders in the Sacred Grove" Redux

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Publication Date
2016

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Socialization Experiences of Doctoral Student Mothers:

"Outsiders in the Sacred Grove" Redux

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Education

by

Susan Elaine Swarts

2016

ABSTRACT OF THE DISSERTATION

Socialization Experiences of Doctoral Student Mothers:

"Outsiders in the Sacred Grove" Redux

by

Susan Elaine Swarts

Doctor of Philosophy in Education

University of California, Los Angeles, 2016

Professor Robert A. Rhoads, Chair

Future faculty members are shaped through the socialization processes of doctoral education. Training the best and the brightest minds for faculty positions is a key interest for colleges and universities, however, structural barriers exist that can impede or prevent many talented students from successfully completing Ph.D. programs. This is especially the case for students from marginalized groups. Within the doctoral student population, there is very little understanding of the experiences of mothers in Ph.D. programs. As women continue to enter the academic workforce, and therefore doctoral education, in increasing numbers the interaction between mothering students and their universities become more salient to understand. Policies, practices, facilities and events are all structural elements that inform the socialization of doctoral mothers. Understanding these structural arrangements sheds light on ways that doctoral education can be improved to be more equitable and effective in training future faculty.

This qualitative study utilized a feminized Bourdieuian sociological framework to analyze the socialization experiences of 16 mothers attempting to earn Ph.D.s to gain a better understanding of the dialectic between these student mothers and the structural arrangements in their doctoral programs. The analysis was conducted using Bourdieuian elements of habitus, field, capital, and practice as well as concepts from maternal thinking and the interests of mothers from marginalized communities.

The findings explain that access to doctoral student capital required time, energy and supportive relationships. Without key support arrangements such as affordable child care and sufficient funding, doctoral mothers missed out on academic activities that were important for their professional success. Beyond tangible impacts related to time and money, the study participants also experienced negative emotional effects of doctoral socialization including isolation, fear, anxiety, guilt and exclusion all of which presented additional barriers to academic participation.

Discussion of these findings explicates the structural arrangements that exist in the field of doctoral education and the dynamics of power and resistance in doctoral socialization. Additionally, women's scholarship is revealed to be secondary to that of male scholars and to the activities of mothering. Implications for further research include applications of Bourdieuian sociological frameworks to doctoral education, exploration of the experiences and career trajectories of mothers of varying communities and positions in higher education, and the views of other academic agents and family members on doctoral moms and their scholarly work. Finally, practical considerations are presented as opportunities for universities to address structural barriers to mothers who aspire to complete their doctoral programs and enter the academic profession.

The dissertation of Susan Elaine Swarts is approved.

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2016

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ACKNOWLEDGEMENTS

This dissertation represents the end of almost a full decade of learning and change in my life. Like most difficult journeys, I did not travel this road alone. There were many travelers who shared in the triumphs and struggles that occurred along the way. First, I must thank the women who participated in this study. Your stories are the life of this project. I wish you each success and happiness.

At the beginning of my doctoral journey there was the *Illuminati* or as Eric calls you, *Funky Cold Medina*: Chris, John, and Lisa. Thank you for your collegiality, your senses of humor and for being solid and trustworthy comrades at the outset of this adventure. To my peers, David, Dayna, Marcella, Brit and Jen, who reviewed different parts of this project along the way, thank you for the gift of your time and best thinking to help shape this study.

My committee gave me the most gratifying academic experience of my life: my proposal defense. In that meeting, I felt like a real scholar and they felt, to me, like real colleagues. I fielded tough, but fair questions, and received valuable feedback. You are exemplary scholars and mentors. To my chair, Rob, your direction and support propelled my progress at the very end. No one turns around feedback like you. You got me in this program and you got me out. Thank you for your support and dedication to my academic development and professional success.

So many work colleagues provided space, encouragement, references and ideas as this project came in to formation. Suzanne and Pat, thank you for the gift of time and flexibility in my work. Martine and Lori, thank you for early assistance with reference collecting discussions about my ideas. Joe Ann and Janelle, you were instrumental writing buddies. Cheryl and Linda,

you were endless sources of encouragement and incentives both of which were instrumental in the completion of this work.

JD, you were my dissertation support, sitting with me during the writing phase, always checking in on my progress as well as occupying the Prince and delivering peanut butter cups. You regularly asked me how I was doing, and meant it, and tolerated sleep-deprived nonsense on late nights. How lucky I am to have had such a steadfast ally on this journey.

Finally, I want express my sincere gratitude my family. Mom and Dad, you nurtured in me a love for learning and curiosity about the world we live in. You always supported my educational aspirations. I am so glad that you both have been able to share in my academic achievements because they are yours as well.

To my children who helped inspire this study, thank you for your love and attention to the playful side of life. Your example reminds me to have fun in the midst of the work. This balanced approach will continue to serve us well through the years.

To my partner I want to express my ongoing appreciation for your openness to my goals and how they impact our life together. Your support and resistance to this project is echoed in the stories of the other families in this study. We all struggle to find the right balance. There isn't a better person with whom I could face this struggle. You always have my back, even when I can't see it, and you regularly challenge me to reflect and think about the ways in which I live my life in service to our shared values and dreams.

I am grateful to each of you.

VITA

Susan E. Swarts

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CHAPTER 1: SOCIALIZATION EXPERIENCES OF DOCTORAL STUDENT MOTHERS

The first time I visited campus during my maternity leave, I pushed my infant's bright, and shiny new stroller around the school of education building three times searching for the access ramp to the entrance. It was well hidden behind a manicured row of shrubs near the front entrance of the structure, a set of doors I rarely used during the four previous years of my doctoral studies. I had never needed the access ramp. I had never noted its location and its stealthy placement made it all the more difficult to detect. Prior to being pregnant, my able-bodied privilege allowed me to traverse the halls of academia without thought to access or accommodation. Now, things were different. Now, with my son, I needed the access ramp. Now, I also really *needed* the elevator. Motherhood had changed my life and what I needed and came to expect from the university.

I brought the baby that day to sit in on a doctoral seminar of my peers led by my advisor who had invited the two of us to visit. Everyone welcomed me warmly and was excited about meeting the baby. As we normally did in this seminar, we went around the room and each of us shared updates on what was happening in our lives including personal happenings. I introduced my son and talked a little about my new role as a mom. Eventually, the check-in was over and the discussion turned academic. As the conversation carried on, I found myself sinking further against the wall with my son in my arms as he grunted, cooed and occasionally cried out. I kept wishing he would just fall asleep quietly so that the conversation could continue without interruption from him. No one said anything nor did anyone's body language indicate annoyance. They all simply did their best to ignore my son's noises and continue to conduct themselves as they normally would in the class. I was so grateful for their patience and

willingness not to address what I felt was the obvious elephant in the room. I was quite aware of my discomfort with the present situation. Although we had been invited and sincerely received something was telling me that I was out of place. Despite my confidence in myself as a student in the classroom, I lacked the same security as a mother in the same environment.

When I later excused myself and the baby from the classroom to change his diaper, I found myself travelling to all three floors of the building looking for a diaper changing station or some surface other than the floor on which to lay my child. I found none. There he was, lying on the cold marble floor of the women's restroom looking up at mommy on her knees trying not to get her pants too dirty while changing his diaper. It became all too clear to me at that moment that mothers and children, especially babies, were no more than a theoretical consideration for the school of education. That might be obvious to some. After all this was a university, not a preschool. Yet, there were several scholars in this school that studied children and families. Additionally, there were a number of students enrolled in the school who had children, and certainly, there were faculty who were parents. At that moment it seemed to me that there was an unspoken expectation that academics, both graduate students and faculty, should keep their children separate from the scholarly environment. I began to think about the messages that doctoral students like me see and hear about the academic culture and the appropriate place of family and life outside of doctoral work. I started to consider what was present and not present in the conversations, the physical facilities and written work of my chosen field and how I interpreted those symbols through my new lens as a mother in a Ph.D. program.

The norm for most families in the United States is that parents work outside the home, including the majority of mothers (U.S. Bureau of Labor Statistics, 2011). In fact, over 70 percent of mothers with children under 18 years of age work. In addition, working mothers carry

the brunt of childcare and household work (Allard & Janes, 2008, U.S. Bureau of Labor Statistics, 2011). Despite the high numbers of working mothers, employers continue to lag behind in addressing their needs (Crittenden, 2001). Colleges and universities are no better than other employers in dealing with the needs of their faculty who are parents let alone graduate students (Springer et al., 2009).

Universities as employers may have varied responses to the needs of their employees, including graduate student workers. However, doctoral training is not concerned with employment matters as much as the preparation of students for professional roles in academia. This preparation is often referred to as graduate student socialization (Austin, 2002; Tierney & Rhoads, 1993). Through this process, students often grapple with new values, expectations and understandings of themselves and of academia. Much of literature on doctoral training questions the appropriateness of current doctoral student socialization models for the modern academic workplace and challenges institutions to rethink doctoral education (Anderson & Swazey, 1998; Austin, 2002; Golde, 1998; Tierney, 1997). Many of these scholars argue that the academy does little to assist future faculty to truly understand academic careers and faculty life. Others add that discrepancies between students' understandings and expectations versus the realities of the doctoral training experience can lead to attrition (Golde, 1998; Tinto, 1993).

During the doctoral years, students may go through a number of life changes, including moving to a new city, marriage, break up with a significant other, childbirth, death of a loved one, and a return to student status after being a full-time worker. Individual contexts are likely to impact how graduate students experience their doctoral program, both in positive and negative ways (Malenchek Egan, 1989; Tierney, 1997). Becoming a mother for the first time is a significant change in life circumstances. It can be both a wonderful and overwhelming

experience that brings new challenges and priorities. When intentional, the decision to become a parent during graduate school can be influenced by students' experiences in their doctoral program, certainly for women (Ward & Wolf-Wendel, 2004). Ward and Wolf-Wendel found that doctoral women's perceptions about their advisor's support or the quality of faculty life for mothers impacted their decisions about having children. Similarly, perceptions of barriers to combining parenting and faculty work can deter doctoral students from a career in the professoriate (Golde & Dore, 2001; van Anders, 2004). Additionally, the quality of a student's experience may color a student's perception of the doctoral program as well as her post-doctoral employment goals (Anderson & Swazey, 1998; Golde & Dore, 2001; Nyquist et al., 1999).

The data show that graduate student parents are less likely to secure tenure-track faculty employment than graduate students without children (Mason & Goulden, 2004, Morrison et al., 2011). Additionally, Mason and Goulden found that women are less likely than men to be in entry level, tenure-track faculty positions. This is especially true for mothers with young children. It is unclear if motherhood causes women to turn away from tenure-track jobs or if they are instead "pushed out" of the career path (Springer et al., 2009). While data show the clear stratification in the professoriate between men and women and between mothers and women without children, it is simply unclear as to why this is so. Since a major focus of doctoral education is to train future faculty it is important to understand how particular experiences relating to motherhood play out during the doctoral experience. More to the point, what is missing in the literature is a deeper understanding of how doctoral socialization influences a student mother's experiences and how in turn those experiences influence her thoughts about her academic career path. The reality is that discussions of graduate student mothers are rare in the

literature and there are few higher education scholars that address the balance of family and work as part and parcel of graduate education reform.

This qualitative study of mothers in Ph.D. programs at a large, public, research-intensive university examines the socialization experiences of doctoral students who are mothers and explores the ways these mothers adapt or reconcile their daily lives to accommodate both their academic and family responsibilities. In addition, I explore the ways in which these socialization experiences influence how the participants think about their future career possibilities and direction. Ultimately, I hope to have provided a rich and genuine representation of the environment in which doctoral student mothers live and work, the dynamics at play in the environment and the underlying social arrangements and activities that characterize the setting with the goal of understanding how structures may be changed to enhance the doctoral socialization of mothers.

R*esearch questions:*

1. How do mothers in Ph.D. programs experience socialization to their academic disciplines? Who are the actors that convey the socialization experiences for graduate student mothers?
2. What strategies do mothers in Ph.D. programs employ in their daily lives in order to be successful in their academic career? For what resources/rewards do these mothers struggle?
3. In what ways do practices and structures in Ph.D. programs complement or stand in opposition to the mothering practices of doctoral moms?
4. How have doctoral socialization experiences influenced graduate student mothers' career aspirations?

CHAPTER 2: LITERATURE REVIEW

This chapter examines the extant research literature related to the experiences of doctoral student mothers. Specifically, I organize the discussion that follows around these themes: doctoral training, graduate student mothers, and mothers in the professorate.

Doctoral Training

The study of doctoral education is complex, given the variety of degrees, disciplines and outcomes associated with the doctoral degree. Research on doctoral education may be focused strictly on Ph.D. programs or they may be inclusive of other types of doctorates in fields such as education, psychology, medicine or law. In addition, more general graduate school literature combines exploration of master's and doctoral level experiences and issues. A focus on Ph.D. programs in particular may seem to simplify the task; however, this review of the literature shows otherwise.

Much of the literature paints a bleak, dysfunctional picture of Ph.D. education in the United States. From charges of being out of touch with the modern workplace to concerns about the ethical treatment of graduate students, there is an abundance of publications decrying the state of American doctoral education. Overall, students, faculty and institutional structures are all called to account for problems of doctoral education. Two major concerns addressed in the literature on doctoral education are its failure to adequately prepare future faculty (Bieber & Worley, 2006; Gaff, 2002; Gaff & Pruitt-Logan, 1998; Golde & Dore, 2001; Nyquist et al., 1999) and doctoral student success and completion (Gardner, 2009; Golde, 1998; Golde, 2005; Lovitts & Nelson, 2000). This scholarship is generally concerned with the quality of training and production of Ph.D. scholars or the experiences of students during the doctoral process.

Doctoral Training Outcomes

The outcomes of doctoral training are numerous. Many scholars argue that a crucial outcome of that process is the training and production of academicians. Weidman and Stein (2003) claim that the predominant role of those who earn the doctor of philosophy is that of the scholar: "A central purpose of post baccalaureate education, particularly at the doctoral level, is the socialization of individuals into the cognitive and affective dimensions of social roles related to the practice of learned occupations" (p. 642). In concert, several scholars contend that, as the first step toward an academic career, doctoral education must be transformed in order to better prepare doctoral recipients for the realities of modern faculty life (Austin, 2002; Bess, 1978; Bieber & Worley, 2006; Gaff & Pruitt-Logan, 1998). In their quest to explore the quality of doctoral training, many scholars have focused on the transmission of values and norms of the profession.

Weidman and Stein (2003) examined student characteristics and environmental factors related to the training of doctoral students for the academic norms of research and scholarship, key responsibilities of academicians. In a fundamental finding the authors note a significant relationship between the normative context of an academic department and doctoral student participation in scholarly activities designed to prepare them for faculty careers. Such activities included critiquing peers' work, attending professional conferences, writing grant proposals, and submitting papers or manuscripts for publication. Through these structured activities, students acquire norms and learn expectations of their academic discipline as well as gain and practice skills and behaviors expected to be exhibited as professionals in their field. In this way, doctoral training serves as an apprenticeship of sorts where students engage in activities and practices that characterize the academic profession. Gardner and Barnes (2007) explored this notion via

Astin's (1977) concept of involvement, defined as "the time and effort expended by the student in activities that relate directly to the institution and its program" (p. 21). The authors found that students did indeed see their involvement both in graduate school activities and in professional associations as helpful to their professional preparation. A student's own awareness of and inclination or ability to get involved was highlighted as a key finding in this study. In addition, peers and faculty were critical influences in spurring student involvement.

Anderson and Seashore Louis (1994) explored the factors that contributed to doctoral students' subscription to disciplinary norms in the sciences. They defined traditional norms of science as universalism, communality, disinterestedness, and organized skepticism and presented the opposite concept of "counternorms," defined as particularism, solitariness, self-interestedness, and organized dogmatism. In the study, they found that mentoring, departmental structure and climate were influential on student subscription to both the traditional norms and counternorms of the disciplines. While students' affiliations with the norms or counternorms were on a continuum, it was clear that structural elements of the doctoral training environment were important in transmitting values and norms of the discipline.

Developing an understanding of the academic profession is another key outcome of doctoral training that scholars have explored. Some studies focus on what leads students to doctoral training and their expectations for the experience. Scholars share that students report being motivated to enter doctoral education for a number of reasons including a passion for a particular discipline, the desire for knowledge, the opportunity to do research, and to become a faculty member (Anderson & Swazey, 1998; Austin, 2002). However, the experiences of doctoral students often do not match student expectations coming in to the program (Austin, 2002). In one study, scholars found that many students understood doctoral education and the

professoriate through an existing cognitive framework that did not match with what they were learning or seeing in their program (Bieber & Worley, 2006). These students were attracted to faculty life and doctoral education on a personal, not intellectual, level based on previous personal experiences with teachers, mentors or faculty members. In addition, this perspective was persistent in that students in the study maintained an unrealistic view of faculty life despite formal socialization activities they underwent. Attempts to educate students about faculty life were either ineffective or resisted, based on a mismatch of goals between the students and the institution/faculty. The authors concluded that graduate students in the study had uninformed or unsophisticated understandings of faculty life based on their own observations of faculty despite structured socialization activities. This calls attention to the need to explore students' perceptions of faculty life and address how personal schema may or may not fit with institutional norms or expectations.

Poor fit between expectations of students and those of graduate departments can lead to dissatisfaction with the doctoral program and even departure from doctoral education altogether (Austin, 2002; Golde, 2005; Tinto, 1993). Austin found that students had insufficient understanding of faculty life and the demands on faculty time. In addition, students grappled with their perceptions of faculty life and the reality of what they observed of the faculty in their programs. This struggle caused some to question their commitment to getting the Ph.D. or to become disillusioned with the professoriate. Similarly, Nyquist and her colleagues (1999) found that for aspiring professors, graduate education sent mixed messages about the priorities of the academy and that students showed very little understanding of academic life as a faculty member. In addition, students struggled with the values embodied in their graduate programs and that the lack of discussion and support led them to feel isolated in their experience.

Even if expectations are met, there are other elements of doctoral education that have been found to play a significant role in the quality of experience for graduate students. Anderson and Swazey (1998) found that doctoral students expressed a high prevalence of distress in the climate of their programs. These students experienced role conflicts, the interference of academic expectations with personal life, uncertain academic progress, exploitation by faculty, and a negative change in perspective resulting in distress. Underlying the students' concerns was ultimately apprehension about meeting the expectations for successful completion of the doctorate.

Concepts of success permeate the literature of doctoral education. In many cases, scholars define success as the completion of the doctoral degree. If this is the ultimate indicator of doctoral success, failure abounds, with doctoral completion rates in the U.S. at about 50 percent (Bowen & Rudenstine, 1992; Council of Graduate Schools, 2004; Nettles & Millet, 2006; Tinto, 1993). The departure of a graduate student from a program can be measured in financial costs, including wasted recruitment dollars or financial support given to a student. In addition, Lovitts and Nelson (2000) report that the personal cost to students who leave can be enormous including psychological impacts, economic factors, and career losses.

Nevertheless, Golde (1998) argues that attrition may have its benefits, especially if the departure occurs early in a student's doctoral career. She cites long-term financial savings as well as satisfaction with one's own departure decision as positive outcomes for early attrition. In her work, Golde found several reasons that students left doctoral programs and that the rationale varied based on discipline. A mismatch between the student and the discipline was a significant factor contributing to departure from doctoral studies. She found there were two types of mismatches, disciplinary and departmental. When research practices did not match with

student's strengths, either the skills necessary were not the student's strength or the type of work was not meaningful for the student, this was identified as a disciplinary mismatch. When there was a poor fit between the expectations of a student and the cultural practices of the department it was termed a departmental mismatch. Golde identified that science students exited doctoral programs generally for departmental reasons such as feeling as if they were in the wrong department, if the job market directed them away from the degree or when they felt a mismatch with their faculty advisor. Humanities students, however, departed more frequently due to disciplinary reasons including intellectual differences between what they were learning and what they wanted to learn, a realization that the practice or activities of a discipline did not meet their expectations and a disappointment over the strong emphasis on research over teaching. Regardless of the source of the mismatch, poor fit between students and their doctoral training experience is clearly a significant factor.

Doctoral Training Process

Outcomes of doctoral training are important to explore, as they illustrate the effects of what graduate students go through on a daily basis. The daily interactions, conversations, activities and messages conveyed make up the process through which graduate students learn about being a graduate student and a future faculty member. Many scholars have studied the processes by which doctoral students are prepared for faculty life and "acquire the values and attitudes, the interests, skills, and knowledge – in short, the culture – current in the groups of which they are, or seek to become, a member," (Merton, 1957, p. 287). This concept, called socialization, has been used by many scholars to analyze the training and development of doctoral students and will be the primary focus of this literature review. Graduate student socialization has been studied both as a process and through its outcomes.

Several scholars have examined the socialization process as the primary framework for understanding the graduate student experience (Austin, 2002; Gardner, 2007; Gardner & Barnes, 2007; Golde, 1998; Tierney & Rhoads, 1993; Tinto, 1993; Weidman, Stein & Twale, 2001).

> The socialization process is important because student socialization contributes to students' performance, satisfaction, and success in doctoral programs. Socialization is also important because the movement to faculty renewal and replacement over the next decade will most likely bring a new focus on issues of faculty recruitment, retention, productivity, and satisfaction (Nettles & Millet, 2006, p. 89).

As a theoretical construct, I will explore socialization more thoroughly in the next chapter; here, however, I will outline some of the ways scholars of higher education have conceptualized the doctoral student socialization process. Studies on doctoral student socialization have generated a number of conceptual models that offer understanding of the graduate student experience, the most pertinent of which I will summarize here.

Weidman, Twale and Stein (2001) presented a model of graduate and professional student socialization that has been widely cited in the doctoral student socialization literature (Austin, 2002; Baker et al., 2013; Gardner, 2007; Gardner, 2008; Gardner & Barnes, 2007; Gopaul, 2011; Quinn, et al., 2011; Quinn & Litzler, 2009). Building on much scholarship on socialization for professions, they present a stage model of graduate student socialization, the goal of which is to have a student identify and commit to a professional role. This interactive model illustrates a complex set of relationships and interactions between students, institutions, peers and personal communities that shape the socialization experience in graduate education. Through interactions norms and expectations are created, reproduced and reinterpreted by the

actors involved. Key in this model is the notion of culture which Weidman and his collaborators describe as influencing institutional climate, structures, symbols and rituals all of which guide and effect students. In this model graduate students go through four non-linear stages of socialization during graduate school: anticipatory, formal, informal and personal.

At the anticipatory stage, the newcomer becomes aware of the norms and expectations of the role for which they are being trained. In the formal stage, institutional actors provide formal instruction or documentation about normative expectations. Informal socialization occurs through observations and unstructured interactions with peers, cohorts, faculty and other communities. Finally, at the personal stage the student adopts a professional image and internalizes the professional role while reconciling any previous incongruence with the role. The perspective of this final stage has received some criticism as remaining focused on integration to an existing expectation versus allowing students create their own professional identities, remain in conflict with normative expectations while accepting a professional role or changing the culture (Taylor & Antony, 2000; Tierney & Bensimon, 1996; Tierney & Rhoads, 1993).

From another socialization viewpoint, Golde (1998) concluded that there are four major tasks or questions facing doctoral students: intellectual mastery; learning the realities of graduate student life; learning about the profession and integrating oneself into the department. *Intellectual Mastery* characterized by the question, “Can I do this?” The student engages this question in intellectual settings through coursework, lab work, field work, and so forth. The next two tasks address the decision to go to graduate school and to become equipped for an occupation. *Learning the realities of graduate student life* is represented by the question “Do I want to be a graduate student?” Next students grapple with the question, “Do I want to do this work?” as they *learn about the profession* for which they are being prepared. Finally, students

also consider, “Do I belong here?” the task associated with *Integrating oneself in to the department.* Relationships with peers, faculty and staff play an important role in determining if there is a good fit.

Gardner (2007) found that the process of socialization in doctoral education occurs on multiple levels, or in what she calls “distinct, but synergistic cultures,” (p. 737) of overall societal culture, institutional culture, disciplinary culture, departmental culture, and the culture of the individual graduate student. In these five contexts, students struggled and tried to make meaning of their experience and the socialization processes they were encountering. Five major themes emerged in this study that highlight the complexity and struggle in the doctoral experience. The first theme, called “ambiguity,” brought to light a lack of clarity regarding program requirements and guidelines for progression in a program. Issues of time and balance of responsibilities emerged as the next theme. Students also struggled with the tension of having enough or too much independence as a scholar and researcher. Development in the forms of professional and cognitive development also emerged as a theme. Professional development was identified as the task of gaining skills and a professional disposition in the form of “grooming” by faculty or formal programs. Cognitive development consisted of becoming an active, more critical learner in terms of knowledge acquisition. Finally, support of faculty and peers came through as an important element for doctoral student success and satisfaction in their doctoral experience.

Later, Gardner (2008) presented a three-stage model of doctoral student socialization, tied to program chronology. Beginning with Admission, the stage at which a doctoral student applies to graduate school through the completion of the first year of coursework, students’ progress to Integration, where they build relationships with peers and faculty, engage in

professional preparation and prepare for exams. The final stage is Candidacy, where students focus on their research and become more professionally minded. At each stage students struggle with becoming independent scholars and professionals, culminating in the completion of the dissertation.

In his 1993 work, Tinto suggests adapting his model of undergraduate student persistence to doctoral education. Persistence in this work is a function of the academic and social integration of a student in to an institution. In the process of persistence students bring their pre-college attributes and dispositions to interactions with varying communities both inside and outside of the university. The results of these interactions then lead to integration or lack of integration, depending on the nature of the outcome. Tinto postulates that lack of integration will most likely lead to a student choosing to leave college. In the extension of his theory of individual student departure from college, Tinto expresses how the unique aspects of doctoral education are likely to influence the persistence of graduate students. Local communities, such as the academic department or program, are privileged in a way that does not exist at the undergraduate level. This represents an acknowledgement that disciplinary differences are likely to have greater influence on doctoral persistence than for undergraduate persistence.

As a result, Tinto argues that social and academic integration are likely to be more closely tied together for doctoral students than for undergraduates. Finally, he claims that external communities such as families and work places are likely to pose expectations on graduate students that conflict with those of graduate study. Tinto likens doctoral student persistence to anticipatory socialization in that doctoral programs are designed to prepare students for a particular field of work or profession, a position also noted in Tierney and Rhoads (1993). Here, Tinto recognizes the importance of occupational training and the influence of

professional associations and norms on doctoral socialization in ways that also do not exist at the undergraduate level.

Tinto divides the process of doctoral persistence in to three stages. First is the stage of transition and adjustment, where students enter doctoral training and begin becoming members of the academic and social communities through both formal and informal interactions with actors (faculty and peers) in the local communities. Tinto argues that completion of this stage is based on individuals' judgments about how well the program/community meets their goals and the costs or benefits of continuing in the program. Next comes the stage of attaining candidacy, also called the development of competence, in which a student gains intellectual knowledge and skills. The development of professional competencies is the focus in this stage and influenced by both the individual's capabilities as well as the quality of the interactions a student has with faculty and peers. Tinto asserts that formal and informal social and academic interactions are intertwined due to the insular nature of doctoral program communities. Here the judgments of others play a key role in the assessment of a student's competencies in addition to the student's own valuation of the experience. Negative appraisals may lead to departure in this stage. The final stage is that of completing the research project and the awarding of the doctoral degree. In this stage, both individual ability and interactions with specific faculty and mentors play critical roles in persistence. Students' communities become even smaller, and therefore, their experiences are that much more distinctive. In addition, the nature of the experience in this stage is likely to shape professional success given the value of an influential advisor and a completed degree. At this stage, Tinto suggests that external communities also gain prominence in a graduate student's decision making. Tinto recognizes the potential impact of family conflicts and social norms on female doctoral students.

Disciplinary Influences on Doctoral Socialization

Beyond attrition, disciplinary and departmental differences have been found to influence doctoral student socialization processes and outcomes. Degree completion, time to degree, total number of doctorates conferred, and gender and racial distribution in enrollment all vary by discipline (Bowen & Rudenstine, 1992; Nettles & Millet, 2006).

Disciplines and departments vary in many important ways, such as advisor selection, physical and collegial connections to the campus, coursework structures, formal facilitation from master's to doctoral programs, and departmental culture in relation to academic and pre-professional activities (Golde, 1998). In her later work, Golde (2005) concludes that the impact of the discipline cannot be fully separated from those of the department since the department is a living example of the discipline. However, because departments are different in how they adopt disciplinary culture, they can mediate the student experience differently depending on department structures and practices. The structures and culture of the department do, in fact, shape students' experiences, which in turn influence persistence and attrition, and therefore it is important to study organizational dynamics at the department/program level.

In Gardner's study (2009) that explored faculty conceptions of graduate student success, markers for success varied across disciplines based on culture. In departments that were described as connected communities with high doctoral student completion rates (communication, psychology and oceanography), success was assessed through student characteristics such as self-direction, and independence. In the math, computer science and engineering departments, which all had low completion rates, student success was defined on the basis of work ethic or an achievement represented by the ability to get work published or to

obtain a good job after graduation. These notions of success go beyond attrition and show that the experiences of doctoral students are not monolithic and vary by discipline and department.

Graduate Student Mothers

While there are a number of studies that explore the graduate student socialization experience, few consider how socialization and motherhood interact. In fact, there are few studies that look at motherhood and its effects on graduate student socialization. Having children in graduate school has been shown to impact a student's experience in a doctoral program. Studies have found having that having children generally extends time to degree for female graduate students and contributes to part-time enrollment and stopping out (Abedi & Benkin, 1987, Nettles and Millet, 2006). Nettles and Millet (2006) also found that having children can have negative effects on graduate student peer relationships and participation in some professional development activities including presenting papers at national conferences.

Growing student concerns about the openness of academia to women with children are leading graduate students to reconsider academia as a professional choice with misgivings about how family-friendly universities really are (June, 2009; Mason, et al., 2009; Quinn & Litzler, 2009). Several studies have substantiated that female graduate students, and some males, believed that academia was not conducive to having a family and questioned whether they would or could seek a faculty career (Ferreira, 2010; Golde & Dore, 2001).

A few studies have explored role conflict between the role of graduate student and that of parent. Dyk (1987) interviewed graduate students about role strain between their student and family member roles. Time pressures and emotional strain characterized their experiences and the students' reported several coping strategies for dealing with conflict including renegotiating

expectations with others in one or both roles or redefining their own expectations about one or both roles. In renegotiating expectations, students took reduced course loads, accepted incomplete grades and formed study groups on the academic side. In their family roles, they solicited help from family members for domestic obligations. In redefining self-perceptions of roles, students prioritized role obligations (deciding some activities were more important or more urgent than others), compartmentalized roles (kept academics and family separate), or reduced their standards for performing in their roles (accepted lack of preparation for class as reasonable). These strategies helped the students deal with both time conflicts and emotional strain related to the incompatible expectations of academe and family.

In her study of 30 graduate student mothers from multiple disciplines at several institutions, Lynch (2008) explored the intersection of motherhood and the graduate student experience. In particular, she looked at how these women combined their mother and student identities and the strategies they enacted to be successful in both domains as well as how their institutions responded to their needs. Lynch found that two areas of structural support, financial support and childcare, were extremely important to the women's choices around enrollment, employment, and debt burden. In addition, she found that these women faced conflict between the role of mother and student, and therefore, effectively hid once side of their identities depending on the context. They practiced maternal invisibility when they were acting as students by not bringing their families to academic events, not posting photos of their children in their student workplaces, and not talking about being mothers with faculty. These strategies were employed to maintain a perception of being committed to their academics.

In contrast, many of the students in the study employed a strategy of "academic invisibility" outside of academia. They presented themselves as full-time or stay-at-home moms,

taking on the majority of the child care duties, volunteering at school and taking their children to activities. They did this to maintain a perception of being a good mother, an identity that was salient to each in the study. Due to lack of structural support from academe around substantive financial issues and mixed emotional support from peers and family, these women in fact, did not blend their identities, but kept them separate creating an exhausting and lonely existence. The women reacted to unrealistic role expectations by trying to tackle as much as possible and compartmentalize their roles. This study's particular focus on the intersection of identity and environment is a solid foundation from which I situate the phenomena in a framework that further explores the dynamics between individuals and structures from a particular feminist perspective, thereby adding to the small body of literature on graduate student mothers.

For more clues about how having children impacts the doctoral student experience, we can turn to the literature on motherhood in the academy, specifically the experiences of women faculty with children. Having progressed from the professional socialization of graduate school, female faculty members have taken the next step in professional activity for doctorate holders.

Mothers in the Professoriate

Motherhood has been shown to negatively impact working women in terms of job obtainment, salary, quality of life and self-esteem (Benard & Correll, 2010; Benard, Paik & Correll, 2008; Correll, Benard & Paik, 2007; Hochschild, 1989; Johnston & Swanson, 2004; Rogers, 1996). In many ways, female professors have the same experiences of other professional women. In fact, faculty women have been included in labor studies because of the high level of education and training required for promotion in the field (Crittenden, 2001, Tiejde, 2004). Like physicians and attorneys, professors must undergo years of specialized training and show

continued competence and production in order to receive promotions and to better their professional and economic status. The academic fast track, defined by Mason, Goulden and Frasch (2011) as “tenure-track faculty positions in research-intensive universities” (p. 12) presents significant challenges for moms in the professoriate. For example, having children, especially young children, may have negative effects on female faculty including salary and research productivity (Goulden, Mason & Frasch, 2011; Kelly & Grant, 2012; Morrison, Rudd & Nerad, 2011). In addition, female faculty with children report high levels of stress and time pressure (Mason & Goulden, 2004).

Studies on the interplay of academic careers and family show mixed results (Morrison, Rudd & Nerad, 2011; Ward & Wolf-Wendel, 2004). Many scholars argue that while academic life does permit flexibility, it requires faculty to be solely focused on their professional pursuits dedicating all of their time and energy to their scholarly endeavors in order to achieve professional success (Grant, Kennelly & Ward, 2000; Hochschild, 1989). Some scholars describe that the contemporary work place is generally open to women who conform to a traditional male model of worker. In other words, the woman who is geographically mobile and can work long hours to fully dedicate herself to her work without outside distractions such as family obligations (Crittenden ,2001; Grant, Kennelly & Ward, 2000; Hochschild, 1989). Women who are unable to commit their time and energy with the same intensity are likely to be less successful. Armenti (2004) argues that current models of professional life in academia still do not accommodate a mother's perspective but instead reward a male model of academic life much like other fast-track careers.

Women make up about 48% of full time faculty (NCES, 2013) and 34.6% of tenured faculty in the U.S. (Curtis, 2011). Mason and Goulden (2004) studied the effects of having

children on Ph.D. recipients in the University of California system. Using data from the 2004 Survey of Doctoral Recipients by the National Science Foundation, the authors found that tenure rates for men in their sample who had children early in their academic career had higher rates of achieving tenure than women in the same group. In addition, they found that women who had children later in their academic careers still had lower tenure rates than men in the same group. This led the authors to conclude that family and gender contributed to lower tenure rates for women. In a subsequent study, however, the authors posit that the lower tenure rates are more attributable to fewer mothers obtaining tenure-track jobs than actual tenure decisions (Wolfinger, Mason & Goulden, 2008). Morrison, Rudd and Nerad (2011) had similar findings in that having children in the early career affected a women's chances of landing a ladder track position, but that once on the tenure track, children did not account for women achieving tenure. Regarding professional promotion, some faculty are able to stop the tenure clock or rather add time to the tenure schedule to accommodate a new birth.

While this adjustment is well-meaning, some women faculty have expressed reluctance at utilizing the policy because of fear of negative perceptions by colleagues and ultimately jeopardizing their tenure chances (Armenti, 2004). Additionally, stopping out and taking time off from work does little to advance one’s research agenda, which can further limit the ability of a woman faculty member to earn tenure.

The results of studies on the effects of parental status on research productivity are mixed. Fox and Favor (2011) found that parental status potentially enhanced research productivity for women faculty in social work fields while Kelly and Grant (2012) found that presence of small children in the household was disruptive to female faculty’s research productivity. Sax et al. (2002) found that familial status had little or no effect whatsoever on research productivity.

However, in each of these studies the authors acknowledge that the effects of parenthood on female faculty is intertwined with other important variables such as marital status, academic, discipline, professional rank and research orientation, thus making the phenomena quite complex.

Mason and Goulden (2004) found that women in tenure track faculty positions are less likely to marry or have children than men in the same types of positions. In addition, faculty mothers who were beyond the age of probable fertility were more likely to report they wished they had more children. To adjust to the expectations and perceptions of their departments and colleagues, faculty women are faced with having to strategize how and when to become mothers (Armenti, 2004; Mason & Goulden, 2004; Ward & Wolf-Wendel, 2004). This negotiating of the biological clock along with the tenure clock can be a difficult and tiresome endeavor. Women have shared various strategies, including having babies early in graduate school so that by the time they assume a professional position their children are likely to be in school. Another plan utilized by faculty women is to delay childbirth until after achieving the professional stability offered by having tenure. Finally, some try to hide their pregnancies by timing their childbirths to occur during less busy times of the academic calendar, such as summer or near finals. These women even changed their style of dress to simply project significant weight gain to disguise their pregnancies. The amount of effort behind considering and implementing such strategies can be exhausting.

Ward and Wolf-Wendel's longitudinal study (2012) set out to share a counter narrative to the largely negative assessments of the lives of mothers in the professoriate. In their research the authors examined the ways in which women were able to manage the interplay between motherhood and faculty life. The researchers hoped to present the stories of their participants as

role models and hopeful examples for other women who were considering the professoriate but were perhaps intimidated by the prospect. The authors found that the women who were able to manage the two domains employed a diverse set of strategies and were aided by varying resources influenced by socio-economic status and family history. Disciplinary and institutional differences mediated the types of struggles faculty mothers faced, however, the academic work environment overall lacked in providing adequate support. Finally, the dynamic between academic work and motherhood changed as the women's careers and children matured. Seated in a life-course perspective faculty motherhood was seen as an on-going set of choices and negotiations to create a satisfying life.

A review of the lives of mothers who are professional academics offers a glimpse of what mothers in graduate school may face. In fact, faculty motherhood is part of the socializing environment for doctoral students. Observing faculty motherhood or the lack of such examples influences understandings that doctoral students have regarding faculty life. In addition, experiencing similar issues of scarce resources such as time and energy, receipt of financial and promotional rewards, and the need to strategize carefully about family and career planning may significantly impact the socialization of doctoral student mothers.

The literature presented in this chapter sets the socialization experiences of mothers in doctoral program within the territory of Ph.D. production and development and maintenance of the professoriate. The scholarship that I reviewed represents both positivist and constructivist views in that they either focus on what doctoral students receive or do. Lacking is a view on what happens to doctoral students and what they do (or can do) in response, and the corresponding consequences of their action on socialization processes. Much of it is critical of current models of doctoral education. However, few studies address doctoral education as a site

of oppression and domination, or one that serves to create and continually fortify a system producing inequities among doctoral students and sustaining the very models and outcomes that are criticized.

CHAPTER 3: CONCEPTUAL FRAMEWORK

This chapter explores the conceptual basis for my study, including the ways in which key theoretical concepts such as socialization informed my thinking about the project. Accordingly, I organize the chapter into three sections: socialization and the contribution of Bourdieu, feminist standpoint and maternal thinking, and mothering from the margins.

Socialization and the Contribution of Bourdieu

In the previous chapter, I outlined the ways in which scholars have used socialization as a conceptual framework from which to explore doctoral education. As a cultural process, socialization involves exchanges of thought and action between actors and organizations (Tierney & Rhoads, 1993). With this in mind, Gopaul (2011) argues that the prevalent doctoral socialization perspective leans toward creating a homogenized experience and that may be exclusionary for students who come to Ph.D. programs with dispositions that are dissimilar to the organizational values of doctoral programs. He further states that doctoral programs have structures that actually create inequities further stratifying students and suggests scholarly exploration of doctoral socialization processes using the tools of sociologist, Pierre Bourdieu. In consideration of how individuals may influence and be influenced by doctoral education, Bourdieu presents a cultural framework by which the practices utilized in doctoral education can be analyzed. In focusing on practice, that is, individual and collective behavior, analysis of Ph.D. programs can include structures (requirements, rewards, events) within a program as well as the actions of agents (students, faculty, etc.) associated with the program.

McDonough, Ventresca and Outcalt (2000) explain that the basis of Bourdieu's work is that human activity is characterized by constant struggle for position in specific arenas of

conflict. A key component of Bourdieu's thinking is the bridging of objectivism, which focuses only on structured content and ignores actors' own power and subjectivism. This, in turn, privileges the experiences of actors, without concern for social structures and their effects on an actor's behavior (Prasad, 2005). For Bourdieu, social structures influence and shape individual actors who, in turn, through their own actions influence, shape social structures. Social relations are not simply constructivist or structuralist, but both. This dialectic of interaction between structure and agency, while allowing for improvisation and change, continually produces and reproduces systems of domination that support societal stratification and inequality (McDonough & Nunez, 2007).

Central to Bourdieu's (1977) theory of practice is *habitus,* defined as "a system of durable, transposable dispositions." (p. 72). This system includes schemes of perception and thought that are learned through early socialization experiences with family and the material conditions in which a family resides. Bourdieu explains the substantial and long-term effect of early childhood experiences: "the structures of habitus which become in turn the basis of perception and appreciation of all subsequent experience" (p. 72). All experiences that a person has in life will be filtered by the habitus created in early youth.

Habitus is specific to people within a group that share a common situation and/or environment, defining what a group believes is desirable and acceptable; conversely, it also defines what is inappropriate or objectionable. Importantly, when related to educational attainment, habitus informs aspirations. What a student believes to be probable and proper education experiences and outcomes are guided by the schemes of perception and thought that she holds. Additionally, these dispositions, as well as the social structures in place to support it, are produced and reproduced through practice, or rather, behaviors enacted by individuals.

Individuals will engage in behaviors that are sanctioned and rewarded based on their upbringing and interaction with the environment. In this way, structures and power relations are seen as normal, the way things are. This correspondence between mental structures (habitus) and social structures is what Bourdieu calls *doxa* (Bourdieu, 1977; Mahar et al., 1990).

Fundamental to Bourdieu's framework is the concept of capital, which he describes as accumulated labor that determines the chances for the success of practices (Bourdieu, 1986). In Bourdieu's scheme, resources are considered capital only when they are deemed to have legitimate value. Capital exists in various states. including material goods, institutional structures and symbolic power, and can be transformed in to other forms of capital for the purposes of preserving or gaining more capital. While many are familiar with economic capital (financial wealth, property rights, etc.) – that which immediately and directly converts in to money – Bourdieu focuses on cultural, social and symbolic capital as forms of capital that he claims remain hidden, and therefore, easily perpetuated in class structures.

It is important to note that Bourdieu does not define class as a particular category of people, but rather as relationships. Wilkes (1990) further elaborates on this notion of class as social practice - "an activity in which categorization, structures, dispositions and social choice combine" (p. 129). Cultural capital is knowledge, competence, cultural objects (writings, paintings, instrument, etc.) or educational qualifications/certification. These are the things that people know or know how to do and items that are appreciated not for their material value (but can have a material value), but rather their cultural value or meaning. Academic credentials such as the Ph.D. are considered to be an institutionalized form of cultural capital (Bourdieu, 1986) where the "certification of cultural competence" (p. 247) is recognized more so than the individual's actual competence.

Bourdieu (1986) describes social capital as "the aggregate of the actual or potential resources which are linked to a possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectivity-owned capital, a 'credential' which entitles them to credit, in the various senses of the word" (p. 248-249). This calls to mind the popular saying, "it's not what you know, but who you know," which highlights the value and utilization of the relationships (social capital) that one enjoys. While this adage ignores the value of knowledge (cultural capital), it acknowledges that social networks and relationships have symbolic and material benefits. For example, a family name or status may confer social capital or one may obtain social capital by joining a particular group or club. In either case, the members of a group are required to maintain the structures and practices of the group or risk expulsion. While both cultural and social capital hold value, and may be converted to other types of capital, the accumulation of both generally require major investments of time and effort by the individual who possesses them. The amount of time and effort available to an individual can shape the type and amount of capital accrued.

Finally, symbolic capital resides in intangible resources or attributes such as prestige, status, authority. Symbolic capital is also a set of cultural capitals in relation to one another (McDonough & Nunez, 2007). The ultimate symbolic capital is the power and authority to determine what is recognized as legitimate and to represent legitimacy. It is this power that determines what other capital is seen as valuable or necessary. It also works to hides the social realities of domination and inequality by defining them as normal or a reasonable attribute of social relations (Prasad, 2005). This symbolic power of determination and representation is

generally a characteristic of the habitus of the dominant group which helps to define and reify the group's position of dominance (Mahar et al., 1990).

The struggle for capital occurs in a given social field. Not necessarily a physical location, a field is a structured social space in which agents struggle for positions. "Fields are structured by their own histories, internal logics, patterns of recruitment and reward, as well as external demands," (McDonough et al., 2000). In addition, fields are structured by forces such as institutional structures and changes in other fields (Mahar et al., 1990). Education, art, and science are examples of fields.

Bourdieu explained field as a game. Fields can be distinguished by the objective relations (discourses, objects, power relations), the agents and institutions that exist with in the field, and the logic or rules of the game in the field. Capital is only deemed legitimate if it is valued in a particular field. Fields can be relatively autonomous, meaning the rules and the players and the capital over which the players struggle do not necessarily connect with other fields. In this way, individuals may flourish in one field and flounder in another. While generally distinct, fields usually exist in a field of fields indicating some relationship between some fields.

Practice represents another key element of Bourdieu's way of thinking. Practices are individual and collective behaviors or ways of doing or being and are the result of the material conditions and struggle within a particular environment (Bourdieu, 1984). Practices are driven by interests which are outlined in habitus. Practices are determined by habitus and regularly reinforce the structures from which habitus generates (Bourdieu, 1977). In this way habitus and practice reinforce each other and allow each other to be understood as normal and objective for those that share historical and social space. Bourdieu developed a formula to illustrate the

dynamic of the various components of his framework: [(habitus) (capital)] + field = practice (Bourdieu, 1984, p. 101).

This formula is helpful in understanding the generation of practices but it does not show how practices also impact habitus and field (structures) over time. Practice can reproduce and alter habitus and fields over time; in fact, Bourdieu argues that, from generation to generation, habitus changes (in most societies), and therefore, changes occur in subsequent structures and practices (Bourdieu, 1977). This dialectic nature of the theory is a primary contribution of Bourdieu's work.

Another way of understanding the contest in a field is to liken it to a game. Bourdieu and others used this analogy to explain that, in any given field, rules exist for a particular game and the players possess differing understandings of the rules and competencies (habitus and capital) to play the game (Mahar et al., 1990). In addition to rules, players have the ability to improvise and act in ways that are not strictly dictated by rules but rather their own interests in occupying a specific position in the field. By utilizing strategy, players will maneuver in ways that are likely to yield results that complement their interests. They will use a practical logic shaped by habitus in deciding a course of action in response to the practices of others (Bourdieu, 1977).

Doctoral education can be seen as a field in which cultural and social capital are transmitted and reinforced (Gopaul, 2011). Students, faculty and staff engage in activities within a set of structures in order to gain or create varying types of capital (knowledge, skills, prestige, social connections, funding, etc.). The resources acquired and honed in graduate school are specialized and not available to the general public. As an educational qualification, the Ph.D. is rare and can be highly valued. While initial employment opportunities may not be economically lucrative, high prestige and authority are given to those who hold the degree. For some

occupations or jobs, a Ph.D. is required. In addition, the relationships one develops through doctoral programs with peers and faculty serve as mechanisms for future economic and social gain. Through socialization process as outlined in Bourdieu doctoral education creates and reifies an elite group.

The success of the practices enacted by a doctoral student, informed by her habitus, can determine the types of capital-building experiences she may obtain. Research apprenticeships, opportunities to present at conferences or publish papers, cultivation of relationships with peers and faculty members are all activities that possess capital and require a certain level of competence and time investment by the graduate student. Those who come to a Ph.D. program already possessing dispositions and capital in harmony with these activities have an advantage. Those students who do not may not gain access to these opportunities. The exclusion of these students can result in and reaffirm inequities. “The force of cultural capital can be seen in who gets in to doctoral programs, who gets what within doctoral education, and who gets known by the end of the doctoral process” (Gopaul, 2011, p. 15). By considering the habitus of students in light of that of doctoral programs as well as the opportunities to acquire capital through various academic experiences, it is possible to uncover the structural imbalances that exist in doctoral education.

However, Bourdieu’s work focuses mostly on social class and largely ignores social stratification based on gender. As a primary distinction in most societies, gender plays an enormous role in societal domination through the division of labor and in the accumulation of all three types of capital (social, cultural and economic). Many have assessed graduate education through the lens of gender bringing forth new understanding related to the impact of having children on women’s academic careers and vice versa (Armenti, 2004; Mason & Goulden, 2002;

Wolfinger, Mason & Goulden, 2008). A new view of the academy from the perspective of mothers may offer additional insight into structures, power and domination in higher education. This study offers a distinct feminist standpoint, that of maternal thinking. In considering gender and socialization experiences of doctoral student mothers, I turn to feminist scholarship to provide a suitable framework.

Feminist Standpoint and Maternal Thinking

A feminist standpoint, according to Hartstock (1983), is epistemological device or a mechanism through which to consider the nature of knowledge and the grounds by which it is evaluated. She argues that a "standpoint carries the contention that there are some perspectives on society from which, however well-intentioned one may be, the real relations of humans with each other and with the natural world are not visible" (p. 117). The benefit of a standpoint is that it unearths the hidden logic in ways that are born out of every day activity and struggle. A feminist standpoint emerges from the lives and activities of women and offers a liberating potential for envisioning society free of domination. The fundamental basis for the feminist standpoint is the institutionalized sexual division of labor in most societies where women, not men, are responsible for caregiving labor. The foundation of this labor is child-bearing and child-rearing. Hartstock considers both the biological and social realities of the lives of women in that it is only females that give birth and lactate, and it is primarily females who care for children, especially the very young. The unique view that these activities provides, Hartstock proposes, leads to a way of knowing and a way of being that is unique and in direct contrast to and in conflict with the dominant capitalist, male paradigm in Western society and its institutions.

Maternal thinking as presented by Sara Ruddick (1980) is one feminist standpoint that offers an underused perspective from which to view higher education and the doctoral socialization process. Additionally, much of Ruddick's language and concepts parallel, and extend that of Bourdieu's framework, making it a reasonable perspective for the exploration of mothers going through doctoral socialization processes.

Ruddick describes a specific habitus, maternal thinking, that is developed by maternal agents grounded in care-taking labor and a set of interests that are generated from culture, time, geography and class. This labor, or maternal practice, "responds to the historical reality of a biological child in a particular social world" (p. 348). Ruddick explains maternal thinking as a conceptual scheme by which maternal agents, "order and express the facts and values of their practice" (p. 348). This relates to Bourdieu's claim that all habitus is historically referenced and rooted in specific material conditions. Bourdieu writes habitus is "a disposition inculcated in the earliest years of life and constantly reinforced by calls to order from the group, that is to say, from the aggregate of the individuals endowed with the same dispositions, to whom each is linked by his dispositions and interests" (p. 15). Maternal practices are vital in the early years of life and are guided by the dispositions and interests of the immediate social reality.

Three primary interests guide Ruddick's maternal thinking: preservation, growth and acceptability. Preservation is the most basic and necessary interest, relating to the survival and protection of the life of the child that cannot care for itself when very young. Growth refers to the physical, emotional and intellectual development of a child. This interest relates directly to the transmission of cultural capital to a child, including physical ways of being and acting, sets of values and beliefs, and knowledge that are determined to be important within the child's habitus. Finally, acceptability signifies the shaping of the child to yield a socially acceptable adult

according to the requirements of the community. These interests can be in conflict with other social values and with each other and with divergent communities. Regularly, mothers must assess, adjust and act in response to the changing field in which they inhabit.

According to Ruddick "maternal" is a social category, not a biological category. In fact, being a parent is not a requirement for the acquisition of maternal thinking. Maternal thinking can be held and conveyed by both men and women, and that, not all women accept or embody the schema. However, Ruddick is transparent in asserting that maternal thought is different for women than it is for men, in that through early socialization experiences, girls learn to understand maternal practices as potentials for themselves – their possible futures. Men's acquisition of maternal thinking is not within the context of giving birth or being mothers in a particular society. However, Ruddick asserts her focus on those things that mothers "do," their practice, and not on who is a mother or what mothers are. This focus on practice opens the possibilities to take in and consider varying actors who mother and varying ways that they mother. I believe this openness is critical in considering the many possibilities for mothers who are enrolled in Ph.D. programs.

There are a number of ways in which Ruddick compares maternal thinking to scientific thinking, highly valued in many doctoral programs. There are three areas of difference: 1) Types of activities that result in valid knowledge (unity of intellectual and emotional knowing versus the rejection of feelings), 2) Levels of and value for control of circumstances (predictability vs. unpredictability), 3) Value for and acceptance of changing outcomes (reliability and repetition of results vs. an acceptance of and learning from constant change).

In the difference relating to sources of knowledge, Ruddick argues that, in scientific thinking, emotional feeling is not valued as a basis for knowing, whereas in mothering, feelings

are often the source of understanding a child's needs. This assertion is bolstered by the work of Belenky, Clinchy, Goldberger and Tarule (1986) that presented intuition and feeling as valid ways of female knowing. Regarding predictability, in scientific thinking, the desire to control experimental circumstances, as well as the desire to predict outcomes of an experiment, conflict directly with the experiences of mothers whose children do not always respond in expected ways at predictable times. Finally, concerning orientations toward change, scientific thought often places value on results that can be replicated. Reliability is a factor of judging good data, whereas growth and change are basic goals of childrearing. Mothers are focused on helping their children to develop into productive adults as a necessary change. In addition, mothers must themselves change alongside their children if they are to continue to guide them toward adulthood. If these value differences are interpreted as differences in the between the norms of graduate school and the interests of mothering, it is already evident that an individual occupying both fields may face great complication in realizing success in either field.

Maternal thinking and doctoral education as fields with habiti offer an interesting condition in which mothers in Ph.D. programs must maneuver. I believe doctoral socialization shares two interests with maternal thinking: that of growth, especially intellectual growth, and that of acceptability. However, the practices by which these interests are realized and for whom are not similar. What makes maternal thought a feminist approach is the awareness of a set of dominant structures, beliefs and practices that are exclusionary, if not destructive, and an insistence on a corrective set of dispositions and practices, in this case, for doctoral education. In addition, feminist maternal thinking demands attention and appreciation for all, whereas doctoral socialization often sets up competition among students for scant resources.

The framework presented in this section forwards the perspective and practices of the mother, a standpoint that has been silenced and largely ignored in the discourse of higher education. As the primary purveyors of cultural and social capital for their children, mothers may experience conflicts between their own interests as they try to accumulate capital in graduate school, and the interests of maternal thinking. The accumulation and transmission of capital, especially cultural and social, requires a significant investment of time and effort. Doctoral moms faced with limited time (hours in the day, biological clocks of their children, and the time to degree clock mandated by many doctoral programs) must make compromises on the quality and volume of capital to transmit to their children and to accumulate for themselves.

In addition, the interests and structures that govern the distinctive fields of graduate school and mothering are often at odds. For example, some graduate schools do not provide health insurance for dependents, whereas as this may be a significant concern for a mother. At other times, graduate school and mothering may be in sync, especially related to the relative flexibility graduate students have in terms of how they spend their time. This can be beneficial to a mother whose scholarly productivity may occur only when her children are sleeping. The places where doctoral programs contradict maternal thinking may lead to a number of negative outcomes for mothering students, including the loss of important experiences in their doctoral programs. Even in areas where the two align and mothers are finding ways to make it work, there may be opportunities that can be better structured into socialization practices in order to reduce inequities and attend to all graduate students, regardless of habitus or mothering status.

Mothering from the Margins

Ruddick's framework is presented as broad but it has been criticized for being essentialist in that it comes from the perspective of white, middle-class mothers and does not reflect differing experiences. It does not take into account the intersecting oppressions of race, ableism and class. Mothers in marginalized social groups are still impacted by patriarchy but not by itself, and often, not as the primary form of domination they experience. It is important to explore the perspectives of women of color, varying ability levels and class backgrounds when researching mother's experiences.

Patricia Hill Collins's seminal work on the Black Feminist Standpoint provides a strong foundation for understanding the diversity of maternal frameworks. When taken as a response to Hartstock's work on feminist standpoint, Hill Collins's (1986) work explicates the perspective and value of black women in the academy as "outsiders within." As individuals whose experiences and voices have been left out of much analytical thought, Hill Collins argues that black women are able to view with a critical eye that which is deemed normal by dominant groups, thereby seeing where there are gaps in the thinking, flawed assumptions, and data points that are, in fact, very specific, rather than universal. In this way, black feminist standpoint rejects the concepts of objectivity, universalism or truth in much of the Western canon of thought. Where multiple oppressions are not addressed and where intersecting identities are not explored large groups of people and their experiences are not included in an analysis.

Therefore, many feminists of color have argued for the "centering" of their experiences in scholarly work. In practice, this means to place race and class at the very heart of the theoretical constructs used. Hill Collins states, "For women of color, the subjective experience of mothering/motherhood is inextricably linked to the sociocultural concern of racial ethnic

communities – one does not exist without the other" (1994, p. 47). This connection between intersecting identities, experience and concern relates to habitus. Habitus is formed and reinforced through racialized and gendered interactions between individuals and social structures which themselves are both raced and gendered. Mothers do not mother in a world that is absent of race and gender. Their material conditions are structured by race and gender, as are their interests.

Hill Collins uses her term "motherwork" (1994, p. 47) to characterize the labor of women of color. She argues that this term rejects the dominant view of mothering that creates a separation between home and work, public and private, the individual and the group. She asserts that, for mothers of color, the work of mothering is for the community and blurs the boundaries between spheres of social interaction, making the public private and vice versa. In addition, the specific interests of mothers of color vary from those of mothers situated in the dominant class. Where Ruddick's maternal thinking focuses on preservation, growth and acceptability, Hill Collins identifies survival, power and identity as major themes for mothers of color in the U.S.

In terms of survival, mothers of color are concerned with physical life and death beyond basic early childhood safety issues. The lack of concern for children of color in social structures is something mothers of color have to manage, address, and resist. Poverty, violence, environmental toxins, etc. threaten children of color at higher rates than they do white children (Gochfeld, M. & Burger, J., 2011; U.S. Bureau of the Census, 2010; Zimmerman & Messner, 2013). Mothers of color are doing motherwork in a context that does not support their families' or communities' well-being. The survival of the community is integral to the survival of women of color and their children, so the work is not just by the family at home, but with and by the larger community. White mothers must be concerned about their children's physical safety, too,

but not from the perspective of structural arrangements. The arrangements in the dominant society in the U.S. support white children overall whereas they do not support children of color.

Chicana feminist epistemology provides additional depth in considering the interests and situations of mothers of color. Delgado Bernal explains that this standpoint specifically centers the experiences of Chicanas and explores four specific themes: "the historical devaluation of Spanish, the contradictions of Catholicism, patriarchal ideology that devalues women, and the scapegoating of immigrants" (Delgado Bernal, 1998, p. 562). This perspective provides insight into how habitus and structural arrangements vary within communities of color. Some of these themes diverge from the other two standpoints presented thus far in their focus on colonial experiences related to language, religion and immigration that are specific to the experience of Hispanic/Latino communities. However, Chicana feminist epistemology also speaks to the broader concerns related to power and identity.

In a turn toward another social construct, ability, mothers with disabilities or those mothering children with disabilities also face distinctions of survival, power and choice. Historically, the norming of reproduction has excluded women with disabilities or those who were thought to produce disabled or undesirable children (Davis, 2006). In similar ways, mothers of color have been identified as deviant from the norm. The choice to be a mother has not always been permitted to marginalized women; whether in regards to unplanned pregnancies, via birth control politics, or sterilization programs, many women on the margins have been kept from having children (Lloyd, 2001; Stern, 2005). Historically, women from marginalized groups have also had their children taken from them because these mothers have been deemed unfit by the dominant structure. Examples of this are Native American children going to boarding school to

become “civilized,” social agencies who take children from women with disabilities, or welfare systems targeting of mothers of color (Bates, 2016; Kasinsky, 1994; Roberts, 1998).

In addition, schooling structures often work against mothers in ways that signal that what mothers teach is not acceptable, examples of which include bans on bilingual education in public schools, elimination of ethnic studies courses and struggles to receive services for disabled children. Mothers in the margins must socialize their children to a world that is often hostile to them and devalues them. They must teach their children how to survive and resist in their worlds while at the same time teaching them about their own goodness and self-worth, despite the social context in which they are living (Hill Collins, 1986; Knight et al., 2006; Villenas, 2006).

Mothering across the many boundaries of race, ethnicity, ability, socio-economic status, etc., is complex. The interests and strategies of those doing motherwork vary across material conditions, social status and structural barriers. This complexity enriches the view of motherhood in our current time and the experiences that diverse mothers in doctoral programs have.

CHAPTER 4: METHODOLOGY AND METHODS

In this chapter I outline the methodological perspective from which I approached the data collection and analysis in this study. I explain the methodology as well as the connections to the theoretical framework I have chosen. I then describe the site of the study as well as the study participants and how they were recruited and chose for the study. Finally, I share the process I used for the analysis of the data I collected as well as the approaches employed to ensure trustworthiness of the data. For convenience, I restate here my research questions:

1. How do mothers in Ph.D. programs experience socialization to their academic disciplines? Who are the actors that convey the socialization experiences for graduate student mothers?
2. What strategies do mothers in Ph.D. programs employ in their daily lives in order to be successful in their academic career? For what resources/rewards do these mothers struggle?
3. In what ways do practices and structures in Ph.D. programs complement or stand in opposition to the mothering practices of doctoral moms?
4. How have doctoral socialization experiences influenced graduate student mothers' career aspirations?

Qualitative Methodology

Based on guidelines put forth by researchers, qualitative methods were used to collect data in this study. Maxwell (2005) outlined five intellectual goals of qualitative research, three of which justify the methods used in this study: 1) "understanding the meaning" of the phenomena

under study, 2) “understanding the particular context” of the phenomena, and 3) “understanding the process” involved with the phenomena (p. 22-23). Through this study I sought to understand the socialization process of student mothers in particular context, that of Ph.D. programs. Ultimately, I hoped to get a sense of the field(s) in which these doctoral student mothers struggle, the practices they employed, and the power dynamics in play.

Bourdieu rejects separation between theory and methodology, “Indeed, the most ‘empirical’ technical choices cannot be disentangled form the most ‘theoretical’ choices in the construction of the object” (Bourdieu & Wacquant, 1992, p. 225). Bourdieu and feminist standpoint theory both urge researchers to be reflexive, that is, to take a critical view of one’s perspective and history and to subject the position of the researcher to the same analysis to which the researcher subjects the data (Barnard, 1990). My role of a researcher is particularly relevant in this study because I am a mother in a Ph.D. program. Therefore, I am a player in and a product of the same environment that the participants in this study also inhabit. Scholars are urged to engage in “critical self-analysis in order to become aware of the historically-conditioned nature of both his or her specific standpoint and the means of acquiring knowledge” (Duncan, 1990, p 181).

Further, Ruddick (1980) explains that a feminist consciousness must be wary, uncertain in reflection and, at times, confused, as it reveals the hidden dynamics in society. She warns the work will be morally ambiguous as existing practices and values are questioned and examined. I faced this confusion and ambiguity with each interview as I wanted to reach out and assure each woman in this study that she was not alone. I wanted to share information and advice. I wanted to connect them with each other. They could have been my friends. It was critical that I paid attention to these feelings and thoughtfully considered each time whether my desires were in the

best interest of the participant. It was essential that I consistently turned inward to question my own motives and agenda in addition to turning outward to check my understandings and interpretation of the data. Later in this section, I explicate the manner in which I strove to ensure reflexivity and trustworthiness in the data.

In conducting this study, it was my intention to utilize feminized maternal thinking and practices in the design and implementation of the study. In particular, I aimed to enact the values of loving attention, humility and good humor as explained by Ruddick (1980). Attention is "an *intellectual* capacity connected even by the definition of love, a special kind of 'knowledge of the individual'," (p. 358). Further, loving attention is the ability to see what is real outside of oneself despite conditions that might be painful, oppressive, tiring or anxiety producing. It is described as intense, pure, disinterested, gratuitous, and generous. Here, disinterested does not mean not to have an interest, but rather to have a detachment that does not appropriate or use another person. It is self-restraining and empathetic. "The identification of the capacity of attention and the virtue of love is at once the foundation and the corrective of maternal thought," (Ruddick, 1980, p. 357). It is with this perspective that I tried to interact with the mothers in this study who gave of themselves to participate in this project.

It was clear in the interviews that most of the participants in the study had not spent time discussing with others their experiences as a mother enrolled in a Ph.D. program. For some, I was the only person who had ever expressed an interest in those parts of their life at the same time. In this unique situation, I tried to maintain the empathetic self-restraint that Ruddick urges. During the interviews there were times that I offered encouraging words as participants expressed self-doubt. I acknowledged shared experiences and I laughed along-side my peers as we talked about dirty diapers, messy houses and other mom experiences. These moments of

loving attention and connection deepened the conversations and allowed me to better understand these women's perspectives. After the interviews, I offered information about policy or services if I felt the student had expressed an issue that could be addressed by these resources. Some participants asked me questions about my own experiences and the motivations for the study and I answered them. These gifts of information and self-disclosure were a way to repay them for their time and willingness to be vulnerable with their stories and share of their precious time.

Additionally, I hoped to operate with the virtues of humility and good humor throughout my scholarly journey. Ruddick defines humility as "a profound sense of the limits of one's actions and of the unpredictability of the consequences of one's work," (p. 351). This concept addresses the philosophical question that Bourdieu poses about individual agency in the social world. Individual action is limited by the reality of the objective social structures and material conditions of human life and it was important to maintain this realization throughout this project. My approach followed guidance from Lincoln and Guba (1986), who describe the nature of the relationship between participant and researcher in naturalistic inquiry as embodying respectful negotiation, joint control and reciprocal learning. I started each interview with a statement that while I had a set of interview questions that I was interested in their story and that whatever they wanted to talk about was where we would focus our time. I believe this openness allowed for the very rich data that emerged in these interviews. I asked guiding questions and returned to statements that hinted at interesting data points, but the direction of each interview was unique and jointly crafted by the participants' interests and those of my study.

Finally, resilient good humor is the virtue of maintain clear-sighted cheerfulness and hope, in the face of disappointment, endangerment or subordination. It is the opposite of denial or false optimism. During the interviews I laughed alongside participants as they discussed the

absurdities of some situations they faced, the cleverness that some exhibited in the face of difficulties, and the silliness of some of the family dynamics that they experienced. Some of the interviews started late; some ran long; some abruptly ended because one of us had forgotten another commitment, but each interview ended with them wishing me luck on my study and me wishing them well on their own journey. Many interviews ended with a hug. Together we maintained good humor in the interview. For myself, I reached out to friends and colleagues to process set-backs to my timeline and missed funding opportunities so as to not get mired in the disappointment, but also to refrain from ignoring the challenges of completing my study. As to be expected, completing this dissertation was a difficult and evolving voyage (Baker et al., 2013; Gardner, 2008).

Research Design and Methods

In this section I outline the basic research design and methods that guided the implementation of this study. The discussion begins with a description of the site of study and recruitment of the participants with data on the sample. I then explain how interview participants were chosen and share some descriptive data on the interviewees to acquaint the reader with the women whose stories are shared in the ensuing chapter.

Site of Study and Participant Recruitment

This qualitative study was conducted at a large, public, research intensive institution offering over 75 Ph.D. degrees and enrolling over 4500 students at the doctoral level. In recent years, this institution awarded over 500 Ph.D. degrees annually. As a contextual backdrop for this study, the institution is an appropriate site due to its prolific doctorate production and a relatively large doctoral enrollment. This institution is accomplished in doctoral training and

socialization and provided strong potential for finding adequate numbers of student mothers for this study. The doctoral students and faculty at this institution come from all across the globe, offering a diverse set of students. The local community is highly populated and somewhat fragmented. Cost of living is high and traffic problems pose logistical challenges for people who commute to the campus. The campus itself occupies a fairly large land mass and people who work and study there often remain in relatively isolated communities bounded by organizational structures such as departments, schools or divisions. They do not regularly intermix with others beyond these organizational borders. For being so large, it can be very isolating. These contextual descriptors serve as the back drop for the experiences of the students highlighted in this study.

Recruitment began with a solicitation that was sent out to all Ph.D. students at the university. The solicitation requested participation in a survey about mothers in doctoral programs. I did not provide a definition of the term “mother” in order to encourage students to self-identify. I did this with the hope of attracting a variety of students. The survey was available online for approximately six weeks. In that period 57 students completed the survey. There were a few additional people that opened and started the survey, but did not complete enough questions to be useful for data gathering. The primary use of the survey was to qualify candidates for the interviews. Since there was not organized data collection by the university about Ph.D. students who had children, the survey data speaks only to the pool of students who completed the survey and not the larger graduate student body.

Since I allowed students to self-identify, I did not have inclusion criteria around mothering status. This allowed the opportunity to include a multitude of life circumstances, including adoptive mothers, lesbian mothers, transgendered care-givers, and mothers whose

children are physically separated from them for economic or social reasons. Exposing and exploring the variety of ways that motherhood is expressed provides a rich understanding of contemporary mothers in graduate school. In a feminist analysis, however, it was key to remember that the feminist standpoint is one that is revealed through unique struggle against social structures that privilege male ways of being and knowing. This left open the possibility that men who care for children ultimately might not reveal data that is transformative for mothers who are women, therefore, I was unsure if I would include men who mother in this study. Ultimately, no self-identified men submitted the survey, and therefore, none were included in the pool.

All of the survey respondents identified as a woman or female. Three women indicated that they were not at that time involved with their child's other parent. One respondent indicated that she was in a same-sex relationship with her child's mother, while the rest of the respondents indicated they were involved in heterosexual relationships. Two respondents did not report any information on partners or other parents.

The average number of children reported by the survey respondents was 1.3 with ages ranging from 2.5 months to 10 years. One respondent indicated that her children were adults in their thirties. The mothers in the group with children under five years of age estimated performing child care activities anywhere from 8 to 144 hours per week. Some simply responded that they spent "too much time" or "all of the time" caregiving thereby indicating the intensity of the work and also the difficulty in actually measuring the amount of time one spends mothering. In terms of racial or ethnic identity, half of the survey respondents indicated they were Caucasian while the other responses offered a variety of categories noted in the table below. The question

that elicited these responses was open ended and allowed for participants to answer in any way they wished.

Like responses	# of responses
Chicana, Mexican-American, or Latina	12
Asian American/Pacific Islander/East Asian	8
White/Caucasian	23
Afro-Caribbean/Black/African American	6
Biracial	3
Middle Eastern/Arab/Iranian	2
No response	3

*Note: responses were about racial or ethnic identity not nationality or visa status.

Table 1: Responses to the survey question, "What is your racial or ethnic identify?"

Interview Participants

For the interviews, I sought a sample of 16 self-identified mothers from a variety of Ph.D. programs at the institution. Golde (2005) and Gardner (2009) state that disciplinary differences are important to consider when studying doctoral socialization. I therefore had planned to use Biglan's (1973a, 1973b) taxonomy to attend to differences in disciplinary cultures (see Appendix F). Yet, as the study unfolded it became clear that traditional disciplinary boundaries did not fit well at this institution. Many Ph.D. programs in which the participants were enrolled were interdisciplinary and could not be situated easily into Biglan's taxonomy. Several of the departments represented in the survey blended topic areas, methodological styles and academic

structures. I had anticipated this possibility as the boundaries between the disciplines are often blurry (Becher & Trowler, 2001) making the categorization more of convenience.

In addition, as the interviews went on, it became clear that the locus of activity was the specific academic department, not a larger disciplinary structure. This is supported in the literature that has found that the academic department can act as a mediator of the discipline (Golde, 2005). As such, the disciplinary groupings of the departments in this study are loose and arranged for convenience. The focus of my arrangement tended to be more around subject matter and less so focused on the methodological conventions. The three general groups were: 1) Social Sciences, which includes but is not limited to subjects such as anthropology, communication, education, political science, psychology and sociology; 2) Humanities and Arts, which encompassed areas like art, classics, English, film, history, languages and philosophy; and 3) Science, Engineering and Medicine, which includes fields of biological sciences, chemistry, engineering (all fields), mathematics, medicine, nursing, physics and public health. This list includes examples of the types of departments included in each grouping and not necessarily the list of the actual departments represented in this study.

I used purposeful selection (Creswell, 2009) for inclusion of participants in the interviews. Purposeful selection or sampling is a strategic method designed to obtain specific types of information not available from other sources (Maxwell, 2005). The goal was to obtain a range of data that represents the variations in the specific population that is the focus of the study – in particular, the disciplinary socialization variations of mothers in Ph.D. programs. Miles and Huberman (1994) indicate that there are four aspects of participant selection that should be addressed: site, actors, events and process. In this study the physical site was the same for all participants (and this is controlled); however, the academic programs represented varied, as

previously mentioned. The actors involved were the mothers. The events considered were both academic and mothering activities and practices performed by the participants. Finally, the process that was focus of the study was doctoral student socialization.

In choosing the interview participants from the survey group, I considered the following demographic characteristics: age of children (five or younger), family structure (including parent relationships and number of children), participant race/ethnicity, year in academic program (new student, finished coursework, advanced to candidacy) and academic department based on the loose groupings described above. I attempted to find a cross section of students to maximize variety in the pool.

The focus on young children stemmed from two conditions: 1) children under the age of five require significant care and guidance and 2) in the United States universal, free, public education is not available, generally, before the age of five. Mothers with children under the age of five devote 80% more time in primary child care that those with teenage children (Allard & Janes, 2008). Primary care, as defined by Allard and Janes, is the physical care, playing, reading, or talking with children, and traveling to related childcare (p. 3). Therefore, mothers of young children are more likely to be involved in caregiving activities than mothers with children who spend 5-6 hours a day at school or are able to care for themselves (getting or preparing food, using the toilet, getting dressed, etc.). In addition, given the intense physical care that young children require, parents with pre-school age children tend to experience more role strain and disruption than do parents with older children (Greenhaus & Beutell, 1985; Munch et al., 1997; Pleck et al., 1980).

The 16 participants in the interview pool represented 13 different academic departments that I grouped into the three general disciplinary categories. Humanities and Arts included five of

the participants as did the Science, Engineering and Medicine grouping. The Social Sciences grouping included six participants. Each of the interview participants self-identified as a woman or female. At the time of the interviews the youngest participant was 26 years old and the oldest was 46 years old. The average age of the participants at the time of interview was 33.25 years of age. Two of the women identified as single mothers; the rest all indicated having a partner. One participant reported having a same-sex partner to whom she referred as "my wife." Two students were registered as international students. Participants self-identified on the survey in terms of race or ethnicity. Nine participants identified as women of color including Chicana, Mexican-American, Asian American, and Black. One indicated she was biracial Latina/White. Six participants identified as Caucasian or white, while one did not answer the question.

Most of the mothers had one child, but four had more than one child. Of those four with multiple offspring, one had three and the others had two. The average number of children across the participant pool was 1.3 children. The ages of the children ranged from 2.5 months to 6 years. The average age for all children listed by the participants was 2.3 years of age. Thirteen of the mothers reporting that their children attended some sort of daycare or preschool. The others either shared child care with their partner or their male partner provided primary caregiving at home.

Two of the partners (males) stayed home full-time. Two other male partners were enrolled in graduate study, one at the study institution and one at another university. Both worked part-time in graduate student positions. All others reported that their partner worked full-time. Some partners worked in academia and others in completely different industries. Finally, one of the international students reported that her spouse lived outside the U.S. as he was not able to garner a work permit. Therefore, while legally married, she operated on a daily basis as a

single mother, since her partner was not present to assist with the caregiving duties or household management.

In terms of academic progress or the stage of the doctoral program that the student was in at the time of the interview, seven of the participants were actively working on their dissertations, having defended their research prospectus or proposal. Four had completed major exams and were soon to submit their research prospectus for approval. Two of the students had completed their coursework and were in differing stages of preparing for exams. Finally, three of the respondents were enrolled in required coursework having started their doctoral work in the previous 2 years. In terms of time to degree, one of the students who had advanced to candidacy had started her doctoral program 10 years earlier. The others in the advanced group had been in the program for 5 to 9 years. Of this sub-group, the average time in the program was 7.4 years. Only four of the women in this study availed themselves of a leave of absence after giving birth to their child/ren. Therefore, two-thirds of the women in this study had a baby and maintained full-time, active student status during pregnancy and postpartum while caring for a newborn. In fact, there were several accounts of finishing papers or exams on a laptop in the delivery room or in a newborn nursery. Only four had reported having published in an academic journal. Ten had presented research at a professional conference. Most had held a teaching assistant position or research assistantship and 12 of the 16 students were on or had been on a fellowship at some point in their academic career.

Each of the women chose her own pseudonym, which I use in Chapter 5 as I present my findings. It is difficult to provide a detailed character sketch for each of these doctoral mothers. Based on the relatively small survey pool in contrast to the size of the Ph.D. student enrollment (57:4500+) and the stories told by the participants, mothers in doctoral programs at the

institution make up a small population of the students. Many of the women reported being the only mother in their department. Some were one of few women and others were the only women of color in their departments. By combining gender, race, department and mothering status, including number of children, many of the participants might be easily identified. Therefore, characteristics such as race, although self-identified by the participants, have been distilled to the most general of terms, leaving out rich, but identifying data. Departments are grouped in loose, generic categories which limits the disciplinary specificity, but preserves anonymity. It is important to protect the identity of the participants because of research ethics and due to the real consequences that some of the women feared such as reduction of funding, getting a bad reputation within their department or unspecified concerns related to not being supported by their departments.

The sketches below are time-specific. They were true at the time of the interviews, which spanned the first six months of 2015. Some of the information is likely to have changed as academic work progressed, children aged or if mothers had additional children in the meantime. I have used the most generic of characteristics, academic grouping, to organize the sketches below to maintain focus on the doctoral socialization emphasis in this study.

Social Sciences

Ayana was weeks away from finishing her Ph.D. program and was feeling the pressure when she sat down to meet with me. She said to me, “You are getting me at a bad time.” A woman of African descent in her early thirties, Ayana was struggling with mothering multiple children under the age of five, her relationship with her male partner who was fully employed outside of higher education, and her next career move which would be taking her family across the country.

In her late thirties, Gretchen, too, was going through a particularly tough time when we met. She was facing the possibility of dropping out of her Ph.D. program. A biracial (Latina/Caucasian) woman, Gretchen was collecting data for her dissertation. All the while, she was splitting the caregiving role with her male partner who was employed outside of higher education. Their child was three years old at the time.

Jasmine is of Asian descent and was in her early thirties when we met. She had completed her doctoral qualifying exams in her department and was working on her dissertation proposal. She had one child that was a little over a year old. Her male partner was a stay at home care-giver for their child but Jasmine was finding herself spending more time with them than with her academic work.

The only participant in this study that was in a same-sex relationship was Kerry. Her wife (Kerry's term) and she had one child who was 2.5 years old. Kerry was working on her dissertation and had come up against a few stumbling blocks with her project. Kerry is Caucasian and was in her mid-thirties when she and I sat down to talk.

When I met with Libby she was completing last-minute updates to her dissertation and was beginning a transition to a full-time academic postdoctoral position at another institution. A Caucasian woman in her mid-thirties, Libby had multiple children all under the age of six. Her male partner had quit his job and taken on the lion's share of caregiving for the children to support Libby's academic goals.

Xochitl, a Latina in her early thirties, and her male partner were both graduate students at the time. Their child was just about 18 months old and was enrolled in the university's childcare program. This resource greatly helped Xochitl in focusing on her coursework which she had just finished when we met up in the early summer.

Humanities and Arts

Evy is Latina and was in her mid-twenties with a 16-month-old child at the time of the interview. She was working on her dissertation and enjoyed the support of her male partner who was also a graduate student. They shared caregiving responsibilities.

Lola is a Caucasian woman and was an international student who had completed her doctoral qualifying exams. Her male partner was living in their home country due to visa issues, so Lola was operating as a single mother. In her early thirties, she relied on paid child care at a facility located approximately 30 minutes from campus and her home. Her child was one-year-old.

When we sat down for our interview, Suzanne was in her late thirties with multiple children under the age of five. She is Asian-American and was nearing the end of her doctoral studies, having advanced to candidacy. Her male partner worked full-time outside of higher education and travelled quite often. Suzanne performed the majority of the caregiving labor in her home.

In the first-year of the doctoral program, Sarah was enrolled in courses and utilized the university run childcare center for her 4-year-old. Her child's father was involved in caregiving infrequently and Sarah was no longer in a romantic relationship with him. Sarah is African American and was 30 years old when we met.

Sophia is Caucasian and had given birth to her child six months prior to when we met. She was still breastfeeding at the time. In her mid-twenties, she was enrolled in courses as a first-year doctoral student. Sophia's male partner was employed full-time outside of higher education. They used a daycare close to campus for their child care needs.

Science, Engineering and Medical Fields

A Latina in her mid-thirties, Aimee had multiple children under the age of six and was writing her dissertation when she came to the interview. Her male partner was working outside of higher education and the family lived rather far (35 miles) from the university campus. Aimee did not come to campus every day, which had an impact on her visibility in her Ph.D. program.

Ariel was a first-year doctoral student enrolled in coursework. In her early thirties, she had returned to school after working full-time. Her male partner worked full-time in higher education. Their 6-month-old child went to a daycare close to their home in a neighboring city about 30 miles away. Ariel did not provide racial or ethnic data on the survey.

Bunny was an international student and identified with her ethnicity, not a racial category. Using U.S. census rules, Bunny would be classified as Caucasian (Pew, 2014). In her mid-twenties she had her first child, just about four months old at the time of the interview. Bunny's male partner was employed by the university in a technical position. His mother had come from out of town to stay with them and provide caregiving support.

Emily (Caucasian) had been working full-time and enrolled full-time in her Ph.D. program before she had her child, who was under a year old. After her child was born, Emily, who was in her mid-forties, did not return to her job. When we met she was focused on completing her dissertation and was struggling with her new-found independence. Without a job or a research group, Emily felt "untethered" as she floated from place to place looking for a place to work, to breast feed or to connect with others. Emily's male partner was employed at the university in an academic position.

Iris, Caucasian, was putting the finishing touches on her dissertation when we met. In her mid-thirties, she was looking forward to spending more time with her 3-year-old and her male

partner who worked out of their home, which was approximately five miles from the campus. They utilized a daycare near their home for their child care needs. Iris worked in her advisor's lab and spent a great deal of time focused on that role.

Data Collection Procedures

After the online survey, I conducted one semi-structured interview with each of the 16 mothers. I chose to interview the participants in order to build quick and genuine rapport with them in an attempt to collect somewhat personal data in a relatively quick time frame. The interviews ranged from 42 minutes to1 hour and 20 minutes, therefore, it was necessary that mutual trust be established quickly so that we could concentrate our brief time on their individual narratives. I chose semi-structured interview based on the exploratory nature of my data gathering. While I had notions of what these women's stories might be like, based on the existing literature and my own experiences, I wanted to provide space for completely new data to arise and for diverse perspectives to come forward in the interview. I did not presume similarity in these women's experiences and wanted to allow for the participants to direct their comments toward themes that they felt were important.

At the same time, having some structure to the interview questions helped me stay focused on my research questions and the purpose of this study. In addition, at times when the interview came to a lull, I could refer to the questions in order to explore a new topic area. The interview questions were organized around particular aspects of my conceptual framework. There were questions dedicated to mothering perspectives, career goals, doctoral socialization concepts, and Bourdieuian elements such as practice, capital, and structural relationships in the field. The full interview protocol is provided as Appendix B. Each interview was digitally recorded and transcribed verbatim to make up the bulk of data for analysis.

Data Analysis

In the first step of the analysis of the interview data I employed basic open coding, which is defined by Strauss and Corbin (1990) as the naming and categorizing of phenomena through close examination of data. In the initial review of the data, which began as the interviews unfolded, I took an inductive approach, thereby focusing on the themes that emerged from the participants' narratives (Bogdan & Biklen, 2007). As the interview continued, I took note of themes that were common across many of the stories but also divergent experiences that stood out in contrast to the experiences of others.

Typically, in this first stage, I named categories with the terms used by one or more of the participants. This technique of "in vivo" coding (Strauss & Corbin, 1990) allowed me to remember codes easily as well as to quickly connect the codes back to the narratives of the women in the study. Typical codes I used in this phase were terms such as "breastfeeding" and "exhaustion." Once the interviews were completed and fully transcribed I returned to the full body of data to refine and reduce thematic categories for further analysis.

In the second level of analysis I approached the data deductively with coding structured around my research questions and concepts relating to my theoretical framing of the phenomenon, namely based on Bourdieu and Ruddick (and feminist standpoint theory more generally). Throughout my analysis of the data corpus, I looked for evidence of practice, concepts of habitus, notions of capital and the nature and dynamics of the mothers' graduate student experiences. This method approximates axial coding (Strauss & Corbin, 1990), whereby the coding categories are reconstituted systematically via a paradigmatic structure. Within this general coding scheme, I looked for evidence of maternal thinking based on Ruddick's notions, as well as the interests represented by mothers at the margins, including mothers of color and

mothers of children who did not fit normalcy standards, from an ability perspective, in schooling contexts.

Within this analytical framework, I hoped to gain understanding of the field(s) in which the mothers struggled and the logic by which they determine the choices they made and the actions they took. Data regarding behavior, participation in activities and choices made were coded as "practice." Information about beliefs, concepts of success, fears, concerns, values, aspirations, and so forth were coded as "habitus." Rewards, incentives and resources were coded as "capital." Data about important actors, dynamics, politics, interactions, policies, structures, were coded as "field characteristics." Further within these categories, I looked for evidence of maternal thinking and activity to determine the degree to which maternal thinking and graduate student socialization are congruent in the specific context studied. Here I considered the three primary interests of maternal thinking (habitus): preservation, growth, and acceptability. Additionally, I looked for evidence of themes relevant to mothers of color and those mothering children who deviated from societal ideas of normalcy. The interests of power, survival, choice, devaluation, religion, immigration and more came to the forefront in this critical layer of the data analysis.

Trustworthiness and Authenticity

As a doctoral student, I participate in and am a product of the social world that I studied. A researcher cannot step outside of the social world to be a neutral observer during the research process, therefore, I engaged in creating relationships that were mutually influential (Fries, 2009; Lincoln & Guba, 1986). My habitus and the field of play impacted the questions, methods, and motivations for this research. With such influence it was essential that I attended to my active

interests and counter-acted bias constantly with each research decision. In order to produce an authentic and useful research outcome Bourdieu urges the researcher to take on constant, critical self-awareness call reflexivity (Bourdieu &Wacquant, 1992). Fries describes this reflexive approach as "a self-referential approach to social research, which turns methods of constructing the research object back on themselves so as to produce more accurate understandings of the social world" (p. 329). Further, Bourdieu presents three potential sources of research bias to which a scholar should attend (Bourdieu, 2004). First, is the social location and habitus of the researcher in relation to her own biographic context. The dispositions generated through group characteristics such as gender, class, and race help form and influence the researcher's perceptions of the world and the research topic. Second, conventions of the academic discipline are influential in research decisions. Finally, it is important to be aware of scholastic bias, the tendency of researchers to project or assign meaning to behaviors of research participants based on theoretical assumptions versus the sensibility of the participants (Bourdieu, 2003). These three areas coincide closely with Lincoln and Guba's (1986) discussion of values in naturalistic inquiry. They include the values of the researcher (researcher habitus), choice of inquiry paradigm (disciplinary conventions), choice of substantive theory (disciplinary conventions), and contextual values (researcher habitus and disciplinary conventions). All of these sources of bias/value had to be paid attention to and addressed throughout the activity of scholarly investigation if an acceptable, useful and ethical process and result was to be created.

During this project I regularly reflected on my own experience, perceptions and motivations for this endeavor. I considered my personal history as a raised working-class woman from the American Midwest, a first generation college student enrolled in a Ph.D. program, a full-time worker unsure of her future career path, and my status as a mother of advanced age. In

addition, I considered the conventions of my academic discipline and the feminist theoretical perspectives I chose to utilize in this study. Finally, and most importantly, I paid attention to my own experience during this study and considered where my biases could impact the interpretation of data. In order to engage in a rigorous methodology that allowed for appropriate reflexivity and authentic results, I employed a number of techniques.

First, I journaled after the interviews to explore my own thoughts and feelings about each experience. This activity was the primary way that I turned inward to examine my personal biases and perceptions to best understand how they informed the interpretations that I was making. Next, I utilized a peer experience to assist with debriefing (Lincoln & Guba, 1986). In my study design I imagined this peer group would be solely made up of other scholars. However, I found that the most useful and challenging debriefing came from other mothers. As I discussed my thoughts about the data and my reactions to it, other mothers either reaffirmed or countered my interpretations. Having had their own experiences with mothering, they shared their own takes on what I was presenting and how I was thinking about it. In this way, these peers served as a check and balance on my own reflexivity. The debriefing with other scholars tended to be more about the structure of my findings or my arguments which were also essential in formulating a coherent argument. In addition, I began to read more scholarly work about mothers of color or those who were mothering children with disabilities or who experienced disability themselves. These perspectives enriched my view on the experiences of the mothers in this study whose experiences were multi-layered and complex.

To address issues of fairness and mutuality with the student mothers who participated in this study, I obtained informed consent from each participant as part of the survey (Appendix A). The interview process included sharing a statement about the goals of the study, the theoretical

underpinnings of the study's structure, disclosure about my personal history, and an opportunity for participants to ask me questions about the study, my motivations and interests. The student mothers then stated verbally for the recording their willingness to continue with the interview. Finally, as a member check, I shared a copy of the findings chapter with each interviewee and invited her to provide clarification or correction to any of the data presented or the understanding that I presented about their situation. I received responses from 8 of the 16 interviewees. I incorporated the clarifications and corrections that they presented. The subsequent chapter presents these findings.

CHAPTER 5: MOTHERING AS A DOCTORAL STUDENT – CONTEXT, STRUGGLES AND STRATEGY

It was 5:30 am in the middle of March and the alarm jolted Elsa awake. She vaguely remembered her 2-year-old son coming in to the bedroom around 1 am to snuggle before she sent him back to his bed. The sweet cuddling with her child interrupted what had been a decent night's sleep, leaving Elsa more tired than usual that morning. The bedroom was still pitch dark at that time of year and Elsa's husband slept soundly next to her. Begrudgingly, she slowly rose up out of bed, beyond the seductive warmth of the covers and tip toed out to quietly make coffee and turn on her laptop before anyone else awoke. As she moved quietly down the hall, Elsa kicked a stray Lego that skittered noisily across the floor. She stopped and held her breath. No one stirred and she exhaled and moved on. In those dark quiet hours while the rest of her family slumbered snug in bed, Elsa began her day as a scholar. For about two hours, she kept up with correspondences with colleagues and advisors, read or wrote – whatever needed to be done that day. Then, as her son and daughter awoke, she shifted in to "mommy mode," making breakfast, helping the kids get dressed and getting herself dressed and ready for the day. Later that day she would capture a few more hours to work on her dissertation in a humanities discipline.

These small, snippets of quiet time are the spaces in the day that many doctoral moms find in order to push their academic work forward day by day, hour by hour. The struggle is real. Exhaustion looms and the simplest upset of a child can hijack even the most thought-out plan. For doctoral moms, persistence is required and improvisation a valuable skill. The sixteen women in this study shared stories of juggling their own needs with those of their children and academic work. Lack of affordable and flexible child care, scheduling conflicts, financial issues,

emotional turmoil, physical exhaustion and health problems were factors that impacted their experiences as doctoral students with children.

Most of the women in this study came to motherhood as doctoral students. They had experienced doctoral student life without children, and now, with children. Even the few who had children prior to beginning their doctoral program understood how their academic selves differed from their previous college experiences and from other doctoral students who were not parents. They talked about how being a mother during their doctoral programs affected their academic progress, feelings about themselves, relationships with others, commitment to completing their Ph.D. program and future occupational goals. The remainder of this chapter shares their stories, based on their interviews and survey data, as well as analysis of their experiences as mothers enrolled in doctoral programs. First, this section addresses the most critical needs that doctoral mothers have -- those of adequate time and energy. Next, the section explores the importance of child care in aiding mothers toward gaining some parity in their experience in doctoral education. Finally, this chapter highlights the struggle for resources and opportunities as well as the emotional toll that these struggles exact on the doctoral mothers in this study.

Time, Energy and Space

Time is paradoxically the most valuable and yet insufficient asset for doctoral mothers. They need time to read, think and write. All work requires the investment of time, especially scholarly work. Without time a student does not produce academic work. Doctoral mothers have twenty-four hours in their days just like everyone else, but the ability to invest the necessary time needed to produce academic work is largely missing in their days because they also must

perform other types of work. Like many mothers, the doctoral moms in this study performed caring work for their children. As recipients of care labor, children are demanding. They are impatient and require large investments of time. In addition to caring for children, these doctoral mothers held jobs for pay. Most often this work was done at the university, in the form of teaching, grading, mentoring undergraduates or conducting research on behalf of a faculty member. There is great accountability built in to this work through expectations to be in a particular place (classroom, laboratory, meetings) at a particular time, tangible outcomes such as grades being due by a particular date or showing competency to others through classroom teaching or completion of a research task. Paid labor is judged by others and carries the risk of non-payment or termination if not performed adequately. When push came to shove, caring work and paid jobs regularly took precedence over scholarly work in terms of time investment simply because no one demanded those results, whereas employers and children always did.

The first prompt I presented to each participant in this study during their interview was a variation of, "Tell me about a typical day as a graduate student mother." The majority of the responses to this prompt involved detailing some sort of schedule. It became apparently quite early in the interviews that managing one's time was an activity that was critical in getting through a typical day. The tasks and responsibilities for each mother varied based on their family arrangement, age and number of children, work status, and the stage they were in regarding their doctoral program, for example, taking courses vs. writing dissertation.

Here's how Libby, a mother of three completing her dissertation in a social science field, described her day:

> I'm on (campus) probably 3 out 5 days a week and the other days I just work at home. Now my older two are in school. Now a typical day is, I usually get up

> around 6 am and then help get everybody out the door. Then my husband takes off with them, the including the littlest, and drops the big kids off at school. He usually goes to run some errands and stuff so in that time, he leaves around 8 am Then the time from 8 to 9 am I make sure the laundry is done, the kitchen is cleaned up, dishwasher is emptied, the house is picked up, maybe some vacuuming. I straighten up everybody's room, get myself dressed, get everything together for the day. Go through all of my non-important quick email, make any quick phone calls…Then I work from about 9:30 to noon, take a quick break for lunch and then I often come here [to campus] in the afternoon because the big kids come home. If he's not going to the park or something with them after school, they are home by like 3:30 pm So then I usually go elsewhere because our house is too small for that. I try to work until 5 pm and then I work again in the evenings. I don't work so much on the weekends now but I'm just about finished. So, I'm really at the tail end of things now and I'm not putting in the same hours that I was my first two years…I'm graduating in two months…it's a little different now.

Libby's elaborate description illustrates the complexity of her life as a doctoral student mother and the variety of ways she approaches her daily activity. She marks activity with a time schedule; she shares housework with her partner who also performs the majority of the child care; she varies the location where she performs academic work due to the fact that home is not always conducive to scholarly activity. Libby also noted that her daily experience had changed both since the older children started school and as her academic work changed as she progressed through her dissertation. The experience of a doctoral

student mother is dynamic, ever-changing as her children develop and as her academic work evolves.

Sophia's day was quite different from Libby's. A first-year doctoral student in the humanities, Sophia was still taking courses and her only child was a newborn. She was at the very beginning of her doctoral student career and her experience as a mother. On top of the newness of both of those roles, Sophia was also employed as a teaching assistant to help pay for school.

> So because I'm a breastfeeding mom, I need to set aside three to four hours a day for pumping [breast milk]. On Mondays this past term I would drop my child off around 8 am at daycare, head to campus, get to my office around 8:30 am, try to take care of some of the day to day business of answering student emails…Then I would pump at 9 o'clock…then the class that I was TAing for would begin from 10 to 12 o'clock…My general tendency would be want to multitask but you are really not supposed to do that when you are a Teaching Assistant; you are supposed to sit there and take notes and listen. I did the best I could…Then from 12 to 1 pm I would pump again, while eating.

The minute detail of time and activity articulated in Sophia's account are important to note. The mothers in this study needed to attend to specific time allotments and the activity contained within that time. The fact that Sophia didn't feel that she could multitask during the lecture is critical in that it signified lost time, time that she could have been devoting to her own studies.

In addition, the fact that Sophia was breastfeeding at the time is also important. Lactating mothers must express milk several times a day and must have access to hygienic, cold storage. Sophia gave me details about the office space that she felt "lucky" to have and how she

advocated and got a refrigerator provided by her academic department so she could comfortably pump and safely store breastmilk. This provision of adequate lactation space and refrigeration was a crucial asset and permitted Sophia to maintain a relatively structured and successful schedule. Then she continued to share her schedule from the previous academic term,

> Then from 1 to 3 pm I taught two sections of the class that I was TAing and then from 3 to 4 pm I would pump. Then I wasn't taking a graduate seminar so around 4 pm I would leave and pick up the baby and go home. As you can see there's no time on that day to get any of my personal research done. So in the course work phase - personal research would have just been like reading and writing for a class - but there was no time for that. I'm writing my seminar paper now during spring break. It's really the only time I can get it done. I was able to keep up with the reading this term, mostly because I bought the Kindle version of the book we're reading for one of my graduate seminars and read it on my phone while nursing like in the middle of the night. The hardest thing about this term I found was a) finding time to do my own research and b) just like the physical hours that I don't have…The problem is I physically didn't have those hours and a lot of that was because I was breast feeding. They just didn't exist...That time doesn't exist and that's detrimental to me as a graduate student.

Libby and Sophia spent their days differently based where they were in terms of stage of motherhood, stage in their doctoral program and financial situation. Libby was putting the finishing touches on her dissertation and would be graduating just weeks after our interview. She was not working for pay during her last term in school. Her children were older and were no longer breastfeeding. Libby's husband was the primary caregiver for their children, although her

account showed clearly that she performed household labor during her day. At that time in her doctoral student career, Libby had flexibility and a relatively ample amount of time. Sophia, on the other hand, was still breastfeeding an infant. She was working as a teaching assistant and was enrolled full-time in classes. Her husband worked full-time, and therefore, they had to use child care to allow for them both to work. Sophia's day was filled with must-do activity that was generally outwardly determined by others. Sophia understood that her academic work was suffering because of how she was spending her time. She also had very little choice based on the requirements of her employment and her needs as a lactating mother both of which were bounded by the hours of operation of her child's daycare.

The preceding accounts may seem tedious, unnecessarily detailed, and yet, it is the detail that doctoral moms must consider every day. Before leaving or getting on the road to take baby to daycare and then to enter campus for classes or work, doctoral moms must think through the day. Where do I need to be today and when? Is there food in the refrigerator for dinner? Did I pack enough changes of clothes and diapers for the baby? What books/materials do I need for class today? Did I pack the breast pump and the pumping supplies? Forget something and the day could go downhill quickly. Tedium is where many doctoral moms live.

Alternately, some doctoral moms made choices to limit their activity, either as a response to stressors or as a conscious decision. Jasmine had passed her qualifying exams in her social science department and was the mother of a one-year-old daughter. She shared her day with me and expressed that although she and her husband had agreed that he would be the primary caregiver, she found that she was spending more time caring for her child and doing household work than attending to her academic work. Jasmine found her husband's parenting style somewhat acceptable, but felt more comfortable once she had "smoothed" out the day for him by

feeding the baby in the morning and allowing her husband to sleep late. Jasmine also felt guilty about leaving her daughter, “It’s really, really hard for me to leave her. I know that she’ll be okay…but I can’t stand hearing her cry.” Additionally, Jasmine believed that the attention she gave her daughter resulted in positive developments and at the same time worried about neglecting her academic work,

> She's really blossomed…All the time I spend with her is totally worthwhile. This is why instead of getting up and write my paper I should be talking to her, because look at her - she's learning…In some way I am justifying why I'm not doing my own doctoral work...the role of being a mother is definitely in conflict with being a doctoral student.

Jasmine’s conflicting feelings about the choices she made regarding her time were in contrast to Bunny’s intentional focus on motherhood. When I met Bunny, she had finished her major exams and was at home taking care of her new born son. Bunny was an international student from a country where maternity leave is more generous than that in the U.S. Bunny believed that culture in the U.S. as well as the norms in her academic department were different from her own, but took maternity leave anyway, " I felt really kind of intimidated to want to take all that time off but at the same time I knew like I had to, like it just wouldn’t be feel right for me not to." Bunny took formal leave from the university in order to avoid any conflict with academic demands and focus on raising her child and caring for her household. She was transparent in her enjoyment and complete lack of guilt for taking this concentrated time away from her studies, “I'm focusing on the baby the whole day…I don’t do any work. I don’t care about anything else. It is the first time in my life that I haven’t been working or going to school…. I have really enjoyed it.”

Several women spoke about how after having a baby they reallocated time that had been dedicated to study or socializing with peers to spending time with their newborn children and family members. Often referred to as "family time," this was time that had once been spent on academic pursuits or self-care activity such as exercise or just general free time. When I met with Evy, she was working on her dissertation in the arts and her son was a little over a year old. In the management of her week, Evy set aside family time, "On the weekends, I usually try to dedicate that time to my family and I do spend a little bit of time on Sundays writing…but the rest of the weekend is guilt free." Sophia talked about family time as her favorite part of the day, "I've learned since having a baby…how important that time is…I used to feel guilty that this was wasted time." She now believed that focused time with her son and partner were more valuable that the time she might spend working on her academic work. For most, family time usually occurred on weekends and in the evenings when courses were not being offered, when partners were not working, and when professional daycare was closed. As such, time structures were externally enforced and families typically gathered when other institutions did not need them or did not serve them.

In addition to time pressures, the stories of the students in this study revealed another coveted but scare resource – energy. Exhaustion, the lack of physical and/or mental energy, was a topic of discussion with many of the women in the study. Many made clear that the sensation was not just being tired, but a feeling of being fully drained of all ability to be thoughtful or intellectually productive: debilitated, depleted, done. A mom can learn to change a diaper in the middle of the night simply by touch with no need for open eyes or ambient light, but academic work requires a significant amount of attention and mental illumination. A howling child will compel even the most run-down parent to get up and retrieve a lost pacifier. A silent stack of

paper, an article or a dissertation chapter waiting quietly on a laptop does not get the same reaction. It can't. Moms can't. She just can't open her eyes, put her feet on the floor, sit up. Just can't. Ariel, a first-year student in engineering with a newborn at home, explained,

> Other people that aren't…parents, don't realize that you don't sleep very much and how hard that is to go on with your day, every day when you don't sleep at night…especially in the sciences where you have a lot of focused math - numbers you have to be staring at and if your eyes are blurry it can be hard!

Many of the mothers expressed how difficult it was to perform academic work when sleep deprived. Their ability to compete in the academic realm is hampered by this material condition. Elsa explained that even mundane activities that require just a scant amount of mental attention were unthinkable on most evenings due to her lack of stamina,

> I just find having kids and work to be especially, in the early years, mentally and physically exhausting… (it) is the challenge as a mother…having to be sharp mentally and having to have original ideas in my research and having to make arguments. I mean if you are not getting enough sleep that definitely suffers.

A key component of the interrupted sleep for some mothers is the need to nurse a child. This time and energy-consuming activity did not factor into the plans of some of the mothers in this study. Lola, an international student in a humanities program, shared her lack of awareness and her displeasure with the reality of sleepless motherhood, "I thought I could write as much as I can during pregnancy and then during the first six months. No, absolutely not, it was worst in the world! I was nursing her…waking up every two hours." As a first-time mom with no local family support or advice, Lola had not realized that she would not get quality sleep when taking care of a breast-feeding infant. Similarly, Kerry, a social sciences doctoral student who was

working on her dissertation, disclosed that the physical demands of caring for her newborn child were only revealed to her in a child care class that she took immediately before giving birth. Once she started breastfeeding, Kerry was shocked at how intense the experience was, "The exhaustion of nursing…the exhaustion of not sleeping…you have to feed your child every two to three hours…you nurse for an hour and then you take a half hour nap and then you nurse [again]." This demanding cycle of nursing and sleeping over and over was a complete surprise and nothing that Kerry could have anticipated prior to having done it.

Interrupted sleep or lack of sleep was a recurring theme in several of the narratives of the women in this study. In the early years of a child's life interrupted sleep is often related to nursing, however, other needs can lead to sleep issues. Sarah was a student in the arts who was taking courses when her child was diagnosed with special needs and required a level of undivided attention at night in order to go to sleep,

> It's like okay, put down your laptop, lay in the bed [with him], but don't fall asleep yourself …or you set your alarm and wake up at 1 in the morning and work from 1 to 5, get three hours of sleep, wake up again and try to get him to school…I'm extremely exhausted right now.

Lack of quality sleep was a serious detriment to many of the participants' ability to be at their best as students. Deadlines were missed, papers were sloppily written, readings were misinterpreted, and the right words sometimes just wouldn't come fast enough to participate in class discussions. These mothers were doing the best that they could under the circumstances, but at times it did not seem as if it were enough. Later in this chapter, I share how this lack of performance can impact self-esteem as well as the opportunities that mothers are afforded in graduate school.

Breastfeeding was a topic that came up time and again in my interviews. Although there are a number of ways one might situate this data, I chose to align it in this section because of the physical nature of the act as well as the relationship that breastfeeding has with sleep and time. As mentioned by Lola and Kerry above, breastfeeding is a time-consuming activity. Whether nursing an infant or expressing breastmilk via a breast pump, a mother can be occupied for up to an hour (sometimes more) performing this activity. Then a mother must pump or nurse again 2-3 hours later due to milk production cycles. Expressing milk is a corporeal activity that expends numerous calories. It is physically demanding on the mother which adds to feelings of tiredness. It can ruthlessly demand a mother's resources of energy and time.

Cultural attitudes about public breastfeeding vary, but all of the mothers in this study who spoke about breastfeeding also talked about the need for private or semi-private space when pumping on campus. Some had access to offices that could be secured, others did not. Some academic units offered lactation spaces and there was a campus policy requiring adequate provision of lactation space at the institution at large. However, few such spaces that these women had encountered felt clean, comfortable or adequate. Some were told to use student lounges, unoccupied basements that served as furniture storage, or lactation spaces that were in locations that were difficult to access. Emily had trouble finding a location to pump, "The yucky student lounge…was actually under construction…so I was tromping around to other buildings…it seemed very inhumane…and trying to get hold of some secretary to get access to a room - that was crazy making!" When no space was available, mothers pumped breast milk while sitting in their cars or stopped pumping altogether like Ariel did, "I stopped breastfeeding about six months, cause I was pumping on campus which was terrible." In a time saving move, Iris used to pump in the car on her way to campus, "I would pump in the car all the time…that's

a half an hour I can save by pumping while I'm driving. Plus it's more private than some cold room full of (old) furniture, plus, I can listen to the radio."

In addition, breastmilk, when pumped for later use, must be kept cold. Some students had access to refrigeration; if not, some used personal coolers. Regardless, every mother had to provide her own breast pump, which meant lugging an 8-9 lb. piece of equipment from home to campus each day, in addition to academic supplies like books and laptops. Finally, the need to express breastmilk during the day complicates the task of scheduling and attending classes, meetings or events. If academic obligations are not spaced out correctly, mothers had to step out or miss entirely some activities in order to express milk. Bunny indicated that her academic department did offer a nice lactation space, but that her course choices were going to be limited because she could not take back to back courses because she needed a break in between to pump. She had to plan courses carefully and make compromises in her course taking to ensure time to express milk, but also to ensure that her course progress stayed on track.

Together, time pressures and physical exhaustion constrained the ability of these women to compete at the same level as other graduate students. The bodily debilitation that most participants experienced hindered mental engagement in scholarship. Their mental energy was often spent planning or executing highly structured schedules full of varying daily activity. In addition, some women prioritized family activity over academic activity in order to address the lack of time and sleep. Already dealing with tough new conditions as mothers, these doctoral moms then found themselves facing a number of structural barriers that further impeded their ability to garner the many types of capital for which graduate students vie. While such rewards will be discussed later in the chapter, I first turn to some of the structural concerns that further impede doctoral mother progress. For example, the structure of child care arrangements in the

local community placed further constraints on these women's ability to effectively perform their doctoral student roles.

Child Care

The need for affordable child care for graduate student mothers cannot be overstated. Every mother in this study talked about the struggles of finding child care that was acceptable and workable within financial and time constraints they had. Child care is the only support that truly allows a student mother time to focus on academic work. Supportive words are helpful, but if a child needs to be bathed, fed, read to, played with or generally supervised someone has to do it and it usually falls on a parent. The academic work of other moms in the study ranged from required work in a laboratory that was not safe or accommodating to a child's presence, sitting in a quiet (not characteristic of child care situations) location for contemplative thought or reading, or sitting still (also not a characteristic of child care) at a computer to write. Little children make noise, constantly move (unless sleeping) and they explore their surroundings without discretion. Simply put, you can't do academic work when you are caring for a small child that is awake.

In many cases in this study, because the doctoral mom's student schedule was more flexible than the working spouse's, doctoral moms took on the responsibility of either performing the care work or arranging to have someone else do it for pay. Most of the families in this study used some sort of child care, whether it was part-time or full-time, sporadic or daily. Some families opted to hire nannies which tended to require less financial output than a licensed facility, especially for multiple children. Some of the mothers in the study were accepted into the university's child care program, which cost, at the time of this study, $100 less per month than the starting gross wage for a teaching assistant at the institution. There were scholarships

available to assist with the cost of the university's child care program, but they were limited and not all students qualified. Others had to find child care in the community which could often be a challenge.

It is important to note, that many of the mothers in the interview group had come to the university from other parts of the U.S. or from other countries, and did not have family or close friends in the near vicinity to help with child care, and therefore, had to rely on paid child care or none at all. This is possibly typical for the graduate student cohort across at competitive research universities that seek and find high quality students from all over the world. Higher education is an industry of mobility, and graduate students' lives reflect this phenomenon. Ariel and her husband did not have family close enough to provide daily child care, so they sent their daughter to a private home daycare in their community, "We are lucky enough to be able to afford daycare which has been essential to making it work. If I couldn't afford daycare there, I don't know what I would be able to do, it wouldn't work."

Aimee, a doctoral student in a science discipline and a mother of two children, added to this narrative on the importance of child care to her success as a graduate student and her decision to put her kids in daycare, "I was trying to do what every mom does… work...in the night…in the morning…when the kids are sleeping. The problem with that is that you really don't get much work done…I needed undivided attention… I need to finish this [the dissertation]."

Besides finding time to complete academic work, child care provides time for department or institutional professional development activities which often occur in the late afternoon or evening which can conflict with child care hours. Several mothers mentioned that their department held roundtables, colloquia or other academically-oriented activities that they could

not attend because of conflicts with child care. When a student can only afford part-time child care, even activity occurring during typical business hours could be inaccessible. A doctoral candidate in the social sciences, Gretchen explained that the student representatives in her department planned professional development activities. These students did not understand Gretchen's part-time child care situation and events were regularly scheduled at times outside of Gretchen's existing agreement with the child care facility.

In addition to professional development events, some work commitments required evening time. Final exams in Lola's department were being held in the evening and she complained the expectation put on her as a teaching assistant and the impact it would have on her as a single mother, "I'm not hiring a babysitter, because that's $100 probably, so that I can proctor an exam that's scheduled at night. That's not family friendly and I think I am asking my colleagues to do it for me." Lola indicated that she would complete the other tasks as a TA such as grading, but she would need to negotiate with her colleagues to cover an obligation that none of them had any ability to change.

The students in this study were incredibly creative, resourceful and, at times, brave in the ways that they organized child care in order to provide time to work for pay or complete academic work. Aimee's department held a mandatory weekly course for doctoral students who were at a certain point in their academic progress. When Aimee reached this academic milestone her husband who was employed in an industry that utilized shift work was working from mid-day to late at night. This meant that Aimee needed to someone to watch her children for the time between the end of regular daycare and when she got home after her weekly evening course. This was not an easy arrangement, as she explains,

> My mother-in-law was the only one in our family who agreed to come…My husband had to get off from work early…leave work during his lunch hour take an extra-long lunch, two to three hours, go pick her up in and they go pick up the kids at preschool and then bring them back to our house…by the time he got done with all that it was about six...and I got home about seven, maybe 8 pm so that means that she only actively took care of them for like an hour or two. Yet, I had to come home and then had to host my mother-in-law, have dinner and bedtime routine and all that stuff but with the other stress of mother-in-law.

The conditions around Aimee's mother-in-law's availability and the care activity she was willing to perform further complicated this situation. Aimee still had to cook dinner, bathe her children and put them to bed when she got home. Aimee's mother-in-law lived in a nearby city but did not have the means for transporting herself to and from her son's home, and therefore, spent the night in their home until one of them could take her home in the morning. Aimee's only free child care option was a problematic agreement with her mother-in-law that was not free of costs. Aimee's husband had to make special arrangements with his employer to take an extended lunch, they incurred costs of fuel and wear and tear on the family's vehicle to transport, and Aimee had to deal with the stress of acting as host to her mother-in-law as she was simultaneously engaged in child-rearing activity after a very long day. Aimee and her husband were left stressed and emotionally depleted as a result of this arduous, although temporary, situation.

The fact that there were courses, student events and graduate student employment obligations in the evening illustrates how the doctoral programs that these women attended were designed for students without familial responsibilities. The very structure of the program

activities and the expectations set forth for students conflicted directly with the doctoral mom's lives. Departments did not offer child care during evening events and those planning such activity did not take in to account any family obligations of the students for whom these activities were supposedly offered.

The university did offer child care to faculty, staff and students. This child care program, while judged to be expensive by the mothers in this study, received high marks for the quality of care. However, the waitlist for the program exceeded two years and many families never got in. Bunny joked with me that the university child care was the one with the "three-year wait" and dismissed it as a possibility even though the facility was located in the university apartment complex where she lived. Ayana, a mother of two working on her dissertation in the social sciences, shared that one of the most important resources that the university could offer was not affordable. Ayana's partner worked full-time and his income precluded them from qualifying for a child care scholarship to defray child care tuition, but also did not provide enough to outright pay the tuition. Xochitl, another student in a social science program, did receive an offer of enrollment for her son and was able to receive a scholarship as her partner was also a graduate student. Xochitl talked about the program quality and how it helped her and her graduate student partner progress in their studies knowing that their son was well cared for, "It helps…know that he is in great hands with a great curriculum, learning so much. He is a student himself, it's amazing! It really helps me, and my partner…otherwise we wouldn't be able to do it."

Sarah, a single mother, and her son benefitted from the knowledge of the trained teachers employed at university's pre-school program. Through their intervention, Sarah learned that her son had autism. The teacher noticed Sarah's son's behavior as possibly qualifying him for services through government and public school programs. Sarah sang the praises of her son's

teacher, “I love her! She is amazing and she is willing to work with the public school process with me and go to the meeting and we’re doing paperwork right now.” This offer to attend meetings and assist with the paperwork associated with accessing such services was meaningful and helpful to Sarah as a busy graduate student and single mother to a child with special needs. Daycares and pre-schools in the state are not required to employ staff who are trained or experienced in recognizing special needs and supporting families in accessing public services. This benefit is significant for Sarah’s son’s future and her ability to manage the network of services and tangled web of policies in the state.

Both Sarah and Xochitl hit the child care lottery when they were able to get off the waitlist and start using the university’s child care. Others were not so lucky. The university child care program was notorious for its waitlist and lack of space for student parents in comparison to faculty and staff parents. Several doctoral mothers had applied but had no luck getting in. Evy’s child was in part-time daycare because she and her husband, who was also a graduate student, could not afford full-time care and were still on the waitlist for the university program.

> Child care has been one of my biggest stressors since becoming a mom. Some moms are lucky enough that they get their kids in the subsidized daycare through [name of institution]. I live right there; it would be lovely to be able to put my son there but I can’t. I’ve been on that wait list for ages.

Some of the women mentioned a useful service that the university used to offer parents looking for child care. The university’s child care program had employed a person in the past who acted as a liaison between local home care providers and families affiliated with the university. For confidentiality purposes, I will call this person Sheila. Sheila had a background in early childhood education and would research and monitor the daycares offered out of private

homes (home care) in the area around the university. She would meet with parents, assess their daycare needs and make recommendations of local home cares to call or visit. As such she acted as sort of a match maker between families and daycare providers. As a new mother, I, myself, sat with Sheila and she helped me find the first home care I used for my child. When Sheila retired from the university the service was discontinued. Sophia's experience with Sheila was impactful and she talked about how she had kept the list of home care providers that Sheila had given her and had shared it with other students who were also looking for child care. She felt it was a shame that the university had ended the service and she was thinking about asking the student government to create a board position focused on helping student parents find good care.

In addition to Sophia, Ayana and Iris also used the service that Sheila provided. They both lauded Sheila's connections and resourcefulness. One described her as an "angel." Without Sheila's knowledge and helpfulness, mothers at the institution had to access networks or employ other strategies to find full-time child care. Some of the mothers in the study turned to mothers in their neighborhood, recommendations from other students or online sites but the search for an affordable, trustworthy part-time caregiver was difficult. Lola expressed the difficulty in finding a part-time babysitter to care for her child on occasional evenings or weekends, "I had no idea where to look…I would never look for someone on the internet… I just asked around for long time, and I've only had her [since last term]…she used to be one of the students in our department."

Temporary care arrangements are often critical for meeting the demands for doctoral student life which can changes with each academic term. Whether it be going to class, attending a meeting or interviewing a study participant, sometimes moms needed help for just a few hours,

but not always at the same time each week. Gretchen expressed her frustration with trying to find this kind of flexible, part-time care for her daughter,

> I wish I had more resources to find child care because one of the things with doctoral work you don't have a 9-to-5 schedule. This has been a really big struggle…finding part-time because I can't afford full-time that can be flexible… people won't share their babysitters because it's so hard.

In two cases in this study, the doctoral mom's partner (in both cases the father) was designated as the primary caregiver for the children. In both cases, the doctoral mom expressed that her partner had expressed some discontent with the arrangement. In Jasmine's case, she felt obliged to help out with child care, partially because her partner seemed "grumpy" and complained to her about his caregiving duties. In another case, Libby and her partner made an agreement at the beginning of her doctoral program that her academic work would be paramount. It was why they had moved across the country. They agreed that Libby's ability to focus her time and energy was key to completing the degree that would then, hopefully, lead to an academic career for her and a better financial future for the entire family. Libby's partner intended to work part-time from home while taking care of their child who was born just before Libby began her doctoral program. They both understood that this arrangement would be bounded by a certain amount of time and would eventually end with Libby's graduation. Then they would renegotiate the relative value of both of their labor. However, as Libby's doctoral program went on, the couple adjusted their agreement as they decided to have more children. When they realized that the amount of time needed to care for multiple children eclipsed his ability to also work part-time for pay, Libby's partner stopped working regularly for his employer. This decision concentrated all of Libby's partner's time to caregiving. This change had implications on their financial

situation as he was no longer bringing in income and on his emotional state over time. After several years of being the primary caregiver, he began to express discontent with the arrangement. However, Libby was nearing the end of her doctoral career and she had already accepted a job in another state that would begin in the fall. She was resolute that the arrangement would continue, "Now he's working very little and he's not happy about it… at this point we just need to kind of power through and regroup once we've moved and the kids have settled." To be clear, even with her husband as primary caregiver, Libby performed plenty of caregiving work for her children. She had to, in part like Jasmine, to gain some good will with her partner. Their marital relationships were suffering because of the strain of their unusual (for this study) agreement.

The variety of ways that the students in this study addressed child care needs illustrates their creativity in an environment with very little support or resources. The diversity of strategies results from the complicated nature of child care in the local environment and the institutional neglect for the needs of graduate student families. Most students pointed to affordable, flexible, quality child care as the solution to their problem but none of the students was able to find it. Flexible child care was hard to find. Child care facilities usually wanted stable income, and therefore, were mostly absent in the local pool of service providers. Temporary care, such as babysitters, often came with challenges of reliability and visibility. Quality care often was described in terms of children learning or being happy or safe. Some of the women in the study questioned the educational value of some of their caregivers, but all were content that their children were happy and safe. This happiness came with a cost. Quality child care was expensive, even when one of the partners was a stay at home caregiver, because there was opportunity cost in their lost wages. Financial issues influenced the many child care situations as

seen throughout the previous paragraphs. However, financial issues had impacts for the students in this study that went well beyond child care arrangements. This next section will explore those implications.

Financial Struggles

Inevitably, each of my conversations with the women in this study turned to finances. This ought not be surprising, given the state of graduate student support nationally. At this institution, the sources of funding are varied and variable. Many of the students in this study described the tenuous nature of their funding as temporary and negotiable on an annual basis or sometimes more frequently. Of course, this cyclical dance of negotiating new financial arrangements is not reserved for mothers in doctoral programs. What is specific to their plight is the relative importance of securing stable and adequate financial support. Sophia put it this way,

> Honestly, the finances are the worst thing because when you're trying to be in graduate school, the last thing you should be thinking about is, "Should I take on another job so that we can afford to feed our family?" I mean none of us are putting away for retirement while we're in graduate school! I'm not putting away for my child to go to college, either.

Sophia's plea is quite modest, as she was just hoping to cover basic necessities for her household. For the women in this study, rarely did the graduate student support provided by the university suffice, if supplied at all. The women in this study had varying financial arrangements in place at the time of our interviews.

In addition, in every case, financial arrangements changed across time based on funding availability, job security, and household need. Graduate student fellowships, savings accounts,

public assistance, loans and wage work were all forms of financial support utilized by the women in this study and their families. Wage earning was prevalent but was also varied among the families and over time. Throughout the stories from the participants, I heard about cases of single-earners (almost exclusively the doctoral moms), dual-earner families, and in some situations, no one was earning a wage. Ayana was in a dual-earner situation and reflected on the difficulty for graduate students to earn enough to cover all the expenses for a family. She complained that together she and her partner made too much to qualify for resources that students with lower household incomes would receive, but that they also didn't make enough to comfortably cover their expenses. Ayana held down two part-time paying jobs on campus in order to help make ends meet while simultaneously trying to finish her dissertation. She indicated that one job covered tuition and fees plus a stipend that paid half of the rent in university-owned housing. The other job paid a wage that took care of her son's daycare. Ayana's daughter's daycare, the other half of the rent, dependent health insurance, food and transportation were all covered by her partner's full-time wage from a job not affiliated with the university. In addition to not providing enough money to cover the necessities, Ayana's jobs prevented her from advancing her own research because her work schedule required her to be present during the day which was also the time when her children were in daycare and did not need her attention.

Of all of the students in the study, Evy was the most acquainted with campus services and financial resources. She explained that she had used public assistance to buy groceries and also took advantage of a little-known policy that allowed students to increase their financial aid budget for child care costs and increases in rent. The result was a small loan that allowed them to

stretch their dollars to get by. Evy situated her family's financial situation within socio-economic status:

> In terms of being working class - that's really tough because there were times where my husband and I would have to get groceries for $50 a week…that was our budget fifty bucks for a week for all three of us! And we have to make that work because our stipends are so slim and we don't have financial security.

Other students in the study also utilized public assistance programs such as food stamps, rent subsidies, and social security programs. These programs offered much needed income for some families, but were also incredibly complicated to piece together and use. Sarah, a single mother receiving no child support, shared that in her department funding was scarce and that she received a little support for partial tuition, but had to come up with the balance in addition to paying for all of her household expenses. She worked as a teaching assistant at the maximum amount that she was allowed, but did not earn enough to support herself and her son. Therefore, she turned to government programs for extra income. However, being a graduate student earning a wage complicated the situation, "I think I'm going to get in trouble because I'm technically on SSI (Supplemental Security Income). I don't know if I can really be doing research assistantships or teaching assistantships. I don't know if I just have to notify them or tell them." Sarah did not know if being enrolled in school mattered or if the income that she earned that paid for tuition counted against her SSI, but she was fearful that she was not complying with the program and would get caught.

> I know that is going to be reported. I'm going to get in trouble. This is how my son's medical is set up. I don't know if they kick me off SSI, they will kick me off the [the name of the state sponsored insurance program] and then my child won't

> have insurance. These are things that I can't afford, I can't afford to go to school here let alone afford the insurance. When I get kicked off of SSI then I kicked off of my stipend for my daycare.

Everything seemed to be intertwined for Sarah, she received tuition coverage and a child care stipend for being a TA (a unionized position that came with this benefit) which required student status for eligibility, but being enrolled in school and working in a student position potentially compromised her ability to qualify for SSI which provided her with income for housing and healthcare. Further, when Sarah tried to take out loans to cover the difference, she was told that the SSI and the child care stipend had to be accounted for and would be considered means to pay back the loan.

The tenuous nature of financial support reported by some participants, in addition to causing financial hardship and stress, served as a method of keeping students in a subordinate position within the institution. Emily, who was working on her dissertation and had a newborn, shared that her science department had reduced the student stipends on a training grant without sending notification to the students and that she and her peers were afraid to ask about it. "I get a couple hundred bucks in a check periodically. It fluctuates year to year. It's weird." When I asked for more detail, she said she used to receive a higher amount but it changed at one point with no explanation from the department. Emily shared that students grumbled to each other but did not ask anyone in authority about the change, "It's a sensitive issue and for whatever reason you can't ask about it." She learned that each student was in a different situation regarding financial support, and that the decisions about funding were made by faculty on a case by case basis that changed from year to year. In this case, unreliable funding and lack of communication lead to silence and fear in the student community and put individual families in an unstable

financial position. Emily felt that if she asked for clarification about the process of student funding that she might offend the decision makers and believed it better to just say nothing.

Many of the participants worked in student jobs on campus that provided a meager wage and sometimes coverage for tuition. However, some participants had to look beyond the campus boundaries for financial opportunities. Jasmine had received a four-year fellowship when she started her graduate program. The fellowship paid for tuition provided a $25,000 stipend annually. At the time, her husband was working at a minimum wage job and the pair was able to skate by. However, in her third year of school, Jasmine became pregnant and gave birth. At that time, she and her partner decided that for financial reasons he would stay home and provide full-time care for their newborn leaving Jasmine as the sole wage earner for the household. Jasmine explained to me that while the fellowship covered tuition and provided a stipend, the stipend was not enough to cover all of their expenses with the baby but that her husband's wage was less than what it would cost to pay for child care, so losing his income was the better choice. Jasmine found herself looking for work outside of the university in order to receive a higher wage. She cobbled together several opportunities over time, including a part-time job she described as "soul crushing and draining." All of this outside work pulled her away from her research, "My proposal was on hold for a year while I was working extra time outside so I that could support my husband and my child." At the time of our interview, Jasmine was in her fifth year and no longer was on a fellowship. The loss of the fellowship funding exacerbated her need to find outside work in order to pay for tuition costs. In that year, Jasmine had been teaching both at the university and at another local institution. She shared with me that she hoped to take a full-time job at the other institution to make ends meet. This loss of academic funding in the fifth year, combined with the fact that she was the breadwinner for her family of three led Jasmine to focus

more on high wage potential jobs outside of the university and less on her own research productivity.

Gretchen also found herself in the never-ending circle of working for wages to stay in school, but never making enough academic progress to finish her program, and therefore, needing to register again term after term. She explained that the situation became particularly difficulty when her child was born. Her husband had temporary work that was unreliable and they were on public assistance, took out loans, and were splitting the day to care for their daughter since they could not afford child care. When Gretchen's husband cared for their child, this freed Gretchen up to work to help pay for tuition, but not to do academic work. This dynamic created a difficult, circular situation where she just worked to stay in school but made no progress,

> I begged for TA positons and I got some GSR (graduate student research) work…but my studies have gone really, really slowly…in the meantime, I've had to take out loans…I'm $100,000 in debt…I can't justify taking out any more loans…I could be in this cycle forever where I just keep working and working.

The financial situation had created stress for she and her partner and their relationship was suffering. Gretchen had become concerned that if the financial situation didn't improve that she would have to quit the program to take a full-time job. Her partner had expressed that he wanted her to quit the doctoral program. Gretchen shared that she had applied for a fellowship for the coming school year and it was critical to her academic future, "If I don't get the fellowship this year then I'm done. And that's a hard thing but I can't do it to my family anymore. I just can't do it." Leaving the doctoral program in the middle of conducting her dissertation research and giving up on her career goals was a very real possibility for Gretchen.

The international students in this study faced particular financial challenges that the others did not. International students paid higher levels of tuition than did domestic students until they met criteria for becoming a candidate for the Ph.D. Advancing to candidacy typically included passing a qualifying exam. In some departments, advancing to candidacy also required approval of a written plan for original research. As an international student, Bunny raced to take her qualifying exams two weeks post-partum in order to meet the deadline for the next academic term. Her son had been born prematurely and Bunny had been hospitalized for an associated condition, but because of her status as an international student she was trying to advance to candidacy to avoid paying international student tuition for another term. There was no opportunity for Bunny to receive an exception for the fee. If Bunny had not taken and passed her exams just prior to giving birth she would have been facing a significant bill that she could not afford. Bunny risked her own health to do this and was unable to give full attention to her premature child during the first few weeks of his life. This experience left her exhausted and disinterested in her studies.

As an international student, Lola's tuition was covered by departmental funds, so she did not have the same tuition pressure as Bunny. However, as a result of Lola's visa situation, her husband had not been permitted to come to the U.S. to work, and they could not afford for Lola to be the sole wage earner for the family. They made the very hard choice to live apart for financial reasons despite the fact that it left Lola essentially as a single mother here in the U.S. Lola's husband struggled to build a relationship with his young daughter via web conferencing. The separation was taking a toll on Lola's well-being as well as the relationship between father and daughter.

In addition to taking a negatively impacting academic progress and well-being, financial pressures in graduate school can lead to long-term financial liabilities. Taking out loans both small and large is one way to cover costs that are not met by fellowships or wage work. According to all of the student responses on this study's initial screening survey (57 responses), the collective loan debt of the 22 respondents surveyed who had taken out loans to finance their graduate study was $642,000. This amounts to an average of $29,181 per student who had taken out a loan. In the interview pool, nine of the sixteen women had taken out loans, representing 56% of the interview pool – slightly higher than the 38.5% of loan taking in the overall survey respondent pool.

Of the eight women of color interviewed for this study, six had taken out loans for a collective total of $193,000, whereas only two women who identified as Caucasian had taken out loans for a joint total of $65,000. One other interviewee whose racial identification was not easily captured by the binary categories I have used reported having a loan balance of $30,000. In the overall survey pool white women represented 40% of loan receivers, so they are underrepresented in the interview pool due to other sampling choices. In the overall pool, white women had an average debt of $26,333, while women of color had an average debt of $33,909. The survey did not include questions about the source of loans, but it is very likely that in most cases the loans were going to earn interest that must be paid off along with the principle, thereby, increasing the amount of indebtedness of the loan holder.

In Libby's case there were private resources available to her family of five, which was crucial for the way they needed to use the funds. She was borrowing money from family members which allowed quick access to funding without lengthy loan applications and qualification processes, "We are borrowing from family. Without the ability to do that there is

zero chance I would have finished this program…because we would not have been able to take out loans in the way that we needed to." Libby explained that there had been a number of emergency needs that had come up. In addition, her children had unique educational needs that were not supported by local public schools or medical insurance. The ability to receive funds quickly from people she knew enabled Libby and her partner to meet immediate needs that may not have qualified for loans offered by commercial lenders. She confided, "There is no way I would have been able to do that without turning to family and saying we need to borrow this money. And in terms of paying it back I'm not quite sure how, or what that's going to look like, yet." Having the benefit of flexible repayment without interest also helped to relieve the immediate financial pressure for Libby and her partner.

Besides wage work, public assistance and loans, another source of funding for students in this study were public and private organizations. In Iris' science doctoral program, the faculty members who ran labs with doctoral students were obliged to provide support for their graduate students after their first year. However, Iris shared that this was accomplished by the graduate students obtaining outside funding on their own. "When I joined my advisor's lab…I did a *quite a lot* of grant writing and I did get a grant. I was on that grant when I was pregnant and had my son…it is a federal grant…it allowed maternity leaves." Although the grant funding was for a limited time frame and required Iris to produce specific research outcomes, she was able to take three months of paid leave with her newborn child, a benefit that would not likely have existed were she on another type of graduate student funding. In addition, grant funding does not require repayment so Iris did not incur debt during graduate school.

Kerry found it difficult to obtain outside funding from a non-university source due to some of the requirements that were prohibitive to her as a mother acting as the primary caregiver

for her child. The fellowship required physical residency in the library, which was not possible for Kerry, given her child care situation. Kerry tried explaining her situation and asked the funder if she could scan the archives and do the work from her home but the agency refused to grant any flexibility. Kerry express frustration at the situation, “There were these opportunities that would be great, if there was extra consideration for parents…especially when you’re the primary caregiver, there’s sort of this added pressure.”

Economic need was high for the families in this study. The cost of living in the local community, even in subsidized housing, was prohibitive on a graduate student’s salary. Adding household costs for families with small children, transportation and child care led to ongoing negotiations between the doctoral moms, family members, and the variety of funders/employers that existed. The continuous nature of the stressful quest for enough income cost these moms study time, energy, mental well-being, and in many cases material opportunities that would have benefitted their academic careers. Additionally, many of the mothers in the study were not aware of institutional policy or other resources that could have assisted them with financial struggles. It did not occur to several of them that they might qualify for or use public assistance and there was little or no mention of the free institutional services that might have alleviated stress, such as a food pantry, support groups or exercise opportunities. In addition, to missing out on existing support services, the students in this study also missed out on several other types of opportunities as a result of their mothering status.

Lost Opportunities and Compromises

In the previous section, I shared that Kerry was not eligible for a fellowship because she could not meet the residency requirements due to her parenting obligations. Like Kerry’s many

of the stories of the other women in this study illuminate the many struggles that mothers in doctoral programs face. One can infer the losses and compromises that these women experience, but I asked them directly what they felt they were missing out on by being mothers enrolled in doctoral programs. Their perspectives are broad and insightful. Ayana's wishful, yet, resigned response is revealing, "What is missing is control. I am not in control…I am just responding to what is needed. What I miss is control over my time." Ayana went on to share how much she enjoyed a recent week off from caregiving when her mother-in-law had taken the children away. She was wistful for days gone by when she had leisure time that she could spend in any way she wanted,

> I miss that…People say, "You should take time for yourself." I am not taking time for myself. Don't have time for myself…even if I do get that time that time is for sleep…so that you can come back because…the kids will need you. They are not going anywhere. The work is not going anywhere, either.

Ayana was not taking care of herself and admitted as much. Several other mothers in the study complained of medical problems, mental distress and weight gain. If academic work was taking a back burner as far as priority, self-care was not even in the picture for many. A number of the participants acknowledged the need for taking care of themselves and also knew of campus resources, but could not find the time or initiative to avail themselves to the resources.

Ayana also shared her sadness about not being able to enjoy her children's youngest years because they were associated with the difficulty of completing the dissertation. She felt as if she were missing out on critical time that was going to go away forever as her children aged and needed her less, "It's just…they are…it is so intertwined with me being not happy. I am

missing it...as a happy time. That is the regret that I am going to probably have. I just can't separate it, you know?"

Ariel echoed similar concerns about missing precious early moments with her child while she focused her time working on her academic courses,

> Now that she…she started crawling, I am like, "Oh my gosh my baby is going to be gone, my little tiny baby!" So lately, I've been a little more careful, sensitive to observing her, whereas [during] the first term I was really stressed out about school…I feel like maybe I missed out on a period of her as really young then but I try not to kick myself over it. Now, I'm more aware and more sensitive to observing her and relishing like this is what it's about…you know you don't get this back.

On the other hand, Ariel was less concerned about missing out on professional relationships related to her academic program. We talked about how her own professional trajectory and the fact that she was older than most of her classmates resulted in her lack of interest or need to build strong relationships with them. As we continued talking she did acknowledge the more important professional relationships were probably with the research group of which she was a part and she indicated that she would probably try to make more of an effort to socialize with those colleagues, but then she added laughing, "But back to your question, I don't feel like I am missing out now. I feel like I am missing out on a good night's sleep -- and some wine!"

Aimee's view was that younger students tended to be single, childless and more able to devote time to their academic programs, and therefore, were more desirable students to the faculty. I asked Aimee to elaborate on what she had seen or heard that led her to this perception and she explained that faculty tended to give opportunities to the students who were available to

attend voluntary meetings or events and were able to get face time with the faculty. Aimee felt as if she didn't get the same face time as other students because of her family responsibilities and therefore, missed out on research opportunities, "Professors tend to remember faces…people that are at the table…if you are not there, they can't remember you. If there is a new project…they will be like, 'Hmm, who is interested in that?' They don't remember my face."

Jasmine also worried that her scholarly life was being neglected and worried about the lasting impacts of the situation,

> There are meetings, not expectations…attending job talks or going to professional development workshops…the more you show your face, the more likely you will see faculty, and the more likely you will get…if they know you, they support you, or even find out about opportunities to collaborate on research…by hiding at home with my toddler I'm missing out on all these informal opportunities.

Offers to collaborate on research projects or to co-author papers are key opportunities that help graduate students advance their scholarly careers. If a student is not present in the community or not considered a good fit based on their availability to faculty members, mothers whose time is constrained by the varying circumstances already explored in these findings are unfairly disregarded.

Iris expressed that she had not thought of the doctoral mom experience as one of missing out, but admitted that there were certainly compromises she had made along the way in order to accommodate her new life as a mother,

> I actually I never really thought about it that way, but I probably did kind of torpedo some of my research future as the tradeoff for being able to have a kid…I would say for me the biggest sacrifices have been delayed work development.

> You know, slower dissertation progress and reduction in a good, social environment for me which has been definitely a problem.

Several of the mom's in the study believed that their situations were temporary, that graduate school would end and their children's needs would become less intense as the years went by. When Elsa discussed the things that she feels she missed out on, she shared her philosophical take on the doctoral mom phase in her life,

> Yes, there are a lot of things [that I missed] but I think it's temporary…I would say there was a two-year period which I would call the 'dark years'…when I was in kind of a fog. I totally cut off communication…except barely…I didn't do any conferences; I didn't do any papers… I kind of emerged from it maybe a year ago…it's like you know, so temporary.

Understanding the temporary nature of their situation helped some mothers rationalize their losses and find ways to exist as both a mother and a scholar. When I asked Sophia if she felt as if she was missing out either as a doctoral student or as a mom, she replied, "Yeah, but not anything that I can't live without." She explained that she valued having both experiences at the same time and thought that she would not be happy if she was only doing one or the other, "So to the degree that it's possible to do both, I just think that I have to." Lola, too, couldn't imagine life without motherhood and graduate school together and didn't view the situation in terms of missing anything. She summed up her thinking this way, "I'm doing both things and I want to do both…I'm not missing out on anything. It's not either this or that. It's just both things at the same time."

This section highlighted the types of opportunities that the doctoral mothers believed were lost to them. Their material circumstances were misinterpreted, ignored or devalued. Their

dual roles as mother and student were regularly in conflict and neither seemed to be recognized by actors in the opposite camp, meaning families did not understand doctoral student expectations and colleagues and authorities at the university rarely considered the pressures that motherhood put on these women. These misunderstandings prevented them from participating fully in the types of scholarly activities that other graduate students did, for example, joining voluntary research projects, co-authoring papers, and attending professional conferences. Unpaid scholarly activities or undertakings that required an investment of additional time and money regularly were put at the end of the priority list and rarely were realized. At home, scholarly activity was not valued and was not adequately supported. Further, the lack of support at home and at school seemed to weigh greatly on these women.

Emotional Struggles

The students in this study were able to identify a number of ways that being a mother contributed to them missing out on opportunities of which other graduate students were able to take advantage. In addition, they shared the challenges they faced in being mothers while also being doctoral students. These experiences elicited in these women a number of emotions from feelings of isolation to ambivalence. They doubted themselves, felt guilty or lonely, and also got angry. Here Libby shared how she felt about the dynamic of difference between her and her peers, “I’ve missed out on a lot of connecting with people…When it gets tough as a grad student, I don’t have people to relate to. There aren’t really other people who understand what my life looks like.”

Feelings of isolation and loneliness were prevalent in the stories shared by the mothers in this study. For Libby, the fact that her colleagues could be spontaneous and she could not was a

source of frustration, but mostly, it highlighted how different her life was from the rest of her cohort. Feelings of being different or misunderstood were sometimes combined with the feelings of loneliness. In addition to being alone without any family in the U.S., Lola also felt isolated as a graduate student. She knew no other parents in her academic department or any other graduate programs at the university, "My biggest issue being a grad student and a mom is that… not many people understand what it means to be a grad student and a mom at the same time. Well…nobody can really relate."

Emily, too, felt alone and talked about being dislocated or "untethered" as a result of her situation. She had completed the coursework phase of her doctoral program and was working in isolation on her dissertation. She did not have a group with which to affiliate, no office to go to, and no peers with which she could share her daily struggle. The university didn't provide work space for students in the dissertation phase, so Emily found herself wandering the campus every day for an adequate space to work. In addition, to being logistically challenging, being untethered left Emily feeling out of place. Emily further lamented that despite the fact that her daughter was enrolled in the institution's daycare, the families in the facility did not develop a close network. She observed a similar phenomenon among other re-entry students in her age range: "I feel like there is a lack of community here, and it's too bad…as a professional doctoral student I really wanted to meet like-minded or situationed people but I never did and we were all too busy."

Other forms of isolation resulted from racial and ethnic realities in the doctoral mom's lives. The dual oppressions of racism and sexism were intertwined in the experiences of the mothers of color in this study. Xochitl observed on the bus line from campus to the student apartments that some riders, particularly white and Asian men who she presumed to be members

of the university community, ignored her or did not provide ample space for her pregnant body to pass them,

> Is it because I am another Chicana who is pregnant? That's how I felt and so that made me feel very invisible and made me very angry and made me very sad and that to me, told me that I did not belong, that I wasn't welcomed, I didn't feel like I was a student… I definitely felt like isolated and ignored and invisible.

Aimee noted that in addition to being one of the only parents in her program that being a person of color was also a factor in her isolation, "Being a minority you don't have a whole lot of people there that are the same, so I just felt disconnected that way, too." The mothers of color in the study already felt marginalized because of low numbers of women of color enrolled in doctoral programs and visibly present on the faculty. Their mothering status added another layer of relegation in the student hierarchy.

Elsa was the only women of color in her humanities program and had remarked to me that her colleagues already thought that she was different, but that she had learned to deal with that dynamic and still be a competitive student. However, she explained that further assumptions about her family situation made by students and others in her academic program left her feeling discounted, "People do assume that if they invite me I won't come because I have kids…just ask me. Sometimes it works out. I think being a grad student with kids does make you sometimes feel a little bit excluded."

Sarah felt excluded from her student cohort and her academic field because of her status as a parent. Her peers, like those of others in this study, organized social outings or events at times that she could not attend due to parenting obligations. Sarah also indicated feeling marginalized based on messages that she received from the faculty in the academic department:

> The cohesiveness they are trying to have I am already going to be blocked out of that…there is a culture, this is really important – there is a culture of telling you not to have kids…if you are a woman and you are going to survive in this you need to not have kids because you need to publish or perish…they don't say, 'Don't have kids,' but...you get messages that you really shouldn't be having kids in graduate school. Then even when you become a professor, you're going to need to write a book, and then to become an associate professor you are going to need to write a book.

The messages Sarah received from various actors through their words or actions or through department practice and policy conveyed that academia was suited to single individuals who were unencumbered by familial commitments. A few other mothers remarked that children were not visible in academic spaces on campus such as offices, classrooms or at events. It made them feel as if they should not be visible as mothers when they were in these spaces. Emily said, "I have thought about bringing the baby into see people, but I still haven't and you don't see a lot of moms bringing their kids."

Aimee also shared concerns about the messages she heard in her department and her experience of exclusion based on her parental status. She described what she had been taught was an ideal student, one that was single without children that could devote all of their attention to academic endeavors. Aimee expressed that at one time she fit that mold very well, but since becoming a mother she did not, and felt overlooked, "I feel like academics doesn't necessarily cater to motherhood…because of the boundaries that you have to create for your family…because professors don't view you the same way that they view some of the students…the other, younger students."

In addition to feeling lonely or excluded, several participants in this study shared their feelings of anger or frustration about their sense of isolation or difference from other graduate students. Their ire at being discounted or not being able to be as free to do the same things as others was pronounced for a few of the doctoral moms I interviewed. Ayana spoke of her experience seeing other mothers around the graduate student housing complex,

> I look at when I am like going to the study room…I look at all the moms sitting on the lawn and having their play dates and talking about the yoga class… and I am looking at their hair perfectly colored and I am like, "What do you guys do?" They are at home and I am looking like, you know… in sweats, hair is all out and going to go write something. I don't even want to read or write, and that gets me angry.

Gretchen's anger was directed at her department based on the non-academic requirements put on the students to maintain good standing for funding opportunities. The department required fellowship recipients to attend an annual evening function for which Gretchen needed to hire a babysitter. This mandatory nature of the event had been contentious in the past between department administrators and graduate students, and this year, Gretchen and others seemed to be at their wit's end, "The annual fellowship reception was last night. It was interesting… you know I see people individually but…being with the bunch of students in the department…I was like, "Grrr"…I say fuck a lot, like, I'm really angry, really angry." Talking with her disgruntled colleagues at the controversial event had brought to the forefront Gretchen's fury over the fact that she had to dole out scarce financial resources to get child care so that she could attend an event that was deemed mandatory in order for her to continue to receive fellowship funding. The

combination of unjust factors was just too much for Gretchen and she needed to express her anger.

Similarly, Iris resented the unfair treatment she felt experienced as advanced graduate student in her science lab and how the expectations were not beneficial to her life as a mother:

> That was never fun but I didn't spend a lot of time thinking about it until I became a mom…in the beginning, okay, here I am a young person, this is what to do, you do your grunt work, you are putting in long hours, you learn all this stuff and you come out school without any debt. But once I became a mom I was like, this is my job and it's not a very good job because it takes all these hours. It pays me not very much and I don't get any benefits really on the side except for I get flexibility where I am setting my own working hours to a degree…Except you are trying to fit [everything in] …what is happening is that I don't sleep.

Some mothers that I interviewed experienced fear and anxiety related to the expectations for graduate students in their doctoral program or the impact that the conflict between mothering and academics had on themselves and their families. More than once during our interview, Jasmine referred to herself as not being "ambitious" anymore. Jasmine expressed a great deal of worry about how others perceived her fitness as a student. When asked Jasmine what it meant that she used to be more ambitious, she shared,

> It's really scary to admit that to my colleagues. I mean, I knew a Ph.D. would be hard…the Ph.D. process itself has been lonely and even lonelier now, as a mother, because I had to work alone, I had to balance, and I had to lie to my committee members about working outside jobs because they're not understanding of why I'm taking time away.

Kerry, too, had anxious feelings about her scholarly activity and not keeping up with her student peers and their scholarly production, “I start to have those moments of panic like everybody else is graduating, or getting these jobs or doing their conference presentations, or getting their publications and I have one article out and I still have no response on it.” Anxious feelings of not doing enough, not being good enough or far enough along were prevalent for several of the women in this study. Anxiety for some also led to fear and feelings of being overwhelmed.

When I met with Sarah for her interview, various components of her life had started to converge in discordant ways. Her TA work was becoming problematic, her mother had needed surgery and was not available to assist with child care duties, and finally, her son was struggling at his pre-school. She was sharing with me how various situations were escalating and how overwhelmed and anxious she felt trying to manage all of the different problems and duties she had to address. She summed up the current state of affairs in her life, “This is impossible. It’s a constant state of not being able to breathe, just very physical reactions to… I can’t decipher whether it’s asthma…or just panic all day.”

Xochitl’s academic department had been the site of turmoil due to some racial incidents that had occurred, and she was concerned about getting involved in the student response activity:

> I felt unsafe with getting myself involved in that way, I felt unsafe because of my identity…the complexity of being not only a Chicana, a doctoral student, but a mother. I felt like I would get the pushback from the politics in my department…I was really scared also, after baby was born, to get involved.

She shared that she was a bit glad that she had stayed home so she wouldn't have to experience the fear of what was happening in her department. I asked Xochitl to say more about how the fear related to being a mother and she replied:

> I just feel like I needed to protect my son and myself and so that kind of pushed on silence…There was somebody in our department that actually physically pushed somebody else, a student. That's scary, and these are people of color, that's very scary. My son is going to be in that position as he gets older, as a boy of color. So, yeah, that fear definitely is still there. It's very prominent how the power structure exists in the institutions but it's also a reminder that's an act of institution of violence.

In addition to the very real fears of losing good favor or student funding, Xochitl was aware that physical violence occurred in the university setting and it intimidated her. She feared for her own well-being but also the future well-being of her son. For Xochitl, the university was not sacrosanct and she knew it. The fear pushed on her personal value of activism and resistance to oppression. Being a mother had added a new layer of fear that led her to think and act differently than when she was a single person.

In the range of emotions that these doctoral mothers have, guilt was a prominent and strong feeling. Iris experienced guilty feelings as a result of her choice to prioritize academic work for a short time in order to complete the research on which her dissertation is based. She shared that her husband had said that they were still "picking up the pieces" as a family from that difficult time. Iris teared up in my office when she talked about how her son had begun to pull away from her and favor his father during this time frame.

> I knew that it was only temporary…I knew that period was just like this kind of blip but it was really an awful blip and it led to direct consequences in my son's behavior. And it certainly had impacts on my marriage. I don't think it was permanent but we both agree that if that kind of thing was prominent, the marriage would fall apart.

Having guilt about the amount of time one spends with one's child or one's ability to be a good caregiver might be expected from new mothers. However, some of the women in this study also experienced feelings of guilt related to their efforts as doctoral students. Jasmine expressed remorse for her lack of engagement in her doctoral experience and that she was facing a downward spiral regarding her commitment to the program, "Being a doctoral student has become a super-side job…the less I'm engaged, the less I'm excited about it, the less I remember my breeding… I start to feel really bad... I don't feel like I'm a good doctoral student anymore."

Xochitl's felt that she had somehow betrayed her student identity once becoming a mother and retreating from the political drama that had been occurring in her academic program. "I think leaving my student identity behind was like, 'You're a traitor because you chose to have a child.'…I came from very strong foundation of community activism and you just don't leave your colleagues behind." Xochitl's academic identity was intertwined with her values of collective action, but her choice to prioritize her mothering role felt very individually focused and selfish.

Thoughts of not doing enough often contributed to some mothers' feelings of doubt about their own academic ability and commitment. Whether it was the inability to do academic work because of fatigue or believing that your ideas were no longer valued feelings of doubt came up in the interviews time and again. Sophia understood that uncertainty around one's academic

performance occurred for many graduate students but that there will still times when she wasn't sure if being a mom added to that uncertainty:

> There are always undercurrents in graduate school…Like when your ideas are handled in a certain way you know if that actually wasn't a good idea or if it's being couched because you're female…It's hard to know if something that you're saying is understood in certain way because you are a mother of a new born if it's been read into that way or because it's just wasn't a good idea.

Sarah, a woman of color, received a negative review about her writing from a faculty member who verbally questioned Sarah as to whether she ought to be getting a Ph.D. Sarah wasn't sure to what the criticism related: her academic ability, her race, her mothering status or a combination of factors. Regardless, the comments had resulted in rising self-doubt and an inability to produce work. She was visiting the campus writing program on a weekly basis to help her break out of the writer's block she had attributed to the faculty member's comments. "I have to write weekly because I know I have imposter syndrome. Like if this is what I'm really supposed to be doing?"

Aimee, also a woman of color, received an incomplete in one of her first courses in her doctoral program. She was asked to rewrite the final paper, which lead to her doubting her presence in the program. "Of course I felt horrible, like see, I don't belong here…this is not for me. What am I doing here?" Along with feelings of academic inadequacy, Aimee had faced a number of challenges throughout her program including medical issues, difficult childbirth and her husband's job loss. Cumulatively, these challenges lead her to question the overall importance of her goal of getting a Ph.D. despite her advanced status. "How important is this truly? Am I going to…10, 15, 20 years from now say, 'Was this worth it?'"

Ayana, another woman of color, had similar doubts after a rocky experience with her field exam and a faculty member stepped in to guide her through the process. Then her progress, in her opinion continued to decline with the birth of her second child. She doubted the importance of getting the Ph.D. and her ability to do the work required for that achievement, "I am not doing everything that I should be doing… I try to get some work done but it is not, not nearly enough…not good enough for being in a PhD program." When I asked her if she had felt the same about her academic performance before she had children, Ayana's doubt slid in to resignation and concern about her ability to handle the assistant professor position she had accepted:

> I mean yes, I had issues about like whether this work was good enough, whether it was theoretical enough. You know, do I really belong here? Or am I just a pass, you know? Now, I am really like, "This is bad." I am making statements, not questioning…but this is all I have got right now…if that is good enough, I will take it… I would prefer for it to be really great and stellar…I just don't have the capacity…to make it perfect…I have now added this professor position. Am I just jumping out of the frying pan into the fire? Probably. Is this going to crash and burn? Probably…I don't know how it is going to be when I am a professor.

Like the others in this section, Evy acknowledged that she felt self-doubt, but that she also understood her own goals were most important for determining the quality of her efforts, even when her subconscious was telling her otherwise, "That dissertation time is so open-ended…there's no strict timelines…that hold you accountable…I know realistically that I am doing fine…there is still that voice in the back of my head that saying you are not doing enough."

Taking a balanced perception of one's own goals versus expectations from others seemed to aid some of the women in the study with managing their emotional responses to the pressures in their life. Elsa spoke about her view, "I'm trying to balance many things…you have to be a multitasker but then it means that nothing gets done really well. I think that's what you give up when you are a parent… just good enough is good enough."

Adjusting one's original academic goals and finding new ways to get satisfaction in one's work and life requires compromise and Gretchen felt that she had done so to come to terms with what was actually important to her, "I want my daughter to be happy…I want her to feel I was there for her... That's definitely made some of my decisions easier…when I'm thinking about maybe I wouldn't finish this program…Well that's just how has to be then." While Gretchen did want to complete her dissertation research and receive the Ph.D. she also had faced the possibility that the financial situation would not let her do so. Therefore, she found comfort in knowing that the time she had spent with her daughter contributed to another life goal of hers.

Alternatively, Lola's feeling was slightly different than Gretchen's in that she felt that she would eventually acclimate to the new life she was leading. "I think you can get used to everything, I can get used to being a single mom…at the beginning, I cried…now, it's like okay, let's do it. There is no more defense. I can do everything." In some ways, Lola had no alternative plan, if she wanted to complete her studies. In being alone in her struggle, she learned to rely on herself only. This strategy had gotten her to where she was at that point. Only time would tell if that strategy would continue to serve her.

The emotional struggles of the women in this study were numerous, diverse and, at times, heart-breaking. These stories most vividly illustrate the difficult positions that these students occupy at home and in academia. To understand what it feels like to have the experience of a

mother in doctoral program is to better understand the impacts of oppressive structures on women in academia. Like physical energy, mental wherewithal can be critical to persistence in any difficult endeavor. Ongoing struggles seemed to weigh heavily on most of the women. The students who had advanced to candidacy were the ones who question their ability to complete the program or the worthiness of that task. The women who were at the earlier stages of their doctoral programs seemed more likely to express more optimistic or balanced views than those who were more advanced. Of course, this is not absolute and some who had weathered the storm remained faithful that the temporary nature of doctoral education and early motherhood would pass and that there was light at the end of the tunnel, even if they could not see it at the time. Maintaining a perspective of hope was one of the many strategies that was employed throughout the academic careers of the student mothers in this study. Now, I share a little more about ways they addressed the many barriers they faced.

Strategies

Throughout this chapter the stories from the participants shed light on the multitude of strategies that they employed to persevere as mothers enrolled in Ph.D. programs. They made compromises, they adjusted their expectations, they shifted their long-term goals, they found ways to use policy and resources to their benefit, they suffered in silence, they boldly acted against expectations, they risked their marriages and their physical well-being. In this final section of the chapter I share just a few more stories to illuminate the range of strategies that I heard from the women in this study.

Gretchen, who was in the middle of data collection for her dissertation, conveyed how she was beginning to adjust her expectations about her professional employment in the face of

potential lack of funding. She had come to the Ph.D. program planning to go in to academia as a professor but had begun to look for alternative employment, “It's this realization that I might not be getting through the program that has really changed things… I actually kind of have started looking for jobs just to see what is the safe thing to do.” When I met with Gretchen, she was very close to giving up on her dream of receiving a doctorate. She felt that she had risked all that she could and needed to find safe alternatives to better care for her family obligations.

When the going got rough, sometimes a participant found ways to work the system for their benefit. For example, Emily discussed how she strategically chose her committee in order to direct the structure and timing of her dissertation project to best meet her needs,

> It was very helpful to navigate some of this by talking to people first…to put together my committee so I could... streamline the process for myself…I had to know who was in which camp and try to figure out who my allies were, depending on these issues. I didn't want to waste a bunch of time.

By taking time to understand the political dynamics of the disciplinary differences inside her academic department Emily was able to construct a dissertation committee of like-minded faculty who were not apt to conflict with one another and make her journey toward the doctorate difficult.

Sometimes the mothers in the study had to fight against the expectations of others. Bunny shared how her parents wanted her to quit her Ph.D. program after the birth of her son to focus on caregiving instead of returning to school and hiring a nanny as she was intending to do. She responded, “He has had enough mommy time. I really need to go back to school now."

Aimee shared a story where she bucked her Latino cultural tradition and hired a nanny when her son was an infant. Her son was experiencing medical problems and Aimee was feeling

overwhelmed. No one in her own family or her husband's family offered to help, so Aimee used a stipend that she had received from a grant to pay a nanny to help her. She said, "I decided to hire a nanny which is something you don't do in our culture…you don't welcome people you don't know in the house…I took lot of grief for that, just because I did it." Aimee explained that her decision was born out of desperation and she was willing to buck cultural expectations in order to save herself and do right by her son.

The strategies highlighted in this last section, show the wily, brave and pragmatic ways that doctoral moms sometimes solve their problems. Utilizing strategies that go against norms or that might seem unwise or selfish shows that doctoral moms do not always play by the accepted rules of the game. They may suffer negative consequences for those actions, but have decided that meeting an immediate need is the most relevant course of action. In understanding that situations are mutable, these doctoral mothers are exercising the type of agency that demonstrates the dialectic between individuals and societal structures.

The stories in this chapter shine a spotlight on the struggles that mothers in doctoral programs face, their hopes, their fears and the creative, and sometimes, subversive ways they go approach it all. Each uniquely attempted to advance her own, often conflicting goals in the face of barriers at home, at school, and in society at large. The societal structures in place impeded many mothers' efforts and resulted in delayed progress, emotional struggles as well as financial liabilities.

The doctoral moms in this study had it hard. They were ignored, isolated, depleted, and doubted. This is done by fellow doctoral students, advisors, administrators, spouses and partners, their own parents, in-laws, and themselves. Reinforcing the extent literature (Ferreira, 2010; Golde & Dore, 2001), many of the women in this study remarked at the incompatibility between

being a mother and being a doctoral student at the same time. The expectations on both sides seem to be in direct conflict, and yet, they expectations were often the same. In these women's stories, many were faced with expectations of being fully dedicated to mothering. Some of them held this belief themselves while others struggled against the expectation of their own parents, partners and children. Similarly, they also understood that they were supposed to be completely devoted to scholarly activity, especially if they wanted to be perceived as acceptable doctoral students and potential professional academics. In both cases, devotion to either endeavor was to be at the sacrifice of the women's own well-being. Time for oneself was seen as non-existent, selfish or unproductive. In rare cases when women did create personal time, it was an act of resistance that often came with feelings of guilt. These findings support prior studies in which mothers in graduate school were found to compartmentalize their academic selves and their mothering identities (Lynch, 2008; Dyk, 1987).

These moms were tired. Some were sad, others were angry, while others were resigned to their plight. They were often silent in environments outside of our interviews. Often there was no one there to hear them. Their partners, if present, often had jobs outside of academia. They usually didn't understand doctoral work. They didn't see concrete outcomes of the work. There was no increase in pay, no better job. Doctoral work, in fact, often cost them money. It put families in debt and robbed them of a comfortable standard of living. Partners could be resentful and tired, too. Doctoral work caused problems in some of the families. Alternatively, some spouses or partners did understand. Typically, they too were graduate students or had been one. Home relations seemed better when the other partner had experienced doctoral education. Even so, these partners did not know what it was like to be a mother and a doctoral student at the same

time. They didn't understand the push and pull between child rearing and scholarly productivity and the guilt of not doing either well enough.

Peers, faculty and administrators often did not understand or take time to understand the unique situation of these doctoral mothers. Many mothers felt ignored or excluded by these academic actors. They felt unfairly discounted, punished or relegated because of their "choice" of being a mother or for not properly managing their lives. They missed out on important offers to collaborate on research projects, professional development activities, and funding opportunities. The mothers believed that other academic actors didn't think they were serious about their studies or that they were not even remembered by others. Solving some of the issues that they mentioned could be relatively simple logistically, but were not even considered or discussed with the doctoral moms in the academic environment.

In addition to feeling discounted by others, many of the mothers in this study doubted themselves and their commitment to their doctoral work. Some wondered if they really belonged in a Ph.D. program or if they could complete their degree program. They wondered about their motivations for entering the program and the benefits of remaining. The rewards felt mostly elusive and many were reconsidering their original career goals of being academic faculty. Some were considering alternate careers and others thought they might not finish the doctoral program at all. Nevertheless, at least at the time of the interviews, they were all still enrolled in doctoral programs and were trying to engage as productively as they could. Sometimes, they pushed against norms and structures and other times they bent with the weight of it all. They were motivated by their hopes, pride or knowledge of their past performance as well as fear and anger.

The lack of adequate support was a problematic finding in this study. Without assistance with child care and financial burdens, most of the women in the study had to devote precious

time to child rearing and wage work with very little time for academic work. Even when relatives were close by and available to help, getting them to understand and honor the importance of time for reading, writing and thinking was nearly impossible at least for as much time as was required for adequate academic progress. Funding was scarce and many in the study were forced to use time for wage work instead of scholarly work. These barriers seemed insurmountable or at minimum very difficult to face. These women did what they believed they had to do in order to survive in their material situations and it often led to the reduction of time spent on their own scholarship. This tells of a lack of value for women's scholarship and the opposite emphasis on mothering and/or wage work to support the family. These societal values allude to the structural arrangements in doctoral education that reinforce the status quo and contribute to the invisibility of mothers in academia.

CHAPTER 6: DISCUSSION, IMPLICATIONS AND CONCLUDING THOUGHTS

In this qualitative study, I explored the socialization experiences of 16 mothers in doctoral programs to better understand the dialectic between these student mothers and the structural arrangements in their doctoral programs. I was specifically interested in studying the interaction between such structures and the aspirations and practices of the mothers. In the previous chapter, I outlined several institutional barriers to the mothers' ability to garner capital in their academic programs. Additionally, structural arrangements in the women's family lives arose in the data to illustrate other ways that societal structures impact mother's choices and activities related to their academic progress. I sought rich, detailed stories from the participants in order to explore the diversity of responses to barriers and the corresponding support needed to address those obstacles.

Summary of Findings

The findings described in the preceding chapter show that access to doctoral student capital required time, energy and supportive relationships. Many scholars previously have acknowledged the importance of time and involvement in academic activities as key factors for persistence or success in academia (Astin, 1977; Gardner & Barnes, 2007). Likewise, Bourdieu noted that the accumulation of capital is related to the amount of time one has to dedicate to that quest. Since many of the women in this study lacked the time to engage in the field of doctoral production they lost out on opportunities to achieve the types of capital that were important for their professional success such as collaborating with colleagues on research projects, presenting at conferences, publishing in academic journals and preparing grant proposals (Gopaul, 2011).

In the findings, child care and funding were identified as key support arrangements. Access to affordable, reliable child care was essential for providing doctoral mothers time to engage in academic activity. Financial support, when adequate, provided the ability to purchase said child care. However, the manner in which financial support was delivered, primarily as wage work, created a time crunch in that student moms had to work during the hours that daycare had released back to them. In this way, wage work replaced scholarly work. In addition, the dollar amounts provided to the students as wages or fellowships were not enough to cover the full costs of child care and household necessities. Therefore, many of the doctoral moms in this study had to employ other strategies for gaining financial capital to make ends meet. This included incurring loan debt, working additional jobs outside of the university, reliance on partner wages and/or public assistance. These findings are consistent with extant literature on doctoral students and mothers in academia.

Beyond tangible impacts related to time and money, the study participants experienced emotional effects of doctoral socialization. The nature of doctoral work, especially at the dissertation stage, can be lonely. It was certainly so for the mothers in this study. Most reported not knowing other mothers in doctoral programs and/or not having time or interest to foster and maintain collegial relationships with student peers. Additionally, doctoral moms were unable to participate in academic activities to the same extent as other students thus they struggled to establish or maintain a social presence with their colleagues and faculty. This lack of face time cost some of the doctoral moms important capital, and the isolation and the seemingly insurmountable barriers brought about feelings of doubt, anger, frustration, exclusion, guilt, fear and anxiety. These emotions were often unchecked and not addressed by proper support services leading to psychological struggles that presented additional barriers to academic participation.

Several mothers feared getting a bad academic reputation as a result of becoming a mother. They felt as if student peers and faculty would believe them to be not serious or productive in graduate school, and therefore, give up on them or work against them. In some cases, mothers reported noting that after becoming a mother they experienced a lack of advocacy from others around scholarly production, funding and/or employment opportunities.

In accordance with the literature, some of the participants indicated that their experiences as mothers in doctoral programs led them to conclude that academia was not family compatible, and therefore, many were considering careers outside of academia. However, others were still intent on pursuing professional academic positions. Whether their career paths will ultimately include faculty positions or if they will turn toward employment opportunities beyond the university is yet to be known for the students included in the present study.

Bourdieuian Analysis

In conducting my research, I employed the elements of Bourdieuian sociological thought to explore the doctoral socialization of mothers. Gopaul (2011) encouraged the use of the Bourdieuian framework to challenge extant studies on doctoral socialization that tended to homogenize the student experience. In addition, I layered in diverse theoretical perspectives on mothering to provide a relevant feminist treatment to the primary conceptual framework. Altogether, these viewpoints provided a specific way to view the dynamics of structure and agency in doctoral mother's lives. The findings of this study illustrate the variety of experiences that mothers in doctoral programs have, the struggles they faced that were different than their non-parent peers, and the ways they had to manage pressures at school and at home if they were to succeed in their Ph.D. programs.

The participants in this study expressed that they operated in two distinct social spaces: doctoral education and motherhood. They described each field as discrete and divided their activity between them. Whether by utilizing strict schedules or bouncing between the two arenas as time would permit, the participants did not blend motherhood and doctoral education. They even used different language when talking about the two fields. Motherhood was described with terms such as “at home” and “mommy time.” Academia was referred to as “school,” “campus,” or “my program.”

Mommy time largely existed at the beginning and end of the day and school time existing during the mid-day, if at all. These temporal notions of the field evolved most likely from the business structures of society where schooling and regular child care are scheduled between 8 am and 5 pm Although, classes and other academic activity do occur after 5 pm, regular child care generally does not. Motherwork did not occur at the same time or in the same location as academic work. There were separations between the activities of the two fields, generally marked by a commute on a bus or in a car between two locations, typically the campus and home. It seemed as if motherwork and school work could not easily exist in the same time and space boundaries as evidence by some of the participants’ practices.

In addition to occupying differing times of day and locations, the arrangements of the two fields were different. To use the game analogy, the players, the rules and the tools used were specific to each field. Doctoral education seemed like a card game such as poker. A player plays poker for herself using thoughtful, deliberative strategies to earn limited resources in order to become the victor. The other field (motherhood) was more like a soccer game, fast paced, rarely linear, where the players worked toward the team goals. If one team player deviated from the group goals, there could be negative consequences for that divergent player. If a mom was to act

on her own individual interests in this game, she would receive negative feedback from others on the team (children, partners, parents, etc.). While an imperfect metaphor, the point is that the two games are different and never played together. Poker is not played on a soccer field, and players do not wear cleats at a poker table. The fields of mothering and doctoral education, too, are distinct. They are governed by very different rules and have very different structures. They occur in physical and social spaces that are unalike. The actors and relations among actors are dissimilar. The rewards are different.

As described by the participants in this study, "mommy time" was made up of activities such as preparing food, reading, playing or physically caring for children (bathing, diapering, etc.). Mommy time usually happened at home, also occurred at playgrounds, friends' homes or at other public spaces inhabited by children. The major actors in this field were the children, other parents, grand-parents, and mothers of other children in the field. During mommy time the struggle was for sleep, time to do academic work, financial resources, and attention or acknowledgement from others. Conflicts amounted to crying babies, arguing spouses, and unreliable grand-parents. Mom's used schedules, toys, food, guilt, hostility and physical absence as strategies for gaining capital in the mommy field.

For the study participants, the field of doctoral education existed in social spaces where students wrote, thought, read, discussed, presented, networked, and showed face. These activities included attending departmental colloquia or other department sponsored events, meeting with an advisor, working in a laboratory, attending a course for which a student served as a teaching assistant, reading or writing for one's own original academic work, and socializing with colleagues. Classrooms, advisor offices, libraries, conference rooms, student lounges, bars and restaurants all served physical locations of activity. Activity also occurred on email and through

written critique of academic work. Struggles included negotiating with colleagues to cover TA sections, justifying lack of attendance at departmental events due to child care issues, reminding colleagues of one's continued presence and progress in the program, and fighting for the intellectual recognition and worthiness to remain in the academic realm. What was at stake was consideration for research and funding opportunities, good will to use to negotiate with peers, professional recognition for future employment, and emotional support or encouragement to dispel self-doubt.

Interestingly, during the discussions with the doctoral moms we never talked about the space in between the two fields. My research questions did not directly ask about moving between the fields and no one discussed the transition between them. Some implied that when at home it was nearly impossible to enter the field of doctoral education because of exhaustion or interruptions. For some this liminal space may not have come up at all because they never fully engaged in either field and perhaps regularly inhabited an intermediate place, standing at the threshold of either for both fields without recognizing it. Some participants reported engaging primarily in one field, typically motherhood, and perhaps did not pass between fields often. Given that the two fields and the rules were so different it stands to reason there would be some sort of transitional activity or time that occurred as mothers went from one field to the next, but it is not clear what occurred or if these mothers were aware of such a transition.

Structures within the larger institution reinforced messages that motherhood and student status were not compatible. Limited access to university-run childcare, a small childcare subsidy, limited lactation rooms and refrigerators for breastmilk storage, the exorbitant cost of dependent health insurance, the lack of intentional sharing about leave policies, restrictions on leaves during

fellowships, all point to the institution's lack of understanding and/or concern for the material conditions of mothers of small children.

In viewing doctoral education as a constant struggle in field fraught with conflict, the Bourdieuian framework is on point. In examining the dialectic between structures and individual agency, the framework is useful. Employing the concept of capitals is also effective in this study. However, the concept of habitus is more difficult to fit with doctoral education at the institution studied. Habitus, as described in chapter three, is name for mental structures (perceptions, beliefs, values) that are created and reinforced through socialization processes. Habitus is specific to groups of people living and interacting within similar class situations, locales and social arrangements.

As the location of faculty production, academia is characterized by a set of dispositions that is durable, that reproduces and affirms itself. The habitus of professional academia in the United States dictates that faculty life is unique and exclusive. To be permitted on the field of professional academia, one must have achieved the coveted capital of the Ph.D. along with the networks required for proper acceptance. The origins of this habitus were the early universities that arose as finishing schools for males from the country's elite class (Rudolph, 1990; Thelan, 2011). However, in this era of mass education, doctoral students are more diverse, hailing from varying social conditions made up of different class markers including socio-economic status, race, gender, ethnicity, religion and national origin. A doctoral student mother's interaction with and response to the habitus and structures of doctoral education is mediated by where she comes from and the habitus to which she was socialized as a youth. The ways in which each mother engaged in the field of doctoral education varied based on her habitus. Returning to the game analogy that I previously presented, some doctoral moms showed up to the poker game with a

deck of cards wearing poker face and others came to the poker table wearing soccer cleats while riding a unicycle. The ability to match strategy with the field depends on one's understanding of the field and its dynamics and rewards.

Each of the doctoral students in this study has been socialized through undergraduate education and again through their graduate programs (some also had completed master's programs prior to doctoral enrollment). Therefore, in addition to the individual habitus learned in their youth, these students had also experienced socialization within the realm of higher education. Each of these women had enjoyed a level of rare success within the educational system. They each earned a college degree and had been accepted to a Ph.D. program. This required the performance of a series of behaviors that led to the accumulation of cultural capital (grades, GRE scores, research experience, letters of recommendation, etc.) that deemed them acceptable candidates for doctoral education. Some might say these women had beat the odds, while others would argue that they had sold out and conformed to the existing hierarchy, and still others would not take notice because the system, in their eyes, is simply doing what it is supposed to do. Which perspective one takes on higher education, and doctoral education more specifically, depends on one's habitus. Regardless of habitus, however, not a single one of the women in this study, at the time of our interview, had given up on her dream to earn the Ph.D. There was plenty of doubt and despair expressed, some confusion of motives shared, and a bit of counterproductive avoidance admitted, but no one said, "I quit." Their aspiration, whether formed by or in resistance to their individual habitus, continued to be the acquisition of the Ph.D.

Some of the women in the study mentioned that they were the first in their family to go to college and that their doctoral experience was foreign to their family members. Others acknowledged having family members with advanced degrees whose support was invaluable.

Regardless, none had been exposed to the combination of having children while enrolled as a doctoral student. This was a unique experience in these students' social worlds. It is this unique experience that is at the heart of this study. Due to the distinctiveness of each of the fields on which mothers in doctoral programs must struggle, mothers regardless of their individual habitus, experience inequality in both realms. There seems to be no room for a comfortable existence as a mother in a doctoral program and a varying experience for doctoral student moms at home. The struggle was real on both fronts and what support that did exist was entirely insufficient to truly be helpful.

Consideration of Maternal Frameworks

In their quest to be mothers with Ph.D.s the participants in this study projected a variety of interests beyond accumulation of doctoral student capital. Most of the students in the study were Ph.D. students before becoming mothers. Prior to the birth of their children, the women in this group prioritized their own academic interests by spending the necessary time to complete scholarly activity. However, after the birth of their children these same women lost the ability to prioritize the accumulation of doctoral student capital because of the intensity of infant care needs and the lack of support they received from others around caregiving. From a maternal thinking perspective, preservation was the basic interest that drove the participants in their motherwork. Caregiving activities such as feeding, bathing and putting a baby to sleep were daily preservation activities that they performed. When doing these activities, the doctoral mothers usually were not able to attend to scholarly activity such as reading and writing. Therefore, in order to make time to conduct such academic work, mothers needed help with

caregiving. All of the mothers in the study felt that the well-being of their children was paramount, but they responded to those needs in varying ways.

In addition to preservation, the mothers expressed deep concern for their child/ren's growth and development. This was framed in conversations about the quality of caregiving or the things that their children were learning as a result of child care arrangements. Sometimes quality was ascribed a lesser importance to affordability leading some mothers to leave their children in physically safe, but not optimal caregiving situations. The structural relationship between money and child care in the U.S. is a significant barrier to the participants' ability to complete their doctoral work. The availability of financial resources combined with the relative cost of different care options, narrowed the choices quickly for most mothers.

Additionally, the financial situations of these students compromised the survival interests of several mothers in the study. Graduate student wages, stipends and fellowships have not kept up with the cost of living or the cost of doctoral education. In addition, these financial arrangements were not structured with families in mind. The insufficient amount of support provided in addition to the tenuous nature of the manner in which support was given was unsatisfactory for families with children. Such instability impacts survival issues, whether food insecurity, loss of safe childcare or the accumulation of unmanageable debt. Returning to Sarah's attempts to use cumbersome and conflicting public assistance programs should remind the reader that basic life provisions are on the line for some doctoral mothers and their children.

Mothers of color also have community-based concerns. This was poignantly told by Xochitl in her account of feeling guilty for betraying her activist orientation related to her fear for her son's well-being and that of herself. Xochitl was directly faced with the contradictions between organizational structures and her own interests and those of her community. Her initial

decision was to retreat from the conflict but she was beginning to gain confidence, and support from peers, to resist the structures for the greater good even if it might lead to negative outcomes for herself individually. The structures in her department as well as those in most departments reflected in this study dissuaded such collective student interests.

Mothers in this study who had exceptional children struggled with slightly different interests than other mothers. After ensuring basic preservation needs were met, they were faced with issues of development and acceptability, the second and third interests presented by Ruddick. Children who do not easily conform to ideas of normalcy are often branded as problematic, not acceptable. Furthermore, their developmental needs may not be well served by institutional structures such as schooling and healthcare which often denigrate or stigmatize these children. Mothers are then faced with oppositional structures and lack of support. However, in this study one mother received support from an institutional structure in the form of the university-run daycare. The other student created a support network of non-university mothers in the community who had similar interests. Neither student mother expressed in her interview having received support from her doctoral programs in terms of these mothering challenges, in fact, neither mentioned that they had spoken with anyone in their doctoral programs about these issues.

Some women in the study mentioned that they minimized or hid their mothering status from agents in their academic program. This was done to avoid negative interactions or to maintain a persona of a model graduate student so that they would still be competitive for doctoral student capital. This dynamic relates to the interests of power and choice that emerge from operating in the margins. For some simply being a mother in a doctoral program put her on the outside. Most of the participants indicated that were the sole mother in their academic

program. They received messages from institutional actors that their mothering status was not valued or should be set aside in the academic realm. Although they had agency, alone they did not have the power (social capital) in their doctoral programs to demand attention or appreciation for their mothering interests. Additionally, many of the women expressed that their academic department or their advisors were in positions to confer capital such as wage work, research opportunities, authorization of academic progress, and professional recommendations. Their reliance on these academic agents put the doctoral students in subordinate positions where strategy became a matter of survival not just in the academic realm. In addition to staying in the game of doctoral education, these women had to worry about how their academic choices would affect their children. While they had very little power in academia they exercised great amounts of power in their children's lives. This imbalance of power led to confusion, compromises and missteps in both arenas.

Significance

The analysis of doctoral socialization from a feminized Bourdieuian framework brings to light two significant issues: the dynamics of power and resistance present in doctoral socialization, and the secondary nature of women's scholarship. "To educate women to take themselves seriously at all is, in itself, a subversive act," anonymous informant (Aisenberg & Harrington, 1988, p. 139). In their study of women in academe in the 1980's, Aisenberg and Harrington argued that women in academia held a series of countervalues in contrast to those traditional to the academy and that they aspired to a countersystem that opposed excessive hierarchy, incorporated diversity, used cooperation, resisted centrality of political and intellectual

authority, and legitimized the personal within the profession. They asserted that women's participation in academia and their insistence for a new set of structures were radical acts.

With the benefit of almost two decades of additional feminist scholarship, it is easy to see now the limitations of Aisenberg and Harrington's study in that their standpoint was that of white, middle-class feminists and their assumptions about work and social structures were informed by that limited view. Yet, their push for a countersystem, especially the notion of legitimization of women's personal lives, is relevant for all of the women in the present study. Contemporary women in the present study lamented their conclusions that doctoral education and motherhood were not compatible. They wished and pushed for recognition, support, and fairness in their doctoral programs. Their refusal to choose neither motherhood nor their academic goals over the other, was an act of resistance. Their continued persistence as student mothers in Ph.D. programs pushed against values and norms in both fields. They experienced opposition from actors in both arenas who did not want or feared these women's insistence for legitimacy as doctoral student mothers.

They also experienced triumphs – the provision of a refrigerator for breastmilk storage, encouraging words from a peer, successful completion of an academic milestone – while struggling against the various barriers outlined in the last chapter. They continued to asked for changes in terms of provision of affordable child care and adequate financial support for their families, flexible scheduling of departmental requirements, and appreciation for their intellectual work. They also wanted others to know how complicated and difficult their struggles were. They believed no one else knew or cared.

This study also brings to light the theme that women's scholarly work is not valued or that it is considered disposable or unnecessary. Historically, women in the academy have had to

fight to receive respect and recognition for their scholarly work. Our research and scholarship has been denied, discredited, ignored and stolen by male academics (Aisenberg & Harrington, 1988; Lee, 2013). Additionally, the marketization of education that questions the overall value academic scholarship adds a layer of complexity to the struggles of female academicians. Our work is not generally appreciated outside of academia, and it is often devalued inside the sacred grove.

Most of the women in this study experienced a depriortization of their doctoral work compared to their motherwork, the wage work that they performed and the wage work of their partner (if one was present). Any paid labor, whether it be their own work or that of their partner, frequently was deemed the most important activity for the family interests, and therefore, received the most weight when it came to decisions made about the daily schedules, who did daycare pick up or who took off days to care for a sick child. Wage work outside of academia usually received priority attention due to the fact that it generally produced higher income than paid academic work. Wage work generally eclipsed motherwork as well in that it could facilitate the purchase of motherwork in addition to other household items. It certainly eclipsed doctoral work which in some families was seen as a detractor that cost the family in terms of time, financial resources or well-being. Some family members were antagonistic or dismissive of the doctoral students' academic work. Typically, the women explained these struggles as stemming from others' lack of knowledge about the value and process of doctoral work. Grandparents did not understand why their doctoral daughter needed to take time out from mothering to sit and read for her dissertation. Partners expressed frustration at how long the doctoral education process seemed to take, thereby, delaying full-time work for their doctoral spouse. As a result, some of the doctoral moms had to defend their academic activity or quietly persist by trying to

make it unobtrusive in the home as possible. Some of the mothers valued their own efforts as mothers more than their efforts as students. In these cases, they spent their time fully engaged in mothering activity or avoiding academic activity to the detriment of their scholarly progress. This dynamic illustrates that the contribution of scholarship, especially by women, as not valued outside of academia.

In addition to being unfair to mothers in academia, the risk to the academy is that brilliant minds and alternative perspectives are prevented from contributing to the corpus of knowledge. The participants in this study were poised to provide valuable insights into various social phenomena and scientific conversations. If they and other mothers do not persist in doctoral education, their potential may lie dormant and unexpressed. To be clear, these women's brilliance and potential was not related to their mothering status. Rather, it is their mothering status that was often interpreted or treated as a detriment to their brilliance and potential. This misinterpretation of mothers and mothering practice shows the symbolic power that exists in academia, and more largely, in patriarchal society. The ability to devalue or legitimize anyone or any set of activities is the benefit of symbolic power which is held by dominant groups and reinforced by structural arrangements and actors in the field.

At the same time some of the doctoral moms agreed with the notion that motherwork was more important than academic work or that once becoming a mother academic work lost its importance for them. Some stated that they preferred spending time with their children to doing school work. Other student mothers expressed feeling as if they were required to devote their time to child-rearing as part of their role as a mother. Some neglected their scholarship. Many exchanged academic time for family time or leisure time. A few participants admitted that they were taking advantage of the flexibility in the doctoral programs to create time to attend to their

children in ways that they could not have if they had held conventional employment outside of academia. These statements show the dialectic between beliefs about motherhood and scholarly work as well as the agency that these women chose to exercise. Collusion with normative ideals and social arrangements at times were clearly detrimental to the women's academic progress while at other times it was actually a manipulation of structures to achieve a goal. However, reifying gendered expectations worked against these women's own interests in addition to strengthening oppressive social structures. Manipulation of the situation may have achieved short-term benefits in some case, but what does it mean to use graduate school as flexible time for child-rearing? Flexibility can quickly devolve in to neglect and rejection. Doctoral students who neglect or reject their own scholarship might not be able to aptly defend or support academic scholarship more broadly thereby robbing academia of supportive voices. If women believe and express that academia is no place for mothers then women who want to be mothers may drop out or avoid academia altogether, therefore, reinforcing dominant norms of gender in the academy.

Moreover, since half of the mothers in this study were women of color, the dynamics explained above also reinforce racial structures in the academy whereby the white male with no distracting family obligations remains the model to which all academicians are to aspire. As mentioned before, scholars have sounded the alarm about this arrangement that attempts to create homogenized doctoral experiences and outcomes (Crittenden, 2001; Gopaul, 2011; Grant, Kennelly & Ward, 2000). The stories shared in this study support the idea that mothering experiences that are in contradiction to normative experiences in doctoral education are framed as problematic and unwelcome. Therefore, I argue that this study allows a deeper understanding of the gendered dynamics of doctoral education by looking through a mothering lens.

Implications for Research and Practice

As explored earlier in this chapter, I believe that the use of a Bourdieuian analysis of doctoral education has merit. If viewing doctoral education as a field of struggle where actors vie against one another for legitimized resources, a Bourdieuian framework provides many tools for exploring power and resistance in graduate education. Future studies could utilize this perspective to explore specific types of doctoral capital in depth (fellowships, publications, access to collaborative research opportunities) to better understand the dynamics and relative importance of accumulating these capitals as well as who receives what capital and to what extent. Additionally, a scholar might explore a specific department or disciplinary area to better understand notions of habitus and the interaction between the habiti of individuals in the field and the structures that exist within the field. Alternatively, research on other specific populations within doctoral education merit analysis. The present study included women of color, however, the focus of the study was not on race. Undoubtedly, more insight would come from a specific treatment of racial dynamics and raced structures in doctoral education and their impacts on doctoral mothers.

Further feminist treatment of Bourdieu should also occur. Bourdieu's work does not adequately explore gender dynamics in the formation of habiti or social arrangements. In his existing work, gender is treated more as a mediating circumstance instead of a process of social relations and understanding. In this light, an interesting study might consider gender as a field of struggle – a social space where actors struggle for capital and legitimacy. Of course, this would be a complicated endeavor requiring much narrowing of scope. Future research could more deeply investigate the career trajectories of mothers in doctoral programs. The findings in this study hint at career directions, but all of the women at the time of the study were still Ph.D.

students. Two of the participants had in hand post-graduate employment offers, but whether those plans would be realized was unknown at the time of their interviews. A study of post-graduate employment could yield valuable data on the persistence of mothers in academic careers as well as alternative career paths for doctoral moms. Both outcomes could add to the literature on the value of a doctoral degree for women in contemporary society.

This study focused on the perspectives of doctoral moms. New research could focus on the perspectives of faculty and administrative staff about students with children. How do faculty members perceive doctoral students who choose to have children in the midst of their studies? How do their perceptions influence their behavior or attitudes toward such students? In addition, examining how administrators who often set and implement policy understand or view the needs and circumstances of doctoral students with children could illuminate how and why academic structures create barriers for doctoral moms and how to break them down. Finally, understanding the points of view of the family members of doctoral moms would also provide additional insight on the dynamics with which doctoral moms interact. How does support or opposition from partners, parents or even off-spring influence doctoral mothers' academic activity?

In the practical world of doctoral education, there are many insights that this study provides both uniquely and in support of the existing literature. Institutions of higher education could benefit from taking note of the specific needs of mothering students and the specific ways they need the same resources as other students. Within higher education, advocacy for specific student populations has often been spear-headed by the student themselves through student organizations and activism (Rhoads, 1998). Mothers in doctoral programs are not likely to organize as a group given their stated lack of time and energy and the doctoral environment that discourage agitation by students who are dependent on institutional actors and resources. It is not

satisfactory to wait for mothers to advocate for themselves. Institutions must take action on behalf of their students who are mothers.

Financial Support

Most students would benefit from proper financial support; however, mothers and their families have specific and acute needs. Financial aid policies and funding programs that treat a student as if she is a single person without children are exclusionary and inefficient. The reality that most of the women in this study had to slow their academic process in order to garner additional financial resources is completely counterproductive to the mission of doctoral programs. Students using institutional financial resources without making adequate progress lowers the return on investment for the institution.

Making Connections

As with other isolated student populations, helping mothers make connections with one another could help to alleviate emotional stress and provide opportunities for strategy sharing among mothers. Empathy from someone who has a similar experience could bolster confidence and lessen loneliness. In addition, it was clear in my interviews, that many mothers did not know about a number of resources that were available to them or how to access support services. Information sharing from mothers who have utilized resources would be helpful. Whether it be specific contact names, awareness of unknown policies, or tactics by which to garner capital, other mothers could be rich sources of information for each other.

Services and Spaces

Provision of services and spaces to mothers is also a significant area that higher education organizations need to review. To be clear, doctoral mothers are not the only mothers that inhabit a campus. Faculty, staff, undergraduates and visitors to campus are inclusive of mothers. The

provision of adequate child care to enable participation in academia by mothers in various categories would likely contribute to improved outcomes and support for academic activities. Child care is an expensive service given the need to provide qualified and appropriately compensated caregivers as well as safe facilities. However, institutions could do more to partner with outside providers to fill in gaps. At the site institution giving consideration to the reinstatement of the child care liaison position that was once held by Sheila, would be a step toward better coordination with external providers at a much lower cost than expanding university-owned child care centers.

In the same vein, provision of lactation spaces for all breastfeeding mothers that inhabit a campus would better serve student mothers. The U.S. Patient Protection and Affordable Care Act of 2010, commonly known as the Affordable Care Act, requires employers to provide time and space for employees to express breastmilk during the work day. Since doctoral mothers are often employed by the university as teaching or research assistants, they could qualify for these accommodations. Provision of lactation spaces at the institutional level vs. individual accommodation at the department level is likely to lead to cost-sharing and standardization of space condition, use and monitoring.

Policy Review from a Mother's Perspective

A close look at policies and practices from the lens of mothering students would also yield new insights on how institutional structures result in inequities. From considering how and when to schedule events to be more family-friendly to better understanding the intricacies of enrollment requirements and leave policies, campus administrators could limit institutional liability and enable better student participation by adopting such an analysis. Graduate student advocacy bodies might also lead the way in data collection and or provision of such an analysis

of existing practice. Specifically, mothering students need better maternity leave. “Better,” in this case, might mean having a clearer understanding of existing leaves. In this study, some women were not aware of the institutional policy on maternity leave for students. Better could mean more encouragement from institutional actors for the use of and acceptance for maternity leave. Some of the study participants avoided taking a formal leave because of their fear that they might be perceived as taking advantage of something they did not deserve. Additionally, better might mean maternity leave that coordinated with fellowship or visa requirements. A number of women in the study expressed concern about losing fellowships if not continuously enrolled. One international student worried about jeopardizing her visa status if not enrolled. Maternity leaves allow mothers to focus their time and energy on caregiving and the reality is that infant caregiving demand such focus. Without taking leave, mothers delay academic work which is inefficient use of institutional resources.

Finally, many doctoral moms in this study pushed their physical and mental health to the brink in their attempts to continue academic activity when caring for their newborns. Some emerged from the fog of this earlier child care time worse for wear and less energized for their academic work. As products of the doctoral education, these women were worn down and not able to maximize their intellectual potential and professional development. This seems to fly directly in the face of the goals of doctoral education. The interests of the women individually and collectively as well as those of their academic departments are not well served by the systems of oppression that do not recognize and support the needs of the mothers in doctoral programs.

Limitations

The first limitation of this study is the unknown nature of the actual pool of mothers in Ph.D. programs. Census-type data does not exist for mothers at the institution nor in graduate education at large. In some ways this study was a stab in the dark. I did not know how many students would respond to the survey but I had hoped for at least 50 responses because it would yield a reasonably sized pool from which to choose interview participants. However, there is no way to determine if the group of survey respondents was in any way representative of all mothers in doctoral programs at this institution or simply the group that chose to participate. In speaking with the interviewees, some indicated that they participated because they wanted to support research in general or that they felt that the topic was very important and needed to be studied. Either way, both motivations indicate a self-selected group. Additionally, based on my own knowledge and reports by the participants, there are mothers out there who did not sign up for the study. The reasons for their lack of participation are unknown, as is the case in many research studies.

The next limitation of the study is the lack of information about the academic departments that are represented in this study. The research design did not include an ethnographic analysis of each department. Originally, I operated with the assumption that disciplinary differences would be more relevant than they were. I chose not to add an analysis of individual departments because in order to receive access to activities and people in a department other than the one with which I have my student affiliation, I would have needed to disclose the nature of my study, thereby possibly compromising the anonymity of the participants who were generally the only mother, or one of few, in their respective departments.

Finally, the data collection methods are specific and limited. There are many ways to understand the fields, practices, habitus and capital that shape the social worlds of doctoral student mothers. In making the choice to limit data collection to a short questionnaire, and interviews, I left out other methods such as participant observation, empirical surveys, and life histories. Scholars must make these choices regularly for practical reasons as well as epistemological reasons. The questions I chose to ask best lent themselves to qualitative methods, and within this category, I decided to choose methods that were realistic for a student mother and acceptable in my doctoral program. Interviews are defined situations with time limits and that worked for this working student mother and the student mother participants. In my own research, I chose strategies and practices recognized by the conventions of my academic discipline and that were likely to be successful in the field of my doctoral program. And as Bourdieu tells us, these concepts both guide and limit each researcher's choices.

However, the limited number of data gathering techniques should not be interpreted as yielding a lack of data. With sixteen participants in the study this researcher had over 20 hours of recordings and 350 corresponding pages of data to utilize in the data analysis. Due to limitations in the allowable length of this document, there were many stories and themes that simply could not be included in this manuscript. There is much to be told about the socialization experiences of doctoral mothers, however, this study only highlights small slices of their lives. As I have identified above there is much future research that can and should be done to expand our understanding about this phenomenon.

Concluding Thoughts

As a product of doctoral education I take both a supportive and a critical stance when it comes to the processes that make up the socialization experiences of doctoral students. I have observed repugnant behavior between colleagues. I have enjoyed intellectually stimulating discussions with peers. I have heard unfair criticism and I have seen privilege play out in classroom discussion. I have received support and given it. I have felt excluded and exclusionary. As a mother I have struggled in many of the same ways as the participants in this study and at the same time my experience is unique just as is the case for each woman who interviewed with me. My analysis of the data is no doubt framed by my own experience and it is sure to be in need of review and critique by alternative viewpoints. After all, that is what academic scholarship offers: the full exploration and review of phenomena over time by many.

The process of socialization in doctoral education is about learning and developing as a scholar. The values for exploration and understanding of our social and physical worlds are at the heart of what we learn as doctoral students. However, the structures of doctoral education must be more informed and changed by the inequities it produces. Doctoral training must include more reflexivity of itself. If we are to strive for excellence in graduate education then agents of doctoral socialization must be challenged to understand and make transparent the processes by which new members are engaged in the development of a future professoriate that will increasingly include mothers, if the tenacity of the study participants is any indication, who will struggle but not settled for anything less than being scholar mothers deeply engaged in both arenas at the same time. I was reminded of the quote by former Texas Governor, Ann Richards, “After all, Ginger Rogers did everything that Fred Astaire did. She just did it backwards and in high heels.” The doctoral moms in this study are not the first women to excel in unequal

conditions, but they are not complements to their male colleagues, they are peers and ought to be treated as such - not equally, but equitably.

APPENDICES

APPENDIX A: STUDY SOLICITATION

Create more awareness about the experience of mothers in doctoral programs at INSTITUTION NAME!

I am conducting my dissertation research on the experiences of mothers enrolled in Ph.D. programs at INSTITUTION NAME. The goal of this study is to better understand the lives and work of mothers in graduate school and to share the multiple voices within a group of students who are largely absent in the scholarly literature and university policy discussions.

If you participate you will be asked to:

• Complete an online questionnaire containing questions about yourself and your experiences as doctoral student mother - https://www.surveymonkey.com/s/PHDMOMS

• If selected, attend a 60-90 minute taped individual interview about your experience as a mother and doctoral student at INSTITUTION NAME (scheduled based on your availability). You will receive a $25 gift card if you are chosen for and attend the interview appointment.

Feel free to call or e-mail the researcher, Susan Swarts, a mom and doctoral student (sswartsu@g.ucla.edu or 310-487-9357).

APPENDIX B: INITIAL QUESTIONNAIRE AND INFORMED CONSENT

The purpose of the study is to learn more about the experience of graduate student mothers at INSTITUTION NAME. Specifically, the study will explore student mothers in doctoral programs at INSTITUTION NAME and how they negotiate both their academics and family. You were invited as a possible participant in this study because you are enrolled in a doctoral program at INSTITUTION NAME. Your participation in this research study is voluntary.

Your participation in the research may assist you in reflecting on your experiences thus far at INSTITUTION NAME to come to some conclusions about your own experience in doctoral education. The researcher is a mother and a Ph.D. student at INSTITUTION NAME as well as an administrator with experience in student housing and undergraduate education. The results of the research may be utilized to improve services to mothers living in graduate and family housing at INSTITUTION NAME. Finally, your perspective and story may provide a voice for other mothers whose voices are not represented to university administration or in the research literature.

By completing this questionnaire you are providing data for the study and will become a study participant. All of the data will be kept on a password protected server. Some participants who complete the questionnaire will be asked to attend a 60-90 minute interview. Participants who attend the interview will receive a $25 gift card.

The questionnaire below requests information about yourself and about your experiences. You may choose NOT to answer any of the questions. There are questions on this survey asking about gender identity and family formations/partnering. The researcher intends to be inclusive of various parenting structures that exist in families. Asking questions about family formation and gender assist with identifying an inclusive pool for the interview stage. In addition, since this is a study that focuses on gender, gathering information on gender identities can help inform on the various ways mothers and other family members conceptualize their gender identities within the family structure.

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122 or write to: UCLA Office of the Human Research Protection Program, 11000 Kinross Avenue, Suite 211, Box 951694, Los Angeles, CA 90095-1694.

Researcher Contact Information: Susan Swarts, sswartsu@g.ucla.edu, 310-487-9357
Faculty Sponsor Contact Information: Robert Rhoads, rhoads@gseis.ucla.edu, 310-794-4243
Experiences of Doctoral Student Mothers
Consent: Please check the box to indicate your agreement with one statement below.☐ I understand the study description as outlined on the previous page and consent to being a participant in this study called, "Socialization Experiences of Doctoral Student Mothers".
☐ I do not consent to being a participant in this study called "Socialization Experiences of Doctoral Student Mothers".

Doctoral Student Mothers

2. I am a doctoral student at INSTITUTION NAME. Yes, No

Socialization Experiences of Doctoral Student Mothers

About you

3. Your name:
4. Please list your field of study/department
5. What is your age?
6. What is your racial or ethnic identity?
7. What is your gender identity?

Socialization Experiences of Doctoral Student Mothers

Your Ph.D. Experience

8. In what year did you start your Ph.D. program?
9. 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

10. Are you enrolled full-time in your Ph.D. program? Yes, No
11. Have you ever taken an official leave of absence from your Ph.D. program? Yes, No
12. Does your Ph.D. program allow for part-time enrollment? Yes, No, I don't know
13. Have you ever been enrolled part-time in your Ph.D. program? Yes, No **Socialization Experiences of Doctoral Student Mothers**

Academic Activities

14. On average, how many hours per week do you spend on activities related to your academic work?
15. Have you presented research findings at any of your discipline's professional associations? Yes, No
16. Have you published in any of your discipline's professional journals or publications? Yes, No
17. Have you held any Teaching Assistant (TA) positions during your doctoral career? Yes, No
18. Have you held any Research Assistant (RA) positions during your doctoral career? Yes, No
19. Have you held any other type of academic employment during your doctoral career? Yes, No

Doctoral Student Mothers

Funding

20. Do you have any fellowships or scholarships that help fund your doctoral study? Yes, No
21. If yes, how much funding are you receiving for the current academic year?
22. Have you taken out loans to fund your doctoral study? Yes, No
23. If yes, what is the approximate total of funds borrowed for doctoral study?

Socialization Experiences of Doctoral Student Mothers

Your family

24. How many children do you have?
25. What are the ages of your child(ren)?
26. Are you the primary caregiver for you/r child(ren)? (Primary care includes activities such as bathing, feeding, diapering/toileting, playing, reading, or talking with children, and traveling to related childcare.) Yes, No
27. If not, who is the primary caregiver?

28. Does your child (or any of your children) attend a daycare or preschool? Yes, No
29. If yes, does your child (or any of your children) attend a daycare run by your university? Yes, No, I don't know
30. On average, how many waking hours per week do you spend caring (physical and emotional) for your child(ren) in total?
31. Do you have a partner and/or co-parent(s) that participates in the physical, emotional and/or financial care of your child/children. Check all that apply. *A partner is defined in this study as a person with whom you share a romantic relationship. A co-parent is someone who shares custody or care of a child or children but does not share a romantic relationship with you.

☐ Partner
☐ Co-parent(s)
☐ Neither partner or co-parent

Socialization Experiences of Doctoral Student Mothers
Partner or Co-parent

32. What is your partner or co-parent's gender identity? If there are multiple parents in your family, please answer the following questions about the one person who contributes most to the care of your child(ren).
33. Is your partner or co-parent also a student? Yes, No
34. Please check the statement that best describes your partner or co-parent's employment status.

☐ Employed full-time (30-40 hours per week) outside the home.
☐ Employed part-time (1-30 hours per week) outside the home
☐ Not employed outside the home.

Socialization Experiences of Doctoral Student Mothers
Insurance

35. Is your child (or any of your children) covered by health insurance? Yes, No, I don't know
36. If yes, what is the source of this insurance (check all that apply)?

☐ My graduate school insurance
☐ Partner or co-parent's insurance
☐ State government provided health coverage
☐ Other (please specify)

37. If you have multiple children, are any of them uninsured? Yes, No, I don't know.
38. Are you willing to participate in a 60-90 minute interview about your experiences as a doctoral student mother? Yes, No

Experiences of Doctoral Student Mothers
Contact

39. At what email address can the researcher contact you to schedule an interview if you are chosen?

Socialization Experiences of Doctoral Student Mothers

Thank you for participating in this questionnaire about your experience as a mother in a Ph.D. program. If you have any questions or concerns about this study, please feel free to contact the researcher or the faculty sponsor:

Researcher Contact Information: Susan Swarts, sswartsu@g.ucla.edu, 310-487-9357
Faculty Sponsor Contact Information: Robert Rhoads, rhoads@gseis.ucla.edu, 310-794-4243

APPENDIX C: STUDY DESCRIPTION DOCUMENT

Study Description and Research Contacts

Study Title: Socialization Experiences of Doctoral Student Mothers

Study Description: The purpose of the study is to learn more about the experience of graduate student mothers at INSTITUTION NAME. Specifically, the study will explore mothers in doctoral programs at INSTITUTION NAME and how they negotiate both their academics and family. You were invited as a possible participant in this study because you are enrolled in a doctoral program at INSTITUTION NAME. Your participation in this research study is voluntary.

Your participation in the research may assist you in reflecting on your experiences thus far at INSTITUTION NAME to come to some conclusions about your own experience in doctoral education. The researcher is a mother and a graduate student at INSTITUTION NAME as well as an administrator in student housing. The results of the research may be utilized to improve services to mothers living in graduate and family housing at INSTITUTION NAME. Finally, your perspective and story may provide a voice for other mothers whose voices are not represented to university administration or in the research literature.

By completing this questionnaire you are providing data for the study and will become a study participant. All of the data will be kept on a password protected server. Some participants who complete the questionnaire will be asked to attend a 60-90 minute interview. Participants who attend the interview will receive a $25 gift card.

The questionnaire below requests information about yourself and about your experiences. You may choose NOT to answer any of the questions.

There are questions on this survey asking about gender identity and family formations/ partnering. The researcher intends to be inclusive of various parenting structures that exist in families. Asking questions about family formation and gender assist with identifying an inclusive pool for the interview stage. In addition, since this is a study that focuses on gender, gathering information on gender identities can help inform on the various ways mothers and other family members conceptualize their gender identities within the family structure.

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law.

If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122 or write to: UCLA Office of the Human Research Protection Program, 11000 Kinross Avenue, Suite 211, Box 951694, Los Angeles, CA 90095-1694. Researcher Contact Information: Susan Swarts, sswartsu@g.ucla.edu, 310-487-9357

Faculty Sponsor Contact Information: Robert Rhoads, rhoads@gseis.ucla.edu, 310-794-4243

APPENDIX D: INTERVIEW PROTOCOL/INTERVIEW TOOL

Socialization Experiences of Mothers in Ph.D. programs – Interview Tool

Study reminder: Before we get started with the interview, I want to share with you the study description again. (Provide the study description document).

Preliminary Question: Before I start asking questions of you, do you have any questions for me about the study or my motivations for the study? Do you have any concerns about this study or your participation? Is there anything that you want me to do during our time together today?

Gift Card: As an incentive to participate in this study you were offered a $25 gift card. I'd like to give you the gift card now. Please sign the receipt form indicating that you received the gift card.

Recording: In order to capture the data from this interview and to analyze it later, I will be recording out interview session.

Consent: As part of the online questionnaire that you filled out, you clicked a box indicating that you consented to participate in this study. In addition, you indicated that you were willing to participate in an interview and provided your email address so that I could contact you. Are you still interested in participating in this interview?

Start Recording!

Opening interview question: Tell me about your typical day as a graduate student mother. What do you do? What is your schedule like?

Probing questions about doctoral experiences:

- Who do you interact with on regular basis in your doctoral program? What is the nature of those relationships?
    - What are your relationships in your doctoral program like? (If necessary, ask specifically about advisor, other faculty, fellow students, administrators)
    - What do you talk about or do together? How do you feel about these relationships?
- Are their politics in your doctoral program? What are they like?
- What does your academic work entail right now?
    - How are you spending your time academically?
- What graduate school activities are important to participate in?
- What things are important to accomplish while you are in graduate school?
- What other graduate student things do you do?
- What does it mean to be successful in your doctoral program?
    - What do you do to be successful in your doctoral program?
    - Have there been instances where you did not feel successful? Can you describe this instance?
- What messages do you get about motherhood from your doctoral program or people associated with your doctoral program (faculty, students, administrative staff)? How do these messages come to you (conversations, comments, documents, etc.)?
    - Does your department have handbook or a newsletter? How might I access them?
- What are your current post-doctoral career plans? How have they been shaped by your experience as a doctoral student mother?

Probing questions about motherhood:

- Tell me about at typical day with your child/ren. What do you do with them?
- How would you characterize your relationship(s) with your child(ren)?
- With whom do you interact when it comes to your child/ren? Who do you talk to about your child/ren? What is the nature of those relationships?
    - What are those relationships like? (What do you talk about or do together? How do you feel about these relationships?)
    - Who helps you with your children? (If necessary ask about partner, family members, daycare providers, neighbors, fellow students)
- How do you blend your school/graduate work and your responsibilities as a mom? How do you make it work?
- What resources do you utilize to mother your children?
- What resources do you wish you had?
- Do you feel like you are missing out on anything (in regards to school or motherhood)? If so what? If not, why not?
- What does it mean to be successful as a mom?
    - What accomplishments do you hope to achieve as a mother?

APPENDIX E: GIFT CARD RECEIPT

I have received a $25 gift card for attending an interview as part of the study entitled Socialization Experiences of Doctoral Student Mothers.

_____

Signature Date

APPENDIX F: BIGLAN'S TAXONOMY OF ACADEMIC DISCIPLINES

Table 2

Biglan's Taxonomy of Academic Disciplines

Clustering of Academic Task Areas in Three Dimensions				
Task area	Hard		Soft	
	Nonlife system	Life system	Nonlife system	Life system
Pure	Astronomy Chemistry Geology Math Physics	Botany Entomology Microbiology Physiology Zoology	English History Languages Philosophy Communications	Anthropology Political Science Psychology Sociology
Applied	Ceramic engineering Civil engineering Computer science Mechanical engineering	Agronomy Dairy science Horticulture Agricultural economics	Accounting Finance Economics	Educational administration Secondary education Vocational education

Adapted from Biglan (1973b)

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