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# Tenure-Track, Alt-Ac, or Post-Ac: Understanding Career Choice for Women Doctoral Students in the Social Sciences 

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# Tenure-Track, Alt-Ac, or Post-Ac: Understanding Career Choice for 

 Women Doctoral Students in the Social Sciencesby<br>Laura Elizabeth Struve, B.A.; M.A.

## Dissertation

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## Dedication

This dissertation is dedicated to my family:
My grandmothers, Ruth and Dorothy.
My mother, Kathy.
My sister, Anne, and my nieces, Madison, Mackenzie, Morgan, and Tegan.
And for my father, Dan.

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# Tenure-Track, Alt-Ac, or Post-Ac: Understanding Career Choice for Women Doctoral Students in the Social Sciences 

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The University of Texas at Austin, 2017

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#### Abstract

Women have made tremendous gains in degree attainment at all academic levels, including doctoral degrees. However, as women become the new majorities of their fields, an increase in their proportional representation in their career advancement and economic outcomes has not followed. The "educational pipeline," a metaphor for the series of successful transitions between educational stages, degrees, and the workforce, has been used to understand how women "leak out" or advance through academia. Although the pipeline concept is useful in understanding the model of women's progression, it does not capture the reality of how women advance in academia today. The purpose of this study was to understand women doctoral students' perceptions and meaning-making of their career choices, in the context of two majority-women fields at a Predominantly White Institution.

Utilizing social cognitive career theory (Lent, Brown, \& Hackett, 1994), this study explored: 1) What, if any, barriers do women perceive regarding their career choice and how do they make meaning of these barriers? 2) What, if any, supports women perceive regarding their career choice, and how do they make meaning of these supports? 3) What, if any, opportunities women perceive regarding their career choice, and how do they make


meaning of these opportunities? 4) How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding their career choice?

This study applied a critical qualitative approach with a quasi-phenomenological instrumental case study design. Drawing from 22 semi-structured interviews with women doctoral students in the social sciences, in addition to other data sources, three key findings emerged: women perceived their faculty advisors as gatekeepers to their academic success and thus, career choices; women made meaning from intersectional aspects of their identities, which informed their doctoral student experiences and perceptions of career trajectories; and lastly, women made meaning from constrictive workplace structures, both inside and outside of academia, which influenced their career choices. Ultimately, the goal of this study was to understand how women may be better supported by university faculty, staff, and institutional structures, as they make meaning of their career choices.

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## Chapter 1: Introduction

The "educational pipeline," a metaphor for the series of successful transitions between educational stages, degrees, and the workforce, has been used to theorize and explain the points at which students persist or "leak out" of educational transitions and has been applied to a diversity of populations and educational stages (e.g., Astin \& Astin, 1992; Ewell, Jones \& Kelly, 2003; Jackson, 2003; Jackson \& Moore, 2006; Maltese \& Tai, 2011; Sólorzano, Villalpando \& Oseguera, 2005; Yosso, 2006). This model has also been used to describe women's progression through postsecondary education and into the professional world - a linear succession through requisite courses, milestones, and degrees through which women progress or exit at specific transitional points. Although the pipeline concept is useful in understanding the model of women's progression, scholars have criticized it for failing to capture the reality of how women advance in academia today (Ahmad, 2016; Mason, Wolfinger, \& Goulden, 2013; Wolfinger, Mason, \& Goulden, 2009; Xie \& Shauman, 2003). Ahmad (2016) states, "the pipeline model is troublesome because it shifts the focus away from the role of gatekeepers, and the inadequacy of the institutional response in leveling the playing field" (p. 7). Moreover, there is a "lack of focus on systemic change and power relations, particularly those that are raced, classed, sexed, and gendered" (Metclaf, 2010, as cited in Ahmad, 2016).

Alternate metaphors have been used to explain the disparities in women's representation by disciplinary field, their advancement through academia, and their holding of leadership positions in both academia and industry such as "leaky pipeline," "revolving door," "glass ceiling," and "academic snake" (Bain \& Cummings, 2000; Clark Blickenstaff, 2005; David \& Woodward, 2005; Jacobs, 1989; Goulden, Mason, \& Frasch, 2011; Heward, 1994; Rausch, 1989; Tancred \& Czarnocki, 1998; Van Anders, 2004;

Wolfinger, Mason, \& Goulden, 2008). As women experience more entry, exit, and reentry points within their career pathways than their male counterparts, an alternate metaphor is needed. Johnson (2016) supports the idea of a "pipeline myth," or the "persistent idea that there are too few women qualified (e.g., degree holding) for leadership positions" (p. 2). The pipeline myth is probably a more accurate depiction of contemporary women's academic representation and advancement (Johnson, 2016). Thus, a better metaphor for women's careers may be a highway with on- and off-ramps (Hewlett, Luce, Shiller, \& Southwell, 2005).

## Statement of the Problem

Women have made tremendous gains in degree attainment. Since 1981, female students have earned half or more of all baccalaureate degrees, more than $50 \%$ of all master's degrees since 1991. By 2001, women had reached parity or were overrepresented in five of the seven broad major fields of life sciences, social sciences, humanities, education, and the professional areas. Women have also received a majority of all doctoral degrees each year since 2002 (Johnson, 2016; National Center for Education Statistics [NCES], 2015; National Science Foundation [NSF], 2015d; Watford, Rivas, Burciaga, \& Sólorzano, 2006). The progression of women's overrepresentation in doctoral degree production in many of these fields, including education, psychology, and sociology began as early as the 1980s (Glazer-Raymo, 1999; Watford, 2007). Doctoral degree production as a whole has increased significantly due to the rise in numbers of women earning degrees, and the average annual growth for women exceeded that for men in every broad field except mathematics and computer sciences (Gonzalez, Allum, \& Sowell, 2013).

Despite these gains, disciplinary differences in doctorate degree attainment for women persist; traditionally male-dominated fields like the physical sciences still do not
draw as many women doctoral students. The three broad fields of engineering, mathematics, and computer sciences accounted for $41.1 \%$ of all doctoral degrees earned by men (Gonzalez et al., 2013). Although women represent a small proportion of doctoral students in the fields of science and engineering, since 1993 most of the growth in the number of doctorates earned by women has been in the fields of science and engineering (NSF, 2015c). Collectively, women earned $42 \%$ of science and engineering doctorates awarded in 2013 (NSF, 2015c).

These steady gains in women earning doctorates obscure the disparities in doctorate attainment by race. White and Asian women constituted the majority of women who earned doctorates ( $54 \%$ and $22 \%$, respectively), while Latina and African American women comprised six percent, respectively, of all women doctorates awarded in 2013 (NSF, 2014d). Overall, women and students of color are less likely to attend research universities, and they earn fewer doctorates than expected in relation to the overall population and population of baccalaureates awarded (Gonzalez et al., 2013).

As women have become the new majorities of their fields, an increase in their proportional representation in career advancement and economic outcomes has not followed. Women earn more doctorates in education, humanities, social sciences, and health-related fields; however, these are also the fields in which tenure-track positions are declining (Bonawitz \& Andel, 2009). Moreover, doctoral recipients in 2014 in education, social sciences, life sciences, and humanities were more likely than the fields of engineering and physical sciences, which are majority men, to have over $\$ 70,000$ in education-related debt (NSF, 2015c). In addition, men earn more than women at every rank, in every discipline, and in every institutional type except two-year private institutions (Johnson, 2016).

Within the ranks of academia, there are gendered and racial disparities. In 2013, women made up $31 \%$ of full professor positions, $44 \%$ of associate professors, and $50 \%$ of assistant professor positions; in addition, women comprised a greater percentage of all fulltime instructor and lecturer positions (NCES, 2015b). Women are overrepresented in faculty positions at community colleges and baccalaureate and master's degree colleges, while men comprise almost $70 \%$ of faculty positions at doctoral-level universities (Mason, 2011). More women of color hold lower-ranked faculty positions at degree-granting postsecondary institutions than men of color, but men of color hold full professor positions more often than women of color (Johnson, 2016). Although women's doctoral production and attainment of ladder-rank faculty positions has increased, their concentration in faculty and leadership roles in community colleges and baccalaureate and master's degree colleges suggest something different than a "leaky pipeline" to explain their professional and economic differences from men and the under representation of minority women in these fields.


Figure 1.1: Full-time faculty members by gender in degree-granting institutions, 2013. NCES (2015b).

Although a tenure-track position in academia has traditionally been the career outcome for doctoral degrees, other sectors, like government entities, nonprofit organizations, and industry are increasingly becoming viable options for doctorate degree holders. In the social sciences, the proportion of doctorate recipients who have accepted postdoctoral fellowships in the past decade has sharply increased to $37 \%$, from $31 \%$ (NSF, 2015c). Data from the 2015 Survey of Earned Doctorates showed that a higher proportion of women in the social sciences had accepted postdoctoral fellowships (23\%) after completing their doctoral degree, compared to their male peers (17\%) (NSF, 2016a). In the same survey, a higher percentage of women in the social sciences reported obtaining employment in the government, industry, and non-profit sectors, compared to men. There are increasingly more options for employment with a doctorate degree, but little is known about the influences these degree holders attribute to their decision-making processes.

Research regarding career choice and pathways in higher education, especially for women, point to a variety of indicators that shape their decisions whether or not to pursue careers in academia. Women's decisions to opt out of the professoriate often occur during their doctoral studies, and lack of full socialization into the culture of the academy influences women's decision to pursue a career in academia, along with the perception that women have a harder time balancing academic careers and families (Bain \& Cummings, 2000; Egan, 1989; Golde \& Dore, 2001; Mason \& Goulden, 2004; Watford, 2007). In a national, cross-disciplinary study, Golde and Dore (2001) found that White men and men of color were more likely than White women and women of color to desire a faculty career. Even the women who aspired to a faculty career preferred positions in community colleges or baccalaureate and master's institutions. Other studies show women in faculty positions do not desire university leadership roles because they perceive the nature of the work to be unappealing; the demands on their time are too great; and the traditional, hierarchal, male leadership styles are incompatible with the types of environments in which women would want to lead (Dominici, Fried, \& Zeger, 2009; Eckel, Cook, \& King, 2009). Missing from the literature is an in-depth, targeted understanding of how women doctoral students perceive their career choices and the nexus of contextual and structural factors that shape their decisions; this study will address this void.

## Context of Study

The context of this study is bounded within the psychology and sociology departments at Midwestern University (a pseudonym), and serves as a meaningful case to examine doctoral women students' career choices. Since the 1970s, the social and behavioral science disciplines have undergone dramatic shifts in their gender composition at both the baccalaureate and graduate degree levels; in fact, some have referred to these
specific fields as "feminized fields" or "new female-majority fields" (Glazer-Raymo, 1999; Watford, 2007). In 1974, only $33 \%$ of doctorates in social and behavioral sciences were awarded to women (Ginther \& Kahn, 2006). Since 1999, women's share of doctorate degrees awarded in the social and behavioral sciences have been at parity or majoritywomen $^{2}$ (NCES, 2015c).

As women's doctorate degree production in the social sciences has increased, one would assume their proportionate representation in academia would follow. However, this has not been the case. In 2001, women earned $54 \%$ of the doctorates awarded in the social sciences, but only $47 \%$ of assistant professors were women (Ginther \& Kahn, 2006). Among those women who planned to enter academia, fewer women than men have tenure track jobs five years after earning their doctorates and are more likely than men to have lecturer positions (Ginther \& Kahn, 2006).

The psychology and sociology departments at Midwestern University mirror many of the national demographics and trends within these fields. Women have earned the majority of doctorate degrees awarded for at least the past 15 years, and of all women, White women overwhelmingly earned the majority of doctorates awarded (Office of Institutional Research, 2015). Women's representation in faculty ranks fare slightly better than the national averages. In the psychology department, approximately $40 \%$ of tenured and tenure-track faculty members are women. In the sociology department, $43 \%$ and $33 \%$ of tenured and tenure-track positions are women. Although women are reaching parity in

[^0]representation with their male counterparts, the state of racial and ethnic diversity of department's faculty membership is much bleaker. In the psychology department, faculty of color comprise only eight of the 63 faculty members, and only three are women of color (see Table A2 in Appendix G). In the sociology department, 4 of the 44 faculty members are women of color (see Table A3 in Appendix G).

Paradoxically, women have exemplified steady gains in advanced degree attainment, yet they remain underrepresented in tenured faculty positions at doctoral and elite institutions and are underpaid in comparison to their male peers. This is especially true for women of color. Sociologist Charles Tilly (1998) referred to these inconsistencies as durable inequalities, or the egregious forms of inequalities that endure over time, bounded in categories like gender, race, and class; such inequalities are made possible because of mechanisms like exploitation and opportunity-hoarding social infrastructures. In her work regarding merit, diversity, and faculty gatekeeping of graduate admissions, Posselt (2016) explains how these durable inequalities regarding gender and race endure in academia:

In a society where overtly racist and sexist behavior are socially unacceptable and where diversity is something to celebrate, the institutionalization perspective [of academia] makes it clear that durable inequalities are neither inevitable nor natural, but instead are the result of a process we have created (p.13).

Academic women earn more doctorates than their male peers, however, once they enter their careers, they experience "the coexistence of structural inequality with individual and group mobility" (Katz, Stern, \& Fader, 2005).

Watford (2007) applied feminist sociologist, Dorothy Smith's (1987), call to critically examine "critical rifts," or the instances in which the world that is researched differs from women's lived experiences. Watford examined the meaning-making women in the "new female majority" experience in terms of their numerical overrepresentation in
their fields with long-standing patriarchal policies, practices, and attitudes in academia. In her study, she called for a further examination of women's career decisions as they progress through their doctoral careers. Previously, the means towards reaching gender equity in the academy centered on greater numerical representation, or as Twombly (1999) explained, "it was believed once women reached a critical mass in an organization, the character of the organization would change in ways more favorable to or consistent with women's strengths" (as cited in Watford, 2007, p. 9). Twombly (1999) then stated, "We now know that both training and restructuring are necessary but insufficient for organizations to shed their patriarchal ways and to become more "peoplearchal." This study focused on the social science fields that have arguably achieved critical mass but have not "shed their patriarchal ways." In this study, I analyzed these women's perceptions and meaning-making of their experiences and how they relate to their future career choices. Although useful, the metaphors used to describe women's professional disparities and pathways in academia do not account for their agency or describe what influenced their career choices during Ph.D. completion. Furthermore, it is critical to understand how contextual influences like institutional structures such as tenure and promotion, family leave policies, and representations of faculty interact with doctoral women's sense of decision-making power, academic capital, and personal attributes to inform career decisions.

## Purpose of the Study

The purpose of this study was to examine the context of two women-majority fields in the social sciences and understand the contextual influences (i.e. barriers, supports, and opportunities). The study also aimed to identify and analyze the intersectional aspects of identities doctoral women in women-majority fields attribute to their decision-making regarding their career choices and how they make meaning of those experiences and
identities. Primary data sources included semi-structured individual interviews with 22 participants. Other methods included two focus groups, follow-up interviews, document analysis, and participant-observations. Ultimately, the goal of the study was to better understand how these women's meaning-making as graduate students and their career trajectories may be supported by university faculty, staff, fellow graduate students, and institutional structures as they undergo their career choice decisions.

## Research Questions

I look to two research questions to guide my understanding of the complexity in these women's career choices following attainment of their doctorate degree:

For women doctoral students in majority-women fields:

1. What contextual influences shape perceptions of their career choice?
a. What, if any, barriers do women perceive regarding their career choice and how do they make meaning of these barriers?
b. What, if any, supports do women perceive regarding their career choice, and how do they make meaning of these supports?
c. What, if any, opportunities do women perceive regarding their career choice, and how do they make meaning of these opportunities?
2. How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding career choice?

## Overview of Methodology and Theoretical Framework

Qualitative research explores how and why questions, and case study design is a useful way to understand contemporary phenomena in context (Creswell, 2012; Yin, 2003). Additionally, phenomenological research calls for participants to illuminate their
experience in relation to specific phenomena (Creswell, 2013). As such, this study blends research traditions of case study design and phenomenology. This study applied a critical qualitative approach (Pasque, Carducci, Kuntz, \& Gildersleeve, 2012) which applies the "philosophical tradition of critical theory, which centers on understanding the historical and contemporary oppression and inequities that particular groups of people have experienced" (Winkle-Wagner \& McCoy, 2016, p. 186). Women and women of color have historically been excluded from academia, and the structures that exist continue to reflect a traditionally patriarchal, hegemonic space. This methodology focuses on a unit of analysis: women doctoral students in majority-women fields in the social sciences and their career choices. Following other studies, this study will focus on participants' perspectives to drive the findings and implications, rather than assessing the structures or specific outcomes themselves (Flyvberg, 2006; Winkle-Wagner \& McCoy, 2016).

## Methodology

This quasi-phenomenological single instrumental case study methodological design, informed by feminist research methods, works well to integrate a variety of data sources to understand how women doctoral students, who represent the new majority, perceive and pursue career choices. The main source of data drew from 22 semi-structured, in-depth interviews with women doctoral students at a predominantly White, researchintensive university in the Midwest United States. These women were enrolled in two majority-women fields, psychology and sociology. To augment these interviews and contextualize the bounded system in which they learn and work, this study drew from other data sources including: focus groups; documents, such as university and departmental websites, and academic or alt-ac career announcements; and participant-observations of graduate school-wide career workshops.

## Theoretical Framework

This study utilized social cognitive career theory (SCCT) (Lent, Brown, \& Hackett, 1994) to enhance our understandings of doctoral women students' contextual influences and the disciplinary context that shaped perceptions of career choices for women in two majority-women disciplines. Grounded in Bandura's (1986) social cognitive theory which integrates individual agency, "extra-personal factors," and overt behavior regarding career development, SCCT describes how social and institutional contexts shape career decisions (Lent et al., 1994). Lent et al. (1994) conceived of career decisions as a developmental model; positive self-efficacy beliefs and outcome expectations shape career interests along with personal characteristics (gender, race/ethnicity, disability/heath status), learning experiences (access to role models, encouragement from faculty), and contextual influences. These ultimately inform goals, choices and then action towards pursuing a career.

This study focused on the contextual influences that informed women's perceptions of career choice in majority female fields and allowed for a greater depth of understanding of a "contemporary phenomenon in a real-life context, when boundaries between the phenomenon and the context are not clear, and when it is desirable to use multiple sources of evidence" (Schwandt, 2001, p. 23). There is a dearth of literature that applies SCCT to women's experiences especially utilizing a critical qualitative approach; this study fills in some of these gaps.

## Definition of Terms

Several terms used in this study are defined as follows:

Alt-ac: an abbreviation for "alternative academic" careers ${ }^{3}$ in higher education; although sometimes used to denote only full-time non-teaching and non-research positions within higher education for this study, this term refers to any position, full-time or parttime, that is off the traditional tenure-track faculty career in the academy (Sayre, Brunner, Croxall, \& McGinn, 2015).

Doctoral student: ${ }^{4}$ a student admitted to and actively pursuing a program of study for completion of a doctoral degree.

Doctoral candidate: doctoral student who has successfully completed all doctoral coursework and has achieved this status after defending a dissertation proposal, and awarded the status of doctoral candidate by the Graduate School.

Career choice: the intended career goal doctoral women aspire to attain after completing the Ph.D.

Career pathways: the various careers doctoral women may pursue after completing the Ph.D.; they may be in or out academia, or exit the workforce, temporarily or permanently.

Majority-women doctoral disciplines/fields ${ }^{5}$ : broad fields of study, as conceptualized by the National Center for Education Statistics, that have awarded over 50 percent of all doctorates to women.

Post-ac: any career outside of academia altogether (Sayre, Brunner, Croxall, \& McGinn, 2015).

[^1]Woman/women: term used to describe a socially constructed gender, which was historically conceived to biologically differentiate between the female and male sexes. For the purposes of this study, any doctoral candidate in this social sciences field who identifies as woman is eligible for this study ${ }^{6}$.

## Significance of Study

Scholars have noted the discrepancy between women's overrepresentation in undergraduate and graduate school and their diminishing representation in tenured leadership positions (Anders, 2004; Bain \& Cummings, 2000; Bonawitz \& Andel, 2009; Mason, 2004, 2009; Perna, 2001). Recently, there has been a promulgation of successful industry, policy, and academic women ${ }^{7}$ who have extended advice for the next generation of women regarding career advancement and work-life balance, which has provoked simultaneously conflicting, empowering, and sometimes exclusionary reactions. Sheryl Sandburg, COO of Facebook, urged women to "lean in," or remove the internal barriers that prevent them from advancing through their careers, like not volunteering for new projects, or waiting to be asked to contribute at work. Dr. Anne Marie Slaughter (2012), former Dean of the Woodrow Wilson School of Public Policy at Princeton, stated the current structures and policies in contemporary American work culture do not facilitate an environment in which women, specifically those with family or care-giving responsibilities, can thrive in both arenas, or "have it all." In bell hook's (2013) response to Lean In, she noted "at no point in Lean In does [Sandberg] let readers know what would motivate patriarchal white males in a corporate environment to change their belief system

[^2]or the structures that support gender inequality" (para. 7). Although recently Sandburg has amended her argument and has acknowledged it originates from a privileged point of view and ignores the different experiences and barriers a diversity of women faces, this general sentiment could be extended to the patriarchal academic environment where women move through their undergraduate and postdoctoral careers. A greater understanding of women's experiences and how they interact with these academic structures that support gender inequality is needed if we are to move women through the "pipeline."

## Summary

One goal of this study was to uncover the perceptions women doctoral students in majority-women fields have regarding their career choices and how various influences from those fields' environments affected their career choices. This study's findings can inform faculty advisors, administrators, and other graduate students about women's experiences and perceptions regarding the academy's structure, including family-friendly policies, the tenure process, and work-life balance. Institutions may be better informed of the specific structures or practices that women perceive as promoting gender inequality. Faculty may be better equipped with specific strategies regarding career mentoring for doctoral women, as well as recognizing the implicit and explicit socialization mechanisms they extend to their doctoral students. These findings can also inform future and current women doctoral students, helping them recognize a diversity of career choices as well as better understand barriers, as well as strategies to entering the professoriate. Increasing gender equity in faculty and leadership positions benefits higher education institutions and society as a whole, but we must know what women attribute to their career choice decisions and how these influences shape their behavior. This study revealed these contextual
influences to better inform doctoral women as they consider career choices, as well as how faculty can support them as they navigate these career choices.

## Chapter 2: Review of the Literature

Rhetoric regarding graduate education, specifically doctoral education, tends to focus on high rates of attrition, the dismal job market for Ph.D.'s, and women's representation (or lack thereof) in Science, Technology, Engineering, and Math (STEM) fields (Golde, 2005; Mason, 2012). Research regarding women doctoral students' experiences often make direct connections from their doctoral careers to the disparate outcomes women faculty members face, such as their lower rates of tenure and pay disparities. However, there is limited understanding as to how women doctoral students make meaning of their career choices and determine their career pathways. This chapter is divided into three broad categories. First, I examine historical contexts and current conditions for doctoral students, as well as present data regarding women doctoral students. Next, I discuss the career pathways of women in academia, and third, I review theories of doctoral student socialization. A discussion of the theoretical framework follows; lastly, I synthesize the literature and how it informed my study regarding doctoral women's career choices.

I utilized an EBSCO search to scan through Academic Search Complete, Education Source, Ed Admin Abstracts, ERIC, and PsycINFO databases for relevant peer-reviewed articles. My search terms included women OR female OR gender; faculty OR doctoral OR professor* OR "graduate student*" in the subject terms; I specified the terms "decision making" as well as the words decision, career, choice, pathway, choose to occur within three words of each other, as to obtain articles relevant to those search terms. This resulted in a total of 392 peer-reviewed articles, 200+ of which directly related to this topic. Additionally, I conducted ancestry searches of the reference lists of articles and descent searches using Google Scholar to discover other relevant studies. I used journals specific
to the field of higher education but also expanded my search to include articles and books published in the sociology, American Studies, aind critical university studies fields regarding universities, the professorate, doctoral students, and women.

## Higher Education: Historical Contexts and Current Conditions

Women have made significant strides in their educational outcomes, especially at the undergraduate and graduate degree level. In order to situate the historical context of women's achievement in higher education, a discussion of women's enrollment trends at higher education institutions and current conditions for women at the doctoral degree level follows.

## Historical Context of Women in Higher Education

Throughout the 1700s and most of the 1800s, institutions of higher education in the United States largely reflected traditional conceptualizations of women's limited intellectual and physiological capabilities, so enrollment remained limited to men (Bernard, 1964) ${ }^{8}$. These institutions were created by, taught to, and administered by white men to facilitate moral, social, and intellectual development of white, Protestant males (Karabel, 2006). While there was some diversity in class composition in early- $19^{\text {th }}$ century colleges, these schools remained predominately racially and gender-exclusive (Lucas, 2006).

Many private women's colleges were located in the northeast but Midwestern states' public land-grand colleges and state universities like Iowa, Wisconsin, Indiana, Missouri, and Michigan led the way for coeducation, beginning in Iowa in 1855. As

[^3]institutions on the East coast such as Wellesley and Smith opened in the 1870s, most collegiate institutions on the West coast had widely accepted the practice of coeducation (Newcomer, 1959). There was a tremendous expansion of co-enrollment for women during the late $19^{\text {th }}$-century; by the beginning of the $20^{\text {th }}$ century, almost 75 percent of all collegiate institutions were coeducational (Newcomer, 1959). The Second Morrill Act of 1890 provided a means for greater numbers of African Americans to attend colleges, as it prohibited distribution of money to states that made race-based admissions practices unless there was at least one land-grant college for African Americans. While it did not significantly increase minority enrollment at these state institutions, 19 public black colleges, mostly in the south, were created because of this legislation (Karabel, 2006; Lee \& Keys, 2013).

Throughout the $20^{\text {th }}$ century, enrollment trends varied greatly among gender, age, and race. From 1900 to 1930 , the number of male to female undergraduates was at about parity (Goldin, Katz, \& Kuziemko, 2006). However, during the 1930s, and especially following the end of World War II, enrollment for men far surpassed women's enrollment as the G.I. Bill ushered unprecedented access to higher education that allowed men from different socioeconomic and racial backgrounds to pursue higher education but largely pushed women back into the home (Karabel, 2006). In the 1970s, undergraduate female enrollment began to approach men's enrollment numbers, and equal representation of undergraduate enrollment for both genders was reached again around 1980 (Goldin et al., 2006). A combination of social movements, legislation, and judicial decisions facilitated access for large numbers of women, people of color, and members of the working class into higher education (Brubacher \& Rudy, 1997). Since 1988, women's overall undergraduate enrollment has surpassed male undergraduate enrollment, and there have been increasing numbers of women of color at universities as well (NCES, 2015a).

## Contemporary Doctoral Student Enrollment and Degree Completion

The work of DiPrete and Buchmann (2013) is one of the most comprehensive analyses of the growing gender gap in education, in which they synthesize decades of empirical data and previous studies to evaluate how women's gains in educational attainment interact with larger social issues and the changing labor market (see Buchmann, DiPrete, \& McDaniel, 2008; DiPrete \& Buchmann, 2006, 2013; McDaniel, DiPrete, Buchmann, Shwed, 2011). Their work helps explain not only how women have fared better than their male counterparts in higher education degree completion, but also how key differences among men and women actually explain the gender gap in educational and labor market outcomes.

DiPrete and Buchmann (2013) posit three features of the growing gender gap in U.S. educational progression. First, women did not merely reach parity with males in their educational gains; they surpassed them by a large margin. Men earn fewer college degrees than women because they do not transition to postsecondary education at the same rates as women (McDaniel et al., 2011). Second, gender segregation in academic fields has persisted over time despite women earning more undergraduate degrees. Lastly, differences in educational attainment within race and ethnicity vary considerably. For instance, White women's growing undergraduate completion rates over White men is actually growing faster than Black women over Black men. Historically, Black women have better rates of college completion than Black men; for White women, this is only a recent development (McDaniel et al., 2011).

The perception of a "return" on a college education for women is also a significant factor in their growing educational achievements. The economic gains for women who earned a college education rose over the past few decades, but their social returns drove the value in a college degree for women as well. With a college education, women found
a higher probability of marriage, insurance against poverty, and an overall higher standard of living (DiPrete \& Buchmann, 2006). Social developments such as delaying marriage, declining marriage rates, and access to contraception have contributed to an increasing value of an undergraduate degree (Harknett \& McClanahan, 2004).

Although women have earned more undergraduate degrees, and in some fields, more advanced degrees than men, gender segregation between academic fields persists. Studies show that majority-women undergraduate fields have become female dominated fields, indicating females enter these fields, rather than those typically overrepresented by men (England, 2010). DiPrete and Buchmann (2013) identified the years between middle and high school as crucial for girls to formalize their STEM-orientation and aptitude for pursing these fields of study. The authors found that by high school, if girls intended to major in a STEM field, they were just as likely as boys to graduate from college with a STEM degree. However, if they had not indicated an interest in a STEM field by high school, they were much less likely to major in a STEM field in college. Together, these findings explain the prevailing "new female majority" that persists in academia. Women recognize the economic and social benefit to earning an undergraduate and graduate education, but the ways in which they pursue female-dominated fields has largely remained unchanged. Therefore, the phenomenon of the social sciences becoming a "feminized field" (Glazer-Raymo, 1999) is not a surreptitious development. How girls experience and relate to different fields of study prior to college informs their choice of college major. This also explains how women persist in these same fields through graduate school and beyond.

The first decade of the millennium showed a tremendous amount of growth in postbaccalaureate degree enrollment, which includes master's, doctoral, law, medical, and dental degrees; enrollment in these programs increased $36 \%$ between 2000 and 2010 (NSF, 2013). In 2013, there were a total of $2,931,516$ students enrolled in both full-time and part-
time post-baccalaureate degree programs (NSF, 2015). This trend is expected to continue, as post-baccalaureate enrollment is projected to increase by $20 \%$, to 3.5 million students by 2024. Men represented approximately 1.2 million, or a little over $41 \%$ of all postbaccalaureate enrollment; women represented $1,721,896$, or $58 \%$ of all post-baccalaureate enrollment (Knapp, Kelly-Reid, \& Ginder, 2011).

Earning a doctorate is a rare accomplishment; only $1.5 \%$ of the U.S. population earns a doctoral degree and, for women, $0.57 \%$ of the total population (U.S. Census, 2014). Of the total U.S. population aged 18 or older, whites represent the largest racial group who have earned doctorates ( 2.9 million); Asians have earned 478,000 doctorates; Black or African American, 206,000; and Hispanic or Latinos have earned 193,000 doctorates (U.S. Census Bureau, 2014). Although Latinos earned doctoral degrees at lower levels than other groups, they have shown the highest percent increase (67\%) in number of doctoral degrees earned from 2003 - 2012 (NCES, 2015a).

Doctoral degree production has increased substantially over the past few decades, and since 2002, women have received a majority of all doctoral degrees (Johnson, 2016; NSF, 2015c). In 2012, men earned the highest percentages of doctoral degrees in engineering (77.6\%), mathematics and computer sciences (74.8\%), and physical and earth sciences ( $66.6 \%$ ). Although women represent a small proportion of doctoral students in the fields of science and engineering, since 1993, most of the growth in the number of doctorates earned by women has been in the fields of science and engineering (NSF, 2015c). Collectively, women earned $42 \%$ of science and engineering doctorates awarded in 2013 (NSF, 2015a). Between 1980 and 2001, women of color received only $16.7 \%$ of all doctorates earned by women. As White women and White men's doctorate production reached parity between 1990 and 2000, Latina and African American women exceeded men within their respective racial groups earning doctorates (Watford et al., 2006).

## Academia: A Gendered System

Despite gains in the numerical representation in a variety of areas in higher education, including students, faculty members, and leadership, the structure of academia itself remains a gendered space in its policies, norms, and outcomes. Many institutions and organizations are reflective of structures that were built upon a division of labor between genders (Acker, 1990). Academia is no different; it still operates under the assumption of an "ideal worker" - an employee, usually a man, who is both willing and able to work long hours, without additional family or personal obligations to detract from such productivity (Acker, 1990; Ely \& Meyerson, 2000; Sallee, 2012); "put another way, men can be productive academics because they are not expected to be responsible at home" (Sallee, 2012 p. 798). However, there is evidence the system once built by and for men no longer serves neither men nor women. Scholars have recently extended this discussion of conflict between the ideal worker to men in academia as well (Reddick, Rochlen, Grasso, Reilly, \& Spikes, 2012; Sallee, 2012, 2013) and have found fathers report "work-life conflict" in equal to greater levels of their women counterparts (Galinsky, Aumann, \& Bond, 2011). Although some studies indicate men may report high levels of work-life conflict, research still shows that women still do the majority of childrearing and housework (Elliott, 2008; Hochschild, 1989; Rhoades \& Rhoades, 2012).

Acker (1990) postulated organizations may be gendered in five ways. First, divisions of labor are constructed along lines of gender, and in academia we see this in overrepresentation of women to men in staff and administrative positions, but also along ladder-rank faculty positions (Mason, et al., 2013). Moreover, colleges and universities operate based on gendered perceptions of traditional male and female roles. For women, this includes teaching, clerical, and mid-level administrative work (White, 2005). Women
may be encouraged to spend more time on "feminine" roles such as teaching and service, leaving more room for men in research.

Organizations are also gendered through the construction of symbols and images that reinforce or sometimes oppose these gendered divisions, which include sources like language, television, and other media. Sturnick (1999) found women leaders experienced harsher criticism of their physical appearance than men. Peers also judged women as weak if they did not demonstrate masculine leadership attributes such as force and strength, but simultaneously criticized female actions seen as pushy and opinionated. Other studies have also noted the frequency of "male" language and leadership adjectives such as "aggressive" and "tough" for evaluative measures (Eagly \& Carli, 2003; Jablonski, 1996). Third, organizations may exhibit gendered interactions which often produce patterns regarding dominance and submission. For instance, in faculty meetings, do men interrupt men when they speak? Do women acquiesce when a male faculty member pushes back on a policy? Will male tenure-track professors feel confident in utilizing family leave policies while their senior peers did not? (Sallee, 2012). Fourth, processes help produce and reinforce gendered components of individual identity. Power relationships that result from gender differences are not fixed or innate, but with repeated interactions, "differences between genders and power imbalances are reinforced" (Sallee, 2016, p. 787). Finally, as gender and the resulting power relationships are reified within an organization, so too are the gendered processed that support social structures.

## Tenure

Although education institutions are increasingly relying on adjunct and nontenure track positions to satisfy their teaching needs, the system of tenure still has a prominent role in the academy. The American Association of University Professors (AAUP) first
articulated their statement of academic freedom and tenure, known as the 1915 Declaration of Principles, and these tenets inform the scaffolding of academic freedom and tenure today. This report outlined the three elements of academic freedom: freedom of inquiry and research; freedom of teaching within the university or college; and freedom of extramural utterance and action. The 1915 Declaration stated the purpose of tenure was "to render the profession more attractive to men of high ability and strong personality by insuring the dignity, the independence, and the reasonable security of tenure, of the professorial office" (p. 300). These principles were primarily enacted to enable faculty members to pursue research and teach without the possibility of censure or retributions from academic, political, or governmental authorities. The 1940 Statement of Principles on Academic Freedom updated the definition of tenure and outlined acceptable applications of academic tenure and explicitly included women in its definition: "tenure is a means to certain ends; specifically; (1) freedom of teaching and research and of extramural activities, and (2) a sufficient degree of economic security to make the profession attractive to men and women of ability" (p.14). Over time, the AAUP has refined these principles, reflecting legal precedents and institutional developments, but tenure remains a nebulous process, and women often report dissatisfaction with the fairness and transparency of this reward system (Glazer-Raymo, 2008; O'Meara, 2011).

Shirley M. Tilghman, the first female president of Princeton University, stated tenure was "no friend to women" (Mason, 2009, para. 1), and there is ample evidence to support her claim.

Women faculty members are tenured and promoted less often than men, and this is exacerbated for women of color (August \& Waltman, 2004; Marschke, Lauresen, Mason \& Goulden 2002; 2004; Nielsen, \& Rankin, 2007; Umbach, 2006). Mason et al. (2013) estimated that across all academic disciplines, women are $21 \%$ less likely to get tenure than
are their male colleagues. Tenure decisions often occur during a woman's prime childbearing years, and women professors face the intricate difficult balance between advancing at a crucial point in their career, with balancing the reality of meeting family goals in a constrained period of time (Dominici et al., 2009; White, 2005). Studies generally focus on family formation patterns to explain the disparities in women's tenure attainment and advancement, as women who are married or have children, especially young children, are less likely to earn tenure than their male counterparts (Comer \& StitesDoe, 2006; Ward \& Wolf-Wendel, 2004; Wolfinger et al., 2009; 2010).

Different experiences within the academy also explain the disparities in women's tenure attainment. On average, women perform more service, mentoring, and teaching duties than men, sometimes as much as eight hours a week more than men, while men spend 7.5 hours more on research than women (Harper, Baldwin, Gansneder \& Chronister, 2011; Misra et al., 2011). These excessive demands of domestic functions of academic work have consequences on tenure decisions, as they are rewarded less in the tenure system. Furthermore, women have less access to mentoring and collegial networks, (Rankin, Nielsen, \& Stanley, 2007; Sands, Parson, \& Duane, 1991; Wasburn, 2007) which affect career satisfaction levels (August \& Waltman, 2005; Blakemore, Switzer, DiLorio, \& Fairchild, 1997; Wright, 2005) and research productivity (Harper et al., 2011). These "accumulated disadvantages" (Clark \& Corcoran, 1986) contribute to women perceiving academia as a chilly climate: one that does not support their career advancement.

## Policies

U.S. federal laws have improved women's status protections against gender discrimination, and institutional policies have shown considerable improvement in the work-life balance for both men and women. One of the first federal protections towards
women was Title VII of the Civil Rights Act of 1964, that prohibits employment discrimination on the basis of sex, race, national origin, or religion. In 1978, the Pregnancy Discrimination Act (PDA) amended Title VII to prohibit discrimination on the basis of pregnancy, childbirth, or related medical conditions. Although the PDA extended protection to women in these circumstances, there were considerable gaps in employment protections. In 1993 the Family and Medical Leave Act (FMLA) marked a significant step in ensuring job-protected leave to employees for specific family and medical reasons, including care for a newborn. FMLA entitles those who work for a public or private employer, with 50 or more employees, to twelve weeks of unpaid leave in a 12-month period, to both men and women (U.S. Department of Labor, 2012). This signified a great step for both women and men for protecting their employment while fulfilling caretaking responsibilities, but since it is unpaid, full utilization is not feasible for all. ${ }^{9}$ Moreover, research shows that men benefit from FMLA differently than women. Boushey, Farrell \& Schmidt (2013) found that men who took parental leave were substantially more likely than women to be paid for that time off. In this same study, the authors found since the passage of FMLA in 1993, the share of women whose parental leave was paid has remained steady, at about $45 \%$, however, the share of men whose parental leave was paid was approximately $70 \%$ (Boushey et al., 2013).

Institutional Policies. In 2001, calls for renewed attention regarding the status of families, particularly for women, regarding work-life policies resulted in American Association of University Professors (AAUP) issuing its Statement of Principles on Family Responsibilities and Academic Work (2001). This report acknowledged there had been significant demographic and legal changes in the academic professions, but there had not

[^4]been commensurate development of institutional policies to support these changes, especially for women. Drago and Williams (2000) warned:

Raising a child takes 20 years, not one semester. American women, who still do the vast majority of child care, will not achieve equality in academia so long as the ideal academic is defined as someone who takes no time off for child-rearing. With teaching, research, committee assignments, and other responsibilities, pretenure academics commonly work many hours of overtime. Defining job requirements in this way tends to eliminate virtually all mothers, so it is not surprising the percentage of tenured women in U.S. colleges and universities has climbed so slowly (p. 48).

The AAUP policies fell into two categories: first, general policies to address family responsibilities, from family-care leave to eldercare; and second, specific policies like stopping the tenure clock (STC). Higher education institutions responded and have established a number of these policies and have had differing utilization rates and outcomes for faculty. This range of work-life policies include flexible work arrangements, STC for childbirth or medical reasons, part-time faculty positions, dual-career hire programs, telecommuting, childcare centers on campuses, and paid family and medical leave (Lester \& Sallee, 2009).

Hollenshead, Sullivan, Smith, August, \& Hamilton (2005) studied eight work/life policies and programs at a variety of institutional types, ranging from Research I and II universities to associate-degree granting institutions. The eight policies examined included STC, modified duties, paid leave while recovering from childbirth, paid dependent care leave, unpaid dependent care leave in excess of the 12 weeks mandated by FMLA, reduced appointments for ordinary or extraordinary dependent care needs, and part-time and jobshare appointments. The authors found on average, institutions reported having fewer than two institution-wide policies; however, research institutions reported almost two times as many policies as other schools in their sample. The policies most common at research
institutions were those that did not have a financial cost to the universities, like STC and unpaid leaves in excess of the twelve weeks mandated by FMLA.

STC policies have existed in some form for over 40 years and is available at over 90\% of research institutions (Hollenshead et al., 2005; Thornton, 2005) and scholars have investigated utilization rate and outcomes for faculty members who use this policy. The intention of this policy (also known as tenure clock extension) is to allow tenure-track faculty members to delay their tenure review in order to dedicate time to family or personal reasons that may negatively affect their research productivity during this period. STC was originally created to support women tenure-track faculty members who had recently given birth, but it has expanded to include anything from adoption, to natural disaster that destroys research materials, to caring for a death of a parent, spouse, or domestic partner, and these qualifying reasons vary across institutions (Thornton, 2005).

Although men can benefit from this policy, their adoption of it is much lower than women's, and studies have shown a variety of outcomes for those who use the policy. Mason et al. (2013) found that $30 \%$ of female assistant professors used the tenure clock stop policy, but only $8 \%$ of male assistant professors did. Some faculty members fear they will be stigmatized for stopping the clock or believe it will lead to negative career outcomes (Drago et al., 2006; Hollenshead et al., 2005; Ward \& Wolf-Wendel, 2005; Mason et al., 2006); other research shows STC is not always implemented or evaluated appropriately by university leadership or tenure review committees (Thornton, 2005). Manchester, Leslie, \& Kramer (2013) found two conflicting outcomes for faculty members who utilize the STC policy. First, their analyses revealed faculty members of both genders who use STC for family reasons incur a salary penalty that cannot be explained by a change in quantity or quality of publications. Furthermore, they found evidence that STC policy use has a persistent effect on salary decisions for male faculty members. The authors hypothesize
evaluators see faculty members who use the STC policy as less committed to the academic profession (especially men), and thus, subjective factors influence salary decisions. Second, and somewhat counterintuitive, the authors found a positive relationship between promotion chance and use of STC policy for family reasons. The authors posit promotion committees may fear legal recourse if promotion is denied for those who used STC, and faculty members who used STC may have better publication record leading up to tenure review.

In an analysis of data from assistant professors hired at top-50 economics departments between 1985 to 2004 Antecol, Bedard, \& Stearns (2016) found genderneutral STC policies actually reduce female tenure rates while increasing the male tenure rates. In their analysis, the authors found men are more likely to be more productive while their tenure clock is stopped and publish more in top-5 journals than women, "yet they are treated equally under these policies" (p.24). This effectively raises the within-university tenure standards to which women do not meet and perpetuates the "family gap" or motherhood penalty at research universities (Antecol, Bedard, \& Stearns, 2016).

Flexible career tracks in higher education are an emerging development in workfamily policies. Flexible career tracks would include the option to temporarily move from full-time to part-time, depending on family circumstances. Corporations and industry have already implemented similar part-time flexible policies, but higher education has significantly lagged behind in this aspect of family-friendly policies (Lane, 2012). Since 2006, the Alfred P. Sloan Foundation gave awards to over 15 institutions to develop their policies regarding work flexibility for faculty members. These awards have been used for a variety of initiatives, including creating awareness for flexible work arrangements, creating a tracking system for policy use, and educating department chairs and leadership on work-family policies (American Council on Education, n.d.). In a survey of University
of California system faculty, more than $60 \%$ of women and $30 \%$ of men stated they would be interested in a flexible, prorated tenure track system (Mason et al., 2013). Proponents of this plan expect universities would retain qualified talent who would otherwise leave, as well as the ability to recruit new faculty members (Drago \& Williams, 2000; Thornton, 2005). Others point to the strong financial penalty policy-users would incur and most often would not be able to afford. Moreover, faculty members doubt they can run labs or research groups on a part-time basis (Mason et al., 2013).

Some of the barriers to using family-friendly policies are legitimate concerns, like financial constraints, but the others speak to the broader problem of a work culture in academia that is not supportive of the modern faculty member - male or female - who no longer embodies the "ideal worker" norms of the past. Kossek, Lewis, \& Kramer (2009) argued organizations can support employees in two ways regarding work/life support: structural support in the form of policies and programs, and cultural support, in which supervisors and fellow employees encourage each other to use these types of policies and programs. The latter component is crucial for better adoption by men and women in academia, as the AAUP (2001) advised "a more responsive climate for integrating work and family responsibilities is essential for women professors to participate on an equal basis with their male colleagues" (p.344). Scholars contend that in order for these policies to dramatically shift organizational culture, policies should be opt-out rather than elective (Center for Worklife Law, 2012). Moreover, institutions need to communicate the availability of these policies, as many are unaware of their existence (Reddick et al., 2012; Sallee, 2012; Thompson et al., 1999).

Many of the studies regarding family work-life balance and policies bifurcate men and women's experiences, rather than look at faculty experiences as a whole (Sallee, 2012). As more men take advantage of family policies, studies should examine men and women's
experiences together in order to understand how the policies work within the context of a department, discipline or institutional type. Although there is a growing body of literature regarding graduate student women and families (e.g., Holm, Prosek, \& Weisberger, 2015; Lynch, 2008; Springer, Parker, \& Leviten-Reid, 2009), there is a dearth of literature on how institutions can support women and men regarding their family formation during graduate school. Additionally, most of these institutional policies apply only to tenuretrack and tenured faculty. Since women comprise a majority of contingent faculty positions, institutions should expand their eligibility to include faculty members off of the tenure track if they want to retain talented individuals in academe. All of these considerations should help "create an academic community in which all members are treated equitably, families are supported, and family-care concerns are regarded as legitimate and important" (AAUP, 2001).

## Women in the Academic Pipeline

As discussed previously, scholars have referred to the academic "pipeline," and have investigated the career trajectories of women and whether women disproportionately "leak out" of the pipeline at specific points in their career development (Cole \& Zuckerman 1987; Ginther 2001; Perna 2001a, 2001b; Wolfinger, et al., 2009). Women experience "academic life courses," or the academic career, differently than their male counterparts (Bain \& Cummings, 2000; Clark \& Corcoran, 1986; Seifert \& Umbach, 2008; Wolfinger et al., 2009). There are various explanations for these on- and off-ramps, and many of them focus on either the broad organizational structures of academia, or personal, individual choices of women. For instance, Anders (2004) found family and mobility issues, not teaching or research, were more negatively associated with entering academia for women than men. Anders suggests this supports the conception that the academic systems like
tenure and promotion, expectations of service, and distribution of courses, are the barriers for women entering academia, rather than parenthood.

Mason et al. (2013) identified five primary career pathways students undertake after they earn their doctorate: tenure track faculty, contingent teaching at college or university, non-teaching university position, employment in government or private sector, or exiting the labor force. Following completion of their doctorates, men and women both aspire to faculty careers, but ultimately, do not achieve faculty positions at the same rate. Golde and Dore's (2001) national cross-disciplinary study investigated the motivations of students pursuing a doctorate, how effective they perceived their programs to be, and their understandings and expectations of their program. Of the 4,100 doctoral students surveyed, men $(67.3 \%)$ were more likely than women $(60.1 \%)$ to report they intended to pursue a faculty career. White men were the most likely to aspire to a faculty position, followed by men of color, White women, and then lastly, women of color. Not only did desire to obtain a faculty position vary depending on gender, but preference of institutional type varied along gender as well. Men were more likely than women to desire positions at research universities, and women were more likely than men to prefer a career at community colleges, liberal arts colleges, or comprehensive universities (Golde \& Dore, 2001). ${ }^{10}$ During graduate school students modify their faculty aspirations, and women are more likely to turn to nonacademic careers than men (Mason, Goulden \& Frasch, 2009). Although the data are clear that men and women formulate different career aspirations in terms of preferred institutional type and ladder-rank faculty, little is understood about how they arrive at these decisions.

[^5]In a smaller, mixed-method dissertation at a research extensive university, Watford (2007) investigated women's career aspirations in relation to departmental socialization activities; her research reflects Golde and Dore's (2001) findings. In her study, the women who experienced the most doubts and reconsiderations about original career goals were the ones who entered the program with goals to work at a similar research university. Eleven women of color and four white women stated when they entered graduate school they planned to pursue a faculty career at a research institution. At the time of their interviews only three of the eleven women of color and three of the four white women still had faculty career aspirations of working at a research university. Watford suggests that a reevaluation of career goals seems to be more pronounced among the women of color, and many of them cited a concern of a supportive work environment and a doubt of the ability to balance teaching and research duties.

## Women in the Professoriate

In 2013, of all full-time faculty in degree-granting postsecondary institutions, approximately $30 \%$ of all full professors and $43 \%$ of the associate professors were women (NCES, 2015a). Women made up the majority of assistant professor, instructor, and lecturer positions (NCES, 2015b) (See Table 2). The disparity of women in full-time faculty positions is greatest in doctoral-degree granting institutions; women comprise $38 \%$ of these positions, compared to $56 \%$ of men. In two-year colleges the gap is significantly smaller; women comprise $65 \%$ of all full-time faculty, and men represent $69 \%$ of faculty members (NCES, 2015b). Often the disciplines that rely most heavily on traditional faculty hiring patterns (tenure and tenure-track positions) are also those that hire the fewest women (Harper et al., 2001). Women of color make up only 2.3\% of tenure-track and tenured faculty; White women comprise $23.4 \%$ of all tenure-track and tenured faculty (Ginther \&

Kahn, 2013). Overall, women of color are more likely than white women to be employed in a non-tenure track position and working at a minority-serving institution (Ginther \& Kahn, 2013).

| Rank | Percent Women | Percent White | Percent Black | Percent Hispanic | Percent <br> Asian/PI | Percent American Indian | Percent Two or more | Percent <br> Nonresident <br> Alien |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professors | 30 | 83 | 5 | 3 | 6 | 0.4 | 0.6 | 1 |
| Associate professors | 43 | 76 | 7 | 4 | 9 | 0.4 | 0.7 | 2 |
| Assistant professors | 50 | 69 | 8 | 4 | 10 | 0.5 | 0.9 | 5 |
| Instructors | 57 | 74 | 8 | 6 | 5 | 1 | 0.8 | 1 |
| Lecturers | 55 | 74 | 5 | 6 | 7 | 0.4 | 0.8 | 4 |
| Other <br> faculty | 47 | 65 | 7 | 4 | 9 | 1 | 1 | 10 |

Table 2.1: U.S. Women Faculty by Rank and Race/Ethnicity, 2013. ${ }^{11}$

Marschke et al. (2007) applied the concept of demographic inertia to predict when gender parity in the professoriate may be reached at one research extensive university. In their study, they found there was greater female attrition at the associate professor level; female proportions of faculty in departments fell short in their Ph.D. pools; and men were more likely than women to be promoted to associate professor rank than women. They determined if demographic trends and hiring practices remained the same, women faculty members at this university would stagnate at $34 \%$. However, it would take an additional 40 years for this percentage to even be achieved. For women across all professions in the U.S., the gender pay gap is more acute; a recent AAUW analysis of U.S. census data showed that women will not have equal pay until 2152 (Hill, 2017).

As a group, women faculty members are fairly racially monolithic; 73 percent of all full-time women faculty members in degree-granting postsecondary institutions are white. Asian females are the second-highest represented by race at $8 \%$, and Black and Hispanic women represent only $7 \%$ and $5 \%$, respectively, of all full-time faculty (NCES, 2015a). Obtaining faculty positions may be especially challenging for women of color;
correspondingly, attrition is higher for women faculty of color as well (Cooper, Ortiz, Benham, \& Woods-Scherr, 2002; Turner, 2002). However, other studies have found minority men are more likely than minority women to be employed in full-time non-tenuretrack positions (Harper et al., 2001).

Although all faculty members are expected to devote time to teaching, research, and service, studies have shown that women faculty members spend a greater proportion of their time on teaching and service than do men (Park, 1996; Porter, 2007; Toutkoushian \& Bellas, 1999). Misra et al.'s (2011) review of 350 faculty members at the University of Massachusetts at Amherst found, on average, male associate professors spent 37\% of their time on research, while women associate professors spent $25 \%$ of their time on research. Women associate professors spent 27 percent of their time on service while men spent $20 \%$ of their time on service. Research has found that women's overall publication rate is lower than men's, and these time detractions from scholarly pursuits have real consequences for women, as scholarly pursuits are ultimately favored in career advancement (Harper et al., 2001; Misra et al., 2011).

These differences in tenure and promotion also result in pay gaps between men and women which show pay gaps have persisted (Perna, 2001, 2002; Umbach, 2006). In each traditional professorial rank and institutional type, women full-time faculty members earn less than their male colleagues; only at the community college level are women approaching pay parity with their male peers (Curtis, 2010). At public institutions, this gap in pay is less than at private institutions, but persistence of inequitable pay for women and men can largely be attributed to women being overrepresented in lower-rank faculty positions as well as institutional type (Johnson, 2016; Mason \& Goulden, 2004). Other studies have shown that pay disparity emerges over time; recently hired, new faculty members tend to have less of a pay gap, however, this finding differs at research
institutions. Recently-hired women at research-intensive institutions earn 9\% less than their male counterparts, taking into account several human capital and disciplinary variables (Porter, Toutkoushian, \& Moore, 2008). This may suggest that from the beginning, women at these categories of institutions are perceived differently than their male peers, and this is only exacerbated over time.

## Marriage and Family

Gender alone does not explain the disparity in women's academic career paths; marriage and family formation appear to have a greater influence on women's professorial roles. Women are 43 percent more likely than men to have adjunct jobs and not tenuretrack positions; those with children under six are disproportionately likely to have adjunct professorships (Mason \& Goulden, 2004). Similarly, Perna (2001) found the odds of holding a part-time, non-tenure-track position appear to be higher for married women than for non-married women even after controlling for race, human capital investment, and structural characteristics. In contrast to Perna's findings, Mason et al. (2013) determined that family formation patterns like marriage and childbearing, explain female departure from academia and tenure-track positions. However, they determined that marriage alone cannot explain why women become adjuncts rather than tenure-track faculty members. A woman with a child under age six is $22 \%$ less likely to obtain a tenure-track position than a childless woman (Wolfinger et al., 2008). Compared to a married man without children, a married woman has a $12 \%$ lower odds of getting an academic job (Wolfinger et al., 2008). Interestingly, single and childless women tend to fare better in an academic market than single and childless men (Wolfinger et al., 2008). This new model of the academic life course differs greatly between men and women, but also between women with and without
children, and those who are married and not; ultimately, patriarchal and inflexible structures for women and families hamper gender parity (Mason et al., 2013).

Women often have different expectations in terms of balancing service, teaching, and research obligations, and this is no different at home, as they also are responsible for greater numbers of hours dedicated to family and housework. In a survey of over 1,000 tenured and tenure-track faculty members in the natural sciences, not only did the female scientists do almost twice as much housework as their male peers, even the 13 female scientists who had a stay-at-home-partner still assumed a greater share of core tasks than did most male scientists (Schiebinger \& Gilmartin, 2010). As graduate student cohorts and faculty continue to diversify so, too, do their expectations regarding careers and workfamily balance. In a national, cross-disciplinary study of 8,000 doctoral students, nearly all students said they were somewhat or very concerned about the family friendliness of their career choices; however, more women ( $84 \%$ ) than men ( $74 \%$ ) expressed this concern (Mason et al., 2009). In this survey, a majority of men and women considered faculty careers at research universities unfriendly to family life. Although women may assume a greater amount of teaching, service, and home responsibilities, both men and women show concern about the possibilities of balancing family responsibilities in an academic context, and this will likely continue to come to the foreground in the future.

## "Opting" Out and Off/On Ramps

Despite tremendous headway in higher degree attainment and access into professional careers, women are disproportionately more likely to exit the labor force. After decades of decline of stay-at-home mothers, in 2012, an increase to $29 \%$ of all mothers were stay at-home, up from $23 \%$ in 1999 (Cohn, Livingston, \& Wang, 2014). In 2012, nearly 370,000 U.S. married stay-at-home mothers (with working husbands) had at
least a master's degree; this accounted for five percent of married stay-at-home mothers (Cohn et al., 2014). Lisa Belkin (2003) declared this trend as the "opt-out revolution," in which highly educated women (who had financially viable partners) chose to leave their careers after motherhood, rejecting the feminist headway of previous generations who declared they could "have it all."

Belkin's statements ignited a maelstrom of both criticism and support regarding this idea of an "opt-out revolution." Other scholars stated a woman's decision to return home after having children is not actually a choice; rather she is "pushed out" of the labor market, due to an inability to balance parenting demands with strict, gendered "gilded cages of elite professions' work structures" that do not take into account maternity leave, childcare, and other obligations (Stone, 2007a). Although Stone's exploratory study is a relatively limited look at White, married women with children who had previously worked as professionals and who were married to men who could support their being home, they were, in fact, those most privileged to make a "choice." She also supports that these women have been "crucial to advancing gender parity and narrowing the wage gap, which stubbornly persists to this day" (Stone, 2007b, p. 112). Ultimately, she rejects this idea of "opting-out" and posits a "choice gap," or the "difference between the decisions or 'choices' women could have made about their careers... and the decisions they actually make to accommodate these responsibilities in light of the realities of their professions and those of their husbands" (Stone, 2007b, p. 112). Instead of concentrating on personal choices, Stone highlights the structural forces that pressure these successful women, who are unable reconcile their home and child responsibilities with a flexible workplace.

A greater understanding of women's paid labor force exits is better described as a nonlinear model that involves "on- and off-ramps" (Hewlett \& Luce, 2005). These offramps include leaving the workforce for any period of time, working part-time, or finding
alternate arrangements for earning income outside the standard labor force. Scholars estimate than anywhere from $35-47 \%$ of highly qualified women have stopped working at some point in their careers; by contrast, only $24 \%$ of highly qualified men have taken an "off-ramp" in their careers (Cabrera, 2007; Hewlett \& Luce, 2005). Women are more likely to exit the labor force for any amount of time, but nearly $70 \%$ of women who leave the labor force re-enter at some point in time (Cabrera, 2007). Exiting the labor force, even for brief periods of time, has economic consequences. On average, women lose an average of $18 \%$ of their earning power when they take an off-ramp; when women spend longer than three or more years out of the workforce, they lose around $35 \%$ of their earning power (Hewlett \& Luce, 2005).

These on- and off-ramps have been well documented in academia as well. Shuster and Finklestein (2006) assert that time off the tenure track is a "new rung" in the academic career ladder, both for men and women. If a recent doctoral degree earner does not obtain a tenure-track job, there are still on-ramps for them to obtain one in the future and obtaining a career in higher education. Ramps such as becoming contingent faculty or administration can be a re-entry point to tenure-track positions. Over half of all Ph.D.s who obtain contingent faculty positions immediately following graduate schools obtain tenure-track jobs within ten years. However, this is less likely for women, and especially true for women with young children, compared to men (Wolfinger et al., 2009). Women are more likely to leave the labor force after earning their doctorates than men, but there are disparate outcomes for married women and especially women with children under six (Mason \& Goulden, 2013). Women with children under six are almost four times as likely to leave the labor force in lieu of a ladder-rank professorship compared to women without young children. Compared to her unwed counterpart, a married woman is $28 \%$ more likely not to
work (Wolfinger et al., 2009). Women, especially women with families, experience entry and sometimes re-entry into the academic labor force differently than their male peers.

Although the total number of women who "opt-out" may be relatively small, the total number of women who exit the labor force (permanently or temporarily) or decrease their working hours invested a substantial amount of time, energy, and financial resources to earn higher education degrees. A variety of reasons have been found to explain women's disparate representation in academic positions, including the perceptions that the academic labor force is incompatible with marriage and family (Dryfhout \& Estes, 2010; Mason \& Goulden, 2004; Perna, 2001; Wolfinger et al., 2009); lack of role models (Cantor, 2010; Grant \& Simons, 2008; Wolf-Wendel \& Ward, 2006); and beliefs that the traditional, masculine organizational structure is incompatible with women (Clark \& Corcoran, 1986; Easterly, \& Ricard, 2011; Hart, 2011). Women are more likely to get off and back onto their career paths than their male counterparts, and the difficulty in obtaining a tenure-track faculty position is exacerbated for those women with young children. The implication is that women make difficult choices when navigating a system that does not work for them, both personally and professionally, and it is the structure itself that needs changing.

In order to understand how women arrive in these different academic roles, it is worthwhile to expand the discussion to include how students experience graduate school, in terms of their socialization to their fields and the academy, as it explains the ways in which they are trained to adopt prevailing norms and become professionalized to their field. As such, a discussion of socialization, including prevailing theories and critiques of doctoral student socialization, follows.

## Socialization in Academe

Sociologist Robert Merton (1957) defined socialization as a mechanism for an individual to acquire the knowledge, skills, values, attitudes, and norms to gain membership of a particular group, organization, or society. If socialization is a broad function for an individual to gain membership to an organization, organizational socialization is a contextual framework to understand the process. Van Maanen (1978), a foundational organizational socialization theorist, defined organizational socialization as "the manner in which the experiences of people learning the ropes of a new organizational position, status, or role are structured for them by others within the organization" (p. 19). Central to the concept of socialization is organizational culture, or the "sum of activities symbolic and instrumental - that exist in the organization and create shared meaning" (Tierney, 1997, p. 3). From a modern perspective, culture is the sum of the activities and socialization is the process by which an individual successfully acquires and adopts an understanding of these activities (Tierney, 1997). Understanding how socialization occurs in the academy, the mechanisms by which it operates, whom it excludes, and how it has been historically understood in relation to doctoral students, is essential in considering women's opportunities and barriers as they progress through graduate school and determine their career pathways.

## Doctoral Student Socialization

While Van Maanen (1978) briefly alluded to a doctoral student's socialization in his organizational socialization framework, his work was not specific to students or academia. Later, scholars applied Van Maanen's organizational socialization theory as a lens through which to see socialization in a higher education context (Clark \& Corcoran, 1986; Lovitts, 2001; Tierney \& Rhodes, 1994; Tinto, 1993; Weidman et al., 2001). Socialization in graduate school can be defined as "the processes through which individuals
gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills" (Weidman et al., 2001, p. 4). Socialization occurs prior to and throughout the doctoral career, as students learn the norms and values of their respective disciplines (Austin, 2002; Mendoza, 2007; Sallee, 2011b; Weidman et al., 2001). The ways in which students are socialized are not limited to the critical moments in a graduate career like admission, advancement to candidacy, or successfully defending a proposal. Individuals "become socialized to an organization from the less dramatic, ordinary daily occurrences that take place as we go about the normal business of being a professor, student, administrator..." (Tierney, 1997, p. 3). In sum, it is the collective relationships, skills, observations, and behavioral and intellectual congruence with these norms that result in successful graduate student socialization into the organization.

At the core of the graduate socialization experience is the institutional culture (academic programs, peer climate), the socialization process (interaction, integration, learning) and the core elements of socialization (knowledge acquisition, investment, involvement) (Weidman et al., 2001, p. 36). Graduate students uniquely experience "double socialization," as they are socialized into the graduate student role as well as preparatory socialization into the role of their future career (Golde, 1998, p. 56). Generally, the end goal of socialization for graduate students is the faculty role, as they are expected to assume these types of positions after completing their degrees (Austin, 2002; Sallee, 2011a); there is a dearth of literature regarding the nexus between graduate student socialization and alt-ac or post-ac career pathways.

Weidman et al. (2001) included four components of graduate student socialization in their model: prospective students (background, predispositions), professional communities (practitioners, associations), personal communities (family, friends,
employers), and novice professional practitioners. These four elements interact with the core of graduate student socialization and have varying levels of saliency on the graduate student's academic and professional development. Gardner (2008) argues graduate student socialization is complex and also occurs at various levels and contexts. She found graduate students experience socialization within five distinct but synergistic cultures: overall culture, institutional culture, disciplinary culture, departmental culture, and individual culture. Likewise, Weidman et al. (2001) place institutional culture at the core of their model.

Lovitts (2005) formulated a model that identified five personal and psychological resources (intelligence, knowledge, thinking styles, personality, and motivation) that contribute to graduate students' transition to independent scholars. Together, these five resources interact with and are influenced by factors in the micro- and macro-environment. For doctoral students, the micro-environment is the immediate setting in which the student learns, works, and interacts with others. These settings include laboratories, offices, the department, and the university itself. Some examples of people with whom the student may interact at this level include the student's advisor, peers, and other faculty members. In this context, the resources, nature, and quality of interactions are not distributed equally across graduate students (Lovitts, 2001). This unequal distribution of micro-level resources "affects students' trajectories through their graduate programmes, their socialisation into the discipline and the profession and, ultimately, the quality and significance of the contribution they make to knowledge" (Lovitts, 2005, p. 149).

The macro environment includes "the social-cultural and institutional context in [which] graduate students live and work," and this social-cultural context "embodies the norms, values, and beliefs of the surrounding culture" (Lovitts, 2005, p. 150). These norms, values, and beliefs guide interaction, teaching, and training in universities and departments.

Unlike the imbalanced distribution of micro-level resources, Lovitts states that socialcultural contexts "impinge on all graduate students equally" (p. 150); however, their perceptions of the environment and cultural/family background contexts may affect their reactions and ability to persist through the program. Together, the micro- and macroenvironmental factors have the potential to shape doctoral student socialization and their capacity to become creative, independent doctoral researchers.

Doctoral socialization includes a variety of factors that influence doctoral students' progression, success, and meaning making of their experience. Acquiring the values, skills, knowledge, and building relationships are all crucial to successful doctoral student socialization (Austin, 2002; Gardner, 2008; Lovitts, 2001; Tierney \& Rhodes, 1994; Weidman et al., 2001). Although each model may differ in specific aspects pertinent to doctoral student socialization, all include culture as an influential force in the student's socialization. Whether the authors consider culture from a micro-level like personal and familial background to broad, socio-cultural contexts, culture itself represents an integral part in doctoral student experience.

## Stages of Graduate Student Socialization

Scholars generally contend that socialization occurs in a stage-like model as the individual progresses with their understanding and commitment to their new role in an organization (Baird, 1993). Within the higher education context, some authors have posited a two-stage model (Tierney \& Rhodes, 1994), a three-stage model (Clark \& Corcoran, 1986; Gardner, 2007, 2008; Tinto, 1993), and a four-stage model (Lovitts, 2001; Weidman et al., 2001). Regardless of the number of stages, there is a common course of socialization in which each stage is interactive and informs the other. Weidman et al.'s (2001) seminal model of graduate student socialization is not linear; rather, each stage can simultaneously
occur at any point in the graduate student experience, as it is a complex and developmental process.

For the purposes of this study, this literature condenses a discussion of the fourstage models proposed by Weidman et al., (2001) and Lovitts (2001) into a synthesis of three-stage higher education socialization models (e.g., Clark and Corcoran, 1983; Gardner, 2007, 2008; Sallee, 2011b) or departure models (Tinto, 1993). Weidman et al. and Lovitts essentially split a second stage into two separate stages, in which they delineated formal practices learning a new role from informal practices like observations and behavior cues. In the discussion that follows, these informal and formal practices are incorporated into the explanation of the second stage.

The first stage, referred to as the anticipatory stage (Lovitts, 2001; Weidman, et al., 2001) or transition (Tinto, 1993) involves the individual preparing to enter the organization, forming ideas, acquiring the language of a particular discipline, and developing relationships with peers and superiors. Common perceptions about the role of a faculty member are informed by media, personal experiences from undergraduate years, observations, and interactions with peers and faculty members (Clark \& Corcoran, 1986; Tierney \& Rhoads, 1994; Weidman, et al., 2001). Despite these undergraduate perceptions, many graduate students neither have a clear understanding of what doctoral study entails nor realistic expectations of faculty life (Bieber \&Worley, 2006; Golde \& Dore, 2001). In Bieber and Worley's (2006) study, they found many graduate students formulated their "ideal script" of faculty life during their undergraduate years, piecing together personal interactions, observations, and positive teaching experiences of faculty members to arrive at a somewhat uninformed expectation of faculty life, much of which did not differ than the general public's perceptions of faculty. Collectively, these perceptions, understandings,
and meaning making of students prior to graduate school inform their experiences and later, socialization processes during graduate school.

The second stage is considered entry into the organization. In higher education socialization models, entry into the organization is typically understood to occur from the point of first contact, which could include interviews for doctoral admission, campus visits, or orientation into the program of study (Sallee, 2011b). During this stage, relationships with peers, advanced doctoral students, and faculty members are instrumental in developing an understanding of the graduate student role and expectations and contribute to persistence in degree completion (Tinto, 1993; Weidman, et al., 2001). Central to this stage is a focus on learning and acquiring the knowledge and skills to be successful in their discipline. Graduate students become more involved in programs and activities and experience peer climate, and a firmer understanding of the primacy of research is also formed (Sallee, 2011b; Weidman, et al., 2001). The new graduate student receives behavioral cues, observes acceptable behavior from incumbent students, and responds accordingly. As the students progress, they begin to adopt an identity of an insider rather than outsider, as they may have in the beginning of their graduate career. During this stage, some may even reevaluate their decision to enter the program (Sallee, 2011b). In this stage, it is crucial for graduate students not only to understand the norms, practices, and values within their discipline and institutional culture but to adopt them as well. Doing so is imperative in order to advance further in academic and social spheres for them to move forward to the final stage (Weidman et al., 2001).

The final stage, referred to as Commitment to Organization, Personal Stage, Research Stage, or Doctoral Completion, marks the point at which the student advances through candidacy and places more of an emphasis on his/her own learning through individual work on a dissertation research proposal and finally, dissertation defense
(Lovitts, 2001; Sallee, 2011b; Tinto, 1993; Weidman et al., 2001). Students have less interaction with the faculty in this final phase, as they work primarily with one or two professors, usually their advisor. Some scholars contend the critical outcome of socialization is characterized by the student adopting the professional values and identities of the organization and thereby eschewing any previously held values that conflict with the organization - "personalities and social structures become fused and the role is internalized" (Weidman et al., 2001, p. 14). Although these authors recognize that socialization is dynamic and ongoing, ultimately, identification and commitment to the role are essential. In contrast to this fixed conceptualization of socialization, Tierney and Rhodes (1994) suggest socialization is an ongoing process, and the individual will be continually socialized throughout their careers.

## Critiques of Graduate Student Socialization Models

Egan (1989) railed against the pre-existing structures of graduate students that restricted graduate students' personal expectations, independence, or their current outside role responsibilities. Borrowing from Goffman (1961), Egan asserted that, as a whole, graduate school resembles a "total institution" - an isolated place that is separated by its own culture and norms, of whom all successful members are expected to assimilate. Ostensibly, the end goal of socialization is assimilation and congruence; those who do not assimilate have failed (Antony, 2002; Tierney, 1997). Another critique of this "one-size-fits-all" socialization is that in order to be successfully socialized, graduate students must adopt this prescribed faculty identity and abandon their previous values (Sallee, 2011b). The lack of accounting for individual agency in these models and the "realization that most socialization efforts fail to acknowledge the importance of individual differences led to an important, yet still unanswered question in the socialization literature: who is 'socializable'
and who is not?" (Sweitzer, 2009, p. 16). Bieber and Worley (2006) contend graduate student socialization itself is not an applicable theory to apply towards graduate students' conceptualization of academic life. In their study of graduate students, they found socialization did not even take place; for instance, there was little evidence that their graduate student participants internalized the values and attitudes regarding the primacy of research. Moreover, these socialization models theorize socialization as a one-way process and do not account for how individuals may, in turn, affect the organizations to which they are being socialized (Winkle-Wagner \& McCoy, 2016).

Egan (1989) also suggested the end goal of organizational socialization is "not just a better educated person but a new and different person, one with a transformed, professional self-concept. This desired outcome implies a deficiency in the present self... and may involve abandoning or changing aspects of one's present personality" (p. 201). She stated this is better characterized as resocialization, rather than development socialization, as it moves away from previous unique conceptions of self into a more prescribed, organizationally defined concept of a successful student. However, in Egan's (1989) critique of doctoral student socialization, she failed to consider how intersecting identities like race, class, and gender may affect these experiences and meaning making.

Emphasizing strict academic and social integration rather than maintaining differences "has potentially harmful consequences for racial and ethnic minorities" (Tierney, 1992, p. 603). In doctoral student socialization,
socialization is particularly bound to be influenced by an individual's past experiences as well as by gender, race, social class, and other salient characteristics. At the same time, the discipline - and those within it - plays a critical role in shaping the accepted behaviors and gender identities of students and faculty alike. (Sallee, 2011, p. 190)

Likewise, Tierney (1997) criticized the modernist perspective, which postulates socialization occurs in a social and racial vacuum; if only those who fulfill these monolithic conceptions socialization are deemed effective, then "we have a unitary view of what it means to be effective" (p.7). Organizational culture does not have to remain fixed; rather, it has the potential to be a "conglomeration of the hopes and dreams of what the organization world might be" (Tierney, 1997, p. 6).

Gardner's three-phase model $(2007,2008)$ recognized that relational aspects of identity development in graduate student socialization are just as important as the programmatic and structural influences on the graduate student experience. Many socialization models viewed students' progress irrespective of their institutional and disciplinary contexts, but these are salient forces that affect graduate students' persistence and integration (Gardner, 2010). Gardner's (2010) qualitative study compared a highcompleting doctoral department and a low-completing doctoral department and applied her three-phase model of graduate student socialization (2007, 2008). While most of the students in her study shared four themes related to their socialization process, (transition, self-direction, ambiguity, and support), those students in high-completing departments experienced more positive experiences related to these themes. Supportive, integrative, and communicative departmental environments mollified some of the confounding aspects for doctoral students, like how to become independent while maintaining supportive relationships with peers and advisors. Gardner (2010) highlighted how disciplinary and departmental contexts have largely been ignored in socialization literature but can have significant impact on student success.

Many scholars who have studied socialization in the context of doctoral socialization made attempts to account for background characteristics like gender, race, and class, but their socialization models have not go so far as to deconstruct how these
identities alone, or in relation to each other, affect socialization. For instance, Lovitts (2005) stated "the cultural/family context in which [the students] were raised or enculturated" (p. 150) could affect their degree completion or work quality, but never detailed the significance of these cultural or familial contexts. The framework posited by Weidman et al. (2001) stated the individual's background, such as "undergraduate education, ethnicity, race, gender, sexual orientation," may interact with the student's socialization into academe (p. 38). The authors expanded their discussion related to diversity in terms of women, people of color, and how to support these marginalized groups in graduate programs. However, their model stopped short of speculating about how intersections of identity specifically informed socialization. This is important as studies have shown doctoral socialization differs by gender and race (Antony, 2002; Turner \& Thompson, 1993). Furthermore, race and gender represent interlocking systems of marginalization in higher education that graduate students must navigate, often without the systems of support available to non-minorities or male counterparts, and will affect meaning making throughout the socialization process (Collins, 1989; hooks, 1989; Turner \& Thompson, 1993). Recently, Twale, Weidman \& Bethea (2016) modified the Weidman et al. (2001) framework to reflect the socialization needs of students of color, particularly African American graduate students. As this is an emergent modification to the framework, additional studies that apply this theory are needed.

Some scholars applied doctoral student socialization to specific populations, such as socialization of male doctoral students (Sallee, 2011a), Black male graduate students (Platt, 2012), minority women's socialization (Turner \& Thompson, 1993). Others have considered women's experiences in the sciences and careers (Hirshfield, 2011; Hren, 2012) and the lived experiences of pregnant graduate students (Larkins, 2015). However, there is still a gap in understanding how women graduate students experience socialization -
especially those of underrepresented races, ethnicities, or sexual orientations - and choose their career pathways.

## Factors Affecting Doctoral Student Socialization

Research has shown that there are differing career, financial, and personal outcomes for women and male graduate students (Ferreira, 2002; Tenenbaum, Crosby, \& Gliner, 2001). Mitigating factors such as access to advising and mentoring relationships with faculty members, gendered and racially oppressive institutional structures and norms, and differing financial support impact women's graduate student socialization (Antony, 2002; Clark \& Corcoran, 1986; Gildersleeve, Croom, \& Vasquez, 2011; Gonzalez, 2007; Tenenbaum et al., 2001.). One theory, the Matthew Effect, or the concept of accumulated advantage ("the rich get richer"), applies to doctoral students (Clark \& Corcoran, 1986; Gardner \& Barnes, 2007). By having faculty and peers who had progressed through the program as mentors, students have established pathways and more opportunities opened to them (Gardner \& Barnes, 2007); in other words, the more the students felt they were encouraged by faculty members and expected to produce scholarly work, the more the students did this kind of work (Weidman et al., 2001). However, women and women of color have less access to resources than their White male counterparts do, including but not limited to: similar role models, scholarly networks, and mentors; thus, a seemingly "accumulative disadvantage" occurs in their socialization (Clark \& Corcoran, 1986, p. 24). Graduate students have benefited from mentoring others as well (Reddick, Griffin, Cherwitz, Cérda-Pražák \& Bunch, 2012). Mentoring opportunities have facilitated an opportunity for the student to more deeply understand themselves and their academic discipline, contributed to the diversity of the academic and professional field when they
mentored an upcoming underrepresented scholar, and cultivated mentoring and advisorship skills (Reddick et al., 2012).

Some factors can ameliorate some of the negative aspects of doctoral programs, such as supportive peer networks, mentoring, flexible organizational structures, or the presence of female faculty members for women graduate students. Collectively, the disparities in support systems contribute to the mismatch between goals, training, and careers for women graduate students (Gardner, 2010; Golde \& Dore, 2001; Grant \& Simmons, 2008). However challenging these structures may be, underrepresented women in doctoral programs show resiliency by utilizing adaptive strategies like looking outside of their department for mentors and creating supportive peer networks to overcome some of these socialization barriers (Gildersleeve et al., 2001; Gonzalez, 2007).

Doctoral student socialization is a mechanism by which students acquire the knowledge, skills, values, attitudes, and norms of their discipline in order to succeed as graduate students and as they enter their professional career (Tierney \& Rhodes, 1994). Although the end product of socialization - assimilation - may be contested, there is consensus among scholars who research graduate student populations that proximal aspects related to socialization like forming relationships, access to resources, and environment are influential in a doctoral student's progression. These socialization models are beneficial in understanding the process and mechanisms by which doctoral students progress through their graduate careers. Additionally, these models incorporate how doctoral students adopt the professional values of their discipline as they move towards their degree completion, and ultimately, a career. However, these models overwhelmingly assume a career in academia is the sole career to which these students are being socialized into, and do not account for the nuances of decision-making regarding their socialization to careers that are not tenure-track positions, or even outside of academia. Although these models assist in
our understandings of the doctoral student experience, it does not provide a nuanced perspective specific to gender, or in their career decisions, as this study does. As such, this study utilizes a theory that combines social cognitive influences to explain career choice interests, goals, and actions.

## Theoretical Framework

Social cognitive career theory (SCCT) is grounded in Bandura's (1986) general social cognitive theory. SCCT emphasizes the means by which individuals exercise agency in their career development process and interactions with reciprocal, "extra-personal factors" that affect personal agency over career development (Lent et al., 1994). Bandura termed this interaction triadic reciprocality, comprised of three factors that are interrelated and work bidirectionally as they influence a person, their behavior, and environments. These three factors include:

1. personal attributes, such as internal cognitive and affective states and physical attributes;
2. external environmental factors; and
3. overt behavior (as distinct from internal and physical qualities of the person) all operate as interlocking mechanisms that affect one another bidirectionally. (Lent et al., 1994, p. 82)

## Social Cognitive Career Theory

Lent et al.'s (1994) framework mirrors other social learning theories that emphasize the importance of "genetic endowment, special abilities, and environmental ${ }^{12}$ conditions on career decision making" (p.85) as well as the interaction of learning experiences with personal and contextual factors in guiding career development; however, SCCT emphasizes how interlocking factors affect interest career development, choice, and

[^6]performance (p. 86). Lent and colleagues identified three functions that SCCT could help explain: "the formation and elaboration of career-relevant interests; selection of academic and career choice options; and performance and persistence in educational and occupational pursuits" (p. 79).

At its core, SCCT focuses on how cognitive-personal variables (self-efficacy, outcome expectations, interests, and goals) proximally influence other aspects of the person and his/her environment (e.g., gender, ethnicity, barriers), in relation to her career development (Lent, Brown, \& Hackett, 2000). SCCT posits career choice goals are influenced by personal interests to pursue a certain career path and, subsequently, to take appropriate action in order to attain that goal (Gibbs \& Griffin, 2013). Lent and colleagues contend career interests result from positive self-efficacy beliefs and outcome expectations. Self-efficacy refers to an individual's beliefs about the capacity to achieve a specific behavior or action (Bandura, 1987). Individuals develop interests in activities in which they believe themselves to be capable and believe will leave to positive outcomes; personal achievements are believed to have the greatest impact on self-efficacy beliefs (Lent \& Brown, 2006). These cognitive-person variables interact dynamically with other aspects of the person in his or her environment that "represent active constructions or processes that can, themselves, affect key career outcomes, like choice actions and performance attainments" (Lent \& Brown, 2006, p. 14).


Figure 2.1: Social Cognitive Career Theory (Lent et al., 1994)

Lent and colleagues (1994) separated SCCT into two levels of theoretical analysis: first, cognitive-personal variables (self-efficacy, outcome expectations, personal goals); and second, contextual avenues through which other variables, like environment, physical attributes (race, gender), barriers, supports (availability of mentors, programs), and learning experiences that interact with cognitive-personal variables to shape career interests and choice behavior. This second level of theoretical analyses, which consists of contextual influences, is of particular interest in this study. Although cognitive-person variables are important when understanding career choice processes, in this study, the contextual and personal aspects are of more interest when considering influences of doctoral women's career choice, as it addresses a gap in the literature that approaches these topics from a critical, qualitative stance.

Lent and colleagues (1994) contend career development is influenced by both objective and perceived contextual influences. Examples of "objective" contextual influences include quality of educational experiences to which one has been exposed or
available financial support for educational pursuits. Lent and colleagues suggest individuals perceive contextual variables like barriers, opportunities, or resources differently; therefore, they represent subjective interpretations of contextual influences on career choice. The epistemological stance of this dissertation approaches Lent and colleagues' idea of strict, objective measures regarding contextual influences with skepticism. Although Lent and colleagues included "person inputs" like gender, race/ethnicity, disability/health status, they measured these factors from a post-positivistic stance. This study may be an important addition to the development of SCCT through its use of a critical orientation when discussing objective contextual factors in doctoral women's career decisions.

This second level of analysis is partitioned in two categories of contextual influences that impact career interests and behaviors: distal contextual factors and proximal contextual factors (Lent et al., 1994). Distal contextual factors include background characteristics and experiences like exposure to certain professions, career role models, the kind of support or discouragement one experiences when pursing academic or extracurricular activities. The second category of contextual influences, proximal, can moderate and directly affect career-decisions in relation to interest to career choice goals, and then goals to actions (Lent et al., 1994). According to SCCT, Lent, Brown, and Hackett (2000) suggest contextual factors influence individual career choice goals, actions, and behaviors more than personal interests or other cognitive-personal variables. Examples of proximal influences include structural constraints like discriminatory hiring practices to professional or career networks. In sum, "the environment serves to determine who gets to do what and where, for how long, and with what sorts of rewards" (Lent \& Sheu, 2010, p. 692).

Barriers, or the "events of conditions, either within the person or in his or her environment, that make career progress difficult," have received a great amount of attention regarding career choice, and particularly regarding women's career choices (Swanson \& Woitke, 1997, p. 434). According to SCCT, barriers are negative contextual influences that can influence a person's interests, goals, and choice actions regarding career choice. For women, barriers represent a mechanism to explain the gaps in women's career interests, abilities, and career achievement (Lent et al., 2000). Others have extended the construct of barriers to understand underrepresented students in science, technology, engineering, and mathematics (STEM) fields, Bernstein, 2011; Byars-Winston et al., 2010; Gibbs \& Griffin, 2014; Jaeger, Haley, Ampaw, \& Levin, 2013; Lent et al., 2005, 2008) and graduate student men in majority-women fields (Michel, Hays, \& Runyan, 2015). Less is known regarding the career supports, positive contextual conditions or resources that encourage individuals' career development (Lent et al., 2000). As such, this study will attempt to understand both the positive and negative contextual influences that support and create barriers for doctoral women's career choices.

## Structure of Opportunity

In order to develop this understanding of SCCT in an academic context, it is worthwhile to extrapolate Astin's (1984) sociopsychological model of career choice, which informed Lent and colleagues' (1994) construction of environmental influences. Although somewhat dated, her model is influential in understanding women's occupational choices and behaviors but can also be extended to men's career choices. This needs-based developmental model addresses both psychological (work motivation, expectations) and cultural-environmental (sex-role socialization, the structure of opportunity) factors that
influence career choice, which then inform occupational behavior. Her model incorporates four major principals:

1. Work behavior is motivated activity to satisfy three basic needs: survival, pleasure, and contribution.
2. Career choices are based on expectations concerning the accessibility of alternate forms of work and their relative capacity to satisfy the three basic needs.
3. Expectations are shaped in part by early socialization through family, child play, school experiences, and early work experiences, and in part by the perceived structure of opportunity.
4. Expectations developed through socialization can be modified by changes in the structure of opportunity, and this modification in expectations can lead to changes in career choice and in work behavior. (p. 119)

Astin's construct of "structure of opportunity" shows how social forces inform career decisions and how social changes including economic developments, codification of women's rights, and medical technology, all interact with socialization to impact women's career choice behavior. These changes in structural opportunity have led to changes in women's career choice aspirations, evolved from early socialization and perceptions of structural opportunities. Astin's model is applicable to this study as it specifically focuses on how changing social structures influence women's perceptions and decision-making regarding career choice. Although dated, she does state that this model can be useful in "understanding generational changes in the behavior of 'class' groups such as women and minorities," but in her model, she does not identify race or ethnic-specific structural changes within women's groups that could address perceptions and behavior regarding career choices and behavior (p. 118). Despite this omission, it is useful to pull apart the gender-specific constructs in order to focus on the contextual factors in academia.

## SCCT in Higher Education

Studies specific to higher education populations have used SCCT to investigate career choices for undergraduates in the STEM fields (Lent et al., 2001, 2005, 2008); women of color (Byars \& Hackett, 1998; Flores \& O’Brien, 2002); doctoral students (Bernstein, 2011; Byars-Winston et al., 2011; Gibbs \& Griffin, 2013; Haley, Jaeger, \& Levin, 2014; Jaeger et al, 2013); faculty (Michel et al., 2015; Wang et al., 2007); mentoring doctoral students (Curtin, Malley, \& Stewart, 2016; Paglis, Green, \& Bauer, 2006) and women (Swanson \& Woitke, 1997). Other studies have shown how graduate students’ cultural social identities have influenced their career choices that preserve the values of their cultural communities (Haley et al., 2014). Michel et al. (2015) identified SCCT factors (opportunities, barriers, supports) that influenced career persistence for men entering women-majority fields; this proposal seeks to add to the research regarding career choice considering gender and majority-women fields.

SCCT is informed by a cognitive constructivist approach to career development which emphasizes individuals' "feedforward mechanisms like anticipation, forethought, and active construction of meaning in interaction with environmental events" (Lent et al., 1994, p. 87), but many of the studies that apply SCCT employ a post-positivistic epistemology to "knowing." For instance, the language used in studies that apply SCCT reflect a post-positivist worldview by utilizing objective, neutral instruments of measurement, like validated self-efficacy scales, research-training environment measures, and dependent variables to arrive at what they perceive to be an objective truth regarding factors that influence career development (Brooks \& Hesse-Biber, 2007; Lent et al., 1994, 2000; Lent, Lopez, Sheu, \& Lopez, 2011). Although some qualitative studies utilize a qualitative approach in SCCT, there are not nearly as many as those that approach the work from a quantitative stance (e.g., Haley et al., 2014; Wang, Lo, Xu, \& Porfeli, 2007).

Applying SCCT in this qualitative study will fill this gap in epistemological and methodological approaches, as well as enhance our understanding of the nuances in contextual influences regarding career choice.

## Summary

As the American higher education system has changed over time, both women and people of color have made tremendous gains in higher education attainment, from undergraduate through doctoral levels. However, there are disparities in doctoral degree completion with regard to race, specifically between women of color and White women, as well as in disciplinary differences (NSF, 2014; 2015).

Furthermore, as doctoral student enrollment continues to diversify, there is a need to understand how these students navigate and persist despite traditional structures that impede their socialization. From a fundamental view, women who earn doctorates seem to have a variety of career pathways: from tenure-track, non-tenure-track, administration, and private/post-academic to "opting out," the possibilities seem vast. However, a more nuanced view reflects the fact that women enter more non-tenure track positions than their male counterparts, and this is especially true for women of color (Ginther \& Kahn, 2013; Mason et al., 2009). In 2014, women comprised the majority of doctorate recipients in four of the seven broad disciplinary doctoral fields, yet did not make up the majority of tenure and tenure-track positions. As such, a further investigation into the complex factors women navigate when choosing their post-doctorate careers is warranted. There is a growing body of research that highlights the structural impediments of academia in relation to family formation, work/life balance, research productivity, and pay differences for men and women. However, there is still a dearth of information related to how and what considerations women take when arriving at their career choices, whether it is in or out of
academia. This study adds to our understandings of how women doctoral students make meaning of these complex factors regarding their career choices.

## Chapter 3: Methodology and Procedures

In this chapter, I discuss the epistemological stance, research methods, design of my study; the data collection instruments I used to understand doctoral women candidates' career choices; and my data analysis methods. This study is situated in an instrumental, case study design that incorporates a phenomenological approach. A critical epistemology and feminist methodology provide an overarching and encompassing framework that I will use to center the perspective of women's lives in my study (Collins, 1990; Hesse-Biber, Leavy \& Yaiser, 2004; Smith, 1987). Feminist methodologies explicitly question the ways in which traditional research has not moved forward in connecting theory to research questions, and it also provides a commitment to the empowerment of women and other oppressed people (Hesse-Biber et al., 2007). A feminist methodology was well-suited for this study because one of its aims was to represent marginalized voices in academia as well as to expand our understandings of how doctoral women negotiate their career choices. Although numerically women may not be marginalized within some doctoral fields, other intersectional aspects of their identities, like sexual orientation, race/ethnicity, and class may be marginalized in relation to their status and power within their broad discipline and within a patriarchal system of academia. I employed a quasi-phenomenological instrumental case study design and applied feminist methods and analysis to formulate a comprehensive, nuanced view into the career choices of women doctoral students in majority-women fields in the social sciences.

## Epistemological Stance

An epistemology is "a theory of knowledge" that delineates a set of assumptions about the social world: who can be a "knower," and what can be known (Harding, 1987, p. 3). In a critical epistemology, Freire (1972) states "we are not only 'in' the world, but also
'with' the world, that is, essentially related to it (as cited in Crotty, 1998, p. 149). Therefore, the worldview from a critical epistemology does not bifurcate subjectivity and objectivity, in regard to "knowing"; reality is people's perceptions of it (Crotty, 1998; Freire, 1972). Critical scholars deny there is an objective truth waiting discovery, or the feasibility of a neutral, value-free researcher (Brooks \& Hesse-Biber, 2007). Moreover, critical inquiry is an ongoing, cyclical process in which reflection and action are refined in order to bring attention to power relationships, inequitable social structures, and work towards social justice. As with other epistemologies, critical inquiry is pluralistic; it represents a diversity of traditions, distinctive in their differences, yet common in their call to highlight the power relations, forces of hegemony in society, and the fragile relationship between concept and object, mediated by social relationship and historically constituted systems (Crotty, 1998). Feminist (and critical) researchers "explain how paying attention to the specific experiences and situated perspectives of human beings, both researchers and respondents alike, may actually become a tool for knowledge building and understanding" (Brooks \& Hesse-Biber, 2007, p. 13). As such, this study aims to illuminate the potential new knowledge to be derived regarding career choices of women doctoral students in a majority-women discipline like psychology.

An epistemology represents the "theory of knowledge embedded in the theoretical perspective and thereby in the methodology" (Crotty, 1998, p. 3). Critical research applies tenets of critical theory to inform the research process and data interpretation, such as the research questions asked, ways to engage with participants, and understandings of power relationships (Pasque et al., 2012; Winkle-Wagner \& McCoy, 2016). In order to address some of the implicit components like race/ethnicity and gender that comprise social cognitive career theory (SCCT), I explicitly include a discussion of critical race theory (CRT) and feminism. This is an important foundation of this study as the values, tenets,
and assumptions of these frameworks have not been scrutinized in SCCT utilizing a critically orientated epistemology.

## Critical Race Theory

Critical race theory originates from legal studies, specifically, critical legal studies (CLS). CLS bases itself in the "Gramscian notion of 'hegemony' to describe the continued legitimacy of oppressive structures in American society" (Ladson-Billings, 1998, p. 10). Although CLS scholars identified the pervasive constrictive social and legal hegemonic structures in the U.S., critics noted CLS failed to offer pragmatic strategies for progressive, systematic change. Moreover, these scholars failed to include racism in its critique of America, which, arguably, is a fundamental element of structural and legal inequality in America (Ladson Billings, 1998; Sólorzano, 1997). As such, scholars extended CLS to CRT, or "a framework or set of basic perspectives, methods, and pedagogy that seeks to identify, analyze, and transform those structural and cultural aspects of society that maintain the subordination and marginalization of People of Color" (Delgado, 1997, p. 6). Educational scholars have written extensively on CRT and have applied this theory to understand marginalized communities of students, offer counternarratives, highlight racial microaggressions, and posit alternate conceptualizations of cultural capital for students of color (Bernal, 2002; Parker, 1998; Sólorzano et al., 2005; Yosso, 2006; Yosso, Parker, Sólorzano, \& Lynn, 2004).

Although Crenshaw, Gotanda, Peller, and Thomas (1995) assert there is no "canonical set of doctrines or methodologies to which [CRT scholars] all subscribe" (as cited in Ladson-Billings, 1998, p. 12), scholars generally acknowledge five fundamental themes that undergird this theory. Central to CRT is the understanding of the pervasiveness and permanency of racism in American society, intersectionality of other social
constructions that perpetuate subjugation and hegemonic structures to prevail in society (Bernal, 2002; Ladson-Billings, 1998; Sólorzano, 1997). Second, it challenges "traditional claims of the legal system to objectivity, meritocracy, color-blindness, race neutrality, and equal opportunity" (Sólorzano, 1997, p. 6). Third, CRT emphasizes a commitment to enacting social justice as a means towards realizing human agency amongst the marginalized, against those who hold power, but also who maintain it (Bernal, 2002; Giroux, 2003). Fourth, CRT prioritizes storytelling and counternarratives as mechanisms to emancipate and transform, as structural hegemony mutes marginalized society members' voices and their experiential knowledge is not valued (Sólorzano \& Yosso, 2001). Lastly, it emphasizes an interdisciplinary, or "transdisciplinary" perspective to understand race and racism from both a historical and contemporary context (Yosso, et al., 2006, p. 4).

Approaching this work from a CRT epistemology is an important component of this study. Storytelling is a fundamental means to understand "people in cultured spaces while taking into consideration both internal and external influences that construct and shape their experiences" (Wallace, Moore, Wilson, \& Hart, 2012, p. 427). Participants' personal reflections will illuminate contextual, nuanced perspectives regarding their graduate and professional careers. Second, SCCT, the theoretical framework of this study, does not emphasize the historical power inequities with regard to race, gender, class, or sexual orientation. The theory does account for background characteristics and other proximal contextual factors, but it would be careless to gloss over these highly relevant and personal aspects that inform career development.

## Feminism

The second area from which this epistemological stance derives is a feminist framework. The roots of modern feminist thought can be traced to as early as the eighteenth century, and numerous categorizations have been created within the overarching epistemological stance of "feminism" over time (Tong, 1998). This diversity of thought highlights the varied, sometimes conflicting approaches feminist scholars have encountered when making sense of phenomena through a gendered lens. Some may consider these labels constricting, but ultimately, these labels "signal to the broader public that feminism is not a monolithic ideology, [and] that all feminists do not think alike" (Tong, 1998, p. 1). Certainly, within each of these divisions of feminist thought, there are pointed differences, each of which has its relative strengths like adopting a pluralistic and expanding view of how multiple identities intersect; and weaknesses, like simplifying sex differences exclusively to socialization. Considering both strengths and weaknesses, this study approaches doctoral women's career choices from a feminist lens, incorporating social-feminism, multicultural feminism and Acker's (1990) theory of gendered organizations.

Social-feminism is influenced by Marxism, psychoanalysis, and radical feminism, and attempts to synthesize the ways in which capitalism and patriarchy oppress women more egregiously than men (Tong, 1998). Young (1990) asserts that the gendered division of labor results from a capitalist patriarchy that excludes women from the public sphere, placing women in a secondary labor force, thereby reinforcing women's economic dependence on men. Some argue social feminists superficially understand the importance differences among women, but multicultural feminists insist that understanding how interlocking systems of oppression related to race, sexuality, gender, and class as a whole are essential to liberating women (Collins, 1990). As social-feminism's aim is to unify all
women's experiences, it is imperative to consider the delicate balance of honoring differences in women, with regard to race, sexuality, or class, without representing one group of women's experiences as the standard of what it means to be a woman (Tong, 1998). Race, sexuality, class, and (dis)ability statuses all constitute unique components in an overarching, interlocking "matrix of domination"; and it is within these matrix intersections that women experience power, privilege, oppression, and subordination uniquely (Collins, 2000, p. 270).

Social-feminism is predominately concerned with macro-level explanations of women's oppression and acknowledges that hierarchical institutions are predominately patriarchal, but, "since men in organizations take their behavior and perspectives to represent the human, organizational structures and processes are theorized as gender neutral" (Acker, 1990, p. 142). Acker (1990) argues that feminists need to reject genderneutral assumptions of organizational structure and recognize the gender-specific ways in which institutions reproduce norms, processes, and structures based on hegemonic masculinity. While social-feminism is a useful tool to understand the conflicting demands on women under a capitalist system, it does not address specific processes by which women experience these gendered organizations. Gendered organizations are areas or domains "grounded in the working worlds and relations of men, whose experience and interests arise in the course of and in relation to participation in the ruling apparatus of society" (Smith, 1979, p. 148). These gendered organizations that create "advantage and disadvantage, exploitation and control, action and emotion, meaning and identity are patterned through and in terms of a distinction between male and female, masculine and feminine" (Smith, 1979, p. 146).

Academia is a historically gendered organization; it was created for and by, wealthy, heterosexual White men (Karabel, 2006). Egan (1989) related the graduate school
enterprise to sociologist Erving Goffman's (1961) concept of a total institution: an isolated place that is separated by its own culture and norms, all of which successful members are expected to assimilate (Egan, 1989; Goffman, 1961). Therefore, women doctoral students, especially women of color, work under these heteronormative, Eurocentric, male structures and norms. In order to understand their experiences, it is important to recognize the gendered and racial spaces these women occupy within their careers. In an attempt not to obfuscate the intersections of women's identities, experiences and contextual influences that shape career choice, this study will integrate these critical epistemologies into the theoretical framework, methods, and analysis.

The goal of this study is to dig deep into our understandings of how doctoral women students work within a historically patriarchal and racist system regarding their career choices. To be clear, this study analyzes a highly-privileged class of women: those who have not only earned their undergraduate degrees, but have also advanced to doctoral candidacy, the last benchmark of doctoral studies before defending the dissertation (Golde \& Dore, 2001). Approaching this study from a critical epistemology resists the status quo of essentializing all women doctoral students' experiences and career choices in the doctorate as monolithic, while considering the gendered organizational structures in which they learn and work. Although the basis of this study may appear privileged by focusing on highly-educated women, its aim is inclusionary, as it integrates a variety of identities and how they make meaning of themselves in relation to their career choices within a traditionally-gendered organization. Additionally, mechanisms are built in the study to check the researcher's own assumptions and interpretations of the case and are discussed in the next chapter.

## Research Questions

Two research questions guided my understanding of the complexity in these women's career choices following attainment of their doctorate degree:

For women doctoral students in majority-women fields:

1. What contextual influences shape perceptions of their career choice?
a. What, if any, barriers do women perceive regarding their career choice and how do they make meaning of these barriers?
b. What, if any, supports do women perceive regarding their career choice, and how do they make meaning of these supports?
c. What, if any, opportunities do women perceive regarding their career choice, and how do they make meaning of these opportunities?
2. How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding career choice?

## Research Methods and Design

Case study design is a useful way to investigate a contemporary phenomenon in its real-world context, especially when the researcher wishes to understand contextual conditions under which the phenomenon exists and when the boundaries between the phenomenon and context may not be clear (Yin, 2003; 2014). In this study, the context is highly relevant: women pursuing doctorates at a tier one public university ${ }^{13}$, within top-20 ranked doctoral programs, in two majority-women social science fields. The context of the university and phenomena of career choice are interrelated and worthy of deeper inquiry. A case study design is also valuable when the focus of the study is to answer "how" and

[^7]"why" questions and when boundaries are not clear between the phenomenon and context (Yin, 2003). Instrumental case study allows a researcher to gain a better understanding of a phenomenon, as the case provides in-depth insight into an issue (Stake, 1995). Additionally, phenomenological research calls for participants to illuminate their experience in relation to specific phenomena (Creswell, 2013). As such, this study blends research traditions of case study design and phenomenology. This design was well-suited for this study because it aimed to uncover how women doctoral students perceive their career choices, as well as understand the meaning-making they attributed to their choices.

In a single case study design, a phenomenon is explored in depth, bound within a specific context (Baxter \& Jack, 2008). For the purposes of this study, the case is comprised of the two majority-women social science departments at a PWI. Context, bounding the case, and unit of analysis are three essential components of a case study design (Merriam, 2009). The context of this study is a Carnegie-classified public, tier one public university in the Midwestern United States ("Midwestern University"). It is bounded by their fields in the social sciences, which are nationally recognized, majority-women doctoral-granting disciplines and majority-women granting doctoral programs at Midwestern University. The units of analyses are the doctoral women's lived experiences related to the phenomena of career choice. See Figure 3.1 for a graphical representation of this case study design. The aim of the study is not to compare these women's experiences between departments; rather, it is to create a holistic depiction how they make meaning of their career choice. Phenomenological research put behavior into context as a way to derive meaning and understanding from participants (Seidman, 2006). The design of this case study, along with phenomenology, allowed for rich and in-depth understanding of how doctoral women make meaning of their career choices in this bounded system at a prestigious public university.


Figure 3.1: Case Study Design

Studies in higher education have utilized case study design methodologies to investigate doctoral student experiences in specific disciplines (Erickson, 2012; Posselt, 2016; Russell, 2015), women faculty members and leaders (Davis, Major, Cook, \& Bell, 2015; VanTuyle \& Watkins, 2010), and work-life balance (Lester, 2015); however, none of these cases studies have concentrated on experiences specific to doctoral students who are women. Other studies in higher education have investigated women's experiences from a feminist methodology (Acker, 2000; Hart, 2006; Lather, 1988) as well as Chicana feminist epistemologies and methodologies (Bernal, 1998; Bernal, Elenes, Godinez, Villenas, 2006; Pizarro, 1998). This study expands the scope of understanding of doctoral women's career choices by applying case study design and utilizing feminist methods. Moreover, case study research allows a greater level of depth of understanding of these women's career choices, unique to their experiences within the context of their department,
discipline, and university. See Figure 3.2 below for a graphical representation of this methodological design.


Figure 3.2: Methodological Design

## Research Setting

This study was conducted with women doctoral students from the psychology and sociology departments at Midwestern University, a pseudonym for a Carnegie-classified public, highest research activity public university in the Southwestern region of the United States. Currently, Midwestern University boasts more than 200 graduate degree programs and enrolls over 11,000 graduate and professional students. In Fall 2015, the graduate enrollment was predominately White and foreign-born; underrepresented racial and ethnic populations represented about $22 \%$ of all graduate student enrollment (Office of Institutional Reporting, 2015). Women represented $43 \%$ of all enrolled doctoral students, however, half of these women were enrolled in the liberal arts, natural sciences, and engineering fields (Office of Institutional Reporting, 2015). A gender equity report found
a salary gap between both tenured and tenure-track men and women faculty members, lack of gender and racial diversity in faculty ranks and leadership, a lack of women leadership. This report drove the creation of a council to promote the status of women faculty members as well as institute climate surveys of graduate students. A woman has never led as president at Midwestern University, but women currently hold ranks of Provost, and vice presidents, and a third of the deans are women.
U.S. News \& World Report reported 40 graduate programs ranked among the top 10 in the nation and three programs ranked in the top five at Midwestern University. The university boasts over 5,000 externally sponsored projects, in the amount of nearly $\$ 600$ million dollars for the 2014-2015 academic year, and in the past 10 years, Midwestern University has generated over $\$ 140$ in licensing revenue, and issued hundreds of U.S. and international patents. Clearly, prestige, rankings, and research productivity are highly valued and commended at this institution. As such, it is an ideal research site to investigate doctoral women candidate's career choices, as they have experienced an intensely research-focused environment during their graduate school careers.

During the 2014-2015 academic year, Midwestern University awarded more than 1,200 doctoral degrees; three broad fields of education, social sciences and the humanities have awarded the majority of their doctorate degrees to women for at least the last fifteen years (Office of Institutional Research, 2015). The context of this case study are the sociology and psychology departments, which are two majority-women departments at Midwestern University. U.S. News \& World Report ranked both of these departments in the top 20 among all universities in the United States within the last five years. Each department's graduate studies webpage highlights significant awards, funding, and contributions their faculty and graduate students have contributed to their respective fields.

## Departmental Contexts

The design of this study is not to treat each department as an individual case and conduct cross-case analysis, as the case is comprised of the two majority-women social science departments at a PWI. However, providing a brief description of each department will give some context to these women's departmental environments.

Psychology Department. The psychology department was created at Midwestern University a little more than 100 years ago. Faculty members are well-known in their respective areas and are national leaders in professional organizations, serve as editors in prestigious journals, and currently hold scores of grants, which generate millions of dollars annually. A recent endowment led the way for construction of a 150,000 square foot building in which the psychology department is housed. Faculty offices, laboratories, classrooms, and clusters of graduate student offices comprise the maze-like corridors that require detailed directions for visitors. Most graduate students' offices are shared between two or three lab mates, and there is substantial natural light in each office. Separate research areas and faculty have their own domain in the building, and each area contains several smaller offices and lab space.

In the Fall 2015 census, there were a total of 95 graduate students enrolled in the psychology department; approximately $67 \%$ of the students were women (Office of Institutional Research, 2015). Women of color accounted for 16 of these students ${ }^{14}$ (See Table 3.1). In 2015, there were a total of 37 faculty members in this department (tenuretrack, tenured, and non-tenure track); women comprised $41 \%$ of all the faculty (See Table A2 in Appendix G). This racial and ethnic diversity (or lack thereof) in this department is

[^8]staggering: of the 37 faculty members, only three were people of color ${ }^{15}$ (See Table A3 in Appendix G).

Sociology Department. The sociology department has existed in one form or another at Midwestern University for over 100 years. It boasts one of the largest undergraduate majors at the university, and has a relatively large graduate program, compared to its peers. Faculty members are nationally and internationally known for their research, have won prestigious teaching awards, and work closely with communities. The sociology department is housed on an entire floor of a 225,000 square foot building built for the College of Letters and Sciences. Each side of the floor is differentiated by methodological focus: the "quant" (quantitative) researchers occupy the east side of the building, while the "qual" (qualitative) research work on the west side. Clear glass windows and doors separate classrooms, seminar space, and computer labs. Many faculty offices have floor-to-ceiling windows and make up the perimeter of a large, open space of graduate student cubicles.

Demographically, the sociology department resembles the psychology department. In the Fall 2015 census, a total of 86 graduate students enrolled; approximately $60 \%$ were women. Women of color accounted for 21 of these students (see Table 3.1). Women made up $43 \%$ and $33 \%$, respectively of tenured and tenure-track faculty members and seven of the eight non-tenure track faculty members. Out of the 44 tenure, tenure-track and nontenure track faculty members, there were four women of color (see Table A4 and A5 in Appendix G).

As scholarship and entrance to the academy is highly prioritized at tier one universities, this site was a noteworthy place to investigate how women choose a career

[^9]and how they make meaning of these factors in their career choices. The presence of a gender equity council that has a proven record of implementing policy changes on campus, and an increased focus in advancing women's status in leadership positions at the university make gender particularly salient in the context of these women's lives. Most Ph.D.-granting programs in these fields of study espouse traditions and value systems of scholarly and applied competencies, and even in applied fields, the dominant training model is termed "scientist-practitioner" (Raimy, 1950; Shivy, Worthington, Wallis, \& Hogan, 2003). These women will most likely have a diversity of research, practitioner, and applied experiences that will inform their career choices.

| Race/Ethnicity | Psychology |  | Sociology |  |
| :---: | :---: | :---: | :---: | :---: |
|  | n | \% All <br> Students | n | \% All <br> Students |
| 2 or more ${ }^{16}$ | 0 | 0 | 0 | 0 |
| American Indian | 0 | 0 | 0 | 0 |
| Asian | 6 | 6 | 3 | 3 |
| Black ${ }^{17}$ | 0 | 0 | 1 | 1 |
| Black only | 1 | 1 | 4 | 5 |
| Foreign | 8 | 8 | 8 | 9 |
| Hispanic ${ }^{18}$ | 9 | 9 | 5 | 6 |
| Unknown | 3 | 3 | 0 | 0 |
| White only | 37 | 39 | 31 | 36 |
| Total | 64 | 67 | 52 | 60 |

Table 3.1: Number of Women and Percent of Graduate Students at Midwestern, $2015{ }^{19}$

16 Excl. Hisp/Black
17 (2 or more, excl. Hispanic)

18 Any combination

19 Source: Office of Institutional Research (2015)

## Sampling Selection and Recruitment

I utilized purposeful sampling techniques, as it enabled the researcher to select information-rich cases to understand issues related to the phenomena of study (Patton, 1990). As the phenomenon of study was women in majority-women fields, I recruited women doctoral students in the psychology and sociology departments, as they represented the academic majority in their field at a national level and at the research site. My goal was to include women in latter stages of their doctoral careers, as they are more "entrenched" in their doctoral experiences and their reflections on their doctoral experiences may better inform their understandings of their career pathways (Watford, 2007). Ten of the 22 participants had reached doctoral candidacy and 17 had been enrolled in their programs for at least five semesters. Originally, I aimed to include only doctoral candidates in this study, but I was purposeful in recruiting a diversity of identities and backgrounds, so I included others who had not been enrolled as long or reached candidacy as a way to fulfill this goal.

Recruitment emails, which were approved by the IRB, were sent to Graduate Coordinators, fellow graduate students, and professors. I had colleagues in both departments who introduced me via email whom they thought may be interested in the study. These colleagues did not qualify for inclusion in the study, so there was not an issue of women knowing if they participated in the study or not. Those emails explained the purpose of my study and directed the students to an online questionnaire, via Qualtrics (see Appendix A), which collected demographic information and determined if they met the above-referenced criteria for selection and participation of the study. After completing the survey, I followed up with the participants to schedule an interview at a time and location most convenient for them. I was also invited to a psychology graduate student Diversity Committee meeting and introduced my study, the goals and outcomes I hoped to achieve from conducting this research, and invited interested students to meet with me if they had
any questions. I also relied on snowball sampling in which participants referred me to others whose experiences are pertinent to my study (Patton, 1990). Again, the criteria for selection in this study were: self-identified as a woman and a doctoral student in the psychology or sociology department at Midwestern University.

There were a total of 22 participants in this study (see Table 3.2 for participant background information). Fourteen women were doctoral students in the sociology department and eight were from the psychology department. As stated earlier, almost half of the participants had reached doctoral candidacy in their respective programs. The average number of semesters of enrollment for these women were 6.5 (see Table A1 in Appendix G for participants" academic information). One participant had been enrolled in her doctoral program for only one semester, but had previously earned a master's degree. She was included in the study because of this prior graduate student experience and she self- identified as Queer, which was an underrepresented identity in this study. The majority of the women (14/22) earned their undergraduate degrees from "doctoral: highest research activity institutions," as classified by Carnegie (2016).

The majority of women (15) were from self-identified "middle-upper class" backgrounds; five were from "low-middle class" backgrounds; one from an "upper class" background; and one from a "low-income" background. The highest degree earned from each of the participants' mothers varied. Six women reported their mother's highest degree earned was a high school degree; two reported an associate's degree; six reported an undergraduate degree; five reported a master's degree; and three reported a doctorate.

In my recruitment efforts, I was intentional to recruit women of color, statistically, women of color may not represent the majority of doctoral degree earners, but the social sciences fields historically have better supported doctoral attainment for women of color (NCES, 2010). Seven of the 22 participants self-identified as women of color and
represented races and ethnicities including: Asian/Pacific Islander; Asian/Pacific Islander \& White; African American/Black \& White; Latina/Hispanic; Latina/Hispanic \& White; and Middle Eastern. I had hoped to include greater intra-group racial and ethnic diversity in this study. For a brief discussion of challenges related to my recruitment efforts, please see the discussion at the end of this chapter.

## Data Sources

A fundamental component of case study research design is the use of multiple data sources, as this strengthens data credibility, and no single source of information is assumed to provide a comprehensive view of the case (Patton, 1987; Yin, 2003). Furthermore, the convergence of these data sources ultimately strengthens the findings in pursuit of greater understanding of the case (Baxter \& Jack, 2008). The data collection sources that were utilized for this study are semi-structured in-depth interviews, participant-observation, focus groups, and document analysis.

## Semi-Structured In-Depth Interviews

In case study and feminist research, interviews often serve as the primary data instrument and other tools like document analysis, observations, and focus groups are used to corroborate the interview (Yin, 2014). Feminist-oriented, in-depth interviews capture an individual's lived experience, as interviews are intimate, information-rich ways in which we can retrieve "the subjugated knowledge that often lies hidden from mainstream knowledge building" (Hesse-Biber, 2007, p. 147). While a goal of in-depth interviews is to gain rich data from participants, in feminist interview methods, the "types of questions feminists asked" differentiate themselves from others methods (Hesse-Biber, 2007, p. 117). In that vein, I constructed a semi-structured interview protocol that sought to understand individual experiences, how participants apply meaning to their own experiences, and
integrate feminist-oriented theory and research questions in my interview guide. Interviews that are semi-structured and adaptable allow for a fluid, individualized interviewing process, especially in phenomenological research (Miles \& Huberman, 1994). The questions centered on the women's doctoral studies experiences; understandings of barriers, supports, and opportunities in graduate school; their perceptions of how intersecting aspects of their identities like race, class, and gender may have informed their experiences and their career aspirations; and how their experiences have informed their career aspirations. (See Appendix E for Interview Protocol). At the beginning of each interview, I began with a discussion of my background, experiences, and motivation to pursue this topic in the interest of full self-disclosure.

After this study was approved by the Institutional Review Board (IRB) at the home institution, I interviewed 22 women doctoral students and interviews ranged between 50150 minutes. I audio recorded and transcribed each interview. To ensure anonymity, I removed all identifiable characteristics in the findings of my study. Additionally, I strove to be cognizant of the ways I am an insider or outsider, or simultaneously both during the course of my interview. For instance, recognizing the ways in which I am an outsider challenged me to ask questions I would have previously taken for granted; as an insider, it potentially facilitated a shorter period of time to establish a research partnership with my participants. I shared transcriptions with the participants and invited their feedback regarding the interview as well as emerging findings. I discussed my positionality and measures I took to be reflexive during the entire research process in a later section.

## Focus Groups

Focus groups are a useful method in discovering subjugated knowledge from group interaction and multivocal narratives, especially within groups who experience oppression
(Leavy, 2007). In group conversations, unique insights may be revealed by group members sharing or comparing experiences (Leavy, 2007). I conducted two focus groups of women doctoral students, segmented by discipline. Lather (1991) suggested sequencing individual interviews then small groups as way build rapport and facilitate collaboration. As such, I invited women to participate in a focus group after their participation in the in-depth interview. Each focus group was recorded and transcribed and lasted approximately 60 minutes. The focus groups were opportunities for me to share emerging findings, provide opportunities for the participants to share additional thoughts, and build knowledge (Lather, 1991). I also made arrangements to meet individually with three women who were not able to attend the focus groups, but expressed interest in providing feedback regarding my initial findings. Those follow-up sessions lasted ranged between 45 to 120 minutes.

Focus groups can be opportunities to brainstorm intervention and programmatic ideas to address specific populations and my focus group protocol included questions that asked the participants for suggestions of concrete ways in which departments, advisors, and programs could support doctoral women's career choices (Hays \& Singh, 2012). The guiding questions of the focus groups centered on the women's doctoral studies experiences, their perceptions of how intersecting aspects of their identities like race, class, and gender may have informed their experiences, their career aspirations, and in what ways their experiences informed their intended career. Appendix F details the intended focus group protocol that guided the discussion.

One potential disadvantage of a focus group is that participant confidentiality may be diminished in a group setting. With this consideration, I individually reiterated the need for confidentiality with participants, as required for the IRB, and again when the group convened, so the participants could feel more comfortable and likely to share candid reflections. I aimed to have a low level of moderation during the focus groups, so that the
participants "ha[d] more control in focusing the conversation on topics of importance to them, in their language and with their flow" (Leavy, 2007, p. 184). Women engaged with each other and with the initial findings and generally did not need additional prompting.

## Participant-Observation

During the 2016-2017 academic year, the Graduate Student Assembly at Midwestern University co-sponsored a series of career workshops for graduate students regarding alt-ac career pathways and how to market graduate student experiences to employers outside of academia. I attended and observed three of these workshops as a way to understand what types of resources are directed to graduate students who are interested in an "alt-ac" career pathway, types of questions the participants asked, and what some of the potential industries they may have been considering for their careers. As a graduate student, I had the opportunity to gain access to this event. One challenge related to participant-observation was my ability work as an external observer and raise questions from different perspectives (Yin, 2014). In order to mitigate some of these challenges, I took notes during the workshops, summarized the conversations, and then synthesized each of workshops at the completion of the series. In one workshop, I was able to debrief with a workshop participant who I had previously interviewed as part of this study. I asked for her input regarding my observations and took notes during this debriefing session.

## Document Analysis

Including documentation as part of data sources can corroborate evidence from other data sources in the study (Yin, 2014). I utilized the departmental homepages as cultural artifacts regarding explicit messages for their students such as advising, job placements of their graduate students, and commitments to diversity. Moreover, these artifacts offered implicit or coded messages to prospective students. For example, did they
include job placements of students who obtained alt-ac or post-ac positions? I reviewed the departmental websites both prior to and during data collection and analysis, as it provided me with a departmental context for my participants. I also utilized reports compiled by the College of Letters and Sciences, which is comprised of several social science departments, including the psychology and sociology departments in this study.

## Researcher Positionality

The genesis of this research study emerged from questions I asked of myself and discussed with my fellow women graduate students regarding our intended career pathways following the completion of our doctoral degrees. These conversations and internal reflections resonated with me to develop this study. This kind of "me-search" has been generated in many fields, and especially higher education, under the methodology of scholarly personal narratives or autoethnographies and are especially useful for uncovering counterstories of marginalized groups (Boyd, Cintrón, \& Alexander-Snow, 2012; FriesBritt \& Turner-Kelly, 2005; Nash \& Bradley, 2011; Reddick \& Sáenz, 2012; Solórzano \& Yosso, 2002). While this study is not a scholarly personal narrative, it aligns wells with the idea that
...re-search of whatever kind conveys the idea that all scholarship begins, in some way, with me-search. Scholars start unavoidably with the evolving and fluid 'meperspective' of the re-searcher. This changing 'me' vantage point of the researcher is unavoidable, and it will always affect the motivation, choice of methodology, process, and product of the research (Nash \& Bradley, 2011, p. xiii).

As such, I acknowledge that my role has to be considered in all phases of research, including the ways I am both an inside and outsider (Maxwell, 2013).

As a woman doctoral student who identifies as heterosexual in the latter stages of my doctoral degree, studying in a majority-women field at a research university, I could be
considered an "insider," as I may share many characteristics with my participants. These shared characteristics facilitated some understandings and rapport-building throughout the research process. In many other ways, I could be considered an "outsider." Both of my parents were academics, which served me in cultivating a considerable amount of cultural capital, or the skills, knowledge, and abilities awarded in a social situation like graduate school (Bourdieu, 1979/1984). This cultural capital acquisition from my family contributed to a unique perspective regarding the inner workings of the faculty-advisee relationship, faculty politics, the faculty and graduate student socialization processes, and general understandings of academia prior to even entering my collegiate career (Yosso, 2005). Moreover, I am from a White, upper-middle upper- class household. In this study, I intentionally included women of color as participants, and as McIntosh and Hobson (2013) urge, I had to consider: "How can I engage with the work of women of color, in an ethical way, without appropriating their work for my academic gain?" (p. 1). Furthermore, as a White woman, how could I connect reflexive engagement of both my privilege and marginalization within the academy (Jones, 2010; McIntosh \& Hobson, 2013)? With these questions in mind, I addressed some of these concerns in several ways with my participants and throughout the research process.

First, I bracketed my assumptions in relation to my preconceptions, beliefs, and knowledge of the phenomena prior to beginning this study to strengthen credibility of the findings (Hays \& Singh, 2012; Moustakas, 1994). These assumptions were informed by my experiences as well as the literature regarding doctoral student women, career pathways, and career outcomes for women professionals. Some of these assumptions could include women receiving messages from the faculty about the capability to pursue research careers, whether through explicit messages like warning women of the difficulty to reconcile work and family in faculty careers, or implicit messages like noticing women
faculty members performing more service or "academic housekeeping" duties. Second, I communicated my background, experiences and goals of this study throughout the research process. Initially, I communicated some of this information in my recruitment email and at the beginning of the in-depth interviews as well. As I facilitated the focus groups and shared my initial findings, I also disclosed how my positionality and experiences informed my understandings of the data as well.

I maintained reflective journals throughout the research process, including prior to commencing interviews with participants. These journals contain my reflections on my positionality regarding my race, class, gender, and other experiences and how this relates to my research, over time (Hesse-Biber, 2007). This process helped me ethically ascertain the "lens in which I am interpreting the world in relation to others" (McIntosh \& Hobson, 2013, p. 3). This kind of intersectional reflexivity should "inform the research process and be present in the final scholarly product" (Jones \& Calafell, 2012, p. 10).

## Data Collection and Analysis Procedures

Yin (2014) outlines four principles of data collection in case studies: use multiple sources of evidence, create a case study database, maintain a chain of evidence, and exercise care when using data from electronic sources. I applied each of these four principles to this study. As referenced earlier, this study integrated data from in-depth interviews, focus groups, participant-observation, and document analysis in order to triangulate data and strengthen the construct validity of my study (Yin, 2014). The database in this study consisted of the interview recordings and transcripts, field notes and observations, memos, a reflexive journal, and relevant case study documents collected throughout the study. These are all stored in a secure online storage system. I maintained a chain of evidence that linked my research questions, case study protocol, evidence, and
research database so that an outside observer could follow the same train of logic and rationale throughout my study process (Yin, 2014). I utilized the qualitative software, Dedoose, to securely store my transcripts and memos, as well as facilitate my coding and analysis procedures. For any of my data sources that originated via an electronic source, I was careful to crosscheck the sources and use permission, if needed.

## Data Analysis

I utilized pattern identification (Stake, 1995) where I examined the broad categories within the case for their relationships or interactions, as well as constant comparison analysis techniques, whereby I identified large codes to compile a codebook, and consistently refined these codes between data collection and analysis (Merriam, 1998). In qualitative research, data analysis should occur simultaneously with data collection; one measure I took to ensure this occurred was writing memos throughout the research process (Merriam, 1998). Memos served as a connective thread throughout field notes, transcriptions, and coding stages and memo-writing was the key transitional step between data collection and the writing process (Charmaz, 2006).

Although the analysis was concurrently constructed, there were two broad cycles of coding: inductive and deductive. The first round of inductive coding applied theory to my data, whereby I coded inductively based on the literature of social cognitive career theory. In the second round of coding, deductive coding, I utilized open, axial, and selective coding process (Corbin \& Strauss, 2008). In the first round of deductive coding, open coding, I used keywords or phrases from the participants to arrive at a broad understanding of the data. Next, in axial coding, I collapsed the open codes into broad categories or codes. Lastly, in selective coding, I identified the patterns, processes, and sequences among the axial codes to generate an intricate view of the phenomena of study (Hays \& Singh, 2012).

## Trustworthiness

Within the descriptions of my data sources and analyses, I referred to some of the measures I took to ensure trustworthiness, such as maintaining a chain of evidence. Additionally, I utilized two mechanisms for triangulation, or the process of integrating multiple methods or sources to enhance data (Lincoln \& Guba, 1985). First, I utilized method triangulation, as I collected data from interviews, focus groups, document analysis, and participant-observation. Moreover, I engaged in peer debriefing throughout the research process. I discussed the design, codes, and interpretations of data with colleagues, so as to enhance and critique my understandings of the study.

## Challenges

The challenges I anticipated and encountered involved access to participants. I had a graduate student contact in each department as well as a faculty connection in a related department. I gained access and referrals to other participants through personal networks and organizational activities. As women graduate students of color represent a small percentage of graduate students in the department, recruitment was a challenge and I was mindful of the ways in which I recruited participants for this study. As a White woman, I did not want to exacerbate the "cultural taxation" these women experience as their limited number on campus disproportionately calls on them for representation and participation in "diversity" endeavors (Padilla, 1994). In the recruitment phase of this study, I attended a Diversity Committee meeting in the Psychology department, introduced my study and how women's voices would be used to construct a composite understanding of what it is like to be a woman in a majority-women field, but also how this research could potentially be used to inform university stakeholders. Unfortunately, this did not yield any additional participants. I also emailed two professors in Psychology Department, both of whom serve on the Diversity Committee as faculty advisors. I explained my study and offered to meet
with them to answer any questions they had and if they could refer me to women of color participants. In one case, a professor forwarded my recruitment email to the Diversity Committee, but in a follow-up request, she stated there was nothing else she could do. In the Sociology Department, I had assistance from a prior classmate, who is a male student of color, who individually introduced me by email to some of his women peers. This, along with the support of a woman faculty member of color, provided entree to meeting with several other women in the Sociology Department.

## Summary

In sum, the purpose of this study was to understand how women doctoral students, who are in majority-women social science fields, perceive and make-meaning of their career choices. Using SCCT (Lent, Brown, \& Hackett, 1994) as a framework, this study sought to understand how contextual factors (barriers, supports, and opportunities) influence these women's perceptions and meaning-making of career choice and how intersectional aspects of identity influence women's understandings as well. This study was grounded in an overarching critical feminist epistemology and blended case study and phenomenological research design to center women's experiences and meaning-making in relation to career choice. The main source of data drew from 22 semi-structured, in-depth interviews with women doctoral students at a tier one, Predominantly White public university in the Midwestern United States. The units of analyses are the doctoral women's lived experiences related to the phenomena of career choice. The case is bounded in the social science disciplines in which the women are students. The aim of the study is not to compare these women's experiences between departments; rather, it is to create a holistic depiction how they make meaning of their career choice.

| Name | Age | Race(s)/ <br> Ethnicities | Sexual <br> Orientation | Family | SE | Mother's <br> Highest <br> Degree <br> Earned |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lynn | 33 | White |  | Heterosexual | Middle-Upper Class | Master's |
| Claire | 26 | White | Heterosexual | Middle-Upper Class | Doctoral |  |
| Nicole | 27 | White | Heterosexual | Middle-Upper Class | Undergraduate |  |
| Angelica | 25 | White | Queer | Middle-Upper Class | Associate's |  |
| Viktoria | 28 | White | Heterosexual | Middle-Upper Class | Doctoral |  |
| Gabrieal | 30 | African American/Black \& White | Bisexual | Low-Middle Class | High School |  |
| Christina | 31 | White | Bisexual | Middle-Upper Class | Associate's |  |
| Michelle | 29 | Asian/Pacific Islander | Heterosexual | Middle-Upper Class | Undergraduate |  |
| Maya | 28 | Latina/Hispanic \& White | Heterosexual | Middle-Upper Class | Master's |  |
| Yumi | 36 | Asian/Pacific Islander | Heterosexual | Low-Middle Class | High School |  |
| Andrea | 30 | Latina/Hispanic | Bisexual | Middle-Upper Class | High School |  |
| Judy | 28 | Asian/Pacific Islander \& White | Heterosexual | Low-Income | High School |  |
| Sheela | 30 | Asian/Pacific Islander | Bisexual | Middle-Upper Class | Undergraduate |  |
| Lauren | 33 | White | Bisexual | Middle-Upper Class | Master's |  |
| Chelsea | 29 | White | Heterosexual | Low-Middle Class | Undergraduate |  |
| Rebecca | 28 | White | Heterosexual | Middle-Upper Class | Doctoral |  |
| Elizabeth | 29 | White | Heterosexual | Middle-Upper Class | Undergraduate |  |
| Melanie | 29 | White | Heterosexual | Low Income | Master's |  |
| Marissa | 25 | White | Bisexual | Middle-Upper Class | Master's |  |
| Leah | 33 | White | Upper Class | High School |  |  |
| Sarah | 28 | Middle Eastern | White | Middle-Upper Class | Undergraduate |  |
| Samantha | 26 | White |  |  |  |  |

Table 3.2: Participant Demographic Information

## Chapter 4: Findings from RQ 1

In the following two chapters, data gathered primarily from interviews, as well as focus groups, follow-up interviews, and documents, informed the analysis of this study's two research questions:

For women doctoral students in majority-women fields:

1. What contextual influences shape perceptions of their career choice?
a. What, if any, barriers do women perceive regarding their career choice and how do they make meaning of these barriers?
b. What, if any, supports do women perceive regarding their career choice, and how do they make meaning of these supports?
c. What, if any, opportunities do women perceive regarding their career choice, and how do they make meaning of these opportunities?
2. How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding career choice?

In the first three sections of this chapter, I present themes and corresponding data that relate to each research questions. Etic coding was used to apply SCCT contextual influences, specifically barriers, supports, and opportunities and to understand how these influences shape women's perceptions of their career choices. Emic coding, or using participants' word and perspectives, was also used for a bottom-up method to share the essence of being a woman doctoral student in a majority-women discipline. This chapter explores the three-prongs of the first research question. Chapter 5 includes findings from the second research question.

## RQ1a. Perceived Barriers that Shape Career Choice

The following section will seek to address the first subsection of the first research question regarding what contextual influences shape women's career choices: For women doctoral students in majority-women fields: What, if any, barriers do women perceive regarding their career choice and how do they make meaning of these barriers? Women attributed several influences as potential barriers to their career choice. First, the theme that the majority of women spoke about and raised unprompted, centered on the feasibility of a healthy work-life balance in academia. Women attributed this barrier to the explicit and implicit messages their advisors and peers gave about their own lives. The question of when to have children was a prominent component of work-life balance and women were conflicted with the advice they were given that graduate school was an opportune time to have children, but this was in direct conflict with their personal and financial capabilities. Second, the job market weighed heavily on women's minds - they were unsure how many positions would be available when they were on the market; for those women on the academic job market, they had to consider a variety of factors about potentially changing locations for a job. Third, women had complex relationships with their advisors, whom they perceived to hold power in allocating (or withholding) resources crucial to the development of their academic career. Lastly, women who were considering non-tenure track jobs or careers outside of academia were unsure of how to pursue those career interests and how to do so without losing advisor support.

## Theme I: Work-Life (Im)balance

Work-life balance, or "the degree to which an individual is able to simultaneously balance the temporal, emotional, and behavioral demands of both paid work and family responsibilities" (Hill, Hawkins, Ferris, Weitzman, 2001, p.49), is a legitimate concern for most people. For women in this study, their experiences and perceptions of work-life
balance, or (im)balance was of primary concern. In fact, in three-quarters of the interviews, women spoke about work-life balance of their professors, their peers, and themselves and towards the beginning of the interview. Whether or not these women had partners, currently had children, and/or personal interests, they attributed their current amount of work as potentially incompatible with their future careers in academia. These women's perceptions of work-life balance drew from a variety of sources and recognized differences in worklife balance demands. Leah said, "to work at an R1 school my perception is that you would have to work all the time to be productive enough to keep it up." There were differences in the degrees to which women agreed with this sentiment, but for the most part, women saw the ability to maintain a manageable work-life balance as a barrier in their careers.

Most women used their experiences as doctoral students as a basis for what life as a tenure track faculty member would look like, at the least. Andrea reflected:

When you're a graduate student you're not obligated to work 16 hours a day if you don't want to. But it's this immense pressure to do so. And so, you just kind of doing it because if not, at least I feel like, the sky's going to fall. Like, if I don't pass my comprehensive exams - I could have just said, 'I'm going to study just five hours a day, and that's it. I'm not studying anymore.' And I could have done that. But stress levels won't let you do that. And when I start a tenure track, it will be the same thing.

Angelica, who is 25 , contemplated what work-life balance would look like as a junior professor and at what point she would feel as though she would be comfortable enough with her career to have a more balanced personal life.

So, when I'm 40 or something, that's when my life will start. That's when I will get to do all of the things that I want to do, and... I'll have a sexual awakening, and it'll be like amazing, and my life will begin when I'm 40. And I'll have tenure, but until then, even when you get an assistant professorship it's like your career is so tenuous it's like 'I'm not there yet, I'm not there yet,' - that idea, right?

One of the first messages Rebecca received about work-life balance for professors in her department was her faculty introduction meeting during her first week of graduate school. In a panel, faculty members were asked by students about their favorite things to do in their city. She recalled:

Four out of five female faculty members said 'Well, I just work and I work. Last time I had fun here was probably on my interview day.' And it's just this message of, you know...they're not out having fun, they don't have a work-life balance. I don't see a lot of happy, well-balanced, powerful, strong, successful, females that are in this department. I do see some females who are happy, and it seems like they have a good work-life balance but unfortunately, I know they were hired as a spousal hire.

Rebecca learned that not only is faculty work-life difficult, but in order to be successful, you have to work excessively, and even more so if you are a woman. Similarly, Elizabeth, who works closely with a male and female advisor, reflected on her female advisor's workload:

Perhaps because she's younger, perhaps because she feels like she has to move forward at a faster pace than her male peers, she's more hands-on and expects you to be readily accessible than the male advisor. I think a lot of that is due to her not being tenured yet and still feeling like she has a lot to accomplish before that can happen.

Women looked to their advisors and other professors in the department for explicit and implicit messages regarding how well they could sustain a manageable work-life balance. Rebecca described what a healthy work-life balance would look like for her:

I think some place where I wouldn't have to be struggling to prove myself to get tenure. That I would feel comfortable enough to actually have that work-life balance that faculty members say 'this is why it's great to be a faculty member, you can have a flexible schedule.' And I don't see that many people who actually do that, and I would actually like to do that. And I think I would just like need to not be at an R1 university.

Most participants identified the time and day in which professors returned emails to be an indicator of how little work-balance a professor had. For example, women recalled receiving emails on weekends, early in the morning hours, or replying quickly meant their advisors were working all of the time and did not have time for leisure activities. Leah explained, "I read those emails and I'm like, 'why is he up at one in the morning answering my emails?" Yumi also made meaning of her professors' work styles and what that would mean for her future career:

And looking at the professors' lives here, it's too work-oriented. My advisor, she's $24 / 7$ in front the computer. She's replying my emails right away. And I send her an email, I get her response right away. And, I understand that's her lifestyle, but I can't do that. I'm not such a person who's like, on email all of the time. And, because it's R1, research-oriented university...but that's not the life that I want to live.

Women observed the amount of time and effort the faculty put in to their work and wondered if they would be able to do so as well. Maya, Marissa, and Rebecca admitted they did not know of strategies, supports, or even whether or not professors struggled in balancing their work-life responsibilities. Rebecca's advisor advocated a good work-life balance and told his students they should treat graduate school as a 9-5 job, Monday through Friday. However, she did not see this as feasible for herself:

That's great, but that's not possible because we're expected to publish papers, go to conferences, do research, do clinical work, go to class, TA. We just can't do it between $9-5$...someone puts that weird rule on you, and that's not actually doable. I think it sets people up for failure. Then you just feel bad that you're not able to accomplish everything 9 to 5 . Like you're some idiot or something, you can't get it done.

Maya also struggled with the idea that she would need to accomplish more as a faculty member when she already struggled as a graduate student:

I don't know. I honestly don't know how people balance. I feel like I have to be doing something wrong... I'm projecting [faculty life] based on like the very unbalanced experience I'm having now, and I don't want to do that.

Melanie grappled with completing her class and research within the 9-5 parameters her advisor advocates. Because of this, she questioned whether she could withstand the emotional pressure of academia, "I am just too anxious for this profession...I can't even like [do this] pre-tenure...I can't even imagine, based on what's going on with me now, like what [tenure] would be like." She then went on to compare her struggles with maintaining a reasonable work-life balance as a graduate student with her perceptions of her advisor's success in doing so:

It also always feels like she is just a more well put-together human being than I am. I think there must be like personality of differences or something. So, she does model [work-life balance], but then I never feel like I could actually attain that.

A quarter of the participants stated their advisors explicitly expressed their own emailing guidelines and feedback systems and set expectations accordingly. Women said this was helpful, and made it clear what they could expect of their advisors. Now that Elizabeth's advisors have kids they'll say, "no work at this time, but maybe I'll answer an email, but you're not going to get a response from us on the weekends. This is our dedicated family time.'" Melanie's advisor always advocated for weekends off, and modeled this to her students. She appreciated that it was like "a two-way street."

For the most part, the students who had faculty members who made these clear boundaries said they kept these parameters and respected them for it. However, most women still did not know what specific supports or strategies faculty members used to be able to maintain a clearly delineated work-life balance system. In an interesting paradox, women thought that advisors who responded immediately to emails or provided feedback
in a quick turnaround time to mean they had little work-life balance, yet, were critical of advisors who did not offer feedback and saw them as unsupportive.

The most dynamic tension between women's perceptions of faculty work-life balance dealt with considering childrearing responsibilities. Not all women expressed a desire to have children. Andrea, who was almost certain she did not want to have children, said that she would consider a different career than academia because she did not consider it to be child friendly. Samantha, who wanted to pursue a tenure-track faculty position at an R1 university and have children in the future believed she would jeopardize her relationship with her partner if she chose not to have children because she would be "denying him of something that he wanted." Yet, if she did have children, she thought she would not be able to co-parent well. Samantha attributed these feelings to the structural constraints of balancing work with raising children:

It's the workforce that I feel is so unsupportive of women who want to have careers and who want to be moms. How do I find time to have kids without messing up my career trajectory? I haven't figured that side out.

Sarah, who would like to have children in the future, carefully considered work-life balance and motherhood in academia and industry. She saw positive aspects to motherhood in the academy, but no matter the career, she saw incompatibility with motherhood and her future career:

I will have to make a tradeoff between professional success and being a good mom. I think if I have to make the decision and this might be untrue, but I think I would be willing to give up professional success if that means being a better mom.

Viktoria, who also wanted to pursue a tenure track faculty career, recognized the compromises she may have to make if she has children. She wondered, "am I going to be able to raise my child how I want to, or am I going to be able to breastfeed for as long as I
want, or am I going to be able to go to as many school functions as I want to?" One way she hoped to mitigate this is with a partner who could co-parent and work well together because she had no intention to put her career on hold.

During college, Chelsea nannied for a woman faculty member who was beginning her first year as an assistant professor. Chelsea explained this woman's schedule and how it informed her idea of what life as an assistant professor with children looked like:

I would watch the kid from 8 to 5 , and she would come home and then put him to bed...and she then she would get up and work from midnight to 3 am and then she would leave at 7 am or 8am. She didn't really sleep much or spend that much time with her kid. That was kind of scary, like, if that's what it's like to be a professor.

Christina, who is a mother to two children, had a unique perspective regarding work-life balance compared to her graduate student peers without children. Christina's children attended the same schools as her professors' children and noticed that they stayed until 6 o'clock, which was the latest time for pick up. She rarely saw these professors at volunteer events at their children's school and discussed that with a professor:

She was telling me like not to feel guilty about not being able to volunteer for anything. That there's plenty of stay-at-home moms at the school that can take care of that. But I like doing some of this stuff, I hate just like not being involved with the different activities at the school. They have these little class parties and it's almost like every time I do go to volunteer all the volunteer spots are already taken.

Christina strategized ways she believed she and her partner could support their family while Christina pursued a tenure track faculty position. One of those strategies was for her husband to find a lower stress job, part-time work. After she earned tenure, she predicted, he could pursue career options with greater responsibilities. She was also realistic about how much they could do to mitigate all of the stress:

I just have to do the best I can. I'll just have to be like, 'my kids will just have macaroni for dinner and they will wear the same clothes three days in a row, not
take a bath all week, but it's okay.' Letting go of this idea of how you're going to parent and just recognize that like your kids are going to be just fine if they wear the same shirt two days in a row, and no one is going to notice.

Although most of the women considered work-life balance as a balance between work responsibilities and children, Michelle believed the department rhetoric that encouraged a healthy work-life balance only emphasized those with families. Michelle had a health condition that took a considerable amount of time and energy to manage. She reflected: "the inequalities of work-life balance that affected were not really given voice. As in life equals family, which is like okay, but life is also other things."

## When to Have Children

Half of the women in this study spoke about specific instances in which professors, peers, or older graduate students told these women about strategizing when, if at all, they should start having children. Some of this advice came unsolicited but most of the advice they received indicated graduate school is the most opportune time to have children. Women had differing reactions to this advice but most of them said that it was incongruent with their life for a variety of reasons.

Claire's advisor told her graduate school was a particularly good time to have children because graduate students' schedules are so flexible. Claire remembered thinking,

I'm 25. No. It feels like it would be a horrible time to have children, so I can't even imagine what it would be like when you're trying to get tenure...Even financially, how on earth can someone afford to have a child unless your partner is earning decent money?

Nicole, Rebecca, Leah, and Elizabeth had similar experiences at the beginning of their graduate careers when faculty members told them graduate school was an opportune time to have a baby. A professor in Leah's department told her and a classmate that having children sooner rather than later would be more manageable. Leah remembered telling the
professor "we don't have husbands! We just started grad school...we're trying to do our homework and deal with imposter syndrome." Nicole's reaction was:

I was like are you fucking kidding me? No. I make no money. Why would I do that? That sounds terrible, but the strictures of the profession, it's like, 'oh wait, so do you wait until after tenure when you're like in your late 30s?' I don't know. I'm too young for that.

Prior to starting her doctoral studies, Lauren worked in the financial industry, which she thought was particularly inhospitable to women and maternity leave. She thought graduate school would be more supportive and conducive to starting a family with her husband. However, this is not the case for her. She reflected, "I've never heard so many comments on my fertility - my reproductive choices professionally."

Some women welcomed this advice to have children in graduate school. Marissa, who was married and was considering having a child, felt relieved when her advisors told her and her friend that graduate school was the easiest time to start having children. She and her friend remembered feeling:
'Whew!' So now we can do it. We felt license - it will be fine to tell them we want kids, and probably soon.' Whereas, other students are trying to figure out if it's okay to do that in grad school with their advisor. I think in my area, people aren't taken aback if you want kids. But I do think there are people in academia who think, 'how can you publish extremely amazing research if you have kids to take care of?'

Women looked to other women graduates to formulate their ideas of how to navigate the question of when is appropriate to have children, if at all. They were also cognizant of the biological factors associated with their decision to have or delay starting a family. Viktoria's lab mate delayed having children for most of graduate school, and at 35, decided she was ready to conceive. Her lab mate found out she had fertility issues, and Viktoria commented, "She has a feeling that it's her fault, that like she waited too long or because she wanted to be in a space where she was more independent after work." After
witnessing her lab mate's fertility issues, Viktoria admitted those were "real fears" for her now too.

Lauren and her husband initially thought they would follow the advice of faculty members and have their first child once she was dissertating. However, several logistical issues impeded their plans. She was offered a fellowship the last academic year, which was a great opportunity to pursue her research, but university fellowships do not include health insurance benefits. If they would have proceeded with their original plan to get pregnant during her last year, she would have had to turn down the fellowship opportunity because it did not offer health insurance. Because of things like this, she felt that she was "constantly...pushing [pregnancy] back." They originally thought they would have two or three kids, but at 33 , she said they were now considering only having one child.

The messages regarding having children during graduate school were difficult, but women expressed uncertainty about how children would affect their professional prospects as well as ability to get tenured. Rebecca considered obtaining a post-doc position after earning her doctorate, but thought:

If you're in a postdoc, you really don't have time to take off to have a baby what do they even give now? Two weeks or something like that. If people know that you're pregnant, are they even going to hire you for that postdoc position? Because they want you to work so hard for that year or two. Same with a first faculty and you're trying to get tenure. Logistically, I just don't know when is a good time.

Lauren heard from some of her fellow graduate students that having a child in graduate school was a "career ending move" because it meant a lack of dedication to the discipline. A couple of years before, a woman came to her department to deliver a job talk. She remembered:

She was behind the podium, and when she stepped out of the podium and she was visibly pregnant, there was an audible gasp from the audience. And the audience
was full of feminist scholars. We have like, three scholars who do gender and work.

Marissa was dubious that fellow faculty members would evaluate women faculty members with children to the same standard as men, or even women without children, despite institutional policies like STC that were designed to mitigate these concerns. She explained:

When you go up for tenure, whether it's explicit or not, [faculty are] like, 'Well, she took a year off to have a kid...' Or, 'she didn't produce as much as someone else could have'...And I think, things are changing...but I don't think that means it doesn't influences people's views [about women's abilities].

Melanie was equally skeptical of how these policies were enforced and how they could vary institution to institution, or even within department. "I know some of places will allow you like a year extension or something, but that's not necessarily legally required of them, so it kind of depends on where you end up."

In sum, women made meaning of implicit and explicit messages from faculty members, peers, and others regarding the feasibility of their own work-life balance. They interpreted faculty behavior, like number of hours worked, emailing habits, or guidelines for research to dictate what their lives as faculty members could be. Women expressed concern with how compatible motherhood could be in the academy. Some were unclear of procedural or policy supports for motherhood, both as graduate students and faculty members.

## Theme II: The Job Market

When speaking about their careers, women referred elusively to "The Job Market." Women were uncertain about the job market and unable to project how successful they would be once they were ready to enter it. According to Rebecca, "some students still felt shell shocked from the downturn of tenure track hiring." Although the job market had
slightly improved in their discipline, women were still trepidatious of how successful they would be in relation to availability of tenure-track jobs. The College of Letters and Sciences compiled a post-graduate job placement report for Ph .Ds. from graduating cohorts between 2002-2007. This report stated $81 \%$ and $70 \%$, of psychology and sociology, respectively, of Ph.D. holders from these years obtained "academic" positions. However, further examination of this data shows only $17 \%$ and $18 \%$ of psychology and sociology Ph.Ds. were placed in AAU institutions. The majority of psychology Ph.Ds. obtained post-docs at non-AAU institutions, while the majority of sociology Ph.Ds. obtained tenure-track positions at non-AAU institutions (see Table A6 in Appendix G). Both students and professors were conscious of the decreasing amount of tenure-track positions. Lauren explained:

We have a funny dance in our department where the department lingo is you have to go the professor track, and there's like a heavy pressure on R1 track. But in reality, only a few of our students graduating each year actually get R1 jobs. So, there's kind of this mismatch between the expectations and reality, but there's this idea that you sort of walk the party line.

Lauren, who was on the job market, applied to 150 jobs in the Fall semester alone. She received serious interest from three universities, two of which were in Europe. She explained her credentials compared to one of her peer's:

I don't have an amazing CV, but...I have a handful of publications and one of my friends, she has a postdoc at an elite top-five program. She has seven publications and she's only had one phone interview. Yeah, so it's just a rough environment out there. The biggest obstacle at this point is just getting a job.

Comparisons to peers' success on the job market informed these women's perceptions of how successful they would be when they were on the market. Sarah's colleague, with whom she shared advisors, was in his third year of his postdoc, but only got one interview. Because of this, Sarah believed her advisor was more aware of the
constraints of the job market and was more open to her pursuing different career paths than an R1 tenure-track position.

Although Sarah's advisor was more open to the changing job market, other women's advisors only discussed career choices pertaining to R1 institutions. In Angelica's professional development seminar, they mostly talked about academia, specifically "R1s" in terms of career prospects. Angelica stated, "It's this idea of like you can be private sector or go to an R1 and there's nothing in between. No one is trying to become a lecturer." Not only did professors emphasize R1 schools as the only type of institution to which to aspire, but rarely did they acknowledge the variation of institutional types and faculty positions where students could work.

These conflicting messages about the competitive environment for tenure-track jobs at R1 institutions and the low chance of these women earning a position at one was not lost on Claire or her professor. In class one day, her professor was lecturing on paradoxes. In this class, her professor used the students for his example:

He was talking about paradoxes that people study...And he was like, 'for example' - and again, kind of joking, but not - 'you're all here in Ph.D. programs, despite the fact that you know tenure track jobs are dwindling. And you could be making more money elsewhere... it seems irrational, right? But yet, you're all still here, what fictions do you tell yourselves to stay here?'

And I was like, fair. But also, our advisors keep feeding us that fiction too, because all of the advisors think their students are the exceptional ones and their students will get the jobs. And they're not allowing us to have a Plan B. Because if you start talking to them about 'what's my plan B?' then they'll stop investing in you. And then you really won't get the tenure-track position. So, it's this annoying, cyclical thing that happens, and it's very irritating.

When asked how students understood tenure-track faculty positions as the standard to which all doctoral students should aspire, Michelle explained the reward structure in the department:

Every time someone wins anything, like a fellowship...or gets placed in the department, or anything, they send an announcement to everyone on the graduate listserv. But if you get a job not in [academia]...it's like those people don't exist, like nobody hears from them.

So, they write the placements of the recent graduates and there aren't any nonacademic people. So, you're kind of like, "What happened to those people?" They like, disappeared.

As women considered their career choices in academia, they weighed other constraints. For one, geographic location placed a limitation on women. Women wondered whether or not they would feel comfortable living there for personal reasons or if their partners would be willing and/or able to relocate. As discussed above, women understood they were expected to earn a faculty position at an R1 institution, yet proportionately, few of them attained these positions. Sarah considered this predicament and decided to apply to universities in locations where she would like to live or to smaller teaching institutions. She explained:

I think there's like this kind of unspoken rule that the job market is so tight that you should be location-agnostic and you go anywhere. And I'm not going to do that. Like I'm not going to live somewhere I don't want to, where I don't know anyone...I think that's kind of what we're pushed towards and trained to do but it seems really difficult and it seems, in a way, kind of fake.

Women expressed that in order to obtain one's first tenure-track faculty appointment, one had to be willing to go anywhere in the U.S., however undesirable that place might be. Most of these women were skeptical of this norm and did not ascribe to this long held practice for a variety of reasons. Nicole, who is 27 and unpartnered, decided:

I don't want to be like 30 and living in like the middle of nowhere as a professor for the rest of my life. I'm only going to apply to jobs in places that I'd be okay with living, and if that means that none of them want me and I don't get an academic job, then I'm like okay with that.

Almost half of the women who had partners said their decision to attend Midwestern University was influenced by their partners and they would take this into consideration when applying for positions after earning their doctoral degree. Samantha's partner had already moved twice for her and they decided after finishing her Ph.D., she would try to find a position close to his hometown on the East Coast, even if it would limit her career options. Melanie's husband moved from the East Coast to the Midwest for her to attend graduate school and said, "I want to make sure that this was worth it for him in the long run. Even if he says it is, I still have some amount of guilt." When Lauren's husband pursued his Ph.D., she moved to his city, and then when she began her doctoral studies, he followed her. Now that she was on the job market for a tenure-track position, they would move together wherever she got a job.

Marissa and her husband discussed her career options for a tenure-track job but had not talked about the logistical arrangements of a post-doc, should she get one. Since it would mostly likely be for only two years, she was unsure if he would move too. They believed his job would accommodate moving to wherever she landed a job, but other women did not feel as though their partners had the same kind of flexibility, or would want to move. For instance, Leah, against her advisor's advice, has decided to limit her job search to about a 30 -mile radius from the city in which Midwestern University is located, because her partner was unwilling to move.

Women with underrepresented identities considered how friendly a rural location would be. Or as Michelle, a woman of color explained, "I don't want to end up in the middle of nowhere." Angelica, who identified as queer, and studied issues related to sexuality and gender, was skeptical of moving to an undesirable location in order to obtain her first tenure-track job.

I'm going to go to Lincoln, Nebraska if that's the only position they have. I feel like the joke is you're going to go to some like really shitty like rural town in the Midwest...It doesn't even have to be a city, but like, you know, an area with I would say like like-minded people is really important to me, having a solid queer community in whatever city I'm in.

Andrea, who grew up in Mexico, took location into consideration in terms of where she thought she could find support with an established Latino community. She explained,

Geographic location is definitely a deal breaker, but it's not because of geography itself...I mean more like demographics that are tied to geography. That's would I would be really scared of, I think. Like, going to a place where I know I'm going to be really, really, angry all of the time. So, I would probably not go to any of those places. And that was the reason why I chose here.

Yumi's career prospects were limited because of her immigration status. As an international student, she would have to find an American employer who would be willing to sponsor her visa, which is costly. Universities are exempt from these immigration requirements, so she felt she must limit her search to academia. While the job market outside of industry may have seemed more attainable for her, the restrictions from her immigration status may hinder her ability to find an industry job. She was even more constrained in an already competitive academic job market.

Veronica, who identified as African American/White and bisexual, was on the job market. One of her on-campus interviews was in a small, rural, mostly-White town in the Midwest. She described the implicit messages the college conveyed about the racial climate on campus and in the town in which the college was located:

And it's funny to think about the coded ways that they try to talk...they were like 'you know, we've had some students, you know...some concerns when like walking through downtown, you know, because we are in a rural community.'

And I was like 'oh, so you're telling me that your students of color have been racially harassed by these White rural motherfuckers' and I'm like no, I don't want to come here, right? And it's like but you know, you have to ask and get them to say something, right, and then they try to code it.

I applied really broadly and really widely and so you don't know who will pick you. And if they had only been the only place I got an interview from, then I guess I would have been going there for a little while and then leaving. But you know, I need a job.

She understood that she did not have the ability to be selective in her search for tenure-track positions but also realized that if she did not have the ability to choose, she might be isolated.

The job market itself was increasingly competitive, but there were many other factors like geography and support and the changing nature of requirements for obtaining assistant professor positions, that contributed to these women's perceptions of the job market and how they would choose to enter tenure-track positions.

## Theme III: Faculty Relationships

Faculty advisors served as conduits to women's networks of support, opportunities, and perceptions of their potential in their respective fields. However, women also identified lack of faculty support as a barrier to their career choice and fit in the academy. Women's negative experiences with their faculty advisors ranged from small incidents to significant, emotionally damaging interactions. As such, these relationships affected their meaningmaking regarding their perceptions of fit in academia and a career in it.

Several women applied to their respective programs to work under the tutelage of specific faculty members. For Samantha, her current advisor also supervised her undergraduate mentor. Samantha applied only to Midwestern so that she could work with this faculty member. Samantha tried as hard as she could to please her advisor and "held her on a higher pedestal" but ultimately, she didn't live up to her expectations. She understood from others she was supposed to "suck up to her," but did not. She explained:

So, while I try really hard to please her and we get frustrated with each other because I don't necessarily suck up to her like the other grad students do. And so,
our relationship is a little uncomfortable for me in that regard because I don't agree with everything that she says. But, I still try to please her, you know, because that's what you have to do.

When I asked what the consequences of not "sucking up to her" would be, she described the ways in which faculty members assigned undesirable TA positions to specific graduate students whom they did not like or whom they believed were more interested in pursuing post-ac carriers. When a graduate student was assigned one of these TA positions, it signaled to the department this student was "on the shit list." Samantha was always cognizant of being respectful to her advisor which also meant hiding her interest in pursuing a non-tenure track faculty career. Earning a spot on the departmental "shit list" would ostensibly preclude her from research and grant funding opportunities in the future, which in turn, would affect her career prospects.

Maya expressed similar concerns about her previous advisor, who was known to other graduate students as "emotionally abusive." Maya switched advisors, but some of her friends in the department remained with this faculty member because of her wide social network and influence in the field. Maya explained, "There's a recognition that I'm being kind of abused or exploited by my advisor, but then at the same time, those are the people plugged into projects." Her peers decided the abuse and exploitation by this woman was worth it, because of the influence she could exert for her advisees' career prospects.

Claire's advisor had been referred to as a "bully" by Claire and some of her peers. Claire had several incidents with this female advisor that negatively shaped her view of academia. Claire conceded, "she's intellectually a fantastic advisor and the good outweighs the bad," but early formative experiences with her still negatively affected her. The incident that stuck out the most for Claire was when she booked a plane ticket home for her grandmother's birthday party. Consequently, she would miss a lecture that an invited guest
in the department was giving. Claire recounted the conversation between herself and her advisor about her absence:
'Well, I don't really think a grandmother's birthday party is really a legitimate reason to be missing things like this.'

I was like, 'I hear you, but I already booked the flight it's a pretty big family event, all my aunts, uncles and cousins are coming out. She's old and she's probably going to die soon.'

And she was like, 'Well, can't you like, just go to the funeral?' And I said, 'Well...yeah. I plan to, but then she'll be dead.' Clearly, her delivery was fucking horrible. I was very upset.

As Claire recalled this conversation, she was agitated and explained why she was "alarmed for a couple of reasons." She thought about it and explained:

One, is that the measure - like is academia so tough that you can't go home for things like this? Like, that that is unacceptable? Because that's the messages I'm getting. And also, what the fuck, right?

To Claire, the meaning she made from this exchange was that anything related to scholarly pursuits, even a talk by an invited guest of the department, held precedence over everything - including special family events.

Other students had more informal exchanges with faculty members that informed their perceptions of barriers of succeeding in academia. One summer, Judy's mother, who is schizophrenic, was having a particularly hard time, so Judy asked her advisor if she could leave to go help her. Judy assumed several other students would have been appreciative of the chance for a paid research position over the summer. However, her advisor told her "I'm really sorry, but this also puts a huge burden on me." Judy did not expect her advisor would respond in this way; she expected her to be more understanding. To Judy, this experience had broader implications for other graduate students in the department, in terms of lack of faculty support and how that affect graduate students' perceptions of academia:

It makes me sad that there is not more faculty wondering why people are not going into academia. I feel like they should be more concerned or be saying, 'if our students feel unconfident what can we do like to make them feel more supported?'

For Nicole, her relationship with her previous advisor was complex. She admired the feedback and encouragement she had received but ultimately described their relationship as this: "We're like frenemies because we've had a lot of weird moments. She's kind of a bully and she's pretty controlling." Nicole had a few other instances in which she felt "betrayed by her" and finally decided they should "break up." With her new advisor, Nicole left meetings feeling smart and that her research mattered. She stated, "It's the best thing that ever happened to me in terms of academia."

Other women had experiences that were not as negative as some of these examples, but still implicate how influential the role of a faculty advisor has on a woman's perceptions of their career. Nicole, Judy, Claire, and Samantha's accounts illuminate how these advisor/advisee relationships informed women's beliefs of whether or not they believed they fit in academia and had potential to pursue a career as a tenure track faculty member.

## Theme IV: "Coming Out of the Academic Closet" ${ }^{20}$

Another barrier women identified in their career choice was related to pursuing any career other than a tenure-track position at a research-intensive university. From the beginning, women understood a career in research or a tenure-track position was the primary career goal for students in their programs. Many women echoed Samantha's sentiments about the advice she was given when interviewing for her doctoral program: "we were told not to say whether or not we have any interest in doing [other work] and just to talk about our interest in research." Because of these early messages, she explained

[^10]"we're all afraid to talk [with our advisor] about our desires to do other work." Women who weren't certain about their academic career pathways or who were curious about gathering more information about alt-ac or industry job were presented with a conundrum: if they asked their advisor for guidance or wished to obtain more information about pursuing other careers, they felt as though they risked losing support, both financial and mentoring.

One participant, Elizabeth, was gradually considering a career outside of academia, one in which she could "hopefully use her tools to give back in a way that can actually benefit people." She explained the subtle ways in which she would try to gain her advisor's opinion about pursuing alt-ac or post-ac positions:

I didn't know a good way to bring it up, I kind of prodded with questions like 'Did you always want to be a researcher?' things like that - trying to get a feel for that from them...I also didn't want it to change my relationship with my advisors, which it hasn't. But I have seen that happen before: people want to leave academia, their advisors say 'alright, well, my investment in you is for nothing, so let's get you out of the program as soon as possible,' and kind of let them fall by the wayside and push them through the Ph.D. at an ungodly pace.

Other students shared similar reservations about approaching their advisors about pursuing careers outside of the typical R1, tenure-track job. Judy, who had been thinking about telling her advisor for about a year or so, said, "I'm only just beginning to feel comfortable telling my advisors that I'm thinking about this. That kind of hiding or secretiveness can eat you up inside." When asked about broaching this subject with her advisor, Rebecca stated: "I would absolutely NOT want to have that conversation because of course, [professors] all expect that you are going into research into a faculty position." She went on to explain that her advisor had previous students who went on to do work outside of academia. When her advisor mentioned this recently to her, she said, "He's receptive to it, but he also thinks that I shouldn't do that because he thinks I'm really good
and I should do the faculty thing." Nicole had similar hesitations, worried that she would lose her advisor's support:

I do think that they're going to invest in you less, and I do think that they're not going to give you the same kind of guidance, and I do think that most of them probably don't know how to advise you in it at all, because they've never done it.

To Nicole, not only would she lose her advisor's support, but he would be unequipped to advise her how to successfully obtain a career outside of the traditional tenure-track job in academia. Similarly, Lynn feared once her advisor knew she was not going to stay in academia "he would just stop investing in me at all, because that's just and understandably, that's what happens when people express that they're not really interested in staying in academia." Elizabeth analogized this experience of expressing career interests outside of academia:

I feel like it's kind of coming out of the academic closet... you don't know how people are going to react. And it's ridiculous! Because it doesn't make a lick of difference in the big, grand scheme of things. But you get so scared about it.

Mentioning these ideas of pursuing a career outside of the typical tenure-track position was generally done in a secretive, private manner. Students might divulge their secret alt-ac or post-ac interests to fellow students, but generally did not do so. Claire explained:

People don't talk about it, it's like very taboo to...because you don't really want to talk about it because your advisor's going to drop you, like if they find out or something. And departments are really gossipy, so you know, they'll find out if you advertise it. I think everyone thinks about it, because tenure track is so tough, and you can make so much more money doing other things. People do consider it, but they just don't really talk about it.

When Leah started working in an applied practicum related to her research interests, she was hesitant to tell her fellow classmates.

I didn't feel like it was safe to tell people that I liked it because then they might think that I want to go into a [post-ac] career and that's frowned upon. I don't think I really felt like safe to actually talk about liking it until like my third or
fourth year, and then it wasn't like I was broadcasting it, but I would like say, 'I did this thing in practicum and it was really cool. I enjoyed that.'

Chelsea, had a rocky relationship with her initial advisor, who did not want to work with graduate students who were not interested in pursuing tenure-track positions. When asked what would happen if she told her advisor if she wanted to pursue an industry career, she stated:

I don't think he'd work with me anymore. In my interview, he told me he didn't want to take any students who don't want to be professors. I knew I couldn't ever tell him - and so for a while I was afraid he'd figure out that I didn't want to go in academia or maybe someone would tell him. I barely told anyone because I didn't want him to find out, because I was like, he'll kick me out if he knows.

Chelsea's advisor eventually told her she needed to find another professor who would agree to be her co-advisor. There was another professor in the department who was known for working with students who were interested in industry careers, but when she approached this professor, she was still unsure if she could tell him about her post-academic career plans. She told him: "'I think I should be prepared for industry, just in case.' And he was like, 'Just be honest with me. Do you want to go into industry?' When she admitted to him that she did, he just replied that was fine, and he has served as her co-advisor since. After Lynn built up the courage to tell her advisor about her plans not to pursue a tenuretrack position, he told her he'd support her however he could, which was a relief. However, he then told her "he wouldn't really know how to help me, because he only knows academia...it was a relief, but it's also kind like, 'well, now you're on your own kind of thing.'" She had finally told her advisor of her plans, but now felt unsupported in a different way than before.

In a Sociology Department town hall meeting, graduate students were encouraged to send anonymous questions for professors to answer. Claire recounted what happened
when a student asked the professor about pursuing non-tenure track or post-academic careers:
[My advisor] was like, 'some professors are ok with it and some are not.' She basically didn't give a good answer and was like, 'you know, you sort of have to feel it out, and it is true that some professors will not invest as much in you if you're not going into academics.' And then [a different professor] said, 'you know, I would be upset if my students weren't comfortable to talk to me about that, because I would not invest any less in a student who like, wasn't going academic.' But my advisor didn't like, echo it. Or say anything. So, I was like ok, I'm not going to say that to her.

Judy recalled a similar question a student asked about when to tell your advisor about your plans to pursue an alt-ac career. A professor replied, "only when you're certain." After hearing that, she thought:

You can only 'come out' if you're absolutely sure? Until I am confident, I can't even talk to somebody or with someone who has gone through this? I can't talk to my parents about this. They haven't been to grad school. Who am I supposed to talk to about these feelings about being unsure? It's only until I decide to leave that I can come out.

Several of the students sought guidance at the alt-ac career workshops facilitated by the Graduate School. However, many students were wary of attending these workshops. They feared their peers would tell others or that faculty members would discover their attendance. In describing her first workshop, Claire recalled her feelings:

I was hyper-paranoid, also because it was held in my department's building. There were two women in my department there, but...I was like, 'Oh, they don't know [my advisor], they're not going to tell her I'm here.' And [the workshop facilitator] said something about it, like, 'please don't 'out' people who are here.' And I was like, this is insane; it's so secretive, this is so ridiculous. But I was very concerned signing in, like, what is she going to do with this list? You know? Should I put a fake email?

I was concerned about what she was going to do with the list. Or, that someone was going to walk by from my department. So, I actually thought about sitting in the back, or moving to the back, but I didn't. I feel a little ridiculous.

Chelsea also attended a workshop regarding how to identify transferrable skills to a postacademic job. At this workshop, she realized how little value she had placed on her knowledge and skills she had acquired in her program:

I realized I actually did know things, we just used different lingo than they do in business. Then I realized there were other options...I basically felt like we're brainwashed to want to go into academia and you can't even ask questions about alternative options because people will question whether you should be in grad school. I really didn't even know what else I could do. I think people in academia see it this way: if you're not in like R1 school you're a failure. So, I finally just got over that.

In the three career workshops I attended as a participant-observer, the facilitator made similar remarks about maintaining the privacy of those in attendance. In one workshop, she asked: "On a scale of 1 to 10 , in terms of zero not caring at all, to 10 scared to death, how afraid are you to be in here, for your faculty or classmates to know?" About 10 of the 20 participants raised their hands when she said "Seven." An awkward laugh resonated through the group, as participants looked around, sharing knowing glances.

The preceding section discussed three emergent themes related to barriers to women's career choices and (1): work-life (im)balance; (2) the job market; (3) faculty relationships; and (4) coming out of the academic closet. Overall, the barriers these women attribute to their career choices highlight a range of influences - structural, institutional policies that do not support women, especially those with underrepresented identities - to personal, biological influences such as family planning and the unsuitable timing for child birth as graduate students and in tenure track positions.

## RQ1b. Perceived Supports that Shape Career Choice

The following section focuses on emergent themes in relation to Research Question 1.b.: For women doctoral students in majority-women disciplines, what, if any, supports do women perceive regarding their career choice, and how do they make meaning of these
supports? The first theme, advisor and faculty support, women recognized how influential their advisors and other faculty members could be in terms of offering co-author collaboration opportunities, assistance with obtaining funding, opening their academic network, and offering feedback on their work. The second theme, peer support, indicates how peers offer support, such as critiquing each other's work, offering advice and moral support as they progress through their program and into the job market. In the third theme, women spoke about the importance of mentorship for their personal and academic success.

## Theme I: Advisors and Faculty Support

Women attributed much of their success and positive outlook on their career trajectories to their supportive advisors and other faculty members with whom they work. Some women had faculty members in their master's or undergraduate careers who mentored them and prepared them for success as their doctoral students. Andrea worked with two professors in her master's program who coached her by setting up a writing schedule and helping her apply to doctoral programs. She explained:

I ended up learning so much from them, and also [how to] make myself [set deadlines and meet them] on my own...because at this point in this department, my advisor has maybe 10 students - he won't keep track of what you need which my professors did for me when I hadn't yet learned how to do it for myself.

These advisors from her master's program socialized her to graduate school and helped her fashion a scholarly identity. She stated, "I needed to understand how things worked in academia" and she attributed much of the success she had in becoming an autonomous scholar to them. She realized if they had not taken the time to guide her before, she never would have refined those skills now, with an advisor who does not have the capacity to do so.

Sarah, Melanie, Viktoria, Andrea, and Marissa appreciated the cooperative environment their advisors created between graduate students and themselves. The women said that this kind of supportive environment made them feel more comfortable and flourish in their academic pursuits. Marissa described this kind of support:

I appreciate that I'm not in a competitive atmosphere. I know other grad students in other programs hate their lives because they all study the same thing, and it's competitive, and they're not happy for each other when they get publications. In my area, everyone's really excited when someone else gets a publication. I think that's partly a function that we're not overlapping, not stepping on each other's toes. But also, because our professors aren't that way, so it kind of trickles down.

Other women described how their advisors were supportive by encouraging them to explore their own research and other curricular interests. After Chelsea switched to an advisor who supported her industry career goals, she felt a great amount of relief. She discussed how to choose her dissertation topic and recalled their conversation:

He told me to pick a topic I love and then we'll figure out how to do it and he knows it will take time to figure out what I want to study. Before, I kind of felt like I was just there to carry on someone's legacy. Now I feel more like he cares about what I want, and he is cool with me not being in academia.

Marissa felt anxious after a departmental meeting where some students were panicking about the dire prospects of the upcoming job market. She remembered her advisor expressed supportive sentiments like Chelsea's advisor expressed:

I was panicking; he emailed me and was like, 'I want to meet with you. I would absolutely love for you to go tenure track, I would support you on that, but if that's not what you want, do whatever makes you happy, and I'll help you get there as best as I can.'

Marissa's advisor assuaged some of her fears in their conversation. Rebecca was having a difficult time and wondered if she wanted to continue her doctoral studies and if she wanted to pursue a career in academia. She thought the competition for obtaining grant funding and publishing were major impediments to obtaining a tenure track faculty
position. She finally decided to discuss some of these reservations with her advisor and he quelled some of her fears.

Professors' standing and stature in the department could also influence how they could advocated for these women. Lauren's advisor was a full professor and used his institutional knowledge and relationships with others to mitigate departmental or university policies that she faced. She explained, "he's always welcome to email to see if there's any loophole or way to push or change policy, and he knows like who to email in upper administration at the university, so that's really helpful."

In a more political example of a professor utilizing professional influence and power, Sheela described how a tenured professor in the department responded to Sheela and her peers' demands for a more culturally and gender-relevant course offering. The professor, who was a senior faculty member, offered to lead a conference course on the same topic for these women, and integrated authors and subject matter from authors and traditions that were typically marginalized in their field. Sheela elaborated:

I feel like that's what commitment to the discipline and that's the commitment to feminism - these are women graduate students who feel completely marginalized and that's not cool, so, 'I am going to teach this.' She's literally teaching a shadow course and the great thing about this department is, I even if you feel like there're are people you don't like, there're spaces that make you uncomfortable there are also other people who'll support you and will create alternative spaces for you where you can feel comfortable. You'll feel like you belong.

Faculty members are in positions of power to allocate resources to their advisees. Viktoria credited a lot of her success to opportunities offered by her advisor, who is a full professor and chair of the department. As a senior faculty member in the department, he was able to structure a mentoring network between his students as well as a system for offering publishing opportunities. Viktoria explained:

My advisor, he's just fabulous... he just has a really great system of mentorship. He has a lot of students, but he kind of cherry picks people, which is really flattering...he takes care of his students, and he makes sure that they have opportunities. He pairs us with older students in our lab and so that we can coauthor or we can get involved. As a first year I had a publication...he put me in that position. He's like, 'hey, listen, here's a book chapter', and he was like, 'I don't really want to write it, but I think it would be a great opportunity for you if you want to write it.' And so, I wrote a book chapter, and we were both on it. I think it's really important that he knows the field and he knows what's expected, and he knows what's going to get his students jobs and attention, and so he puts us in those positions. Because like it looks good for him, but it's also like, if we succeed, he succeeds.

Claire, who had a tenuous relationship with her advisor at the time, also gained the support of a newer professor, Joseph [a pseudonym], in the department and also served as one of his research assistants. Although they were working on a research study through funding he had attained on his own, he encouraged her to write a sole-author publication from their research. He also wrote out their authorship agreements together and then emailed them to her, to be sure their mutual agreements were documented. He also funded her in fieldwork and other research endeavors. Perhaps the most influential aspect of his support was the way he advocated for her to other professors. She recalled:

I got an email from [a faculty member]...asking if I wanted to meet. It was just this meeting, which was cool. He doesn't have a project or anything, he wasn't trying to hire me or anything, he was just, basically, 'if you ever want someone to bounce ideas off of who's not, like, in the mix, and heavily invested, like, feel free to talk to me.'

She attributed this introduction to this faculty member to Joseph "singing my praises," and did not think she would have met this other faculty member otherwise.

She also got an offer to work on a book with a tenured faculty member in the department and attributed that to Joseph's recommendation, not her work in his class. She recognized how these small opportunities built upon each other, and worked to her advantage.

And [this is] just like in the U.S. - this cumulative advantage. So, if I got one RAship, now I'll have no problem getting another one. It's just like, how grants work, like you get one, and other people are like, you must deserve the money here's some more! You get a little bit of support from a professor, and they spread the word, and you get more. And it's kind of dumb, but, I mean, it's working in my advantage, so, I'll take it.

Viktoria, who had several opportunities to publish with her advisor, also saw funding as a direct way to support his graduate students. "He's really great about allocating funding, so if one of his students is about to come off of...a grant that's ending he's able to find in our current funding how he can make sure those students are supported." Her professor was a named chair in the department and was associated with a prominent lab on campus known for its high generation of research. The level of power he could leverage on her behalf impacted how much support she and other advisees had.

Michelle also recognized how influential advisors could be in their ability to allocate certain resources, namely funding in the form of fellowships or research assistantships. She stated that faculty members in endowed positions who had served at the institution longest tended to be white men, who, in turn funded their students, who tended to look similarly, or shared similar methodological approaches. She explained:

The white men have done very well for themselves in our department...And the thing is like, the students who have then done work under these people, they get financial support when they need it....They get the RA-ships, they tend to get the conference opportunities, the chances to publish. At this point I'm just like okay with it because that's what it has always been like. And so, I'm just glad that I even have an adviser who's like I'm not terrorized - I'm not terrified of being around.

Michelle, who identified as Asian American and approached her research from a traditionally underappreciated methodological approach, saw how these markers, along with the lack of support from an advisor with a high status, shaped the trajectory of her doctoral student experience, and ultimately, her career prospects.

Gabrieal, who was on the job market, attributed some of the success she had in the job market to one of her advisors from her master's program who advocated for her through his networks, who were mostly men of color.

He's like - 'it might not be the best job in the world,' he said, 'but you will get a job.' And then he's introducing me to all of these other men of color who like - are running departments or provosts or whatever. So, I feel like a lot of the people I've met who are like high ranking people, men of color.

These advisor networks cast a wide net in their respective disciplines. Claire realized how instrumental these networks were and realized she needed a way to catalogue all of the contacts she was making through her advisors and graduate student networks. During our interview, Claire pulled up her "academic networking Excel spreadsheet" that she had compiled for the past two and a half years. In it, she listed the first name, last name, institution, when and how she met them, their work, and other pertinent notes. At the time of the interview, the list stood at 75 entries and is growing. She compiled a similar networking spreadsheet before she graduated with her undergraduate degree and that was how she got her first job out of college. She described how she would use it in the future:

I wanted to keep this so that when I'm on the job market, I can be like, 'who do I know at Michigan?' I can search for that. I mean, they all know each other. So, you actually do need to get integrated into the department I think, and go to these talks, and go to these conferences and show up and they're sometimes awkward, I think it's important.

Elizabeth, who was contemplating an alt-ac or post-ac career pathway, talked to her advisors about the ways in which they could support her in this trajectory.

We talked about whether they know people, either former graduate students or other sorts of academics who are more involved in policy relevant issues, but coming at it from a sort of academic standpoint. They may not know too many people, but they've said like, 'The next time we're at a conference, let me introduce you to this person.' I think they're willing to help, but if I need something more concrete in my life, like, 'hey guys, can we look up a consortium that would be great for me' they would be willing to do that too.

Sheela, Andrea, and Christina all spoke about the personal connections they had made with their advisors, which in turn, strengthened their bond and gave them more confidence in their academic abilities and identities as researchers. These supports informed their meaning-making regarding what kind of career success they could attain. Christina and her partner had dinner at her advisor's house and they discussed her next steps. Christina recalled other occasions in which her advisor encouraged her to reach beyond her career goal of teaching at a small liberal arts college:

When I say like 'oh, I'm just going to go to like a small liberal arts college,' she says 'I know you're going to go to an R1' - and probably maybe we'll compromise somewhere in between or - she'd be perfectly happy if I got a job at a small community college too I think. I don't think she would think it was a bad thing. I think she was also like, 'this is your potential. You have a lot of potential, and create waves in the field.'

Interestingly, in this conversation, Christina spoke about her own aspirations about teaching at a liberal arts college, but her advisor used the pronoun "we" when referring to her choice, and how they may compromise together on her type of institution. This indicated a more nuanced perspective of how faculty support advisees in their career goals; the process was about the student as much as it was about the advisor's involvement.

Sheela found tremendous personal and academic support from her advisor as well. She described her:

She's very friendly, she's very warm, she keeps tabs, she likes to keep in touch. It's not about work only, and she would just call and we chat about something, we go out or we'll sit around and talk. I feel like there's all my experiences, like negative and positive with other professors or other graduate students - I've been very comfortable talking to her about it. She'd advise me, she'll call me, she'll be like, 'Yeah I know how that works,' and...she has created a very supportive, also a very safe space where I can take any issues that I'm having.

Sheela's advisor was also cognizant that she did not have her own car and reached out to make sure she could attend events:

I mean she's a sweetheart, she'll be like 'oh there's this dinner, can I just drive you there, because I feel like you might not have a car and I don't want you to feel like you can't attend this thing because you don't have a way,' that how fortunate she is. The amount of emotional work [women faculty] have to - I think is incredible and again like it's not, it's not something that's accounted for. I think formally, I don't think people appreciate what goes into it right? Yeah.

Sheela referred to the "emotional work" her advisor undertook along with other women and women of color faculty members in the department. This topic emerged often in the interviews, and especially so for women of color. Since this was a significant theme in the interviews and focus group, it is detailed as its own subtheme in RQ2. These findings show how advisors and faculty members can create opportunities and provide support for women doctoral students through their scholarly networks, access to funding opportunities, and encouraging their research and career exploration.

## Feedback

Women identified advisors' feedback as a source of support. Their advisors provided feedback regarding their writing, academic progress, and job performance. The majority of women did not report having a formal, institutionalized review process with their advisors. The degree to which women desire feedback from their advisors, and they amount they received in return, affected their satisfaction with their advisors. For instance, Andrea, who was comfortable initiating periodic check-ins with her advisors, found this to be a suitable arrangement:

I think it's pretty unstructured. I can just call a meeting and be like, 'I really need to talk about this,' and we'll just meet. But, if I don't call, he probably won't really call one either. And then, at the end of the semester he's like, 'where exactly are you at? What should you be doing next?' So, we'll talk about the next semester and what the goals are for that semester.

Melanie received feedback from her advisor and believed this kind of support was instrumental in her academic progress and development as a scholar. She believed "clear and direct feedback regardless of positive or negative is really helpful."

Samantha was relatively ambivalent about the lack of feedback she received from her advisor:

We don't get a lot of feedback as to how we're doing. When I put out a manuscript or something she'll tell me she's proud. But she's really only at school during spring semester...I tell her I want to do a project and she says sure. But at the same time even though she is so distant she is very present. There's very much that expectation that we keep doing this line of research that we come out of it. I don't know how to best describe it - she's not here, but she still controls our destiny.

Despite the geographical distance from her advisor and lack of formal feedback, Samantha's advisor ran their lab with high expectations for all of her graduate students. While discussing supports in the department, Samantha also spoke about how much she relied on her advisor's previous advisees and graduate students from her lab to guide her on her job market search. While her advisor may have expected a lot from her graduate students, the graduate students did not expect to receive much feedback from her and looked to each other for more formalized feedback and support.

Judy desired more directed and frequent feedback. She worked at an internship over the summer and realized how transformative a review process and formal meetings could be in creating sense of belonging in the organization and improving her work. She described how the director of the organization worked with the team leaders to identify ways in which each team member could thrive in their organization:

One of the things that they would she would ask me and at her team meetings:
'What can I do to help you succeed?' And that's not a question my advisors asked me. I feel like they not only made face-time with me but acted fast to check over something. I was working on reports for them and they would give me feedback
and have lots of it. Because I'm a graduate student, I'm used to coming back and every page has red marks, but I really appreciated it. My past advisors sometimes they haven't read my work by the time we meet. Other times, they've only read part of it, or they'll just tell me what to do instead of having feedback that's direct about certain parts of the paper.

Judy was trying to identify another advisor to work with and felt significant alienation from her department. She stated after working in this internship, she realized how little support her advisors had expressed in terms of providing feedback or interest in her academic progress. These experiences, in turn, significantly influenced her decision to look outside of the academy for her career.

Feedback alone was not only indicative of advisor support but how quickly women received it. Claire's advisor was well known for her level of detail in her feedback as well as how expeditiously she returned her critiques. Although she was a demanding advisor, this kind of feedback compensated for how notoriously callous she was towards her students.

She's incredible with giving feedback. I'll send her something, like a 20-page [manuscript], and she'll send me an email back within like, 4-20 hours.
Sometimes it's a short as 4, sometimes it's a day, but it's never really longer than a day. With like, detailed track-changes. And, like, with a summary of her thoughts in an email. So, incredible feedback and it's always like, spot-on.

Nicole, who also worked with this professor, echoed these sentiments. Although Nicole and this professor did not get along well, she appreciated this investment in critiquing her work.

Women articulated the need for varying degrees of personalized feedback regarding their academic progress and research, but all stated the importance of receiving this feedback, in one way or another. Interestingly, not one of the women brought up any instance or avenue in which they could provide feedback to their advisors about how they felt their advisor/advisee relationship progressed or express concerns about how they felt
they could be supported more. Thus, the relationship appeared one-sided, where women understood the power their advisor could expend towards their improvement, but not in which the women felt empowered to express to their advisors the ways in which they needed their support.

## Theme II: Peers

Women created their own support systems within their departments and across departments. These graduate student networks were sources of friendship, moral and emotional support, and a space of community, especially for the women of color. A majority of the women moved to Midwestern University to pursue their graduate degrees and had to create an entirely new network of emotional support. These networks were often formed with other graduate students in the same cohort or in other classes they took. With their peers, these women workshopped drafts, asked each other for academic and personal advice, and looked to each other for support, as they are all moved together through this common experience.

Lynn, who was originally cautious of forming friendships in her department, explained how some of these friendships developed to be a source of support for her during her studies.

I wasn't super close to anyone in my cohort until the end of my second year, because I didn't really like trust anyone when I first started. But once I was able to see that other people were experiencing similar frustrations and similar critiques of the program, I formed pretty solid friendships with them, and they've been the people who if I'm workshopping a dissertation chapter, they're always there. And they give me really good feedback and that kind of thing, and that's been my support network in the department. It's nothing that's been institutionalized, but just recognizing that some of us were going through similar things and then kind of just really validating those relationships.

Other women also spoke about the relief they felt when they realized their peers were undergoing similar anxieties and experiences as themselves.

Lauren, Gabrieal, and Yumi, who were all doctoral candidates in the Sociology Department and entering the job market together, formed a working group in the summer leading into their job searches. In this working group, they edited each other's personal statements, CVs, and teaching statements. They also practiced their job talks and critiqued their presentations so they would be prepared when they were invited for on-campus interviews. Lauren invited a coordinator from the university's teaching and learning center to review their teaching statements and offer professional advice on their respective statements.

Leah, who was a graduate student in the Psychology Department and was entering the job market relied on near-peers ${ }^{21}$ for guidance in her job search. Her advisor was extremely busy so she made use of their most recent knowledge of navigating the job market:

Seeing what the students before me were doing has helped with like every single thing - having the people who are a tiny bit a step ahead of you. I think that had a big influence on me like seeing what the older students were doing.

Michelle and Maya utilized their peer networks outside of their university who provided feedback, inspiration, and an outside perspective. Michelle had a difficult meeting with some of her fellow graduate students and was troubled by the racial attitudes of some of her peers. She described how she relied on these friends:

I have really good friends who were activists and who do other types of work and care about the things I do and really believed in me. And they're super supportive. Moments when like what happened with that - graduate student meeting

[^11]happened, I could like call, like for example, this friend and just be like, 'tell me I'm crazy.' And she's like, 'No, that's fucked up.'

Michelle needed the outside perspective of people who aligned themselves with her attitudes and behaviors to validate her feelings, something which peers in her program did not do.

Maya was ambivalent about remaining in her doctoral program, especially after her close friend graduated from the program. Her peers were a source of stress and she looked outside of the university for a network of support, which she found in a juggling club. She elaborated:

I mean, like largely my peers like stress me the fuck out...I think I tend to [compare myself to my peers]. I mean, compare and die. And it's just really toxic, and people can be like really nice people, but honestly, I've like built up a bunch of boundaries. I've also juggled - I've also joined like a juggling society. That's also a de-stressor, because that's -as ridiculous as that sounds, like I make time for that twice a week. Because nobody there cares about school, and I just don't care to talk about it.

Sheela, who was in the second year of her studies developed a strong group of friends in her cohort, which developed into a peer-mentor relationship. Rather than feel competition, she thought sharing their experience, especially as women of color, strengthened their bond:

I actually do feel very, very supported...socially and professionally - it's the same group of women that I am friends with - it's women and women of color. We are very good mentors to each other. We discuss our projects, our classes, like our five-year plan, one year plan, one semester plan, and we are always exchanging ideas, workshopping each other's stuff.

Gabrieal also relied on another woman of color who had recently gone through the transition from being a doctoral student to faculty member. As Gabrieal entered the job market, she was anxious about her progress and consulted her friend.

I started like panicking that like maybe like I was doing something wrong. And I wasn't going to get a job and then I was freaking out. The only people I really had
to talk to were my friends who are women of color, one of whom is like a recent graduate in the last two years from my program. She's been through all of this already and she is like our advice person for us. We have like a group text of all of us brown people and she kind of like is our sage advice because you know, she's a couple of years out of it.

Gabrieal described how other women of color needed her friend's advice and how informal mechanisms like group texts bridged them together. Michelle, who identified as Asian American and woman of color, struggled to find supportive peers in her department, but finally found encouragement in the Asian American Studies department.

I found these pockets. It took me a while, but whenever I talked to people, they'd be like, 'you have to talk to people in other departments, other Asian American scholars.' That's pretty much what they said - [find] other race scholars who will also support you.

Michelle also looked outside of the university, particularly at her discipline's national conference when she did not feel as though she had adequate encouragement regarding her research agenda, which focused on issues specific to Asian Americans. Michelle's peers empathized with her feelings of marginalization at these conferences:

When I help at the conferences, I have been able to meet people where they told me what happened to them and I'm like, 'Okay. I see that I am not the only experiencing this.' There are people who care about my work, who can like see the connections I'm trying to make. But the problem with all of these is that those people aren't in [my city]. And so, you know, the day-to-day support is very like hit or miss.

Gabrieal also formed supportive communities outside of her department and at conferences. Once she started to attend conferences, she remembered telling her friends that her professional life felt like it was coming together and that she finally belonged. She attributed this sense of belonging to the communities she built at her conferences and people she met outside of her department. In her departmental classes, she had "incidents that I felt some of these white people were trying to undermine me and my intelligence." She believed she had started to build confidence through these outside
networks, and remembered someone saying "you're smart." And then finally thinking, "Oh, I am!" Women looked to each other and graduate students who had recently gone through their same experience for support, from personal to academic to career advice, and especially leaned on other women of color for this kind of guidance.

## Theme III: Mentors

Mentors played influential role in these women's academic and personal trajectories. Many of the women in this study explained how people in their lives other than their advisors, influenced their decisions to pursue a graduate degree and remained a significant area of support. Some of these mentors included family members, like parents or siblings, or professors or educators from the women's past. These support systems are discussed below.

## Family

Both Rebecca and Lauren had older sisters who recently earned their doctorates. From them, they learned strategies for navigating relationships with their advisors, creating an individual scholarly identity, and strategies for entering the job market. Rebecca's sister earned her degree from a historically male-dominated discipline and had dealt with issues related to sexism and sexual harassment throughout her time as a graduate student. Rebecca talked to her sister often and relied on her opinion for how to handle issues she experiences as a doctoral student.

My sister continues to be a mentor for me. She goes through a lot more experiencing sexism in her [department]. Anytime she has a story, I say, 'oh, well, what I'm dealing with is not that bad.' Like, this is not a big deal. So, that's helpful in a way. She's going through all of the steps that I would think I would go through. So, I get to see how it plays out.

As Rebecca's sister dealt with overt sexism in her discipline consistently, Rebecca has downplayed instances in which she has been uncomfortable with implicit gendered interactions. However, through her sister she had the opportunity to learn about doctoral student socialization, the intricacies of the job market search, and hear advice from someone she trusted, who had recently gone through this career transition.

Lauren's older sister earned her doctorate and began her first year as a visiting professor by Lauren's second year of doctoral studies. Lauren's older sister had always envisioned a career in academia for herself, while Lauren had never entertained that career until well into her doctoral program. Lauren's sister became disenchanted with the job market, the tenure system, and academia in general, and expressed these hesitancies to Lauren. Lauren recalled how her sister cautioned her about pursuing a doctorate degree and entering academia:

This was when she was becoming kind of disillusioned with the career prospects [in academia] and whether she'd actually enjoy them, and so she actually strongly warned me against it. She was like, 'I don't know if I would actually recommend that you do this.

Lauren appreciated the guidance and candor her sister expressed about her hesitancy for Lauren to enter the same path as her but felt their respective expectations differed on how they perceived their fit in academia.

I think she had much higher expectations about it going a particular way, whereas for me, my interests and ideas about what [I] want to do with my career have always been really more open-ended and based on what the context of what I'm doing and where it leads me to. I didn't really start grad school with the idea that I had to do the professor route or not, but to be honest, I left my job with an ongoing offer I could always go back.

## Other Educators

Women pointed to other educators, such as professors from their undergraduate studies and other networks, who served as mentors during their doctoral studies. Elizabeth attributed some of her success in getting into her doctoral program to her high school teacher. He encouraged her to consider the reputation of an institution, especially if she was considering pursuing a graduate degree in the future.

One of the biggest influences on my decision to go into [the social sciences] and to go to my [undergrad institution] was this great high school teacher I had. I asked him for college advice; I was debating between a couple of different schools. And he said something to me like, 'If you go to that school everybody knows that name. You can go halfway across the world and people know what that institution is, and you can do a service to yourself by going there and engaging in research there.' And so that was a big push...for me.

Several women spoke about mentors they had during their undergraduate experience who shaped their ideas about their potential to pursue a graduate degree and career in academia. A graduate student, Rebecca, worked with a colleague in a lab who served as a strong female role model for her. She remembered she told her she never did work on the weekends. She thought, "wow, that must be pretty badass to get by with that!' It was nice to just see some females doing what I thought I would want to be doing." Although this woman served as a role model and mentor, she lamented she did not have many other female role models or mentors other than this graduate student.

During her undergraduate studies, Lauren had thought about a career as a high school teacher until an undergraduate professor encouraged her to think about pursuing a doctorate, which ultimately changed her academic trajectory:
[My professor] sort of kept checking in with me and being like 'have you thought about grad school, or a Ph.D. in history,' and at that point I changed my mind. I was like, well if I'm going to teach, why don't I teach college, you know?

Angelica, Gabrieal, Andrea, and Leah spoke about the professors they had during their undergraduate and master's programs who continued to serve as mentors for them during their doctoral program. For Andrea, her master's advisors coached her through her application process for her doctoral studies. Originally, she was only going to apply to five programs - she thought it was a waste to spend that amount of money on more than five programs until her mentors intervened. "They were like, 'No! You should apply to like, fifteen.’ And, fifteen applications were absolutely hell to get through, but I did." They advised her to apply to different tiers of graduate programs, so that she could have the option to choose a program she most preferred and she ended up getting into almost every school she applied to.

Each of these women formed good relationships with their current advisors and continued to fill a mentoring role their current advisors were unable to fulfill. Leah's mentor had recently started her first faculty position when Leah began her master's program. Leah observed her set up her lab, implement lab policies, and launch her own research agenda. Leah's current advisor was well established in her career and found this experience and guidance from her master's degree mentor to be invaluable.

When Gabrieal started her doctoral program at Midwestern University, she felt unsupported and missed the kind of encouraging relationship her mentor offered her while she was an undergraduate. This mentor insisted that she apply to master's programs, kept in touch, and she described how her transition to her doctorate studies was difficult because she did not have a formal mentor.

I was used to having an advisor that I really could confide in. I just felt really like blowing in the wind, because I was advisor-less - and all of these people it seemed like have an issue with me and it really made me question myself and what I was doing here and whether like, you know, I belonged and like all these kinds of things.

With his encouragement, she stuck out her first year and eventually felt more secure in her program. When it was time for her to enter the job market, she called upon her advisor from her master's program, who had also been a mentor to her. In the summer, when Gabrieal was applying for positions and had difficulty getting ahold of her current advisor, she reached out to her mentor for help. He reviewed her CV, wrote her letters, and revised her application materials. With the support of her undergraduate and master's mentors, Gabrieal was better prepared for the job market, in terms of their writing letters for her, offering advice, and proof-reading her personal and teaching statements. Without the attention from her current advisor, she was thankful she had strong relationships with mentors who could fill in where her advisor was unwilling or unable to do so.

Women who attended national conferences and participated in mentor-matching programs found this to be a significant support in their academic progression. Claire participated in a mentoring program at her national conference and was matched with a professor in her same specialty. This professor reviewed her CV and gave her detailed feedback and suggestions for which kind of publications she should pursue in the future. This made her feel much more confident in her progress and was relieved to have a connection with a scholar in her research area. Gabrieal stayed in touch with her assigned mentor through the same national conference mentor-match program Claire participated in. Gabrieal's mentor Skyped Gabrieal in to her classes as a guest lecturer, wrote letters of recommendation for her applications, and talked on the phone when she needed advice. Judy, who struggled through her doctoral program without a formal mentor and was inbetween advisors, realized how crucial a mentor could be for students like her:

I guess I do feel like a lot of [why] I'm struggling and that probably a lot of other students of color are struggling...I wonder if there should be some kind of formal mentorship for the students. Or, our national organization...they have a minorities scholarship I think. You get matched with a mentor. I keep forgetting to apply to
that, but I think that's a really cool thing, because you get paired with someone outside of your department, who can give you advice. I think if you want, like people who want to be mentors can and are more like, emotionally available.

For Judy, knowing about mentorship programs wasn't enough; perhaps with encouragement from another peer or faculty member, she felt empowered to participate in one of these mentor-matching offerings.

Elizabeth, Melanie and Viktoria all worked prior to entering graduate school and had strong female mentors who continued to serve as role models and sources of support. Viktoria learned a lot about what she wanted to emulate in a career from her boss. Her mentor worked closely with lawmakers, which sometimes meant aligning herself with politicians whose interests did not match her own, but still created policy changes. Viktoria described her:

She's just a powerhouse...there weren't many like workers who were female in our organization to begin with. There were a lot of men in our department, but if we would have like politicians come and talk, she would make sure that there wouldn't be any like inappropriateness... and like if she would hear about it, that person would be like blacklisted from our organization and she was like, an iron woman.

It's like, she knows where to put up a mask or she knows how to kind of get it done. Yeah, so I have conflicted views but I really, really respect her for what she's been able to do for people. I mean, whatever the motive is, like people's lives are better because of the work that she has put in motion in this area.

Elizabeth's previous lab supervisor held both an M.D. and a Ph.D., ran her own lab, and had a family. Elizabeth considered her a mentor and role model, as she "retained poise and kindness, which falls to the wayside with a lot of driven academics." She acknowledged that serving as a role model was an important signal to women that it was possible to pursue both a career and family as well as mentor more women, but she still wrestled with this:

And then the other thing that sort of nags at me when I think about not staying in academia - I'm sure guys don't think about this - is 'well, now I'm just another woman who's left and now I can't be a role model in that way for other female academics.' I'm like, ok, if my primary objective or my primary reason for staying in academia is to help other people, I don't want it to be at the cost of my happiness. I can be a female mentor at any sort of profession, hopefully, but you do sort of feel guilty at the thought of leaving and keeping the status quo.

She has reconciled her desire to move away from academia by realizing she can serve as a mentor and role model for other women, just as her lab manager did for her - without staying in the confines of academia, in which she does not want to remain.

Women rely on mentors from different parts of their lives in different capacities. Family members serve as beacons for what to expect out of academia; advisors and mentors from previous educational stages continue to be present as role models or as influential as writing letters and talking on the phone to discuss their job market strategies. Women understand how mentors serve as supports in their studies and into their careers and are eager to pay it forward to the next generation.

## RQ1C. Perceived Opportunities that Shape Career Choice

The following section will seek to address the third prong of the first research question: For women doctoral students in majority-women fields, what, if any, opportunities do women perceive regarding their career choice, and how do they make meaning of these opportunities? Although this area of inquiry did not yield as robust findings in terms of number of opportunities and meaning-making in relation to their career choices, three themes emerged regarding opportunities in their career choices: 1) ambivalence, 2) industry opportunities; and 3) faculty lifestyle. Each of these three themes are presented below.

## Theme I: Ambivalence

Half of the women in the study did not report having concrete career goals when they entered graduate school. To these women, this could be considered a barrier, but they also perceived it as an opportunity. Since they were open to different careers, they did not feel constrained by their prospects especially as the academic job market had declined. When I asked them to reflect upon their career goals when they entered graduate school, many of the women echoed sentiments like Andrea: "I had no idea what I was doing. I was just going with it, like, I love to read and write, and I've always loved it. But I had no idea." Leah didn't apply to graduate school with the intention of teaching at a university, rather, she liked the subject matter of her discipline and thought it would be interesting to continue studying it and work in that related area.

For the women who entered graduate school directly after earning their undergraduate degrees, this sentiment was especially pronounced. Nicole reflected on her perceptions of what a career would be for her after earning a doctorate, drawing from her interactions with the professor she worked with during undergrad research, "She liked to read a lot, wrote and did research, and I liked that, but like as far as the specifics, I didn't really know or think about it too much." She considered a career in academia to be similar to the duties she saw her undergraduate advisor conduct. She interpreted a doctoral degree would prepare her to do something similar.

When considering her career options, Viktoria had some understanding of faculty responsibilities before she began graduate school, but she didn't grasp the differences between institutional types and how faculty roles varied. When she began to understand the differences in responsibilities and scope of R1 institutions, she started to rethink returning to her hometown to teach at the college in her hometown. Maya said she was
never someone who was certain about what she wanted to do with her life and she approached graduate school similarly:

I was just thinking like one step at a time, I'll just see if this is interesting... and now after having had two and a half years of this work I have just as much uncertainty, but I guess I have stronger feelings about it... I've discovered that there are some parts of this that I actually do like, and some parts of it that I find like terribly unrewarding.

As Maya realized her uncertainty in academia, she started to balance different aspects of academia. Sarah had a similar approach, if not more relaxed, to her graduate studies and career prospects. When asked about her career goals, she said the following:

I don't really have very concrete goals. Everything I do, it's always with the intention of learning and not closing doors...So, I didn't go into graduate school saying, 'I'm going to graduate and get this job.' And I still feel that way. The older I get and the longer I'm here I'm thinking I don't know if that's like the smartest strategy.

I have goals in the sense that I would love to teach eventually. I want to be financially comfortable, I want to be happy...So I guess my goals are, in whatever job I get, to feel like I'm contributing, whether that's teaching or some other way, have autonomy and be financially in control.

Sarah's sentiments about attaining a job that would provide personal fulfillment and contribute to society were echoed by more than a third of the participants. In formulating their specific career goals, women considered how they could contribute to society in a meaningful way as a motivating factor in their career choices, rather than the title or type of institution in which they would work. Nicole also expressed a hesitancy to commit to pursuing a tenure-track faculty position:

I'm like, ambivalent about academia. I'm not sure I want to do it. I guess I'm mostly doing it to see if I can, because like, I'm trained for it, and I think that I would make a good job candidate, but I don't know.

Nicole went on to explain that one of her hesitancies with pursuing an academic position was whether or not her work would have any policy implications or be relevant to a broader audience. To her, pursuing a career as a tenured professor would be worth if it could help affect change. "I see mine as having more practical application...but then on the other hand it's like, so I'm going to write a book that like 10 people read? I don't want to do that."

Just as women expressed an openness to all career possibilities, some women reported a shift in thinking about which career paths they thought they would pursue after earning their degrees. These shifts occurred at different points in their doctoral studies. For Lynn, this happened early in her doctoral studies:

When I first started the Ph.D., I thought that I was going to go look for tenuretrack academic positions. That's no longer the case. That actually changed after my first year of a Ph.D.. I had this kind of like moment of disenchantment with the academy.

She attributed this change to the culture of her current department as being rigid, in terms of their lack flexibility in course offerings, a less collegial environment, and less direct support from her advisor. In her master's program, each student had greater autonomy in choosing courses and the culture of department was collaborative and friendly.

Melanie was no longer sure she wanted to pursue an R1 tenure track job that would emphasize research more than teaching. She considered that she may not have enough publications to be marketable on the tenure track, and if she wanted to put forth the amount of effort to obtain one of those positions:

I have been trying to doing research; that would be the ideal, but if it doesn't happen, it doesn't happen. Now I am feeling less and less inclined towards specific research, I am a little tired of sleepless nights and I am stressed out...at this point, I sort of just made this decision that I am going to try and more actively pursue other career options.

Lauren entered her doctoral program intending to "go the professor route" but decided she wouldn't be disappointed if that did not work out. Before graduate school, she worked in a corporate setting and told herself she could always go back to her previous job if the academic route did not work out. When she was on the job market, she noticed a shift in the types of academic positions she applied to:

I've been applying to jobs, and my ideas have sort of evolved as I've applied to them... I could be equally happy at an R1 where I work with graduate students and have lower class [obligations] - or I would be happy in a liberal arts or teaching school where I get the opportunity to work with undergraduates in the same way.

After witnessing her sister's difficulties on the job market, Lauren gained some perspective that comforted her as she prepared for her career after earning her doctorate:

I guess what I learned from her experience is that if you don't make it in academia, it's not because you failed or there's anything like compromised about the quality of your work...You have to fuel yourself and your interest in it, so I think because of that I realized early on that I getting a professor job couldn't be my measure of my self-worth or success or whatever.

Lauren said that compared to her peers, she felt more self-assured because of what she learned from her sister's experience as well as already having previous corporate experience. Michelle's overall negative experience in her program led her to devise a job search plan that she described as:

I'll just be very picky, maybe I will apply to some academic jobs, but they'll have to be what I really want to do. I'm not going to apply for jobs I don't want. Most likely, I'm not going to get those jobs, the ones that I want.

Like Lauren, Melanie, Lauren, and Nicole, she perceives her personal motivation for personal satisfaction to outweigh the demands of pursuing a tenure-track position.

For Yumi and Sheela, who were both international students, earning a doctorate and looking for work in the U.S. had different implications than their American peers. Yumi saw having a career in the U.S. - either tenure track or outside of academic - as a
way to distinguish herself in an extremely competitive job market in her home country. "I was thinking just broadly after the Ph.D. program I want to get a job in the U.S, and I want to have working experiences for several years." She always had the intention to return to her home country, so for her, whatever position she attained after earning her doctorate, she hoped would improve her chances of obtaining a permanent position back home.

Sheela also intended on returning to her home country after earning her doctorate, and "would be willing to put up with a lot to go back home." She anticipated either obtaining a tenure-track position in her home country or working at a non-governmental organization (NGO), but knew that regardless of her position, her career would be in her home country. In her home country, she understood that obtaining a tenure-track position at a "good university" was difficult, so she opened the door to the possibility of returning to NGO work if it meant going back home.

One may assume students enter graduate school with specific careers in academia as their end goal. However, many of the women in this study spoke about uncertainty, openness for different careers, and personal satisfaction as a driving force in choosing their career goals.

## Theme II: Industry Opportunities

An area of opportunity that has emerged for doctoral students, especially in the social sciences, is the increasing demand for those with significant statistical analytic skills, which many doctoral students in the social sciences have. Previously, academics were prepared only to be academics and the job market for was relatively slow for these directly transferrable skills. Now, larger industry giants like Facebook, Amazon, and Apple are hiring doctoral students with a significant higher salary compared to what they could expect
entering a tenure track position directly after finishing a doctorate. For instance, Marissa explained:

We have friends who have left grad school and went to Facebook, and immediately are making $\$ 200,000$. Whereas, if they were tenure-track, they would be making like $\$ 60,000$ - so that's like, a really hard thing to turn down.

In some cases, women referred to peers who had even been hired away to industry prior to earning their doctorates. Nicole recalled classmates who did just this:

We've had three people leave and go work for [the private sector] and are making a lot of money and love their lives, and only one of them finished a Ph.D. before she went. She's a data scientist for them, and from what I understand, doing data science for like a private company doesn't involve that sophisticated of stats...if the world goes to hell, which I think it might, that's kind of what my Plan B is going to be.

Not only did these peers earn a substantial amount of money, women referred to the relative amount of happiness they had in their jobs compared to their lives in academia. However, women expressed concerns with the rigid schedules in industry. Marissa, who was married and planned to have children in the future, considered the duality between pay and schedules between tenure-track jobs and industry: "the main difference right now is the flexibility of different jobs; industry is high paid but not flexible. Tenure track is insanely flexible but may or may not be high-paying." Several other women saw industry as an economic opportunity, but at a cost of a flexible work schedule.

Viktoria weighed these competing interests of pursuing a tenure track job or entering an industry or corporate job:

I can either put myself through agony of the tenure process...or I can join this organization that needs a data analyst or this organization that needs... and I can make six figures right out the gate with my skills that I have, so that's very tempting.

I'm not one to judge, because maybe one day I'm going to be making that very same decision, and so I don't want to limit myself, but I also want to make sure
that like I position myself in a way that if I want an academic job I can get an academic job. So, I just don't want to close myself off to opportunities, especially if they're better for me in the long run.

Marissa brought up these new career opportunities in her field and how her professors were responding (or not):

It's been interesting especially because [we're] in a little bit of upheaval right now. People are leaving academia to go into really high-paid industry jobs, doing data analysis or user experience with Facebook. They're hiring [us] in droves. A lot of people in my area even at Midwestern are at least considering that and that's very new to our professors. Most of them are trying to be very supportive but still have a reservation about - 'we don't know what that job is like, we don't know how to get you there.'

This subject came up several times in the focus group with the Psychology Department. Professors had started to come around to the prospect that some of their advisees would be leaving academia for industry, but were unable to guide them through this process, as it was unfamiliar to them. One specialization area in the Psychology Department had invited a few industry representatives to speak with their students about job prospects in their industries, their transferrable skills, and interview preparation tips. An invitation like this had never occurred before and women interpreted this as much of an approval from their advising faculty as they would ever see. Thematic conferences were even starting to invite industry speakers to be part of panels and present research. Viktoria saw a shift in her department as well:

I think like as a department, people are really coming to terms with you know, you want to go into going to help you get there. Or like this is a valid path. And I think that that's really important, because people feel - people shouldn't feel blacklisted or feel like there's a dark side or like going over to a dark side....Yeah. And even I think staying in academia can be a dark side.

The availability of industry jobs, especially high-paying industry jobs, has changed the way in which graduate students perceive their career opportunities. This phenomenon has also shed light on how professors have exclusively advised students to enter academia
and how this is a potential limitation to their advisees' development. Other advisors who did not want their students to obtain an alt-ac or post-ac position could choose to ignore or not assist these women with their exploration of industry jobs, and the onus was left to the women to navigate this process.

## Theme III: Faculty Lifestyle

Participants saw an opportunity in academia they did not see in industry or alt-ac fields: the faculty lifestyle, or the ways in which they perceived faculty members to work and live. Women pointed to the flexibility in scheduling and potential for research autonomy as faculty members as opportunities. The first and predominant theme related to faculty lifestyle the women perceived as an opportunity was scheduling flexibility. Women saw tenured professors' schedules as particularly flexible, in terms of both day-to-day schedules and seasonally. Women talked about choosing to come later or leave earlier from campus, working around their families' schedules. Most assumed they would not have significant work responsibilities over the summer. Women also pointed to the autonomy that a tenure-track position could offer, in terms of a research agenda, as well as not reporting directly to a formal supervisor. Chelsea described the opportunity she saw in a tenure track position:

If you like teaching, then you get to teach. And then I think the main thing is - if you're in industry always have to make sure you keep your job and maybe they have layoffs. But if you're tenured then you can pretty much do whatever you want. I mean, if I could just fast forward to being a tenured professor that would be amazing.

While Chelsea may have made a sweeping generalization abut tenured faculty members' lifestyles, other women echoed this idea of a flexible faculty lifestyle. Samantha noticed a contradiction:

There's the common complaint that [faculty] life is their work and their work is their life kind of thing, but, you know, people aren't in early. People aren't staying late.... the faculty are not a big presence here.

Sarah also compared the amount of pressure for publishing and earning tenure with the trade-off of a flexible work schedule and nice lifestyle, "Looking at some of my professors I'm like, you have a really cush job. You're producing constantly, but you have a really, really nice schedule. You have like, a nice life." Sarah also conceded these were only her perceptions and "at least at face value, that's what it looks like."

When women spoke about a faculty position as a "cush job," they interpreted what they saw their own faculty do, like choose their own schedules, leave over the summer, and pick and choose which courses they wanted to teach. In these instances, nearly all of the women who described faculty life like this had tenured faculty advisors. Nicole understood that the process leading up to tenure would be intense, but, "once you get tenure, then you're cool. You still have to do your work, but it's less [of a] time crunch." Nicole's doctoral advisor was a senior faculty member in the department and her master's advisor was a senior faculty member and usually spent her summers at her second home in California. Nicole, Claire, Chelsea, Sarah, and Samantha saw their advisors' lifestyles posttenure, and how they interpreted their lifestyle, without other information, influenced how they could imagine theirs as well. Claire admitted that she didn't know what it was like for her advisor pre-tenure, but admitted it must have been difficult; yet, she perceived ultimately it must have been worth it.

Women who could foresee having children in their future considered the flexibility afforded with a tenure-track position to be an opportunity unique to academia. As referenced previously, women believed they would have greater flexibility in their workweek schedules, which in turn, would help them in sharing childcare and family responsibilities with their partners. Sarah explained:

I think being in academia would be actually better for motherhood than being in a corporate job because you have a little more flexibility and in the summer. I know you still have to work a lot and there's a lot of pressure, but you don't have a direct boss like being like, 'you have to be on your business trip and there's no way you can't do it.'

Nicole envisioned a specific weekday schedule as a faculty member that she would share with her husband:

I really like the idea where you like stagger the work day, like somebody works 7 to 3 and picks up the kids from school and somebody works 10 to 6 and takes them in. That's my ideal way of doing it, and I think if I'm a professor it would be easier to do that than if I had an 8 to 5 .

Similarly, Marissa, who would like children in the future and knows her husband would most likely continue working a 9 to 5 job, admitted the process of getting tenure would be difficult, especially as a mother. However, after earning tenure, she could assume a greater role in day-to-day responsibilities like taking care of a sick child or picking up children from school.

Women saw a career as a tenured faculty member as a specific opportunity to have a flexible work-life style in a way a career in industry or alt-ac job would not provide. Women balanced the opportunity to pursue their own research interests and have a flexible schedule in a tenure with what they perceived to be an inflexible schedule and directed research in industry or elsewhere. These women did not reference flexible work arrangements in industry; they treated flexible schedules as mutually exclusive in industry and academia.

## Summary

Using SCCT as a guide, this study applied three specific contextual factors posited to influence career choice - barriers, supports, and opportunities - to understand how women identify and make meaning of their career choices. (Lent et al., 1994; Michel et al.,
2015). Three themes regarding barriers related to career choices were discussed: work-life (im)balance, the dwindling academic job market, faculty relationships, and how to "come out of the academic closet." Regarding support related to career choice, three themes were identified: advisors and faculty support, peers, and mentors. Finally, three themes regarding perceptions and meaning-making of career opportunities were presented: ambivalence, industry opportunities, and faculty lifestyle. The following chapter will present findings regarding women doctoral student's meaning-making of aspects of their intersectional identities and career choice.

## Chapter 5: Findings from RQ 2

This chapter seeks to address the second research question of this study: How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding career choice? It is impossible to discuss gender without considering other intersectional aspects of women's identities. Although this chapter separates aspects of identities into separate findings sections, this is not to suggest these aspects of identities operate in a vacuum. Race informs gender; class informs experiences with race, and the like. Each of the following sections identifies a broader aspect of identity and discusses it in detail how they relate to other aspects of identity. The three broad sections are as follows: gender, class and cultural capital, and race and ethnicity.

## Gender

Many women were surprised to hear their discipline was majority-women. Women who worked closely with male supervisors and had male advisors spoke about how much more salient gender was in these contexts. Although Sarah's field of psychology is majority-women in undergraduate and graduate students, and women comprise the majority of graduate students in her department, Sarah's lab has only one tenured/tenuretrack woman faculty member. This awareness led her to be more cognizant of feminism. "It's not that I didn't care about feminism in undergrad; I think that enough instances have happened where I'm like, 'oh, that probably wouldn't have happened if I was a man.'" She said that the fact that there were mostly men in power in the department made power imbalances in faculty/advisee relationships more pronounced. One effect of this was that "you have to be more on guard, like not crossing boundaries...and ignoring potentially inappropriate things that they might be saying."

Chelsea was in the same male-dominated research area as Sarah, and to her, "it seems like most of the professors are male at Midwestern University." The faculty exposure she had in this department was mostly men, and she assumed this was true for the university as a whole. Her lab was run by mostly male professors, and when she spoke up, she was often overlooked: "the guys are usually louder, or basically I say the same thing as them but then when they say it, [the professors] are like, 'Oh yeah. Good point." When I asked how this affected her, she replied "I don't feel like it's really hurt me being a woman." She went on to say just those instances of when she says something and a male student gets the credit was annoying, but "I think it happens in just all areas of life." In Chelsea's case, she was aware of some of the differences in how her professors treated male students but seemed resigned to these differences even though they permeated other areas of her life. For these women, their more immediate environment mattered in their sense-making of the role of gender, rather than the broader numerical representations of gender in their department.

Sheela also saw the classroom as a space in which she felt women were constrained by traditional gender roles. She saw how women were treated differently by men and women when they did not display more "feminine" behaviors like being overly friendly or modest. She explained, "it's really like, 'she doesn't smile, she doesn't necessarily go out of her way to be nice to other people in the department." She had heard similar complaints about her and she disagreed with this assessment. She did not believe she needed to exchange superficial niceties with others because she appreciated substantive conversations with others - she just didn't get the opportunity to do this with everyone.

Rebecca's research required a substantial amount of high-level statistical analysis, something with which she had experience, but when she had to present her work to the lab's two faculty members, a statistician, and other graduate students, all of whom are male,
she felt perpetually anxious. She was uncomfortable feeling like this and thought it could be attributed to "stereotype threat." She then started to think about this feeling in the future:

What if this is what being a faculty member is? I'm constantly surrounded by males, because that's what our department looks like, and, I'm going to have to try and prove myself every time, there are going to be, most likely males, because of the numbers, who do know more than me, and I will be in this position where I have to constantly prove myself and I'm going to feel anxious. And it just made me rethink, like, do I want to put that much energy in to that?

One reason why these negative experiences may have affected Rebecca so profoundly was she "never really felt discrimination due to [her] gender until graduate school." Sarah and Chelsea felt similarly: "That there's this, I have to prove myself, above and beyond what maybe, I came in as a graduate student feeling...like I know all graduate students come in having to prove themselves, but now I feel like, I still have to prove myself to my male counterparts." Since they never had to deal with outright sexism or situations in which their gender was uncomfortably salient, they felt ill-prepared to do so at this point in their lives.

Samantha, who was cognizant that she was another woman in a woman-dominated field, purposely chose a research agenda that was considerably more "math and science intensive" than her peers. She tried to "compensate for that because I do feel intimidated by the fact that I am doing more of the stereotypical kind of career for a woman...I'm very present with that discomfort." Her research integrated high-level statistics with a medical and science focus; she thought this differentiated her from other female peers and within her discipline and others could take her more seriously.

Women in this study discussed how the messages they received from other faculty members, including their advisors, affected how they interpreted their place in a traditionally male space. To Rebecca, she saw "a fight that women have to put up with in universities as faculty members." Lynn discussed instances in which faculty members half-
heartedly acknowledged the need to integrate a feminist perspective in research, but did it in such a patronizing manner that it was clear they did not value feminism or genderinclusive perspectives. One example was at a dissertation defense she attended when a male professor asked "a token gender question" and prefaced the question by stating "this is for the feminists in the room." She recalled a practice job talk she attended and her advisor reminded the presenter he needed to discuss gender patterns in his research, but while doing so, made a cat claw gesture and hissing sound. Lynn said that her advisor often made cat claws with his hands, instead of using the quotation symbols with his index and middle finger, when saying the word "feminism." After a few years of hearing these kinds of exchanges from her advisor and other faculty members, she became recalcitrant to discuss her research, which had a gender focus, with him.

Women saw gender differences in the ways women faculty members were perceived by their students. Judy perceived the women faculty members to be harder on themselves in the work they did or how they taught. She believed "men are sometimes so confident they can turn in shitty work." To Sheela, she saw the differences between how women and men faculty members prepared, taught, and were perceived by their students:

The male professors get to very often show up and hang out with their students. And when male professors are incomprehensible it's much easier for grad students to say, 'he's so brilliant, he can't bring it down to our level because of how brilliant he is.'

I have never heard them say that about a woman professor whose class sucked. That, 'maybe it's because she's too brilliant.' It is always because she is lazy. But with the men somehow, it's like, 'oh he can't translate these statistical equations because he is just such a stats genius.'

They interpreted this to mean that when they led their own classrooms, they would be judged unfairly by men and women students and had to be more prepared than men faculty members to be considered just as intelligent.

Judy believed some of the ways women faculty interacted with their graduate students was reflective of the academic climate when they were graduate students several decades before. When Judy told her advisor she was thinking about changing her research methodology to one that she felt more invested in, her response was "work isn't supposed to be fun." Judy reflected on this exchange and thought it showed the differences in how women graduate students think work-life expectations have changed, as well as the climate for women in academia: "I think it's supposed at least be a little bit healthy. Like, I'm a privileged woman. I get to choose the type of research I want to do, or I can have some kind of say in the work I do."

Although woman faculty representation was important for women to envision a potential career in academia, they also described how they needed to see successful women whom they wanted to be like. Claire, Leah, Judy, and Michelle all had woman advisors, and talked about how they did not aspire to be like them, in terms of their disposition, amount of work they performed, and their academic reputations. These women all identified work-life balance and advisor-advisee relationships as significant barriers to their career progress. Moreover, they all expressed conflicting opinions about whether or not they thought a tenure-track job would be something to which they would aspire.

Sarah acknowledged the importance of having female role models, but wanted to understand how these women get to their positions:

There aren't enough female role models who are willing to talk about how they got where they are and why they made this choice. Because I see women in our department, not that many, but I see them and see that they're successful. I don't what they had to do to get there.

In both focus groups, women agreed with this statement. To them, the path to becoming a tenured professor was opaque; without hearing these women's experiences and how they navigated academic structures, they were unsure if they too, could do it. In this
vein of uncertainty, women in the Psychology Department focus group discussed how senior faculty members, including some of their advisors, were seen as experts in their fields and were skeptical if they too, could become an authority in their specialty. These women discussed how they perceived men in their department as surer of themselves and how this confidence translated into more career advancement opportunities like submitting articles for publication and obtaining grants.

Elizabeth's male advisor realized there was a limit to how much he could do for her career preparation, in terms of role modeling. His wife was also a tenure-track faculty member in the department, so he suggested that he might connect the two for formal research collaboration opportunities as well as informal mentoring. She explained how he brought this up to her:

He's a pretty big feminist, and his wife is this go-getter researcher, and so he's like, 'I think it's very important to have that sort of role model here, and I think that's something you should consider.' And I was like damn, you're right! So, even though he's kind of this pompous white male, he does see the advantages of having these female influences and people to aspire to.

Elizabeth and her advisor raised a salient point: opposite genders can serve as mentors, but same-gender role models and access to them can make a unique contribution to these women's understandings of career expectations.

## Sexual Harassment and Consensual Relationships

Although the topic of sexual harassment did not arise in each interview, six women talked about sexual relationships between professors and graduate students in the Psychology Department. In this department, there had been an increased awareness of faculty/graduate student sexual relationships, which had escalated in the time between the first individual interviews and the focus group, which took place about five months later. When the women talked about their knowledge of these consensual relationships, their
reactions were varied, though all visceral. Some women seemed resigned that things like this happened, and some women reacted intensely. One participant, Elizabeth, teared up as she talked about it. "It still feels the potential for like, these girls, because it's primarily girls who are the victims here, to just get like thrown under the bus in situations when a relationship with one of the professors goes awry."

Four of the women in the Psychology Department spoke about a rumor that had been passed down by graduate students about some of the male faculty members in the department who were having sexual relationships with women graduate students in the department. At the time of our first interview, there was not a well-documented consensual relationship policy from the university. Elizabeth found this to be "so patently wrong...but it's not very well-addressed in our department, and I think there's still this culture of 'well, it happens, let it roll off your back' and that pisses me off." When I asked her if she had known about instances of this recently, she responded, "I've heard, 'oh, this professor hits on everyone' or...'Yeah, he hit on my roommate just the other week." Melanie thought that overall, sexual relationships between faculty members and graduate students occurred in their department, but "it's kind of hush-hush." However, when Melanie asked about different faculty members in the department to work with, her advisor had been upfront with her by telling her the ones to avoid, who are "creepy."

Chelsea noted that during the time in between our individual interviews and focus group, a few women from her department approached the chair of the department, who is a woman, to voice their concerns about the sexual relationships that were occurring between male faculty members and women graduate students. She said the Chair basically told them: wait until I'm no longer Chair, and let the next person deal with it. Shortly after this, a university-wide email regarding a new consensual relationship policy was sent to all employees. In the Psychology Department focus group, the women spoke about the email
and were baffled at the timing of it, as it seemed to appear in their inboxes unprompted. There was not any context, just to say the aim was ensure an environment "free from conflicts of interest, favoritism and exploitation." The policy explicitly stated which sexual and/or romantic relationships on campus were prohibitive, which included graduate students and employees, but only if the employee does not have "power or influence over the student." These women did not know if their actions to the Chair or other campus affiliates had initiated this policy implementation.

For Lynn, a doctoral student in the Sociology Department, the sexual harassment she experienced while conducting fieldwork abroad was upsetting, but the lack of support she felt from her male advisor made it worse. She described the situations to her advisor which usually occurred when she was by herself. His advice was to "wear a fake wedding ring...say you're a lesbian." She remembered leaving those conversations feeling unsupported and alienated from her advisor and her program. Later, in a panel about conducting research abroad, her advisor was asked by another woman graduate student how, as women, they could navigate fieldwork in terms of dealing with harassment and assault, or if someone you trust does something that makes you feel uncomfortable. Lynn remembered his response to the audience:

He was like, 'I know all of your sites,' pointed to me, and the three other women who were in the room who all happen to work [together], and he was like, 'if you go there and you know you're going to face sexual harassment, it's like you're walking into a landmine and you should just choose another project,' which was so offensive...there was this message where it's like, 'well, if you can't do it this certain way, or if you can't handle that, then you shouldn't be doing it at all.'

After her advisor offered this "advice" to women in the audience, Lynn said she stopped talking to her advisor about the harassment she experienced doing her fieldwork. Afterwards, she dealt with it by talking with some of her female peers. She reflected on
how these experiences informed her view of her advisor and how this might continue to persist if she stayed in academia:

Those messages really stuck with me, because it just made me feel like - the academy doesn't get it, and if I can't produce things or talk about things in a certain way, then I'm always going to be up against that for like, my whole career, and I know that's like life unfortunately to some degree. I mean, I think whatever field I end up in that's just sort of the reality of living in like a patriarchal world, but I think we're like constantly sort of like receiving messages like that as grad students too.

During our follow-up interview, Gabrieal talked about instances of sexual harassment she had experienced in academia. This was especially salient for her, as she had experienced a couple of situations in which she received unwanted physical advancements. One such encounter had occurred recently at a conference reception she attended with one of her undergraduate faculty mentors. Her mentor introduced her to an older colleague, who was retired. While the three of them were speaking in the crowded reception room full of scholars in their field, the older colleague reached out to "caress her face, tell her how pretty she was, and tugged at [her] nose ring." She had never met this man before, and was unsure what to think. She politely excused herself and found a female colleague outside of the reception. As Gabrieal was telling this woman what had just occurred, the man purposely found her in the lobby so that he could kiss her on the cheek before leaving. Gabrieal was baffled by the entire experience but in the weeks following it, she was more perplexed by the course of events. She wondered who else at the conference saw these actions, if her undergraduate mentor felt uncomfortable for her, and if the woman with whom she was sitting, judged her for this.

In the initial interviews, events related sexual harassment arose slightly, but in the follow up interviews and during the focus group, women elaborated and expanded on how this had affected them at a personal level. This may suggest there are more instances of
sexual harassment in their programs and women are hesitant to speak about them, or, like Gabrieal, have experienced numerous times, including on the job market, and see as something that inevitably will happen, in part due to her gender and race. Regardless, sexual harassment and issues related to consensual relationships still occurred, whether it is majority-women or not. When there were instances of consensual relationship between faculty members and women graduate students, many of the women in this study felt that kind of a working environment was uncomfortable enough to go to university staff, or in one case, speak to the department chair. This speaks to how consensual relationships among those with different levels of power influence the broader culture of the department.

## Class \& Cultural Capital

The majority of the women in this study were raised in what they identified as middle class homes. Four women characterized their family income growing up as lowmiddle class and 15 women reported growing up in a middle-upper class household. Two women stated their family income level was low while growing up, and one woman reported her family's income level as upper class. These women's family income levels made some differences in their current financial situations, such as the amount of loans the women took out, or if they felt as though they had a financial safety net or a source of supplemental income, should they need it. It was also the intangible aspects related to their family's income, like social networks and cultural capital, that made a difference in their lives as doctoral students, and informed their positionality and fit in academia.

For Maya, who received a five-year fellowship that covered all of her tuition and provides a generous cost of living stipend, still saw her background influencing her outlook on her career prospects and SES:

I grew up middle class, and my parents were immigrants...I've definitely confronted and maybe even like it's exacerbated in this program, but like just a
fear of like downward mobility, and I think part of that could be growing up middle class, I think like middle class folks usually have that worry, this like fear of like - I have this like crazy fear of like homelessness and it's the anxiety around the career...

Maya, who had been treated for anxiety and depression, thought about how she saw herself fitting in with her program, the declining prospects of tenure-track positions in her field, and worried about financial stability as one of the reasons she was unsure whether or not she wanted to continue in her program.

## Debt

In a follow-up questionnaire about student loan debt, ten out of eighteen respondents indicated they had taken out student loans at some point in their academic career. Seven respondents indicated their total amount of student debt would be between $\$ 10,001-\$ 30,000$, which was the mode category chosen. When these women were asked how much they expected to owe after earning their doctorate, women's responses ranged from $\$ 0$, as some women had already paid off their debt, to $\$ 180,000$, which was the maximum.

For international students, access to financial aid, including loans, was different than American-born students. International students who were on student visas were constrained by federal regulations regarding work opportunities and loan eligibility. Yumi supplemented her monthly stipend with savings she had in her home country. She was able to travel and conduct research abroad for her dissertation only because she won a competitive fellowship to do so. Many of her American peers worked part-time jobs, both in and out of academia, to supplement their TA or GRA incomes. However, federal immigration regulations required international students to only work on campus and were not permitted to work more than 20 hours per week. In her interview, Yumi emphasized
several times that she "lives simply" and had not traveled to her home country for more than two years because the expense was so great.

Women with student loan debt spoke about the constraints they felt due to their accumulated debt. Lynn, who recently decided she would not apply to tenure-track positions and focus on non-profit or advocacy work, worried about how pursuing that kind of work might affect her ability to pay off her loans:

So, I'm leaving with a lot of student debt and also just like - I know I'm not going to strike it rich doing advocacy work, and so I do worry about that. Like, I think that's going to limit where I go and what kind of positions I end up taking, or even just my ability to keep doing this sort of work, because it's not like very well paid anywhere.

Angelica, who took out about $\$ 30,000$ in student loans for her master's degree, hoped she would not have to take out additional loans during her doctorate. She stated she had "a lot of anxiety" about her loans because they would accrue interest throughout her Ph.D. program and until she could pay them off. She was also concerned if she would be able to afford her monthly loan payments if she did not obtain a tenure-track faculty position. If she obtained a lecturer position, which she expected would pay significantly less than a faculty position, she did not think she could afford the monthly payment, and "might have to refinance them if that's the case. I don't even want to think about that."

Gabrieal expected she would owe approximately $\$ 180,000$ once she completed her doctorate, which was in a few months. She also had to work a couple of part-time jobs to make ends meet and reflected on how much she owes:

In some ways, I regret amassing this much debt, but I also realize that I could not have funded myself during summers, been able to handle having my transmission go out in my car, have funding for my dissertation research, and often, been able to fund travel to conferences.

She did not have any concrete plans to pay down her debt, but hoped she could utilize the federal public service loan forgiveness program, but cautioned, "if it exists after I graduate."

Three of the women spoke about support they had from others to pay down their loans while in graduate school. Nicole would owe about $\$ 30,000$ after earning her doctorate, but only because her parents offered to pay down the interest on her loans while she was in graduate school. She reflected: "that's where my class privilege definitely kicks in, because a lot of my friends who come from working class backgrounds have much, much more student loan debt than me, like 100 [thousand dollars] or more." She thought that owing only $\$ 30,000$ put her in a relatively good position once she began her career. Melanie, who was married, relied on her husband to help share cost of living expenses and had managed to pay down about half of her undergraduate loans, which totaled about $\$ 20,000$. Rebecca had accrued between $\$ 50,000-\$ 75,000$ in student loan debt, but her mother had recently sold her house and helped her pay off her debt completely. Rebecca reflected she was fortunate enough to be part of a funded Ph.D. program, and as little as the stipend was, she "works hard to live off it so that I don't need to take any loans." These interventions, in whatever form, contributed to these women's outlooks on their careers and financial well-being over time.

## Current Finances

Many of the women talked about their current income in relative terms. They understood a graduate student stipend was modest, yet temporary. However, some of them said compared to their peers, they had to rethink participating in some social events like dinners out or grabbing lunch at restaurants with colleagues. Melanie explained:

I am not making much right now and I don't have a safety net. Like, my parents can't support me and if I like, fuck up. So, I can't just go spending money like it's
candy. So that can sometimes feel like I am in a group of people that I don't necessarily relate to in that way.

In her first year of her doctoral studies, Claire realized she was exactly $\$ 200$ short each month, so her dad sent her that amount each month. She then lived with her boyfriend and split rent with him, picked up an extra job that paid $\$ 25$ an hour to conduct interviews, and received an extra $\$ 2,000$ a year in financial aid. Those changes significantly decreased her level of stress, which in turn, made it easier to concentrate on school.

Christina's financial situation was more complex than the other women in this study, as she has two children and her husband was enrolled in a master's program. At the university she attended for her master's program, she received a considerable amount of assistance from the state and university. This included day care subsidies and benefits that Midwestern University did not provide. She paid about one-third of her entire yearly stipend on health insurance for her family of four, which was about $\$ 500$ per month. Previously, her whole family qualified for Medicaid; in this state, there was no Medicaid expansion and they did not even have dental coverage with their insurance. The other university also included a childcare subsidy for its graduate students and supplied funds towards a Community Supported Agriculture (CSA) group, which provided fresh produce to the family for free. Additionally, the manner in which her fellowship money was disbursed disqualified her family from food stamps. Her department paid her semiannually in lump amounts, rather than spread out monthly, and this affected their government benefit eligibility:

We lost our food stamps last year when I got this grant that was meant to cover all summer, but I got paid in like one chunk rather than over the course of a number of months....it's terrible in terms of these poverty alleviation programs.

Gabrieal also felt unprepared for costs during graduate school, especially those associated with her job search. Although Gabrieal understood she would incur some costs
associated with her job search, she was stunned by the amount of money she needed upfront to cover her job talk costs. At the time of our follow-up interview, Gabrieal had gone to six on-campus interviews and had recently accepted an assistant professor position at a larger teaching college in the northeast. Only two of the universities she traveled to for job talks paid for her plane ticket upfront; she estimated plane tickets for each of the other universities cost between $\$ 300$ to $\$ 500$ each. She also had to rent a car for a couple of trips, paid extra to check her bag, and in some cases, had to cover transportation to and from the airport. Even though she would be reimbursed by each school which she estimated to total at least $\$ 2,000$, she had to put those costs on her credit card. She also bought two new outfits for her on-campus interviews and in some cases, had to pay to board her dog while she was on these visits. She tried to save the money she earned from working two, and in some semesters, three part-time jobs to make up for the amount her TA position offered. When her advisor noticed she was overburdened with these other duties, he simply told her she needed to quit her other jobs and focus on her dissertation. When she reflected on this, she remembered what her best friend told her, "I can't wait for you to announce [your job] despite them not giving you any money, working all the jobs you did, and you still outdid these white people!" Gabrieal chuckled and then quietly said, "I had to do so much."

## Cultural Capital

In this context, cultural capital refers to the skills, knowledge, and abilities awarded in a social situation like graduate school (Bourdieu, 1979/1984). Melanie, who described her family income growing up as low-income, was encouraged by her parents to earn at least an undergraduate degree. Melanie considered pursuing a culinary career, but her father, who was a plumber, worked in commercial kitchens and did not think a life as a chef would be conducive for his daughter. Melanie's grandfather was a professor and had
several aunts and uncles who earned their Ph.D.'s. Because of this, education in her family was always impressed upon her as a value and something familiar to her. She grew up hearing her aunts and uncles talk about their careers in academia, and her grandmother made it a point to pay for her undergraduate degree so that she would not enter graduate school with any debt.

Marissa, who was a first-generation college student, saw her trajectory towards earning a doctoral degree differently than some of her peers who have parents and other family members with advanced degrees. To her, she felt less pressure from her family about what kind of a career she should attain. Compared to her peers, she felt like "they need to make a name for themselves; whereas for my parents...if I wanted to be a stay-at-home mom they wouldn't care. They would just be like, 'Oh my god, you got a graduate degree!'"

Half of the women in this study referred to or alluded to the differences between themselves and peers who had parents who were professors or lawyers. They saw other graduate students who had family members who were academics, doctors, or lawyers, as having access to cultural capital with which they were unfamiliar or uneasy. Lauren, who described growing up middle-upper class, saw acquisition of cultural capital as a function of class and race:

There's just all these things that are like the more soft-skills and things that you learn based on class that really match with academia. And that's not to say my friends who were the first in their families to go to college and to grad school, they all are just as like social adept at navigating it, but there's all these other things that are captured just in the way I socialize with at academic conferences or with faculty in our department.

But there are these like things, like you know, that the kind of references and the things that your family do that really shape it... There are just references and sort of things that I grew up doing that enables me to connect with [faculty] and socialize with them.

Viktoria, Lauren, Claire, and Rebecca had at least one parent who was an academic. Both of Viktoria's parents were professors, although each of them had professional careers before holding their professorships. Lauren and Claire's mothers had faculty appointments at nearby colleges or universities; however, they did not have a tenured position while they grew up. Rebecca's mother earned her Ph.D. and held an administrative position at the university in her hometown. Rebecca's mother raised Rebecca and her sister by herself, so while her mother made a decent salary, she felt that as a family, their income was fairly constrained. Rebecca had friends whose parents were professors and remembered visiting her mother at work when she was young. While her family may not have had the level of income as her friends' parents who were academics, from an early age, Rebecca was comfortable on college campuses and was familiar with the structures of higher education. Viktoria grew up knowing she was expected to earn at least her master's degree, and reflected on how she saw her parents' lives as academics:

I always saw their academic life, what that was like, and kind of the freedom they had and also just the important work that they were doing in different settings... so that was kind of the spark that made me think that [a doctorate] was for me. Just being surrounded by it all my life.

Lynn thought those differences were amplified at social events with other graduate students and faculty members. "I just always feel like there are so many moments where there's like some sort of inside joke that I don't get." She described this as "insider knowledge," which consisted of using the academic jargon of their discipline, dropping famous researcher's names, and networking with ease. She also talked about those peers who were more successful had access to resources that she did not:

I feel like they know about like funding I don't know about, or they get funding mysteriously that I don't even know how they got it. Just knowing how to network with professors - that's something I'd always struggled with is building good relationships with professors.

Lauren thought about the ways in which she had been able to exercise cultural capital to her advantage. In her first year of doctoral studies, she wanted to waive a required course in order to take a specialized class that was offered only in that semester. The staff member in charge of registration opposed her request, but Lauren realized the graduate advisor, who was a faculty member, ultimately had the ability to approve or deny her request.

I just kind of went to the faculty member with more power to negotiate that, and they just pushed it through. I think like there is a sense of entitlement or that you're allowed to take up that space and make that kind of difference that I think you know, can't be separated from class and race.

Lauren did not know if a peer in her program who was not from an upper-middle class household, or who was white, would have felt confidence to do that or have been successful in her request, but believed it was a function of those two identities that enabled her to do so.

Christina, Maya, Andrea, and Sheela also spoke about social situations in which they did not feel as comfortable as some of their peers, and how this had implications for how well they integrated into the department. Christina's parents did not go to college and she was raised in what she described as a working-class background. To her, she saw her peers who had grown up with parents who were professionals or academics as "knowing the system really well." She recalled some of the first social functions in graduate school and how she started to become comfortable being around alcohol and wine, in particular.

My parents don't drink alcohol or anything, so even just drinking wine at a party, I never saw that happen growing up, and I never drank alcohol until I came to grad school. It's like, you kind of have to. [Alcohol] just was like not part of my identity or upbringing. So, I had to learn to like wine so that I could drink it at functions. I can't think of one grad school function I went to that there isn't wine.

Like habitus is a term that's like - it's not necessarily like specific knowledge, but it's just like how you interact with people and even things like dress. Like, a lot of people have like nicer clothes than me, and like when we go to conferences they just know how to like present themselves and interact with people in the field, and that was the thing I had to learn, like completely.

For Andrea, who was raised in a fairly affluent family in Mexico, she saw how being in the upper class and access to cultural capital could still be mutually exclusive. Although her family had the economic resources that allowed her to go to college and apply widely to graduate school, there were still things she felt uncomfortable with, like speaking in public or to professors, that she perceived her peers with greater cultural capital were more confident in. She explained:

People say that this imposter syndrome happens to everyone, but it's not true. Like, maybe it happens to everyone to a level, but no. People in my cohort, most of them have professor parents or doctors, or lawyers or judges...they know these things. They've known these things for a long time. [My peers] have been asked, 'where are you applying to college?' My family, I had all of the economic support that I would want, but nothing else. My parents have no idea, had no idea at the time about anything, so, it's just you know, 'find out whatever you want to do.' I think that's definitely a barrier.

Another element of cultural capital women spoke about was the ease in which they perceived other students approaching faculty members. Women attributed their discomfort to a variety of reasons, such as familiarity with different academic structures in other countries, or having limited experiences speaking informally to faculty members, especially outside of class. Sheela, who was an international student, described "a kind of cultural exchange that [professors] are used to," in which graduate students and professors "walk around with pleasantries, like 'how are you, how's the weather?" For Sheela, she was not accustomed to these kinds of informal kinds of conversations. In her first year, she saw new graduate students reach out to professors, something which she was unsure about:

It was just so strange to me that other people in my cohort - we just got here and they were emailing all these professors, nobody knew what they were working on
yet - but they were emailing professors to meet with them to talk to them about their work.

The context that I come from there's a little more distance, so I would see that there's an imposition on their time, like if I just like turn up for a meeting and just talk through like, their research and like my ideas ... I would say there a waste of like their time, imposition on my part but I feel like it's a different cultural context so you expect it you know and its appreciated that you do that.

Yumi, who was an international student from Asia, reflected on similar experiences she first began her program. In her home country, she described elders as respected and "we keep some kind of distance, we are not friends like we are here." She was uncomfortable with this informal context and saw how understanding that earlier could have helped her:

But I see a lot of American students approach their faculty members, being friends, being very close, but that wasn't my culture. And I wish I knew that, like earlier, that I can approach them like closer, and I can ask them various types of help regarding my research, because I feel like I'm doing everything by myself.

Yumi, and others believed this level of familiarity and comfort between graduate students and faculty members, along with other informal experiences and background characteristics, provided access to opportunities and resources they perceived to beyond their control.

## Intersections of Race, Ethnicity, and Gender

The following section presents findings regarding women's experiences, as it relates to race, ethnicity and gender. My intention is not to bifurcate women of color experiences with white women's, but the context with which they enter their doctoral studies differs and deserves attention, so they are initially separated. Moreover, just as each woman's identity, background and experiences are different, the ways in which they felt their identities varied as well. Since race and ethnicity are not disentangled from their gender, these experiences highlight how they are not mutually constitutive of each other.

Women like Judy, Michelle, Gabrieal, and Yumi talked about confronting stereotypes from their peers and professors in classroom and group settings. Women received comments on the manner in which they talked and were judged for the content of their classroom contributions. Judy, who identified as Asian American and White, and Yumi, who identified as Asian and Michelle, who identified as Asian American, all faced interactions in their classrooms and amongst peers that shaped how they perceived whether they were included, or not, in their programs. Judy and Yumi talked about stereotypes some of their peers and faculty members held about Asian women; they expected them to be quiet, passive, and amenable. During her second year, Judy worked on a research team with a couple of students who were in their first year of graduate school. Judy was familiar with the subject matter and felt comfortable leading the rest of the team. However, her advisor would intervene when Judy would talk and encouraged a more junior, white male to speak: "you need to let him speak up, you need to stop talking and let him present too." These experiences made her feel dejected as a student and as her advisee. Judy explained the consequences of these interactions:

She eventually took me off that project that was collaborating with him on...Maybe she thought I was more passive than actually I am, and, like, she was shocked by like, maybe like my stubbornness.

In class, Yumi encountered peers' perceptions about her personality that were based on her race. The interactive format of graduate school classrooms, coupled with her introverted personality, made her more hesitant to speak up in class. To her peers, they thought "Asian women tend to be considered as passive, quiet." However, to Yumi, she reflected:

I'm a quiet person, but it's not because I'm Asian...I'm more of an introvert. But, because of the perceptions people already had, I feel like I am viewed that way. I
mean, my characteristics as Asian are being amplified. So, I didn't like that. It's just me, who is the quiet person.

The women in Sheela's cohort had a reputation for being "difficult" and "aggressive." She explained why she thought this to be true:

I can't remember having been mean to anyone, but again I can remember having been critical in seminar spaces. I don't think it's a coincidence that we are a cohort with more women and more women of color and we are being called aggressive.

Sheela believed they were considered as scholars in training, which required them to be critical of each other's work, but noticed "that experience was different for men versus women." She felt hostility from men as well as other women, especially White women, when critiquing each other's work. She also noticed students as well as faculty members were more defensive when women of color spoke out or analyzed each other's work. She explained that in the classroom, if women didn't smile or appeared "emotionally unavailable and critical in the classroom, [it] really equals bitch." She did not want to assuage others by smiling more or tempering her opinions and criticisms of her peers' work.

For Gabrieal, the classroom was also a space where she experienced distressing exchanges from students, which were often unassisted by professors. One white woman classmate would often "shush" her if she was speaking softly to a classmate, who was also a Black woman. She recalled thinking:

How do you know that what we are talking about is not related to the theory that we were discussing? I'm like, you're just assuming because two black people are sitting next to each other not talking to all of you that we're having a side conversation and we're not participating in class, but we could be just calling out how fucked up all this bullshit is.

A white, male classmate of Gabrieal's approached one of their professors to complain about the amount of time Gabrieal was allowed in class. He felt as though she was given
too much time to speak and monopolized the discussions. Later, he approached her in front of a large, common area for graduate students and in front of everyone told her she answered too quickly and didn't give others time to construct a response. She remembered "being really mad but also embarrassed" which made her frustrated and angered when she had to attend class with him and her other peers.

Yumi and Sheela, who were both international students, said classrooms were spaces in which their foreign identities were amplified. English was not Yumi's first language, so when she first began her doctoral studies, she was not used to speaking English on a daily basis and the informal seminar-style classes made her hesitant to speak in class. There also weren't that many other international students and that made it harder for her to get to know other students, especially Americans. Due to these factors, Yumi recalled wondering if she made the right decision to attend graduate school, and if she was the only one who felt as alone as she did. Sheela, who was raised in India and studied in England, spoke English with a British- and Indian-punctuated accent. She felt that some of her classmates did not put forth a level of listening or understanding that international students put forth towards their American colleagues. She explained how some Americans react to their international student peers speaking:

Like: 'this is not making sense to me, something must be wrong with her.' I don't think [Americans] can do it...Everything is very self-referential, so I have seen a lot of interactions that are played down because it ends up being too much mental work.

She thought her American peers displayed a "superficial level of listening and immense ethnocentrism." Sheela saw professors struggle with this "mental work" to relate to international students as well.

I have seen professors respond with a lot of enthusiasm to very mediocre ideas that comes from White American students and then there are some excellent ideas
that come from, say, my Korean colleague, but I mean I can tell that my professor is only half listening, so it gets lost somewhere.

As an Asian American, Michelle was confronted with justifying to her peers - both white and people of color - the need to discuss theories that situated Asians as people of color and integrate them into paradigms that considered race. She had heard several times from her peers that "Asian are privileged and well-off", or that "they're basically like whites or will become like white and they don't have to deal with how race actually works in the U.S." During our interview, Michelle described a formative experience she had early-on with her graduate student peers, which affected her deeply. She volunteered in a graduate student group that was organizing to demand greater racial and ethnic diversity in their faculty hires in her department. In one discussion, someone asked "if Asians were included as racial and ethnic minorities." She became visibly upset, and another student proposed they take a vote on whether or not Asians were "counted as racial and ethnic minorities." Her peers put it up for a vote and decided that Asian "don't count, they shouldn't be allowed" to be considered in the hiring demands for a racially diverse faculty.

As Michelle recalled this experience, she began to cry. Although this happened a few years ago, it was still fresh in her mind. Her peers, some of whom were considered the top students studying race and ethnicity in the department, betrayed her. She recalled, "I was so upset after that because I had thought these are my people in the department. Like, these are the people who would have my back, but they don't." Just as upsetting to her was the lack of support she received from her friend who she described as "Hара; white and Asian." Her friend approached her and told her:

What you said was...I was thinking that too and I'm so glad you said it.' I'm like, 'why didn't you say anything then?' And the thing is, she didn't because she's friends with those people, like that's her space. And if she had said something, that ruins her relationship with the top race ethnicity scholars.

Michelle shared the discussion with one male faculty member of color and she was equally as disappointed. She told him she thought discussions of race tended to be only Black and White in their department. He took offense to her observation and told her this wasn't the case. These experiences formed Michelle's perceptions of how she fit in her department, as a student with her peers of color, amongst faculty members, and ultimately, within her discipline. Michelle's dissertation investigated Asians in the workplace, but she felt like she had to justify her topic to her committee and debunk stereotypes about Asians even in her proposal meeting. Michelle summarized how these incidents with her peers and professors has formed her sense of belonging in her discipline:

The problem with that moment with those graduate students was denying the fact that I have struggled as much as any of the other ethnic minorities in the department. Basically saying, 'Oh, you're over represented in academia, so you don't experience like, lack of mentorship.' And I'm like, 'Okay.'

And then the same thing, right? Going to these professors, being like working so hard towards a project and having them be like, 'This doesn't - we don't care about this in [our field]. There's no space for you here.'

Maya and Andrea, who both identify as Latina, offered intricate reflections on their race and ethnicity, especially in the department. Maya, who self-identified as Latina, White, and Jewish, recognized the complexity of identifying as a woman of color. Maya listed off the ways in which one could "count" her as Latina: her parents were immigrants from South America, Spanish was her first language, but she also realized she "presents as White." In graduate school, she began grappling with how she identified in terms of race and ethnicity, and what this meant:

It provokes unique anxieties, because there's a lot of currency around calling yourself a person of color. I actually got a fellowship - a diversity fellowship because most of my life I identified as Latina... But now I've started acknowledging that I'm Caucasian, like racially Caucasian, because I'm just uncomfortable and I like, need to acknowledge that.

To Maya, the fact that neither she nor her family was from Mexico or a Central American country, and she as Jewish, separated her from embracing a Latina identity. Since she had not experienced explicit racism in her life and didn't fit in with some of her Latina peers, she was increasingly hesitant to claim her Latina identity, which she previously did so easily.

Like Maya, Sarah had complex ideas about the currency about identifying as a woman of color, or as "diverse." In our first interview, she said: "I get a little bit annoyed that being Middle Eastern doesn't really count as diversity. Because, you get the worst end of the stick, in terms of people think you're a terrorist." She went on to explain:

There's this fight, those things I have to put that I'm White, on all sensitive stuff. It's not even that I want people to be like, 'She's a minority, she should preferential treatment.' But, it just feels inaccurate to put White. And I'm definitely proud of being Middle Eastern and I want to keep that part of me alive.

During the focus group, Sarah said her advisor told her she would have an advantageous experience on the academic job market because she was a woman and "diverse." She was surprised to hear this, but conflicted if a) this was true and b) if she wanted to benefit from this kind of treatment. After thinking about it, she decided if all else was equal, compared to another female candidate, she could accept that her Middle Eastern identity was "advantageous in the job market."

Andrea was one of two Mexican-Americans in her department, and to her, "that definitely informs...not only who I am, but how I'm seen." Andrea was raised primarily in Mexico, but attended college and graduate school in the U.S. In some sense, she did not believe the limited representation of her race/ethnicity made her feel "pushed aside or recognized." She recognized that other women of color in her department felt like it was "a very violent space for them to be in." However, based on her background, she did not identify with them to the same extent as them. She elaborated:

I don't feel it on a personal level. But then again, I think and come from a pretty, like, violent place. This just feels like a bubble, you know what I mean? It doesn't really matter, if people don't really recognize me, or somebody does something that's not nice, just because of how I look or what I said. To me, there's worse things in the world... And so it's just like, I don't feel like this connection just because we are women of color.

Maya and Andrea's experiences highlight how not only intragroup diversity can be complicated, but racial and ethnic minority identities as well. Or in Maya's words, "These boxes - like, 'People of Color,' and 'White' - they obviously mask a lot of complexity." To many of these women, the intricacies of their identities were misunderstood or unacknowledged, which then affected how they saw themselves and how they saw others like them in the academy. While each of these women grappled with how they first in with their discipline, peers, and how their identity informed their experiences, many of their colleagues read them by their race and ethnicity, as though it was monolithic.

Women also noticed the activities and duties women faculty members, especially women of color faculty members undertook. They served on more committees, were at represented departmental functions like recruitment events, and served as mentors to women and students of color more than their male and white peers. Andrea noticed how some of her women faculty mentors limited the amount of commitments they could manage because they were so overburdened with service commitments. Andrea's desk was positioned close to a female professor's office and routinely heard her decline requests for service-related invitations like guest speaking or serving on committees. Andrea described her as "this perfect mix of being incredibly nice, friendly and beautiful, and she can also be really cold." On several instances, she heard this woman say "no" without offering any explanation or excuse, and Andrea beamed when recalling these occasions. She realized this was important for this woman's career for two reasons. First, departmental research expectations do not lower if faculty members perform more service activities. Second, she
observed the more women of color agreed to service activities, the more they would be asked to in the future. She said she wanted to ask her how she navigated these requests, but because of department politics, felt that she could not ask her until she graduated and was separated from the department.

A quarter of the participants, including White women, spoke about the extra demands of emotional labor women of color faculty members performed. Although they may not have explicitly used the term "emotional labor," they described the acts that typically describe it: duties that are typically ascribed as "feminine," such as advising, planning, and listening. Lynn, who was White, saw these expectations assumed by the two women of color professors in the department. She thought these responsibilities fell to them for two reasons. First, "they're better listeners" and also as women of color, they best understood the needs of students of color. Therefore, she thought people in the department believed:

They're the ones who should deal with it, so they end up taking a lot of that on, even for people like I've talked with...just because like it's sort of understood that they're the people who are going to be there [for students of color].

Sheela, who identified as a woman of color, agreed with this sentiment. To her, the women of color faculty members did understand their experiences, but also supported them outside of strictly-academic contexts.

I think like the amount of emotional work they do is just so disproportionate because all of us who are graduate students who are either women or people of color, we are flocking to them. They are advisors, they are informal advisors, they are talking to us, they are encouraging us, they are reading through pretty much everything we write, they are taking us out of lunches and dinner and they just calling us making sure we are okay.

While women like Sheela appreciated the emotional labor of women and faculty members of color, they realized how these same expectations for them in their future faculty careers
were significant. They wondered how much energy they could expend on mentoring and counseling students as well as contributing to service obligations, all while these responsibilities largely go unrewarded in the tenure system. Gabrieal, who had been active in several leadership roles contemplated the personal benefits and disadvantages of these commitments:

I recognize that it is a lot of labor that I take on but it is important to me and so I like to do it. But I also recognize that not everyone is like me. And everyone shouldn't have to be like me. I should be able to just do the service aspects because I personally get something out of it, not because it's literally that dire of a situation. And so, I feel like I'm kind of torn between me doing all the service things - doing all that emotional labor - because I enjoy it and it's important to me, but also because it's so dire.

When Gabrieal was interviewing for tenure-track faculty positions, she knew she would be the first woman of color in some departments. Knowing how much emotional labor she already spent as a woman of color graduate student, she also "really had to think a lot about how much I wanted to be the token when I applied for that job."

Michelle had thought about this same predicament as well. She thought she would enjoy advising and teaching students of color, but ultimately, did not believe it was worthwhile enough:

And so then, of course, like, being like, 'Hey, I actually made it through that system, like I can help you do that too,' like that would be great. But...I don't believe in like changing the system from the inside enough, to like, be like, that would be worth it. Like would it be worth it if I could like be an advocate and mentor for those young, suffering graduates who like - I don't love that enough to like make that sacrifice.

Women of color made meaning of their own experiences in their programs, and those of other faculty members of color to inform their perceptions of what their careers might be like as women of color faculty members. These findings also signify the complexity in
identifying as a woman of color, and how this personally affects women's sense of belonging with their peers and broadly.

## Diversity Efforts and Whiteness

In this study, White women grappled with issues related to race and ethnicity. They considered how they as graduate students, researchers, and those who aspired to become faculty members, could support racial and ethnic diversity in their departments, curriculum, and discipline. As a whole, women from the Sociology Department were much more cognizant of their own positionality as White women. They spoke about how this affected their interactions with peers, how they pursued research agendas, and whether they articulated how they considered racial and ethnic diversity in general. Both the psychology and sociology departments are majority White ( $51 \%$ and $62 \%$, respectively).

There could be several reasons for these differences of levels of awareness of positionality and Whiteness. For instance, sociology focuses on areas of inquiry that explicitly examine race and ethnicity and it is integral to their discipline. As a discipline, psychology does include research that investigates race and ethnicity, but does so from a more positivistic stance. Paradoxically, the psychology department's website readily conveys information related to diversity in the department while the sociology department does not explicitly address diversity on its homepage ${ }^{22}$. Information related to the sociology department's resources on race and ethnicity is found as a sub-link in a working group listing - which is not an intuitive place to click. This is in contrast to the psychology department, whose homepage has a prominent tab for "Diversity" and links to several resources like mentoring, funding, research pages, and includes its own diversity mission statement as well. The psychology department has eight broad areas of study, and even

[^12]though race and ethnicity are a component of some of the research agendas, only one area of study homepage explicitly refers to "diversity" in describing its program ("Program faculty value a diverse student body and actively recruit students from underrepresented groups.").

As a whole, White women from the sociology department spoke at greater lengths and were quicker to offer more introspective thoughts related to race and ethnicity and how their positions as White women to work towards greater racial and ethnic representation and support in their discipline. Four of the seven White women from the psychology department talked specifically about their identities as White women and the lack of racial diversity in their department. They said things like "we're not a very diverse department," or "our field in general, it is mostly White people." Leah saw this as problematic because they were "losing out on perspectives" and thought that "having more diversity would have helped [her] be more aware" of different issues that affect racial and ethnic groups in different ways. Melanie echoed this sentiment, as she believed "diversity of ideas and perceptions is good for research itself like the pursuit of knowledge if you have many different ideas... I think finding the truth is a little bit easier." These two women saw broader, disciplinary implications for intestinally including greater diversity into research.

The four White women who spoke about racial and ethnic diversity were all on the department's Diversity Committee, which was created to help support underrepresented graduate students in the department, mentor undergraduate students of color, and work towards departmental goals such as creating inclusive environments, incorporating diversity into curriculum, and attracting diverse faculty membership and students. Melanie described it as a "grassroots thing" that the department administration supported, but was primarily an initiative by graduate students, who saw a lack of adequate support and awareness regarding diversity issues.

Rebecca identified her department's recruitment process as a hindrance to attracting diverse students. She explained how often faculty members in their department didn't know financially if they would be able to take a student until the last minute. Because of this, faculty members did not necessarily advertise widely if they were accepting new students or not. Consequently, when professors found out they could accept a student, they looked to see which prospective students emailed them and then they interviewed those students. She explained how this affected who they interviewed and thus, admitted:

I think that maybe creates a less diverse pool because... they may not know they're supposed to email a faculty member, and maybe just apply and think, 'well, I'm a good candidate I should just get an interview.' And they should. But there's this weird thing going on here where they're primarily going with people who have emailed them.

Rebecca and Leah both stated that the diversity committee had tried to urge professors to look at their pipeline and the ways they were recruiting students of color and first-generation college students, but did not feel as though they had made any significant progress. In the focus group with the psychology department, Sarah, Elizabeth, and Samantha agreed that the issue with the pipeline from undergraduate students in their field to graduate school could also be attributed to the nebulous nature of understanding what a graduate degree in their field would translate to, in terms of a career. They talked about how they were unsure of what kind of career they would ultimately attain after completing their doctorates. These women surmised that first-generation students or students who do not have family members with doctorates would be discouraged from pursuing a graduate degree that did not lead to a concrete job like a doctor or a lawyer.

Women talked about how important it was for departments to intentionally hire faculty members of color if they wanted to support students of color as well. In the psychology department, the Diversity Committee recommended to their administration that
"every second hire, every third hire needs to be someone from a minority group...to force more diverse faculty hires." Several women in the sociology department talked about an initiative one of their working groups put forth to their department administration for cluster hires for faculty members of color. The department had recently hired a Black male professor who also studied issues related to race and gender, and women attributed some of their efforts to this hire. Nicole reflected:

You know, it's like making a very small dent in a very big problem, but I don't know, I was kind of encouraged that the department was like 'yeah, you're right. Let's do this.' So that was kind of good, but like it's still a place for White people, and most of my friends who are having trouble are people of color.

Although her working group hoped to hire more than one faculty member of color, especially another woman of color, women stated they were pleased that it appeared that at least their call was heard.

White women from the sociology department saw classrooms and curriculum as a space for them to challenge stale readings related to race and ethnicity, and be challenged as well. Claire spoke about the ways in which she tried to be aware of her identity as a White woman. She said that she felt "anxious about making a mistake that's not intersectional or anti-racist," something she thought a "typical White feminist" may do.
... you can be a White intersectional feminist, I think that's possible. I just think it's just like a little more challenging. And I want to make sure I'm not taking up the space that other people should be taking up.

To do this, she described talking less in class and listening more to her peers. Moreover, she described how she negotiated what she felt she "should" be able to access, in terms of those who were different from her in terms of race, ethnicity, and sexual orientation.

I have so many conversations about this in my classes of like, should you study people who are like you? Can you not? How different is too different to be able to gain access and like, to be able to really understand what's happening?

Viktoria recalled how she had shifted her research agenda because classmates of hers "were really antagonistic towards [her]" for wanting to pursue a research study regarding students of color. She said her peers criticized her for previously working as part of Teach for America and doubted that she was "the right person to study racial inequality in education., ${ }^{23}$ Viktoria was still hurt by how she perceived some of her colleagues, who are women of color, felt about her. Initially, Viktoria did come off as somewhat naïve. When I presented the initial findings at the Sociology focus group and brought up how lack of racial diversity can tokenize students of color, or impose an expectation to speak for their entire race, Viktoria was candid that she just realized she too had done this. She stated, "Wow. I've definitely done this before and I never even thought about what I was asking them to do." In this case, it was clear there was more to Viktoria's situation than just some of her classmates acting "antagonistic" about her research agenda. Although this is one instance of her understanding a behavior she had done before in a new light, perhaps she still needed to deconstruct her behaviors or attitudes and her own positionality. However, it should not fall to women of color to "educate" her on her own lack of awareness, as this only exacerbates a tokenized identity to teach others about marginalized identities.

Christina, Lauren, Angelica, and Nicole all talked about how they could influence the diversity in their curricular choices. Lauren was a Teaching Assistant for a well-known professor, but when she had the opportunity to teach it by herself, she replaced some of the older readings with new ones, to use a "more explicitly intersectional framework to teach it." She stated, "I think that's part of making a classroom inclusive is to make sure there's something that's speaking to the different students and their experiences." Angelica was a

[^13]TA for an undergraduate course and described how she wrestled with confronting the Trump presidency with her class after the election:

It's difficult balancing your own personal perspective and then also being respectful to students' views. Because I don't want to turn it into like a Trump bashing thing, and there are probably people in my class who voted for Trump, which is like mind boggling to me, but then at the same time, how do you be supportive to students of color who are going through like, a cultural trauma? It's very complicated and it's something I think about all the time, and I don't have like a solution to it.

After pondering this for a while, Angelica thought of two ways to support students of color. The first was to mentor students of color. The second was for students of color to have more faculty members of color. She recognized faculty members of color and those "who come from the same backgrounds as them, and who like get it, right? In a way that I never will." As she worked out these scenarios, she remarked:

I want my work to be anti-racist in a way to be able to like reach students from under privileged backgrounds, it's like no, because then in that case the best thing would be to just hire a faculty member [of color]...But then I wouldn't have a job, right?

Angelica verbalized a conundrum a few other women in the study worked through as well. They recognized mentoring underrepresented students, especially those of color, was a crucial way to diversify academia and industry in the future. However, they also noticed their own limitations in doing so as White women. Would they say the wrong thing or make a mistake that's not intersectional, like Claire worried? Would they be accused of co-opting a culture, group of people, or marginalized individuals for their own research benefits? Angelica voiced these concerns, as did others, but was the only one who potentially saw how her identity as a White (although Queer) woman fit in with an increasingly competitive job market. She saw getting a faculty job could come at the expense of students of color having the opportunity to have a faculty member of color
teaching them. They were mutually exclusive options; a faculty member of color gets a job, and she doesn't.

In this study, women identified the need for diversity and worked to be more inclusive in classrooms and in faculty hiring. Some White women were more aware of their racial and gendered privilege in academic spaces than others. Other White women also grappled with racial positionality and the negative connotation of being perceived as a "typical white feminist." However, not all of these women felt they had the tools or confidence to act on issues related to their positional power.

## Summary

This chapter represents the findings from the second research question: How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding career choice? Drawing from data sources such as individual interviews, focus groups, and document analysis, these findings show a complexity in the ways women in majority-women fields make meaning of intersectional aspects of their identities. The gender composition of women's immediate environments, especially when they were overrepresented with men in authority positions, informed their perceptions of how salient their gender was. Women interpreted lack of leadership response to issues of sexual harassment in academic spaces and consensual relationships to mean they were unsupported and unwelcomed. Familiarity with cultural capital that is recognized in higher education contexts enabled women to feel more confident in their interactions with faculty members, networking, and ultimately, their place in academe. These findings also illuminate the complexity in identifying as "women of color" and within-group racial differences. Women voiced a need for racial and ethnic diversity, but some White women were unsure of the ability to create change or even how their own positions of privilege
existed. This study enhances our understandings intersectionality and within group differences. In all, women made meaning from their own identities and others' regarding their place in academia and whether the supports, barriers, or opportunities were worth pursuing a faculty career.

## Chapter 6: Discussion and Implications

The preceding chapters presented emergent themes from the two broad research questions:

For women doctoral students in majority-women fields:

1. What contextual influences shape perceptions of their career choice?
a. What, if any, barriers do women perceive regarding their career choice and how do they make meaning of these barriers?
b. What, if any, supports do women perceive regarding their career choice, and how do they make meaning of these supports?
c. What, if any, opportunities do women perceive regarding their career choice, and how do they make meaning of these opportunities?
2. How do women make meaning of gender, race, class, and other intersectional aspects of identity regarding career choice?

In this chapter, these themes are distilled into three key findings based on the theoretical framework, SCCT (Lent et al., 1994) as well as relevant literature and the epistemological stance of this study. Lent and colleagues (1994) contend career development is influenced by contextual factors that influence career interests and choice behaviors. This study applied three specific contextual factors (barriers, supports, and opportunities) along with intersectional aspects of women's identities to guide this inquiry regarding women's meaning-making of their career choice. These findings offer new insight to how women make meaning of their career choices, with respect to intersectional aspects of their identities and specific barriers, supports, and opportunities they perceive regarding their career choices.

The first section of this chapter will analyze three key findings, which are derived from the emergent themes discussed in Chapter 4. Next, I will discuss connections to theory, implications for practice and policy in higher education, and suggestions for future research. The third section will discuss methodological considerations of and sampling of this study and propose future research. Last, I offer a concluding personal reflection, integrating my positionality and experiences in the academy with the direction of this line of research.

## Key Finding \#1: Faculty as Gatekeepers

The concept of faculty advisors serving as gatekeepers to the academy is not new. Previous studies have emphasized the amount of power the faculty yield in admissions to graduate programs, as well as serve as the main socialization agent to academia (Austin, 2002; Boyatzis, 1995; Golde, 1998; Lindholm, 2004; Posselt, 2016). This study emphasizes the power faculty advisors yield in providing or withholding access and resources to women during their doctoral studies. Building upon this idea of faculty as gatekeepers is important, as women made meaning of faculty resource distribution and power to interpret the extent to which they fit in the academy and their potential for success as a faculty member. Women identified resources such as financial support in the forms of research assistantships and grant funding, feedback regarding graduate students' work, publishing opportunities, and mentorship to be instrumental in their progress and meaning making towards their scholarly identity. Conversely, when faculty members withheld or offered limited support, women interpreted these actions to mean they did not "fit" in their discipline or academy. Women identified faculty advisors as a component in each of the three theoretical foci of this study (barriers, support, opportunities). Thus, faculty influence was pervasive in how women made meaning of their career choices.

Faculty members acted as gatekeepers in the academy in the publishing opportunities they extended, such as extending co-authorship opportunities and research team membership. Without a significant publishing record or membership on a productive team, women felt as though they would not be competitive in an already restricted academic job market. Claire's experience is an excellent example of how a faculty member can offer research and publishing opportunities, which then compound over time. She gained the support of one faculty member who "sang her praises," and subsequently earned more opportunities for advancement. Some of those opportunities included an invitation to work on a high-profile research project, funding for summer research, travel to conferences, and introduction to high-profile scholars. This idea of accumulative advantage is well-documented in research regarding graduate students (e.g.: Clark \& Corcoran, 1986; Gardner \& Barnes, 2007; Gopaul, 2011; Weidman et al., 2001) and this study reinforces how faculty members uniquely positon themselves as gatekeepers to resources, enabling accumulative advantage to persist.

The converse of this concept, accumulated disadvantage (Clark \& Corcoran, 1986) or unequal distribution of resources (Lovitts, 2005) affected women's meaning-making of their place in the academy and potential for an academic career. When women perceived faculty members to withhold access to resources like funding, scholarly networks, or research opportunities, it affected how they saw themselves as scholars and their ability to obtain a faculty position. The opposite of this was true as well. Women who benefited from more resources from their advisors saw a better fit for themselves in the academy. Michelle was skeptical of the support her first advisor could offer her, who had a lineage of advising white women graduate students. Although these women "placed" well in the academic job market, Michelle only saw this kind of advantage extended to White women who studied a particular research agenda - neither of which she identified with. According to Lovitts'
(2005) socialization model, these kinds of interactions and unequal resource distributions occur on the micro-environment, such as laboratories or departments. Other scholars have discussed how unconscious behaviors of organizations and faculty perpetuate inequitable resource distributions to graduate students (Gopaul, 2011; Twale et al., 2016). In this study, women's interactions and meaning-making in these micro-environments informed the significance women perceived they could contribute to their field of knowledge.

In this study, women looked to their advisors and other faculty members to serve as a mentor and/or role model. For women with supportive advisors and access to role models, this served as a support. For women who did not have strong relationships with their advisor and/or lack of access to role models, it was a barrier to their progression as a doctoral student and for their careers. Moreover, women who did not have supportive advisors interpreted this to signify a personal incongruence with the academy. Judy, who was without an official advisor, took this to mean faculty members did not see her potential as a scholar and therefore, she would not succeed in academia. Other women like Rebecca, who did not have a strong female faculty role model, questioned whether or not she had the intellectual capability to become a faculty member. Without a woman faculty member to role model how a career in academia could work, especially one with a family, she was left questioning her concurrent goals of becoming an academic and pursuing motherhood. As graduate students become socialized to academia, faculty interaction, especially role modeling and mentoring becomes instrumental in their success (Antony \& Taylor, 2001; Russo, 2011). When graduate students do not have strong connections to the faculty, they do not "position themselves in the figured world of academia" (Jaeger et al., 2013, p. 9). Moreover, this finding supports how influential faculty mentors are to women doctoral students, as women are more likely than their male counterparts to report their primary advisor mentored them or advocated on their behalf (Curtin et al., 2016).

For women doctoral students of color, faculty members served as gatekeepers in a variety of ways. First, women of color expressed the explicit ways in which their opinions, thoughts, and words were silenced by students and faculty members. This echoes work of scholars who have brought attention to the ways society perpetually works to silence and oppress women of color, especially in academic spaces (Collins, 2000; Hurtado, 1989; Solórzano \& Yosso, 2002). Gabrieal and Michelle had lasting negative experiences from faculty members. For Gabrieal, professors attempted to temper her opinions in class, or in Michelle's case, even disagreed whether Asians "counted" as diverse. Faculty members also had the potential to serve in positive ways as gatekeepers for women of color. Women who had strong faculty role models and mentors explained how influential they were to their academic progress but also how they integrated into their department. In most of these cases, these faculty role models were other women of color. However, without a critical mass of faculty members of color in graduate programs, these women of color may struggle to find mentorship and support as well as experience social integration differently in their own programs (Daniel, 2007; Turner, 2002). Cross-cultural and cross-gendered mentoring relationships can benefit students of color, but these mentors must work to become aware of the complex, intersectional aspects of identities and work to understand and appreciate those identities (McCoy \& Winkle-Wagner, 2016; Winkle-Wagner \& McCoy, 2016).

Generally, the end goal of graduate student socialization is successful integration to the professional values, cultures, and norms of their discipline into the faculty role (Austin, 2002; Lovitts, 2001, 2005; Weidman et al., 2001). As discussed in Chapter 2, socialization models assume that in order to be successful, graduate students must conform to culturally-prescribed values and assume a faculty identity as the outcome (Antony, 2002; Gardner, 2008; Gildersleeve et al., 2001; Sallee, 2011b). In this study, many women expressed incongruence with the end socialization goal of becoming a member of the
academy. As most faculty members have familiarity with pursuing only one career path, their scope of knowledge and advice is limited to only academia. Most faculty members are ill-equipped to advise on alt-ac or post-ac career paths, assuming they are open to the possibility of their students pursuing a career other than a typical tenure-track position. In this way, faculty members serve as gatekeepers to women exploring alternative career choices. Some women felt it was impossible to bring up the subject of exploring internship or practical experiences outside of academia with their advisor or "coming out of the academic closet." Although some women felt supported by their advisors to do so, they felt unfamiliar with the process and support to pursue alternative career paths. This occurred despite many doctoral students' pursuit of alt-ac or post-ac careers and the shrinking of the job market for traditional, tenure-track positions (Bonawitz \& Andel, 2009; Russo, 2011).

## Key Finding \#2: Intersectional Identities Informing Experience \& Career Choice

As discussed previously, it is problematic to assume individual aspects of women's identities such as race, sexuality, class, (dis)ability status, are separable and capable of analyzing independent of each other. CRT emphasizes the centrality of race, racism and intersectional identities in our understandings of individual's meaning-making of their lived experiences, and informed the epistemological stance of this study (Crenshaw, et al., 2005; Ladson-Billings, 1998). As Collins (2000) described, these aspects of identity "constitute [a] unique component in an overarching, interlocking 'matrix of domination'; and at within these intersection in the matrix women experience power, privilege, oppression, and subordination uniquely" (p. 270). Accordingly, salient aspects of intersectional identity including gender, race and ethnicity, and (dis)ability status were embedded in framing this key finding. I do not propose that intersectional aspects of identities operated in isolation within the other two key findings; rather, the following
discussion highlights significant aspects of identity and how they relate or add to the body of knowledge regarding women doctoral students, graduate students of color, and career choice.

Women's meaning-making regarding gender norms, expectations, and academic outcomes were informed from several sources. Women observed faculty interactions and gleaned information regarding faculty job responsibilities and performativity to interpret how compatible a similar career path would be for them. Women's interactions with peers, both women and men, challenged women to understand how gender expectations and behaviors were reinforced, and these varied by departmental context. For instance, Marissa felt constrained by the expectations of gender norms her fellow women students placed upon her. Marissa considered herself "super feminine," and believed peopled in academia viewed this negatively. She heard judgmental comments about the wedding ring she wore (e.g., "does your husband own you?") because prominent women in her department "rebel against what is feminine." She did not consider femininity and being a feminist as mutually exclusive identities, but felt constrained by her peers who felt differently. Sheela and her cohort members, who were mostly women of color, were considered "aggressive" by some of their peers and faculty members. Viktoria, who was in the same program as Sheela, expressed discomfort with some of their behaviors, as they seemed too forceful. These examples echoed Sallee's (2011b) assertion that within academic disciplines, "men and women...collaborate to create gender and hold one another accountable for producing appropriate behaviors" (p. 181).

All of the women in this study identified the additional ways women faculty members were expected to serve their departments, which included duties considered to be emotional labor and sometimes exploited their underrepresented gender and racial/ethnic identities. This was especially true for faculty women of color, who women in this study
perceived to be "inundated," "swamped," or "drowning" in committee work and service obligations, in addition to mentoring relationships to other women and students of color. Many of the women of color already experienced tokenism and begun to assume disproportionate amounts of service roles than their white graduate student peers. Studies have chronicled how faculty members and students of color experience cultural taxation and are commoditized to portray a commitment to diversity (Duncan, 2014; Padilla, 1994; Harley, 2008; Wallace, et al., 2012).

In this study, women of color spoke of the ubiquity of their racial/ethnic identity in their academic contexts. Students' racial identities influenced peer to peer interaction, faculty-student interaction and student's perceptions of the faculty (McGaskey, 2015). Women in this study described how markers of their racial and ethnic identities influenced their job market considerations, experiences with faculty members and peers, and relationships with curriculum and classroom spaces. The job market was an especially tenuous environment for Gabrieal and Yumi. For Yumi, she felt her accent hindered her interactions with some faculty members and students on campus visits, in addition to her less mainstream research agenda. On two of Gabrieal's on-campus interviews, she was referred to by the incorrect name. In the first instance, it was the name of a colleague she knew, who was an African American woman interviewing for the same job. In the second instance, it was the name of a post-doc in the department. Gabrieal considered how these microaggressions would continue to affect her after she accepted her offer with the department with whom she was confused for "the other Black woman." Scholars have categorized microaggressions (Yosso, Smith, Ceja, \& Sólorzano, 2009), described their impact on students of color (Sólorzano, Ceja, \& Yosso, 2000; Yosso et al., 2009) and faculty members of color (Constantine, Smith, Redington, \& Owens, 2008; Pittman, 2012;

Sólorzano, 1998). Less is known about how aspiring faculty members of color experience and make meaning of microaggressions on the job market.

Women of color created supportive peer networks, sought mentors outside of their departments and universities, and utilized previously-established support systems, as they were sometimes absent in their own programs. Scholars have described similar resilient mechanisms and adaptive strategizes underrepresented women in doctoral programs have utilized to overcome socialization barriers (Gildersleeve et al., 2011; Winkle-Wagner \& McCoy, 2016). Recently, scholars have begun accounting for racial and ethnic differences in doctoral student socialization theories as well as intragroup differences in socialization (Azizova, 2016; Twale, Weidman, Bethea, 2016). Further inquiries regarding the nexus of race and ethnicity and doctoral student socialization in terms of their career choices are warranted.

Women from all racial and ethnic identities indicated a need for graduate program curriculum reform. Women from the Sociology Department discussed how limited their program's first-year curriculum was, in terms of race and gender. Although their traditional canon included mostly "dead White guys," several women asked professors to reconsider including overlooked scholars of color, like W.E.B. DuBois, when creating their syllabi. Moreover, women discussed the importance of faculty leadership in implementing diverse perspectives in undergraduate and graduate curriculum, but also in their classroom facilitation efforts. In order to promote more classroom discussion and "further develop intellectual development," graduate programs need to include multicultural perspectives, even when it seems incompatible with traditional mores (Griffin et al., 2016; Twale et al., 2016; Winkle-Wagner \& McCoy, 2016). Curriculum reform must consist of dramatically reconfiguring and reimagining the way lessons are taught, so as to not maintain the status quo. In this way, faculty members and graduate students may work together to challenge
dominant disciplinary ideologies and posit a critical perspective, both reflective of a CRT framework (Crenshaw et al., 1995; Yosso et al., 2004).

The psychology department, as a discipline, has been historically less racially diverse and composed of White-women for several decades. Four White women in this department were members of the Diversity Committee and discussed the need for greater racial and ethnic diversity in their recruitment efforts at both the graduate school level and in their faculty. Other than Melanie, women did not offer any substantial conversation or introspection regarding their own identities as White women and how they related to their own lived experience in and out of the academy. In Harley's (2008) article on the disproportionate role African American women faculty members assume in teaching, service, and research at PWIs, she explains how whiteness in academia is "naturalized to the point of being invisible" (p.23).Harley quoted Mills' (1997) analogy of how whiteness continues to operate as an invisible norm, "the fish do not see the water and whites do not see the racial nature of a white polity because it is natural to them, the element in which they move" (p. 76). To some of these women, they were oblivious to the whiteness of their field and the complicated way in which they were complicit in this structure. Some understood implications of the homogeny of their field, but felt bound to the faculty, whom they felt held power in changing the structure of their admissions and recruitment processes.

Women with different backgrounds and identities all considered how their own access to cultural capital, as well as their perceptions of other doctoral students' access to cultural capital influenced their experiences. In this context, cultural capital refers to the skills, knowledge, and abilities awarded in a social situation like graduate school (Bourdieu, 1979/1984). Women like Leah and Andrea, who grew up in families that they described as "upper-middle class and upper class" still felt uneasiness and less prepared
than their peers in academic settings and social environments. Prior research has connected cultural capital with students' background characteristics like parental income and educational attainment (Winkle-Wagner, 2010). Others have shown at the graduate level, family background plays less of a role in cultural capital acquisition at the graduate school level (Mullen et al., 2003; Winkle-Wagner \& McCoy, 2015). Findings from this study suggest women's economic background characteristics do not necessarily indicate a greater availability of structurally-relevant cultural capital in doctoral studies. However, this does not suggest that access to cultural capital formation operates without overarching gendered, racialized, class-based assumptions. A greater understanding of specific aspects women deem as structurally relevant to succeeding in academia, in relation to cultural capital formation could inform ways to support women from all backgrounds.

Although (dis)ability experiences was not a primary focus of this study in terms of understanding barriers and aspects of identities that inform career choice, discussions regarding challenges with mental and physical health emerged for five of the participants. These women discussed seeking professional counseling to help them cope with the anxiety they were experiencing in their programs. Three of these five women were women of color, and psychological, physiological, and behavioral responses to compounding experiences of racism, tokenism, sexism, and other biases in academia are documented (e.g., Cox, Simmons \& Lomax, 2012; Harley, 2008; Truong \& Museus, 2012). A recent study that examined mental health problems of Belgian Ph.D. students found one in two Ph.D. students experiences psychology distress (Levecque, Anseel, De Beuckalaer, \& Gisle, 2017). The authors also stated certain organizational contexts can predict mental health problems for Ph.D. students, which included supervisory leadership style, and perceptions of a career outside of academia. Although more studies in higher education are bringing greater attention to how (dis)ability is integrated in our understandings of identity,
there is still a greater need to uncover hidden and sometimes situational (dis)abilities like mental health with other aspects of intersectionality (see: Kim \& Aquino, 2017; Miller, 2015).

## Key Finding \#3: Constrictive Workplace Structures

Women considered workplace structures and practices in academia such as the tenure process, scheduling flexibility, perceived level of job security, availability of supportive policies and work/life balance as they contemplated their career choices. They made meaning of their own experiences as graduate students to interpret how their own careers in academia might be. Women's meaning making of workplace structures in academia was complex. They identified both barriers and opportunities in work place structures, especially in academia. Women thought similarly about industry, alt-ac, or postac careers; they weighed how individual circumstances and goals influenced how they saw themselves in those careers.

For women in this study, the prospect of obtaining a tenure-track position simultaneously presented an opportunity and barrier in their career choice (Lent et al., 1994). Women drew on their relationships with their advisors, colleagues who had advanced through academia, and other faculty members to inform their perceptions of what a tenured faculty career would look like. Women spoke about how the immediate environment in which they most closely worked and studied - labs, research teams, areas of study - informed their perceptions of the challenges and opportunities in a faculty role. If women saw greater congruence between themselves and the values, goals, and identities of fellow scholars and faculty members in their immediate environment, they expressed greater ease in identifying with a "scholarly habitus" (McCoy \& Winkle-Wagner, 2015). Drawing from Bourdieu's social reproduction theory, McCoy \& Winkle-Wagner (2015)
described the ways in which new graduate students of color in a summer bridge program "further developed their habitus (dispositions, identities, and perspectives) as scholars" (p. 423). Supportive environments that include access to strong role models was influential in building a stronger "scholarly habitus" for these women.

Women in this study identified opportunities in pursuing a tenure-track faculty career. The positive aspects of the "faculty lifestyle" that women identified consisted of greater scheduling flexibility, autonomy of research agenda, and intellectual opportunities. These findings are consistent with other studies that have sought to understand why graduate student choose careers in academia (Corcoran \& Clark, 1984; Jaeger, et al., 2013; Lindholm, 2004; Ward \& Wolf-Wendel, 2016). Women in this study who had senior faculty members also remarked on the amount of personal travel these faculty members pursued, their summer vacation habits, and level of autonomy faculty members could exercise. Ward and Wolf-Wendel (2016) found senior faculty members exercised greater autonomy especially compared to assistant professors. Women fundamentally wrestled with the question of whether or not delayed career and personal satisfaction would be enough to sustain them through the difficulty of earning tenure.

Perceptions of faculty work-life balance, or how well an individual could balance demands of paid work and family responsibilities (Hill, Hawkins, Ferris, \& Weitzman, 2001), influenced women's meaning making of career choice in academia. Lack of balance in faculty lives is well documented (Mason \& Gouldon, 2006; Mason et al., 2009). These demands on faculty members are attributed to the traditional "ideal worker" norm in which academia was founded. Traditionally, an ideal worker is male, always available and working, and is childless, or at least has a caregiver (usually a spouse) to assume home and family obligations (Hochschild, 1995; Sallee, 2012). Most women in this study understood a faculty life to consist of "working all of the time" with little time for family. Some
participants had faculty advisors who were women without children, or women with spouses whom they considered to be "supportive" and "shared responsibilities." Other women talked about male faculty members who seemed to display a strong level of worklife balance with their job duties and childrearing responsibilities. However, when discussing these men, at least three participants made side remarks echoing Andrea's that "men who have a wife, have help." The implication was men faculty members who make efforts for egalitarian marriages still do not shoulder equal responsibility in household labor. As discussed in Key Finding \#2, the amount of extra labor placed on women and faculty members of color also informed these women's perceptions of lack of work-life balance. This finding supports other studies that cite that family issues, not teaching or research, are more negatively associated with entering academia for women (Ahmad, 2016; Anders, 2004; Gold \& Dore, 2001).

Lack of awareness and availability of family-friendly policies is a contributing factor for women's lower representation in tenure-track positions and different institutional types (Hollsenshead et al., 2005; Lester \& Sallee, 2009; Ward \& Wolf-Wendel, 2016). The majority of women in this study were unfamiliar with policies like STC and how they were implemented and utilized for tenure review. Women were unaware of formalized institutional policies regarding parental leave for graduate students. Moreover, some women were unsure if they needed "permission" from their advisors to start a family during graduate school and if they were eligible for university, state, and federal policies (e.g., FMLA, unemployment benefits, university-sponsored health insurance). There is a dearth of literature regarding graduate student mothers, and as such, less is known about why the number of graduate student mothers is so low, especially since most are in "prime childbearing years" (Dominici et al., 2009; Kulp, 2016). This is significant, as graduate student mothers are less likely to benefit from socialization mechanisms like co-authorship
of papers with advisors and assistance in their career progression (Kennelly \& SpalterRoth, 2006).

Recent doctoral degree recipients are less likely to report taking jobs in the academy since 2000 and plan to take jobs in business or industry more than ever before (NSF, 2015; Schmidt, 2016). Considering the growing demand from technology companies for highlevel statistical skills that many social science Ph.D. students have, along with the shrinking job market, this should not come as a surprise. Women in both departments spoke about the emerging job market in "User Experience" or "UX." Employers such as Facebook, Indeed, and even dating service companies were enticing graduate students in these departments for lucrative summer internships and post-doctoral job offers. In an NSF (2016) survey, doctorate recipients in the social sciences who reported employment commitments in industry reported basic median annual salaries of $\$ 90,000$. Compared to their peers' reported basic median annual salaries with employment commitments in academe $(\$ 60,000)$ this difference was substantial (NSF, 2016). Women were more likely to earn less than men in their postdoctoral positions or other employment commitments (NSF, 2016). Industry jobs also had enticing parental and family leave policies as well as childcare benefits (McGregor, 2016). In this study, women grappled with the enticements industry jobs could offer, without the stress of academia, as opportunities. However, the stigma associated with leaving academia, along with the lack of guidance from the faculty, still persisted. Or, as Viktoria explained, "coming to the dark side is going into the industry."

At a macro-level, tenure is a product of a patriarchal, hierarchical institution made to benefit men (Acker, 1990). Women in this study understood this and grappled with these implications for their careers. Could they work within the academic structures, however restrictive they were towards women, especially women of color? Women expressed 201
discomfort with the tenure system and work-life balance issues, but no one discussed alternate structural modifications to the academy. As Ward and Wolf-Wendel (2016) remark: "change, from a feminist perspective, requires alteration of structure rather than of individuals" (p.13). When considering the leaky pipeline in academia, Ward and WolfWendel (2016) caution against focusing on individual choice behavior. Rather, "the social structures that have created the pipeline need to be addressed rather than focusing on the participants in the pipeline and the choices they make" (p. 20). As such, broad federal and state policies to support marginalized populations, including women, and institutions need to address structural barriers, rather than individuals.

## CONNECTIONS TO THEORY

Overall, SCCT was an effective theoretical tool to analyze women doctoral students' perceptions and meaning-making of career choice. The findings from this study enhance previous studies' findings that have focused on contextual influences on career choice. This study positioned women's career choices as a primary focus of inquiry and provided a nuanced view of how aspects of intersectional identity can inform career choice, and in turn, inform theory development in SCCT.

Studies that have utilized SCCT have primarily used this framework to understand the "inputs" and contextual factors that explain career goals, choice, and outcome behavior using a quantitative methodology (Brooks \& Hesse-Biber, 2007; Lent et al., 1994, 2000; Lent, Lopez, Sheu, \& Lopez, 2011). The epistemological stance and qualitative methodology of this study expands a more nuanced understanding of the personal, subjective lived experiences regarding career choice. Moreover, this study focused its
inquiry exclusively to women's career choice, which is also an area of research that is limited. Future research should focus on women's career choice formation, in the context of both majority-women fields as well as fields like STEM, in which women are underrepresented. Although theory generation was not a goal of this study, theory building regarding women's career choices in future research is warranted. Studies could extrapolate women's experiences and work towards a theory of doctoral women's career choice, using Lent and colleague's (1994) theory as well as approach a theoretical framework for understanding their career choice from an intersectional lens.

Faculty have an influential role in graduate students' educational experiences and shaping their career trajectory. Other studies that have utilized SCCT have also shown how influential faculty members can be sources of support towards career development (Lent \& Sheu, 2010) and mentorship (Lent, et al., 2000; Simpson, 2005) as well as structural barriers to women and underrepresented students' career progress (Gibbs \& Griffin, 2013; Jaeger et al., 2013; Swanson \& Woitke, 1997). Moreover, these findings affirm other studies (e.g.: Fries-Britt \& Snider, 2015) that indicate how influential faculty of color can be in role modeling successful navigation of academia for students of color. This study uniquely positions faculty as gatekeepers to women's career choices in academia, both as supports and barriers. When graduate students do not have strong connections to faculty, they do not "position themselves in the figured world of academia" (Jaeger et al., 2013, p. 9). The findings from this study support this assertion and point to faculty as crucial agents in supporting women's representation in academia.

This study adds to a growing body of research that explores how intersectional aspects of identity influence meaning-making of supports and barriers regarding career choices for women in academia. Other studies that have utilized SCCT have demonstrated the significance mentors have for underrepresented graduate students' efficacy and interest in an academic career (Curtain et al., 2016), and how beliefs and expectations of career outcomes are the results of contextual factors like family background (Lent \& Brown, 2013). The findings from this study also show how the influence of supports and identity aspects on career choices. Other studies have indicated how aspects of gender discrimination like tokenism and stigma served as barriers to towards career goal formulation (Lent et al., 1994); these findings specifically integrate intersectional aspects of identity besides gender, to our understandings of career choice.

In this study, women's perceptions of different workplace structures influenced their perceptions regarding their career choices. Women pointed to structural barriers, like lack of work-life balance and policies supporting parental leave that shaped their understandings of career choice. According to SCCT, barriers also explain the gaps in women's career interests, abilities and career achievement, and advancement (Astin, 1984; Lent et al., 2000; Swanson \& Woitke, 1997). SCCT worked well to identify the contextual components that influenced perceptions of career choice for women doctoral students. However, SCCT does not capture the nuances of individual aspects of identity, or "person inputs" Lent et al., (1994) working in concert with other factors to influence career goals, choices, and outcomes. This study adds to this gap in theory. This study gives supports the
need for updated theory generation, regarding career choice, especially those that center underrepresented identities in academia, in SCCT and broadly.

Fewer studies have focused on positive structures or opportunities that encourage career development (Lent et al., 2000), and this study highlighted some of these emerging opportunities, such as the emerging market for highly-trained social science researchers. This industry opportunity for women represents a changing "structure of opportunity" (Astin, 1984) in which social changes and economic developments impact women's career choice behavior. Social changes, especially regarding structures and policies, have not occurred as quickly in academia. Although women in these fields represent a majority of doctoral students, a corresponding structure of opportunity is slow to emerge. Together, this indicates a need for updated theory to address the complexity of women's decisionmaking in and out of the academy.

## Implications for Practice and Policy

The findings from this study indicate several areas that institutions, faculty members, and women can strive towards to improve support for women doctoral students. First, I discuss implications that encompass recommendations for the faculty and administration to implement to institution-wide recommendations for improvement. Second, I present implications for policy efforts and suggestions for policy updates to support doctoral women students in relation to their graduate student experiences and career choice formation.

## Implications for Practice

The experiences from these participants, including their specific recommendations solicited during individual interviews and focus groups, point to several ways in which institutions can support women doctoral students. During the recruitment, interview, and analysis stages of this study, I expressed to the participants that a goal of my study was to present specific recommendations for practice during our focus groups and follow-up interviews as a way to member-check and ensure there was a tangible outcome from their participation, with the aim that it was not purely a one-side transactional process. Broadly, these include data management for post-graduate careers, institutionalize feedback systems for graduate students, support for alt-ac or post-ac career services, opportunities for faculty sharing, and the importance of mentoring opportunities. These changes vary from small, incremental changes, such as faculty sharing their experience to graduate students, to paradigmatic shifts in departmental and disciplinary culture, like reimaging in how graduate students are socialized to different professions and supporting them accordingly.

The level of feedback women received regarding their academic progress, writing, and researching progress varied. Examples of feedback included informal check-ins, emails, and manuscript revisions. For those women who did receive feedback from advisors and/or faculty members, they found it helpful towards their perceptions of fit in the academy and personal potential. Feedback systems do not have to be from advisor to advisee. Not one of the women spoke about formal opportunities to provide feedback to their advisors about the ways in which they felt they could be better supported, voice concerns, or ask for advice. Some women were able to informally interact with their advisors and could bring up concerns, but this was not the norm. Feedback systems
modeled on review-systems used in industry, like 360 performance reviews ${ }^{24}$ or two-way reviews could be beneficial to the student, as it would provide her with information about how she is performing, in terms of academics, work, and progression. Additionally, it would provide the faculty member with information she would not normally have gleaned regarding her supervisory style or suggestions from students. Institutionalizing formal feedback systems are important, as it informed women's perceptions regarding their potential in the academy. Professors are socialized to the academy to be leaders in their fields for research and educators. They are experts in their roles leading labs, research studies, and supervising, but in most cases, have not received formal guidance on supervising and leading graduate students. Institutions should train faculty members with supervisory skills, as well as connect them with campus resources to help their graduate students.

The College of Letters and Sciences at Midwestern University published data regarding job placements for their graduates (see aggregated data in Table A6), but this data was 10 years old. Institutional reports should disseminate this information widely to its students and publish it on their websites as well. Sharing this information with the faculty, current students, and prospective students is imperative. Of course, each student's post-doctoral placement is individual, but providing this information can provide students with tangible data regarding their peers' placement on the academic job market.

In this study, women referenced to the alt-ac career workshops that the Graduate School offered for students as a source of support. Currently, there are four themed, monthly, alt-ac career workshops that are offered by the Graduate School. These topics include identifying transferable skills to converting a CV to a resume to preparing for

[^14]industry jobs. As more women look out of academia for careers that apply their doctoral degrees, universities should respond with programming and support like this office offers. Faculty members have a deep understanding of how the academic job market works and how to best prepare their students to be successful in it. Many faculty members do not have the social networks or working knowledge to prepare students to enter careers outside of academia, so implementing more career support resources for graduate students is imperative. Instituting career services for graduate students goes only so far. If graduate students feel they must seek these resources secretly, students will miss out on a resource that can guide them to a better professional track, even if it outside of academia. Thus, faculty encouragement is essential for graduate students to utilize them.

Women in this study wanted more information from faculty members, especially women, regarding how they made meaning of faculty members' lives including their work responsibilities and home lives. With this information, they thought they would feel more confident in determining their own career plans. It is up to faculty members to determine how much they feel comfortable sharing with their students, but faculty members should be cognizant that women fill in the gaps of their understandings. This could take the form of informal meetings, forums, or role modeling. In a Chronicle of Higher Education (2017) column regarding graduate student imposter syndrome, Rachel Herrmann emphasized the amount of influence faculty members have in modeling behavior to their graduate students. First, Herrmann suggested faculty members model their work-life balance, for instance, establishing email policies (limited evening and weekend correspondence) and encouraging graduate students to adopt their own. Herrmann also suggested faculty members talk about the ways they engage in activities outside of academe: "that's why I deliberately post on Twitter about cooking or going on bike rides."

This study also calls for faculty members to consider advising students using an intersectional and culturally relevant approach (Ladson-Billings, 1995). Ladson-Billings' (1995) work regarding culturally relevant pedagogy centers on classroom teaching that emphasizes cultural competence and developing critical consciousness to challenge the social order. More specifically, culturally relevant pedagogy acknowledges "students' culture as a vehicle for learning" but can also be applied to advising and mentoring students (Pecero, 2016). hooks (1994) advocated for "liberatory practice in the classroom" (p. 147). One mechanism for realizing this is for instructors to understand their own subjectivity as well as connect pedagogy and theory to empower individual student voices in the classroom (and beyond). Faculty members should be trained to understand their own positionality in relation to their curriculum, pedagogy, and classroom, but also how they can go beyond this to encourage critical thinking amongst their students and themselves. This is not easy; "commitment to engaged pedagogy is an expression of political activism" (hooks, 1994, p. 203). This also requires a culture shift in which students and faculty members utilize resources that emphasize equity and justice-based efforts interpersonally, in classrooms, and across organizations.

This study demonstrated the dynamic, diverse aspects of women's identities and their individual strengths and aspects that needed improvement. Faculty advisors should have the opportunity to get to know the whole student and advise them based on these intersectional identities. Moreover, some aspects of identities are more salient for others and faculty members should be aware of those needs. Women like Michelle, who identified as Asian American, felt an Asian perspective was underrepresented in her department, but also struggled considerably with health issues. A supportive strategy for advising a student like Michelle would recognize how these interlocking components of her lived experience inform how she perceived her fit and potential in the academy. At some points in her
graduate student career, issues related to her health drove her experience, and at other points, her professors' and students' dismissals of her ethnic identity affected her progress. How women identified with aspects of their identity changed over time, and to meet their needs, faculty members should become aware of these aspects and support women using a culturally-relevant approach.

An argument can be made that faculty sharing their stories and serving as role models to women can only go so far, especially when there is an absence of faculty members of color at PWI's and in some cases, women faculty members as well (Davis, 2007). Same-race/gender faculty members can empathize with feelings of marginality at a PWI and share experiences and strategies for success (Davis, 2010; Fries-Britt, Younger, \& Hall, 2010). To fill this gap, there needs to be a focus on access to mentorship opportunities, especially considering women of color. Professional conferences are excellent opportunities for women to meet faculty mentors as well as peers who serve as support systems. Departments and faculty members should encourage women to attend conferences, reduce financial barriers, and help accommodate teaching and grading responsibilities during these professional development opportunities.

Although same race/gender mentoring can be instrumental in supporting women and students of color, placing the onus of mentoring duties on women and faculty members of color only exacerbates the cultural taxation these faculty members already undergo. When faculty members - white men included - can access proximal experiences of being othered to mentor underrepresented racial minority students, they are well positioned to serve as mentors (Reddick, 2009). Moreover, faculty members can facilitate "constellation mentoring" practices (Johnson, 2007). When mentors connect students to resources or other scholars with shared interests and expertise, students reap the benefits of these connections (Reddick, 2009). One way to facilitate this would be the creation of a 210
mentoring resource center for graduate students, especially those who have marginalized identities. Just as universities list area experts on their homepages, an online, interactive resource center could identify faculty and staff members who are willing to mentor students, as well as public figures or activists who are able to connect students to others with similar research interests, underrepresented identities, or can serve as a mentor in some informal capacity. An online resource like this would effectively map these constellations of willing mentors and mentees in an interdisciplinary way that consists of experts in the academy, scholar-activists, or community members.

The aforementioned recommendations for practice may take financial resources and energy to bring awareness to a traditional, bureaucratic system that is known for its antipathy for change. However, as universities educate more diverse populations of learners and face economic realities for its graduated students, they must consider their purposes while looking to the future.

## Implications for Policy

Federal policy changes like paid sick leave and state-level policy recommendations to extend additional support for family and medical leave policies have been cited as mechanisms to support many, including those at different ranks in higher education institutions (Lester, 2016). In the absence of federal paid parental leave policies, industry leaders such as Netflix, Microsoft, Facebook, and Amazon are offering paid parental leave benefits for its employees (O'Connor, 2016). Universities need to follow suit because it is a socially-conscious action and step towards gender equality that is long overdue. Moreover, institutional policies that support gender equity have the potential to impact all graduate students, regardless of gender identity, as well as the faculty.

Additionally, universities need to reimagine their tenure systems. Newer, equityminded models exist, like those developed out of the of UC Berkeley Family Friendly Edge initiatives. Some strategies include implementing flexible tenure-tracks, when faculty members can temporarily move from full-time to part-time arrangements, depending on their circumstances. Faculty members who utilize these programs participate in a pro-rated tenure track system (Mason et al., 2013) or opt-out policies or family leave (Center for Worklife Law, 2012). However, new models must be approached mindfully, as genderneutral tenure policies have been shown to benefit men more than women (Antecol, Bedard \& Stearns, 2016). Ultimately, failure to reexamine the academic structures that affect faculty members and graduate students only serves to reinforce disparities. Twombly (1999) stated:

In the face of a patriarchal system that appears to be changing at a snail's pace despite increasing numbers of women academics...We must continue to critique seemingly neutral policies and practices of the academy. (p. 449)

As such, policies regarding tenure and graduate student and faculty parental leave need to be critically reconsidered.

## Institution-Wide Policy Recommendations

The first policy recommendation is addressing the current graduate student funding schedule and structure. Departments are beholden to other internal and external stakeholders who determine the timing and amount of their resource allocation. However, any delay or unanticipated bureaucratic steps women experience directly affect their livelihood. These recommendations deal with three broad areas: funding structures and policies, family leave policies, and consensual/sexual harassment relationship policies.

If possible, departments should take steps to offer multi-year funding offers to women and articulate exactly how the tuition remission policies work (if applicable). At

Midwestern University, competitive academic fellowships did not offer health insurance benefits as part of their awards. Therefore, women in this study had to deal with several consequences of this. For example, when Lauren earned a fellowship during her last year of her doctoral studies, she was excited for the opportunity to devote her time exclusively to writing her dissertation. However, because university fellowships do not come with the staff health insurance, Lauren and her husband decided they should delay starting a family until she obtained health insurance with equivalent benefits and payment as the staff health insurance that comes with TA and GRA positions. At one point, Christina considered declining a fellowship because she did not think she could afford to purchase separate health insurance policies for her husband and children, who were dependents on her current health insurance policy. Additionally, Christina struggled with the manner in which her fellowship was disbursed. It was distributed in two large, lump sums, without taxes taken out. Consequently, the amount of assets she had precluded her from state social assistance programs like SNAP. University policies could disburse fellowships in monthly increments, or state policies could be revised to accommodate for employees like graduate students, who receive their income in large, semi-annual lump sums.

Graduate students also needed to be notified in a timely manner about their TA or GRA position placements. For instance, women in the Sociology Department were notified only weeks before the start of a semester for which class they were going to serve as a TA. This caused a great amount of stress for them and a policy mandate should include a deadline by which the women could be notified. TA assignments are dependent on course enrollment, but devising a way for graduate students to know of their responsibilities would serve them well. Women were also not notified if they could obtain summer employment through their department. Chelsea talked about taking out loans to cover her during the summer, when she was only able to find one part-time TA position. Other women were 213
unsure of whether or not their advisors would support them pursuing industry summer internships in industry, which would pay well, or to wait and see if they could get funded over the summer.

The majority of women were unsure of how university and department policies coincided with federal programs like FMLA for parental leave. Some women heard of other graduate students who had children during graduate school, but were unaware of the logistics or feasibility to do so. Women were unsure if professors would accommodate maternity leave, but heard of some who strategized to work with professors who were comfortable with performing TA responsibilities like grading from home. Moreover, FMLA requirements do not apply to women who have not been continuously employed in the same company for at least 12 months and maintain a minimum number of appointed hours. Many of these women were told graduate school was the best time to have children, yet were unaware of any policy that would help them if this was the case. Universities should articulate how FMLA can work with their own policies and provide clear direction to women of which office assists with this matter. Women need to feel that they will not be punished for inquiring about these policies or utilizing them.

As discussed in Chapter 4, RQ 2, a university-wide policy regarding consensual relationships was enacted between the first interviews during the Fall and the time of the follow-up interviews and focus groups. This was a substantial step in addressing a gap in university policies, and all universities should take measures to draft their own policies as well. However, policies only go as far as paper. Samantha discussed her meeting with the university office that handles issues related to Title IX, gender, and bias incidents. She was disappointed to be met with skepticism from the university officer when explaining the uncomfortable environment in her department where professors were engaging in relationships with at least one graduate student peer. The officer asked her if she knew for
a fact or if she was misinterpreting signals. This left her feeling despondent about the potential to change the culture in her department. Universities should have explicit policies regarding sexual harassment and consensual relationships and train faculty and staff members how to facilitate an open and supportive environment to discuss these concerns.

## Future Research

The purpose of this study was to explore how women in majority-women fields make meaning of the contextual influences in relation to their career choices. More specifically, this study considered what barriers, supports, and opportunities they attributed to their career choices, as well as how intersecting aspects of women's identities informed these choices. As such, this study illuminated specific factors, internal and external, that women interpreted in formulating their career choices. However, there are several areas in which future research could expand, reframe, or investigate topics related to women doctoral students' career choices.

To be inclusive in my study, I provided the option of my participants to self-select as women. In this way, my aim was to capture a diversity of experiences. Future research could investigate career choice and doctoral experiences across a spectrum of gender identities. There are scholars whose work on trans* identities in college as well as educators that are gaining attention (e.g.: Jourian, Simmons, \& Devaney, 2015; Nicolazzo, 2016; Rankin \& Garvey, 2015), but there is a dearth of scholarly work regarding gender nonbinary, trans* and other historically marginalized gender identities in the academy, especially regarding career choice. As such, future studies regarding gender in higher education should consider this void in the literature.

Although it was not a criterion for inclusion in the study or part of the demographic questionnaire, fifteen of the 22 participants spoke about their respective undergraduate
research experience. These women described volunteering in labs, working with faculty members and graduate students, and conducting undergraduate theses as formative experiences that prompted them to pursue a graduate degree. Presumably, this exposure to research and mentors also influenced how women interpreted graduate school and possibly what a career in a research-intensive environment like higher education academic would look like. Future research could track women's level of undergraduate research involvement, if they transition to graduate school, and how those experiences together inform their understandings of a faculty career.

In the same vein, 14 of the 22 women attended universities that were Carnegieclassified as "Doctoral Universities: Highest Research Activity" higher education research institutions. As this is the highest level of research activity designated by Carnegie, these women's undergraduate experiences were in a unique context from some of their peers. Ostensibly, they had been socialized to some of the more informal aspects of these higher education institutions, such as graduate students instructing undergraduates, faculty members whose focus was primarily on research and grant generation, and navigating complex bureaucratic structures. All of these informal socialization mechanisms may have prepared them for the same kind of institutional context as Midwestern University. Some of their peers who attended different institutional types may have had varying experiences adjusting to the culture of Midwestern that highly rewarded research, rather than teaching. As such, studies could explore how women from different undergraduate institutional contexts adjust to highest research activity institutions and how they make meaning from this transition in terms of their doctoral experience and career prospects.

The influence of women's access to cultural capital was an aspect of these findings that extended beyond race/ethnicity, sexual orientation, and class. As such, it would be interesting to apply Yosso's (2005) framework regarding community cultural wealth.

Yosso argues underrepresented and marginalized students have access to "funds of knowledge" that go underappreciated or unidentified in a deficit- narrative culture in which academia operates. Future research could uncover the resources these students have access to and what propels them to persist through their advanced degrees and in high-profile careers in academia and industry. This knowledge could inform faculty members on how to recognize the skills and knowledge underrepresented students bring to academic environments, while also bringing attention to the implicit and explicit ways that they rely on structurally and culturally-dominant sources of cultural and social capital utilization.

Last, this study only explored women's perceptions of what their careers may be, and how they made meaning of the influences on their career choices. Additionally, at the time of this writing, only two of the participants had made definite plans about their postdoctoral positions. It would be fascinating to broaden the scope of this study and follow up with the same women in five years and ten years. In this way, I could explore women's expectations of the job market, barriers they perceived to entering their careers, and how they matched up with their realties.

## Methodological Considerations

The approach of this study was a qualitative inquiry. The aim of qualitative research is not generalizability, but a greater understanding of a phenomenon in depth (Creswell, 2012). Therefore, this study aimed to understand women's experiences, through thick, contextual description; the intention was not to generalize their specific experiences to all women doctoral students. Moreover, the findings represent a fixed point in time for the women's lived experiences and how they made meaning of their experiences. Over the course of time, women will experience different situations such as changing political landscapes or even how they make meaning of different salient aspects of their identities.

Therefore, women may interpret their experiences and make meaning of their career choices in other ways over the course of their development. This study does not purport to predict which careers these women may ultimately pursue, but to offer a description and analysis of how they interpret various barriers, supports, and opportunities, in concert with aspects of their identities.

Women who participated in this study self-selected for participation. Some women were referred by friends or classmates, but ultimately, they chose to share their insights, vulnerability, and experiences with me. Some of the women had especially negative interactions with their departments. Certainly, this informed their experiences as doctoral students and how they perceived they were included in their discipline and the academy as a whole. Additionally, these women who self-selected in the study were therefore more willing to discuss and reflect on their positionality in relation to the phenomena of study. For these reasons, along with the previously discussed methodological approach of the study, this study could not be replicated in eodem modo.

One of the intentions of this study was to purposefully include a participant with a diversity of characteristics, including underrepresented races and ethnicities, sexual orientations, and SES. Seven of the 22 participants self-identified as women of color. I aimed to recruit a diversity of races and ethnicities so I could explore the complexities of identities considering both inter- and intra-group diversity, so as to not tokenize any one women's experience. With this consideration, there was only one woman who identified as African American/Black and White selected to participate in this study. Her experiences were multifaceted and varied from her peers, just as other women of color experiences. However, in writing the findings, I was cognizant of describing her unique lived experience without further tokenizing her identity. Including more perspectives within groups can inform our understandings of intragroup diversity; as such, this is a limitation of this study.

Women of color expressed a variety of influences and experiences that resonated with them as doctoral students and potentially faculty members of the academy. For instance, Sarah, who self-identified as Middle Eastern, expressed a fluidity in her racial/ethnic identity, either a woman of color or White, depending on contexts or structural constraints. Future studies should build on the body of knowledge that situates women of color lived experiences in graduate school contexts (see: Azizova, 2016; Garcia \& Henderson, 2015; Gonzalez, 2006; Espinso, 2014).

A second demographic component of identity is individual sexual orientation. Two women self-identified as Queer and five women self-identified as Bisexual. The women who identified as Queer knew they did not want to live in rural or particularly isolated communities, but did not elaborate on what factors motivated this decision. There could be many interrelated reasons for their geographic preferences, but it would have strengthened the study to explore this aspect of their identity in depth.

The last aspect of demographic information that would be useful to uncover in greater detail is SES, with a focus on debt. In my recruitment questionnaire, I included questions about family SES while growing up, but I did not ask specific questions about student loans. During some of the individual interviews, aspects related to family income, financial assistance, or debt came up but was not fully teased apart. I followed up with all of the participants and asked questions regarding the amount of student loans they had taken out to date, how much they expected to owe after earning their doctorate, and any other relevant information. Consequently, I only have information regarding student loan debt from 19 out of the 22 participants. It would have been informative to include this information in the original recruitment questionnaire and in the interviews, build out specific questions based on their respective answers.

One of the key findings of this study highlighted how women attributed faculty advisors' influence on providing or denying access to research, funding, and career opportunities. It would be interesting to either triangulate and/or fully explore how faculty members perceive their actions and behaviors towards their advisees and their career choices. Women recalled some visceral experiences with faculty members that ultimately informed how they perceived they fit within their discipline and the academy. However, to the same faculty members, these same experiences and moments may have been unmemorable and insignificant. Future research could examine the explicit and implicit ways in which faculty members interact with their students, especially racially and ethnically underrepresented students and those of traditionally marginalized identities in the academy. This information could assist faculty members in their advising and mentoring capacities as they train the next generation of scholars to enter the careers.

## Concluding Personal Reflections

The genesis of this study developed out of my own observations and the meaningmaking I experienced during my first semesters as a doctoral student at a tier one institution. In a field like Educational Administration, where there are seemingly more career choices than other fields, aspects related to my gender were salient when I considered my career choices, especially regarding tenure track positions. Moreover, I realized the relative amount of privilege I had in navigating a space like academia, especially considering my own cultural and social capital and identity as a White, cisgender woman. Considering these markers of identity, I often discussed with other women graduate students the barriers they perceived in advancing through academia, and ways in which they thought they could mitigate some of these challenges. This kind of "me-search" proved to be a worthwhile endeavor. Jones, Torres, and Arminio (2014) stated:

There often is, and should be, a relationship between the researcher and the researched. This reflects the passion that later becomes the research question. Critics of qualitative research often refer to this relationship as bias; however, this is a strength of qualitative inquiry. (p.11)

Indeed, I believe these experiences led me to formulate the research questions of this study and this is not a limitation. Rather, it enabled me to explore a phenomenon in depth with other women who were making meaning of their career choices and ultimately, conceive of ways to support other doctoral students in this process.

The findings from this study show the complexity in which women doctoral students make meaning of their career choices. Although women have made tremendous strides in doctoral degree attainment, especially in the social science fields, this study highlights how structural impediments in academia continue to inform women's perceptions of career choice. Pipeline models of career choice obfuscate the intricacies in which women make meaning in academia, especially the challenges of tenure, unsupportive and often opaque policies regarding motherhood/parenting in the academy, and their own identities. Institutions - academia and industry alike - must make systematic changes to support traditionally marginalized identities, rather than make piecemeal, individual changes. It is my hope that this study critically examined the barriers women perceive regarding their career choices, but also drew attention to opportunities and possibilities for reimaging supports regarding career choice for women in academia.

## Appendices

## Appendix A: Initial Recruitment Email to Participants

Hello,
You may be aware that women now earn more undergraduate and graduate degrees than men, and this is especially true for the fields of liberal arts and education. Many of these fields have been majority-female for over twenty years, more information regarding their experiences is warranted. I am leading a research study regarding the experiences and career choices of women doctoral students in majority-female fields I am interested in the ways in which these women make meaning of their experiences and environment and their career choices and pathways.

If you are at least $\mathbf{1 8}$ years old, self-identify as a woman, and are currently enrolled in a doctoral program in the liberal arts or education at UT Austin, I would like to invite you to participate in my research study. I ask that you complete an introductory, demographic survey, which will take approximately 5 minutes to complete, at the link below. After completing the survey, I will follow up with participants to arrange interviews and focus groups to learn more about your experience, if you indicate an interest in doing so. Your responses will be confidential. Your participation is completely voluntary, and you are free to terminate your participation in the study at any time. Information on your consent to participate in this research, along with the survey link and password, is attached to this message.

Your participation is important to understand the ways in which women understand their doctoral experience and perceptions of career choice. Thank you in advance for your time and help with this project.

Survey link
(or cut and paste:

Best Regards,
Laura Struve, M.A.
Ph.D. Candidate, Department of Educational Administration
The University of Texas at Austin
614.404.2618

Struve@utexas.edu

## Appendix B: IRB Consent Form Participate in Research

## IRB USE ONLY

Study Number: 2016-08-0011
Approval Date: 10/28/2016
Expires: 09/01/2017

## Identification of Investigator and Purpose of Study

You are invited to participate in a research study, entitled Career Choice in the New Majority: A Case Study. The study is being conducted by Laura Struve, Department of Educational Administration of The University of Texas at Austin, 1912 Speedway, \#310 Austin, TX 787121604, 614-404-2618, struve@utexas.edu.

The purpose of this research study is to examine the career choices of women doctoral students in the context of a female-majority field. Your participation in the study will contribute to a better understanding of the different influences doctoral women in majority female fields attribute to their career choices. You are free to contact the investigator at the above address and phone number to discuss the study. You must be at least 18 years old to participate.

If you agree to participate:
Complete a 10 -minute survey about your background information and current role as a woman doctoral student in a majority-female discipline.

You may be asked to participate in an audio-recorded individual interview about your position with the university lasting no longer than 2 hours

You may be asked to participate in an audio-recorded focus group about career choices for women like yourself lasting no longer than 2 hours

You will not be compensated.
This study will enroll up to 30 participants in this study.

## Risks/Benefits/Confidentiality of Data

There are no known risks. However, if you should indicate that you are experiencing distress of some kind, the researcher will provide referral/contact information to the appropriate psychological/counseling resources that are available. There will be no costs for participating, nor will you benefit from participating. Your participation in this study is confidential. Your name and email address will be kept during the data collection phase for tracking purposes only. A limited number of research team members will have access to the data during data collection. A pseudonym will replace your name on all study materials. Identifying information will be stripped from the final dataset. Your subject identifiable data will be destroyed one year after the study is complete.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

If you choose to participate in the interview and focus group, you will be audio recorded. Any audio recordings will be labeled with pseudonyms only, stored securely in a cloud-based storage platform, UT Box, and only the research team will have access to the recordings. Following transcription of the interviews, audio recordings will be destroyed.

## Participation or Withdrawal

Your participation in this study is voluntary. You may decline to answer any question and you have the right to withdraw from participation at any time. Withdrawal will not affect your relationship with The University of Texas in anyway. If you do not want to participate either simply stop participating or close the browser window.

If you do not want to receive any more reminders, you may email me at struve@utexas.edu.

## Contacts

If you have any questions about the study or need to update your email address contact the researcher Laura Struve at $\mathbf{6 1 4 . 4 0 4 . 2 6 1 8}$ or send an email to struve@utexas.edu. This study has been reviewed by The University of Texas at Austin Institutional Review Board and the study number is 2016-08-0011

## Questions about your rights as a research participant.

If you have questions about your rights or are dissatisfied at any time with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 4718871 or email at orsc@uts.cc.utexas.edu.

If you agree to participate, click on the following [link]

Thank you.
Please print a copy of this document for your records.

# Appendix C: IRB Consent Form Focus Group 

## IRB USE ONLY

Study Number: 2016-08-0011
Approval Date: 10/28/2016
Expires: 09/01/2017

## Consent to Participate in Research

## Identification of Investigator and Purpose of Study

You are invited to participate in a research study, entitled Career Choice in the New Majority: A Case Study. The study is being conducted by Laura Struve, Department of Educational Administration of The University of Texas at Austin, 1912 Speedway, \#310 Austin, TX 78712-1604, 61-404-2618, struve@utexas.edu.

The purpose of this research study is to examine the career choices of women doctoral students in the context of a female-majority field. Your participation in the study will contribute to a better understanding of the different influences doctoral women in majority female fields attribute to their career choices. You are free to contact the investigator at the above address and phone number to discuss the study. You must be at least 18 years old to participate.

If you agree to participate:
You will participate in an audio-recorded focus group about your role as a doctoral student and your perceptions of your career choices, lasting no longer than 2 hours. You will be provided with preliminary findings regarding the study, which integrates previous semi-structured interviews with the researcher's understandings of how career choices are formed for doctoral students.
You will not be compensated.
This study will enroll up to 30 participants in this study.

## Risks/Benefits/Confidentiality of Data

There are no known risks. However, if you should indicate that you are experiencing distress of some kind, the researcher will provide referral/contact information to the appropriate psychological/counseling resources that are available. There will be no costs for participating, nor will you benefit from participating. Your participation in this study is confidential. Your name and email address will be kept during the data collection phase for tracking purposes only. A limited number of research team members will have access to the data during data collection. A pseudonym will replace your name on all
study materials. Identifying information will be stripped from the final dataset. Your subject identifiable data will be destroyed one year after the study is complete.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

If you choose to participate in the interview and focus group, you will be audio recorded. Any audio recordings will be labeled with pseudonyms only, stored securely in a cloudbased storage platform, UT Box, and only the research team will have access to the recordings. Following transcription of the interviews, audio recordings will be destroyed.

## Participation or Withdrawal

Your participation in this study is voluntary. You may decline to answer any question and you have the right to withdraw from participation at any time. Withdrawal will not affect your relationship with The University of Texas in anyway. If you do not want to participate either simply stop participating or close the browser window.

If you do not want to receive any more reminders, you may email me at struve@utexas.edu or follow this link to opt out of future emails.

## Contacts

If you have any questions about the study or need to update your email address contact the researcher Laura Struve at 614.404.2618 or send an email to struve@utexas.edu. This study has been reviewed by The University of Texas at Austin Institutional Review Board and the study number is 2016-08-0011.

## Questions about your rights as a research participant.

If you have questions about your rights or are dissatisfied at any time with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

Thank you.
Please print a copy of this document for your records.

## Appendix D: Recruitment Survey

## Women Doctoral Students and Career Choice in Majority-Female Fields

For your reference, the consent form can be found here.
Are you currently enrolled in a doctoral program at UT Austin?
Yes
No
If No Is Selected, Then Skip To End of Survey
In which department/program are you enrolled?
Do you identify as a woman?
Yes
Maybe
No

In what year were you born?
With which race(s) do you identify? (You can select multiple)
African-American/Black
Latino/Hispanic
White
Asian/Pacific Islander
Native American
Other (Please specify) $\qquad$
How would you describe your sexual orientation?
Heterosexual
Bisexual
Homosexual
Prefer not to say
Other (please specify) $\qquad$
What is your marital status?
Never married
Separated
Widowed
Married
Partnered
Other (please specify)

How many adults are in your household?
How many children are in your household?
If you could estimate, what do you believe your total family income was while you were growing up?
Under \$35,000
\$35,001 - \$50,000
\$50,001 - \$75,000
\$75,001-\$100,00
\$100,001 +
What was the highest level of education that your mother completed?
High School
Undergraduate (bachelor's degree)
Master's degree
Doctoral degree (ex: Ph.D., M.D., Ed.D., J.D.)
Other (please specify) $\qquad$
Overall, how would you describe your family's income status while you were growing up?
Low Income
Low-Middle Class
Middle-Upper Class
Upper Class
In what field did you earn your bachelor's degree?
From which institution did you earn your bachelor's degree?
Have you earned a master's degree?
Yes
No
Display This Question:
If Have you earned a master's degree? Yes Is Selected
From which institution did you earn your master's degree ?
What is the highest degree you have completed?
Bachelor's degree
Master's degree
Other (Please specify) $\qquad$

For how many semesters have you been enrolled in your doctoral program?
Have you reached candidacy in your program (the Graduate School has officially
approved your application for Ph.D. candidacy), or you do you anticipate doing so in the next six months?
Yes
Maybe
No
From which source is your primary means of financial support?
Graduate Research Assistantship (GRA)
Teaching Assistantship (TA) or Assistant Instructor (AI)
University or Departmental Fellowship
Outside Grant or Scholarship
Loans
Other (please specify) $\qquad$
If you wish to participate in an interview and/or focus group regarding this study, please provide your first name and email address below and the researcher will contact you to set up time to meet.

## Appendix E: Doctoral Student Interview Protocol

| Warm-up <br> Introduce myself, background, goals of research study, IRB. <br> 1. Can you please describe your background and your path toward higher education? <br> a. What is your specialization/area of focus in your field? <br> b. How about your choice to attend this university for your doctoral degree? | Research Question <br> 2 <br> 2 |
| :---: | :---: |
| 2. Tell me...what messages did you consider when choosing your career path? <br> a. Ex: messages from your mother, parents, school... <br> b. Are there any tv shows or other media that informed your perception of your future career? <br> 3. What do you hope to gain from this area of focus or specialization? <br> 4. How would you describe your career goals when you entered graduate school? <br> a. Have they changed over time? <br> b. If so, in what ways? <br> 5. How would you describe your career goals now? <br> 6. If you could speculate, what will you be doing in 10 years, in relation to: <br> a. Your career? <br> b. Your family? <br> c. Your personal life? <br> 7. If I may ask, do you anticipate having children in the future? <br> a. How do you see your career interacting with your role as a parent? <br> b. Do you consider any obstacles or challenges related to parenting and your intended career? <br> i. What are the ways you may mitigate these challenges? | 2 <br> 1.c. <br> 1. a-c. <br> 1. a-c <br> 1. a-c <br> 1. a-c <br> 1. a. <br> 1. a-c \& 2 . |

8. Are there events or experiences you've had that influenced your career decisions, either reaffirming or changing your decisions?
9. Do you perceive any barriers related to pursuing your intended career path? If yes, what are they?
10. Do you know of someone who holds a career position similar to that which you hope to attain?
a. If so, do you see similarities between yourself and them?
b. What do you like about their position?
c. What, if anything, do you dislike about their position?
11. What, if any, mentors have you had during your doctoral career?
12. How would you describe your relationship with your doctoral advisor?
13. How would you describe the climate of
14. a-c \& 2 .
15. 



1. a.
a.

2. There are multiple aspects to an identity, like gender, race/ethnicity, class, sexual orientation, etc. If you could speculate, how do you see aspects of your identity informing your experiences in your doctoral program?
a. Your career choice?
3. Are any of these aspects of your identity more salient than others?
a. Why do you think this is?
4. If you could offer advice to someone entering your program, (or your younger self) what advice would this be?
5. 
6. a-c
7. Is there anything else you would like to share or that would be helpful for me to know?
8. Is there a question I did not ask you that you consider would have been interesting, controversial, or difficult to be asked?
9. Is there a question that you find difficult to answer during this interview?
10. Is there something we did not discuss about your career or experience in your opinion would be important for you to share with me?

## Appendix F: Focus Group Interview Protocol



|  | regarding your experiences related to your <br> career choice, what would they be? |
| :--- | :--- |
| 2)If you could identify suggestions or <br> recommendations to organizations at your <br> university regarding doctoral women's |  |
| career choice, what would they be (for |  |
| instance, the Graduate Student Senate, the |  |
| Graduate School, departmental |  |
|  |  |
| organizations)? |  |

## Appendix G: TAbles

## Table G1

Participant Academic Information

| Name | Department | Highest <br> Degree <br> Earned | \# <br> Semesters <br> Enrolled | Reached Candidacy | Undergraduate Institution Classification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lynn | Sociology | Master's | 11 | Yes | Doctoral: Highest Research Activity |
| Claire | Sociology | Master's | 5 | No | Doctoral: Highest Research Activity |
| Nicole | Sociology | Master's | 9 | Yes | Doctoral: Highest Research Activity |
| Angelica | Sociology | Master's | 1 | No | Doctoral: Highest Research Activity |
| Viktoria | Sociology | Bachelor's | 3 | No | Doctoral: Highest Research Activity |
| Gabrieal | Sociology | Master's | 11 | Yes | Doctoral: Highest Research Activity |
| Christina | Sociology | Master's | 3 | Yes | Doctoral: Highest Research Activity |
| Michelle | Sociology | Master's | 7 | Yes | Doctoral: Highest Research Activity |
| Maya | Sociology | Master's | 5 | No | Doctoral: Highest Research Activity |
| Yumi | Sociology | Master's | 15 | Yes | N/A |
| Andrea | Sociology | Master's | 5 | No | Doctoral: Higher Research Activity |
| Judy | Sociology | Master's | 7 | No | Master's: Larger Programs |
| Sheela | Sociology | Master's | 3 | No | N/A |
| Lauren | Sociology | Master's | 13 | Yes | Master's: Larger Programs |
| Chelsea | Psychology | Master's | 5 | No | Doctoral: Highest Research Activity |
| Rebecca | Psychology | Master's | 5 | No | Doctoral: Highest Research Activity |
| Elizabeth | Psychology | Master's | 7 | Yes | Doctoral: Highest Research Activity |
| Melanie | Psychology | Bachelor's | 5 | No | Doctoral: Highest Research Activity |
| Marissa | Psychology | Bachelor's | 5 | No | Doctoral: Higher Research Activity |
| Leah | Psychology | Master's | 11 | Yes | Doctoral: Highest Research Activity |
| Sarah | Psychology | Bachelor's | 5 | Yes | Doctoral: Higher Research Activity |
| Samantha | Psychology | Bachelor's | 3 | No | Doctoral: Higher Research Activity |

Source: http://carnegieclassifications.iu.edu/lookup/lookup.php

Table G2
Tenure Status at Midwestern University, Psychology Department, 2015

| Tenure Status | Male | Female | \% Women | Total |
| :--- | :---: | :---: | :---: | :---: |
| Tenured | 26 | 16 | 38 | 42 |
| Tenure Track | 3 | 2 | 40 | 5 |
| Non-tenure | 8 | 8 | 50 | 16 |
| Track | $\mathbf{3 7}$ | $\mathbf{2 6}$ | $\mathbf{4 1}$ | $\mathbf{6 3}$ |
| Total |  |  |  |  |

Source: Office of Institutional Research, 2015

## Table G3

Tenure Status by Women's Race/Ethnicity in Psychology Department, 2015

| Tenure Status | White |  | Hispanic |  | Black only |  | Black (2 or more) |  | Asian |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% | n | \% | n | \% | n | \% | n | \% |
| Tenured | 15 | 60\% | 0 | 9\% | 0 | 0\% | 1 | 4\% | 0 | 0\% |
| Tenure track | 1 | 4\% | 0 | 0\% | 0 | 0\% | 0 | 0\% | 1 | 4\% |
| Nontenure track | 7 | 28\% | 1 | 0\% | 0 | 0\% | 0 | 0\% | 0 | 0\% |
| Total | 18 | 92\% | 1 | 4\% | 0 | 0\% | 1 | 4\% | 1 | 4\% |

Source: Office of Institutional Research, 2015

## Table G4

Tenure Status at Midwestern University, Sociology Department, 2015

| Tenure Status | Male | Female | \% Woman | Total |
| :--- | :--- | :--- | :--- | :--- |
| Tenured | 17 | 13 | 43 | 30 |
| Tenure track | 4 | 2 | 33 | 6 |
| Non-tenure 1 7 <br> track   | $\mathbf{2 2}$ | $\mathbf{2 2}$ | 88 | 8 |
| Total | $\mathbf{5 0}$ | $\mathbf{4 4}$ |  |  |

Source: Office of Institutional Research, 2015

Table G5
Tenure Status by Women's Race/Ethnicity in Sociology Department, 2015

| Tenure Status | White |  | Hispanic |  | Black only |  | Black (2 or more) |  | Asian |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% | n | \% | n | \% | n | \% | n | \% |
| Tenured | 10 | 45\% | 2 | 9\% | 0 | 0\% | 0 | 0\% | 1 | 5\% |
| Tenure track | 2 | 9\% | 0 | 0\% | 0 | 0\% | 0 | 0\% | 0 | 0\% |
| Nontenure track | 6 | 27\% | 0 | 0\% | 0 | 0\% | 0 | 0\% | 1 | 5\% |
| Total | 18 | 82\% | 2 | 9\% | 0 | 0\% | 0 | 0\% | 2 | 9\% |

Source: Office of Institutional Research, 2015

Table G6
Post-graduate Job Placements for Ph.D.s from 2002-2007

| Department | TotalPh.D.s | AAU-Institutions |  |  | Non-AAU Institutions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | TenureTrack | $\begin{aligned} & \text { Post- } \\ & \text { doc } \\ & \hline \end{aligned}$ | \% | TenureTrack | Postdoc | \% |
| Psychology | 98 | 5 | 12 | 17.3 | 13 | 24 | 37.8 |
| Sociology | 76 | 7 | 9.2 | 18.4 | 36 | 2 | 50 |

Source: College of Letters and Sciences Website, 2015

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[^0]:    ${ }^{1}$ Researchers have use "majority-female", "female majority" rather than "majority-women", or "women majority." I changed this terminology to "majority-women" or "women majority" throughout this study. See footnote 6 for working definition of "woman/women." When reporting data, I sometimes used female, to reflect the source terminology, but described data using "woman/women."
    ${ }^{2}$ The field of economics is considered to resemble scientific fields, as women were awarded just $30 \%$ of doctorates (Ginther \& Kahn, 2006). Moreover, if economics is excluded from the social sciences, almost 60 percent of doctorates are now being awarded to women (Ginther \& Kahn, 2006).

[^1]:    ${ }^{3}$ Jason Rhody coined the term alt-ac in 2009, according to Nowviskie, 2014.
    ${ }^{4}$ Doctoral student and Ph.D. student are used interchangeably in this study.
    ${ }^{5}$ NCES, NSF and other agencies report data as "majority-female." See Footnote 6 for clarification.

[^2]:    ${ }^{6}$ Generally, the categorization of woman corresponds with socially accepted behaviors and characteristics associated with females. In this study, the participant identifies as a woman, but it is not a biological marker of identity. Moreover, the experience of being a woman is fundamentally different than being a man.
    ${ }^{7}$ Those with notable commercial success include Sheryl Sandberg, Dr. Anne Marie Slaughter, Lisa Belkin, all of whom are highly educated, married (or widowed), heterosexual White women.

[^3]:    ${ }^{8}$ In his book Sex in Education; Or, a Fair Chance for Girls (1884), Harvard physiologist Edward H. Clarke postulated education forced blood away from women's brains, robbing their reproductive organs and rendering irreparable harm on their uteri. He stated "identical education of the two sexes is a crime before God and humanity, that physiology protests again, and that experience weeps over" (p.127).

[^4]:    ${ }^{9}$ Employees must also have worked for the employer for at least 12 months and have worked at least 1,250 hours of service in this 12 -month period. This would effectively disqualify relatively new employees and graduate students from utilizing this benefit.

[^5]:    10 The authors did not provide specific percentages for each institutional type desired.

[^6]:    12 Lent and colleague use "environmental" and "contextual" influences interchangeably. For the purposes of this study, the term "contextual" will be used.

[^7]:    13 The official Carnegie classification is "highest research activity, public university". However, "tier one" is used interchangeably for ease of reading.

[^8]:    14 Included Asian, Black only, and Hispanic, designated by OIR.

[^9]:    ${ }^{15}$ Identified as Black, 2 or more; Hispanic; or Asian

[^10]:    ${ }^{20} \mathrm{Or}$, longer hiding alt-ac or post-ac aspirations. Context of quote follows.

[^11]:    ${ }^{21}$ Near-peers who are close to their personal, professional, and social level, whom the junior peer can rely on.

[^12]:    22 The only mention of diversity on the webpage is recognizing the diversity of countries represented in students and faculty.

[^13]:    ${ }^{23}$ There are differing opinions regarding Teach for America's approach, which selects high achieving (often Ivy League educated) college graduates in public schools that often do not mirror the SES, neighborhoods, or race/ethnicities of their own experiences. It has been likened to "campus colonialism" (Edmin, 2016); a "crusade" (Rich, 2015); "cultural tourists" (Hopkinson, 2010).

[^14]:    ${ }^{24}$ In 360 performance feedback systems, employees are provided with feedback about their job performance from multiple people with whom the employee works: peers, subordinates, supervisors to deliver a composite account of performance and goals (Church \& Bracken, 1997).

