FIGURED WORLDS: A COMPARATIVE ANALYSIS OF INTERNATIONAL DOCTORAL

STUDENTS' EXPERIENCES IN THE U.S. ACADEMIC SETTING

A Dissertation
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By

Corina Todoran

In Partial Fulfillment of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY

Major Program:
Education
Option:
Occupational and Adult Education

May 2018

Fargo, North Dakota

North Dakota State University
Graduate School

Title

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The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota

State University's regulations and meets the accepted standards for the degree of

DOCTOR OF PHILOSOPHY

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ABSTRACT

Over the past decade, due to globalization and expansion of higher education institutions worldwide, the U.S. has positioned itself as the top choice for students pursuing university degrees abroad, with a record of 1,078,822 international students in 2016-2017 (Institute of International Education, 2017). Nonetheless, a 5.5% decline in new international graduate student enrollment was reported for fall 2017 (National Science Foundation, 2018), a trend that might have been influenced by changes in the current political climate. Particular attention should be given to international doctoral students because they make significant contributions to U.S. campuses, communities, and research enterprises. Thus, education stakeholders should attempt to understand these students' experiences in the socially and culturally constructed, or "*figured world*," of academia (Holland, Lachicotte, Skinner, & Cain, 1998).

The figured world of advising, considered as a branch of the figured world of academia, is explored in this qualitative study informed by hermeneutic phenomenology. More specifically, this study examines how international doctoral students experience relationships with their advisors across disciplines. Twenty-five international doctoral students at a Midwestern university participated in semi-structured, in-depth interviews. Out of this sample, nineteen students also participated in four heterogeneous focus groups and twenty-three shared photographs that best represented their experiences as international doctoral students. Data analysis was a constant process of interpretation and meaning-making. The findings were focused around three pillars: student motivation to pursue a doctoral degree in the U.S., advisor-advisee relationship, and student navigation of the advisor-advisee relationship across disciplines. The findings revealed that advising is considered by international doctoral students as an intercultural and inter-educational experience. Under this generic umbrella, five themes

emerged: advising as mentorship, advising as support, and advising as caring —considered as novel approaches to advising that celebrates cultural diversity; the other two categories — advising as employment and advising as a dysfunctional relationship—are presented as epic advising approaches that emphasize more hierarchical relationships. This study proposes a model of the figured world of advising that draws on Mikhail Bakhtin's (1981) notions of "novel" and "epic" as two opposing genres. Nonetheless, collision of the advisor's different approaches is possible and positive.

ACKNOWLEDGEMENTS

Words cannot describe how grateful I am to the many individuals whose support led me to completing my doctoral journey as an international scholar. Throughout my studies, there were times I succeeded because others trusted my abilities more than I did and for that I am forever thankful. Pursuing a doctoral degree while conducting research and teaching in a foreign country has been the most enriching chapter of my life so far. It has not been easy to live far from home and adapt to new social, cultural, and academic environments, but it has been rewarding; the experiences I have accumulated have shaped not only my scholarly identity, but also who I am today.

I would like to extend my utmost gratitude to my advisor, Dr. Claudette Peterson, and my committee members, Dr. Nate Wood, Dr. Carrie Anne Platt, and Dr. Christopher Whitsel. Thank you for your patience, the time and efforts you invested in me in order to accomplish this goal! I would also like to acknowledge the College of Human Development & Education and the Graduate School for their continued support during my studies. I am grateful for having had the opportunity to work with and learn from many of the mentors who have guided me over the past years: Dr. Claudia Tomany, Dr. Brandy Randall, Dr. Elizabeth Roumell, Dr. Florin Salajan, Dr. Erika Beseler Thompson, Dr. Timothy Alvarez, Mrs. Kristina Caton, Mr. Enrico Sassi, and many other faculty, colleagues, and administrators whose commitment to higher education has inspired me to be part of the world of academia.

Many thanks to my special friends in the U.S.: Denisa Predescu, Elizabeth Maher, Lisa Krumwiede, Lisa Hauck; and back home: Denisa Ciobăniță (Varga), Lavinia Pop, Ana Timiş. You have provided me the much-needed emotional support and encouragement to finish this degree and I hope that you all know how important you are to me.

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Most of all, I would like to thank my close and extended family, especially my parents, Dorina and Constantin Todoran, and my brother Adi, for their constant support over the past five years. Even though there has been a large physical distance between us and I was not always there for you, your love, trust, and appreciation for what I do have allowed me to persist and become stronger. Dear mom and dad, thank you for always encouraging me to trust and acknowledge the power of education!

Finally, I am forever thankful to my study participants who took the time to share with me their unique life stories. The long and thoughtful conversations about what it means to live and study abroad gave life to this study. This dissertation would not have been so meaningful without their contribution.

DEDICATION

I dedicate this dissertation to the twenty-five international doctoral students who taught me what

it means to be human; their narratives and commitment to education have impacted me in so

many ways. May all your dreams come true once you end your doctoral journeys!

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CHAPTER 1. INTRODUCTION

Today, more than ever, the higher education setting encourages educators and

stakeholders to demonstrate a commitment to creating an equitable and positive environment in

which all students succeed. As part of the United States education system, stakeholders should

nurture safe educational contexts for all students and assist them in the successful completion of

their degrees. In addition, globalization processes including the expansion of resources and

cultural patterns across national borders have influenced the educational contexts in which U.S.

universities operate (Taylor & Cantwell, 2015). Indeed, one of the main implications is an

accelerated increase in the international student population across the universities in the U.S., as

seen in the past decade.

The most recent Open Doors Report released in 2017 by the Institute of International

Education indicates that 1,078,822 international students were enrolled at U.S. colleges and

universities in 2016-2017, 85% more than were reported a decade ago. It also shows that

international students represent just over 5% of the students enrolled at U.S. higher education

institutions. 391,124 of these students are enrolled in graduate programs, and 124,705 are

pursuing doctoral degrees. The 2017 Open Doors Report points out that international students'

presence in the U.S. had a very positive economic impact. For example, according to the U.S.

Department of Commerce, in 2016 alone international students contributed more than $39 billion

to the U.S. economy. Moreover, foreign students contribute to the United States' growing body

of scientific research as they prepare to be part of a globally competent workforce (Galama &

Hosek, 2009; Maskus, Mobarak, & Stuen, 2013). Accordingly, stakeholders in education such as

faculty, staff, and policymakers should pay attention to these students' educational journeys and

the factors that might impact their academic success because they bring important contributions to the U.S. economy, scientific and technical research, and to U.S. classrooms and communities.

Indeed, these numbers overwhelmingly tell the story of students who have changed the face of the U.S. universities through their participation in classes, research, and research communication. These numbers also tell the story of students who return to their native countries changed by their experiences here and become stewards of the U.S. higher education. However, these numbers do not tell all the stories of the obstacles and barriers international students must overcome in order to successfully complete a degree in the U.S. Over the years, researchers in the field of education have been concerned with studying these students' experiences; it was pointed out in numerous studies that the fundamental issues that impact international students' successful completion of their programs are related to socio-cultural adjustment (Erichsen, 2009; Kim, 2006; Klineberg & Hull, 1979; Ku, Lahman, Yeh, & Cheng, 2008; Lee & Rice, 2007; Lee, 2011; Ogbonaya, 2010; Olivas & Li, 2006; Poyrazli & Grahame, 2007; Poyrazli & Lopez, 2007; Sovic, 2008; Wang, 2004). As previously noted in the 2017 Open Doors Report, a large proportion of doctoral students are international; thus it is important for hosting universities to understand how they can support these students because they add great value both to the university and the community through their diverse perspectives, new knowledge creation, financial support, and work performance (Maskus et al., 2013). Klineberg and Hull (1979) argued that "special attention should be paid to the adaptation process undergone by those students who journey from one foreign country to another in search of an education" (p. 9). While Klindberg and Hull's comments are appropriate and even timely, it is important to note that these arguments were being made 40 years ago when the international student population was a fraction of what it is today.

Yet, in spite of the rapid growth of the international student population, research on international doctoral students' academic relationships, transformative learning experiences, and identities is still scarce. Special attention should be given to international doctoral students as they comprise a significant proportion of graduate students in the U.S., despite the fact that most of their previous education was accomplished elsewhere. Their integration into doctoral programs may be slower or more difficult *because* of the diversity in their previous educational experiences. In comparison to their U.S.-born peers, international doctoral students "must often spend a great deal of time outside of class processing course content covered in class because of language and cultural issues" (Jang, Woo, & Henfield, 2014, p. 569). In order to better support these emerging scholars, stakeholders in education should be aware of and willing to understand their experiences and meaning-making processes. This kind of knowledge can lay the foundation for international doctoral student integration onto U.S. campuses and providing a more supportive and nurturing learning environment toward the completion of their programs.

Furthermore, international doctoral students are adult learners aiming to develop both professionally and personally; because the doctorate is a terminal degree, their intrinsic and extrinsic motivation and their academic trajectories are more complex than for international undergraduate students. Because international doctoral students are already educated, mature adults, and they have specific educational goals, they make a contribution to the U.S. educational system in various ways: commercial considerations and academic reasons such as diversifying the student population (Chien, 2013) and developing partnerships with other international professionals. In addition, they are also filling the gap of human resources in particular disciplines, such as STEM (Galama & Hosek, 2009; Maskus et al., 2013; Taylor & Cantwell, 2015).

Supporting students is the main responsibility of all higher education institutions and knowing the variety of issues that international students often face in doctoral education provides an in-depth understanding of these students' needs and hopes. Moreover, the recent political climate and changes in immigration regulations have affected U.S. graduate education, thus new international enrollment for fall 2017 has declined by 5.5% compared to 2016 (National Science Foundation, 2018). In the long run, this decline in enrollment will potentially reduce the number of doctorates awarded by universities and affect their research productivity, classification, and reputation. Hence, the graduate education community should be engaged in supporting the success of international students and scholars in the U.S. for both recruitment and retention purposes.

Statement of the Problem

International doctoral students are adult learners who make tremendous contributions to U.S. campuses, workforce, and communities; nevertheless, the literature has overlooked the complexity of these students' experiences, particularly their advising relationships that are a critical factor in navigating a doctoral program. Indeed, although examining advising at the doctoral level is a relatively new phenomenon, the interest in this topic has been growing over the past few years. However, there are few studies specifically addressing the advisor-advisee relationship concerning international doctoral students. Why, despite a decade of accelerated enrollment growth and demonstrated commitment to enriching the U.S. academic dialogue, was this segment of student population not embedded in more rigorous research regarding academic relationships?

Purpose of the Study

As Gardner (2008) noted, research must explore the variety of cultures and contexts representing the diversity of students in doctoral education. Accordingly, in order to provide a window for understanding existent issues and ways to meet the needs of this underrepresented student population, this dissertation focuses on the transformative experiences of international doctoral students and the complexity of their relationships with their advisors in the academic "worlds" in which they participate. This study also discusses critical aspects about the experiences of international doctoral students across disciplines, while analyzing the differences and similarities that might arise as they navigate their doctoral journeys.

This study examines how international doctoral students build systems of meaning and perform in the "figured world" of academia and what they experience as they develop relationships with their advisors. Furthermore, the study is intended to investigate whether students' fields of study and doctoral programs influence their academic journeys, and to explore the commonalities and differences of these students' experiences across disciplines.

Research Questions

In order to achieve the purpose of the study, the following overarching research question was formulated:

- How do international doctoral students experience relationships with their advisors?

The two sub-questions are:

- o How do those relationships impact how they make sense of and navigate their academic and cultural worlds in which they find themselves?

- o What are the commonalities and differences in these students' experiences across disciplines?

Definition of Terms

In order to ensure the clarity of the language used in this disquisition, it is useful to define several key terms:

International Doctoral Students

International students are individuals who enter in the U. S. on a student or exchange visitor non-immigrant visa and who usually face various kinds of legal restrictions (Lee, 2011). For the purpose of this study, research subjects are considered those students who entered the U.S. on an F-1 or J-1 visa, according to the U.S. Citizenship and Immigration Services (USCIS) classification of non-immigrant status. International doctoral students are considered students pursuing a terminal degree.

Doctoral Advisors

Doctoral advisors are faculty who guide doctoral students in their programs; they are also called dissertation chairs or doctoral supervisors. Barnes and Austin (2009) indicated that doctoral advisors are a source of reliable information, advocates, role models, departmental and occupational socializers. Over the years, research has pointed out the critical role that advisors play in doctoral education and that it is an important variable associated with academic success (Gardner, 2008; Golde, 2000; Lovitts, 2001; Nettles & Millett, 2006; Schlosser & Gelso, 2005). Najjar (2015) summarized the roles of a successful advisor as follows:

- to provide reliable information

- to socialize the student in departmental and occupational norms

- to advocate for the student

- to model appropriate professional behavior. (p. 17)

STEM Doctoral Programs

For the purpose of this study, the term "STEM" refers to Science, Technology, Engineering, and Mathematics doctoral programs, and also to Applied Science programs. Thus, STEM international doctoral students are students enrolled in one of the doctoral programs in these fields. The research subjects for this study include eighteen international students attending STEM-related doctoral programs at a Midwestern university.

Arts, Humanities, and Social Sciences Doctoral Programs

These disciplines usually fall under the generic umbrella of "social sciences" or "humanities"; they comprise several doctoral programs that are offered at the Midwestern university considered as research site for this study. The research subjects for this study include seven international students enrolled in several of these doctoral programs.

Figured Worlds

The concept of figured worlds was first developed by Holland, Lachicotte, Skinner, and Cain in 1998, drawing upon Bourdieu, Bakhtin, and Vygotsky. Figured worlds are settings in which individuals' identities are developed, "realm[s] of interpretation in which a particular set of characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others" (Holland et al., 1998, p. 52). In these academically and socially constructed settings, international doctoral students are introduced to prescribed roles. This study will focus on the role of advising relationships in the figured world of academia.

<p align="center">Significance of the Study</p>

This study adds critical perspectives to the existent body of literature focused on international students in the U.S. because it provides in-depth understanding about the experiences of a particular group of students whose academic journeys are not highly explored in

the literature: international doctoral students in the U.S. Doctoral education plays an essential part in higher education and high attrition rates are extremely damaging to these institutions, so there is a call to further explore the issues doctoral students might face throughout their academic journeys and to learn how to better assist them in the completion of their programs. There are a variety of challenges for international doctoral students seeking mentorship in doctoral education; thus this study seeks to reveal how stakeholders in higher education could provide a more supportive environment. In addition, while participating in this study, international doctoral students had the opportunity to reflect on their academic and cultural journeys. Students reflected and then engaged in substantial conversations about their learning experiences and identity self-perception. According to Kegan (1994), individuals' transformative learning involves critical reflection on their assumptions. Reflection is a very powerful tool for adult learners who are critically reflecting on their lives (Brookfield, 1995); thus while choosing photos to represent their experiences and participating in the interviews and focus groups, participants reflected on their transformational and intercultural experiences while navigating the figured world of academia. Hence, the significance of this study is two-fold: a) for participants this study provides a platform for conversation and facilitates reflection on their experiences and b) it informs the graduate education community on the importance of mentoring international doctoral students across disciplines.

Conceptual Framework

This research study is informed by a developing body of literature focused on the concept of figured worlds (Holland et al., 1998), transformative learning theory (Mezirow, 1978; 1991; Mezirow, 2000), and various research studies exploring international students' experiences in the U.S. academic setting. In addition, the researcher's own personal experience as an international

doctoral student in the U.S. informs this conceptual framework. Thus far, my personal journey has cultivated my empathy and interest in studying issues related to international doctoral students' experiences, and I contend that research on this topic reveals how various groups in the academe can help students who deal with multiple layers of cultural novelty and who experience personal transformations during their studies. While these experiences are particularly salient and compelling for many international students, the conceptual framework is also applicable to the experiences of doctoral students across the board. A thorough description of the conceptual framework is presented in the literature review.

Figured Worlds Concept

The concept of figured worlds, developed by Holland et al. (1998), is a theory of self and identity that can be strongly connected to the lived experiences of international doctoral students. This concept outlines that individuals are considered subjects of constructed worlds, and these worlds are sites where identities are developed (Urrieta, 2007). Thus, figured worlds are seen as socially constructed settings in which students' identities are forming; relationships play an essential role in this ongoing process. Also, it is important to pay attention to the figured worlds in which international students perform as these worlds are organized by cultural means or meaning systems (Holland et al., 1998), where people are introduced to prescribed roles which might not be very familiar to international students. This poses a challenge for students seeking answers or mentorship in the academia. Accordingly, in this study I will focus on the figured worlds of mentoring relationships.

Transformative Learning Theory

Transformative learning theory can be used as a lens to examine international doctoral students' cultural expectations and adjustment in figured worlds. Introduced by Jack Mezirow in

1978, transformative learning theory is generally understood as the process of learning and integrating new frames of reference (Mezirow 1978, 1991; Mezirow; 2000; Taylor, 1997). It thus provides a powerful framework that can be used to explore how international students' adjustment to the culture of the host country can catalyze personal transformations (Erichsen, 2009).

According to Mezirow (1991), the transformational process begins with a disorienting dilemma, an event that for international students might be interpreted as living in an unknown setting, and all that implies from a cultural, academic, and social standpoint (Ritz, 2010). Students realize that their cultural context and things that were taken for granted are being replaced by a foreign context, and they face a series of difficulties such as language barriers, cultural and social adjustment, homesickness, and other adjustment issues (Lee, 2011; Ku et al., 2008). For this reason, it may be useful that people surrounding them are aware of the struggles international students are facing, and the transformations that occur throughout this process of learning to adjust to living in a foreign setting. In this context, international students are comparing socio-cultural worlds and educational systems, merging their identities (Erichsen, 2009) and constructing meaning through their personal experiences, while cultivating cultural competencies. The new academic and social worlds in which they function can be thought of as what Holland et al., (1998) call figured worlds. Thus, transformative learning can occur in these socially and culturally constructed settings in which international doctoral students are forming relationships with their faculty.

Dissertation Outline

This dissertation is divided into six chapters and appendices. This first chapter introduced the rationale for this study and statement of the problem, its purpose and research questions, and

a brief definition of frequent terms used in this study. It then stressed the significance of studying

international doctoral students' advising relationships in U.S. academia and outlined the

conceptual framework. Chapter two presents a comprehensive review of the literature regarding

international students, the concept of figured worlds and transformative learning theory. The

third chapter describes the methodology and procedures used, how the study was designed, its

theoretical orientation and researcher's perspective, data collection and data analysis procedures.

Chapter four reports the findings concerning international doctoral students' motivations to

pursue doctoral degrees in the U.S., how they navigate the relationships with their advisors, and

how their experiences are influenced by their program structure and culture. Chapter five

discusses the contribution brought by this study and provides a series of recommendations for

practice in higher education, potential for future research, and limitations of the study. Chapter

six is listed as coda and entails the researcher's final thoughts about this disquisition and how the

study provided a platform for participants to share their stories in a time of political tensions and

reflect on their experiences as international doctoral students.

CHAPTER 2. LITERATURE REVIEW

While developing the literature review section of this disquisition, several arguments provided by Maxwell (2005), Miles and Huberman (1994), and Ravitch and Riggan (2012) were taken into consideration. According to Ravitch and Rigan (2012), the literature review is "an active process of sense making that helps the researcher synthesize and integrate within and across various existing theories and bodies of scholarship" (p. 25); in this context, the main purpose of the literature review is learning. Ravitch and Rigan (2012) further argued that there are a series of confusions regarding the purpose of the literature review, and they suggested that researchers should be explicit about the reason why they chose a particular topic and use the literature review process in order to "develop, refine, and evolve these arguments' (p. 27). Maxwell (2005) also asserted that the literature review can be a misleading term, as it could lead to a narrow focus on the literature, has a tendency to develop a strategy of "covering the field" rather than focusing on studies and theories that are relevant to the purpose of a research study, and it could lead the researcher to only report previous research and theories proposed, instead of critically analyzing the literature. Ravitch and Rigan (2012) considered the literature review as "a process through which conceptual frameworks are developed" (p. 10) and asserted that as researchers review the literature related to a particular topic, their personal interests such as biases, epistemological assumptions, and curiosities evolve into conceptual frameworks. While developing a conceptual framework, the researchers take ownership of their studies' main concepts (Maxwell, 2005; Miles & Huberman, 1994; Ravitch & Rigan, 2012), thus they are the ones who build the structure and overall coherence of their research. As Maxwell (2005) pointed out, the conceptual framework is "something that is constructed, not found" (p. 35).

The considerations mentioned above informed the way the literature review and conceptual framework for this disquisition were developed. This literature review examines relevant studies exploring the experiences of international doctoral students in the U.S. and supports the theoretical framework that describes the variety of figured worlds (Holland et al., 1998) developed by and prescribed to these students. First, the chapter provides background information about international students in the U.S. Second, doctoral education is explored through the lens of international students' experiences in STEM and Arts, Humanities, and Social Sciences. Third, the concept of figured worlds is discussed, followed by a section examining transformative learning theory in which it is argued that international doctoral students are adult learners who might face personal transformations while studying abroad. Finally, I present the conceptual framework for my study and describe its elements. The components of the conceptual framework are supported by relevant research studies focused on international graduate students' experiences in their host country.

Background

Globalization has impacted higher education systems not only in the U.S. space, but worldwide (Altbach & Knight, 2007; Frank & Meyer, 2007; King, Marginson, & Naidoo, 2011; Meyer & Schofer, 2009; Schofer & Meyer, 2005; Taylor, Cantwell, & Slaughter, 2013; Taylor & Cantwell, 2015), and one of its main implications is international student mobility. Over the last decade, post-secondary (or tertiary) education has faced a large increase of international student mobility at the global level. UNESCO reported that in 2013 over 4.1 million students were studying abroad (UNESCO, UIS, 2016). Globalization processes, including the expansion of resources and cultural patterns across national borders, have influenced the educational contexts in which U.S. universities operate (Taylor & Cantwell, 2015). The proliferation of international

student population has played an essential part, as the U.S. remains the first choice for students pursuing tertiary education across their national borders.

International students are individuals who enter in the U.S. on a student visa with the purpose of getting an education and who are usually facing various kinds of legal restrictions (Klomegah, 2006; Lee, 2011; Tincu, 2008), as they have to adhere to particular immigration policies in order to maintain their legal status. According to USCIS, international students who wish to study in the U.S. need an F-1 (Academic student), M-1 (Vocational student), or J-1 (Exchange visitor) visa.

For the purpose of this study, F-1 and J-1 student visas were considered; M-1 student visas were not taken into consideration due to the lack of access at the research site. The information regarding the restrictions that apply to international students was gathered from the USCIS website. F-1 students need to be enrolled full-time and may not work off-campus during their first academic year, but they can work on campus for up to 20 hours per week while school is in session, and up to 40 hours per week during vacations. After their first academic year, F-1 students may apply for off-campus employment that must be related to their area of study, but certain conditions need to be met. The types of off-campus employment are: curricular practical training or CPT (it should be a particular course taken for credit), optional practical training or OPT (students can apply for up to 12 months of OPT employment authorization before and/or after completion of their studies), and Science, Technology, Engineering, and Mathematics optional practical training or STEM OPT (on March 2016 it was established that students in these fields may apply for a 24-month STEM OPT authorization). J-1 students in certain circumstances can work on campus up to 20 hours per week and full-time during vacations, but prior authorization is always required. Universities provide detailed information and assistance to

all international students on campus, in order to ensure that the immigration requirements are observed. It is common that international students have international advisors who assist them throughout their studies regarding immigration-related issues.

Maskus et al. (2013) asserted that immigration policy reform regarding international doctoral students in the U.S. is a significant issue that must be explored. The authors argued that complex analyses on international doctoral student population are needed in order to find out if and how immigration policies should be reformed in order to ease international doctoral students' access to the U.S. universities. Accordingly, Maskus et al. (2013) examined the contributions of both domestic and international doctoral students to creation of knowledge at 100 research-intensive institutions in the U.S. across 23 science and engineering fields. Their study indicated that immigration reforms are needed in order to encourage talented international students to pursue doctoral degrees at U.S. universities. Also, the authors of this study noted that immigrations reforms should encourage doctoral graduates in science and engineering to remain in the U.S. and become part of the workforce. These reforms would "help revitalize innovation and economic growth" (Maskus et al., 2013, p. 563). Immigration reforms have been indeed considered by policymakers; thus, as mentioned in the previous section, beginning with March 2016, international students in STEM fields can apply for a 24-month STEM OPT authorization. Under the previous law, STEM OPTs were granted for a maximum period of 17 months.

The Institute of International Education has been tracing international student enrollment at U.S. higher education institutions since 1949 (www.iie.org), and the data have been presented in its annual Open Doors Reports. These reports have been providing detailed data related to international students' enrollment, countries of origin, funding resources, disciplines, academic level, host institutions, and also the economic impact of their stay in the U.S. (Han, Stocking,

Gebbie, & Appelbaum, 2015). The Open Doors Report released in 2017 pointed out there were

1,078,822 international students enrolled at U.S. colleges and universities in 2016-2017, with

85% more than reported a decade ago. Out of this total number of students, 124,705 pursued

doctoral degrees. The report indicated that just over 5% of all U.S. higher education students

were international and about two thirds of the total international student population received their

funds from sources outside the U.S. The most preferred fields of study for international students

were engineering, business and management, and mathematics and computer science, as seen in

Figure 1. The largest numbers of international students came from China and India and they

represented approximately 50% of the total number of international students in the U.S.
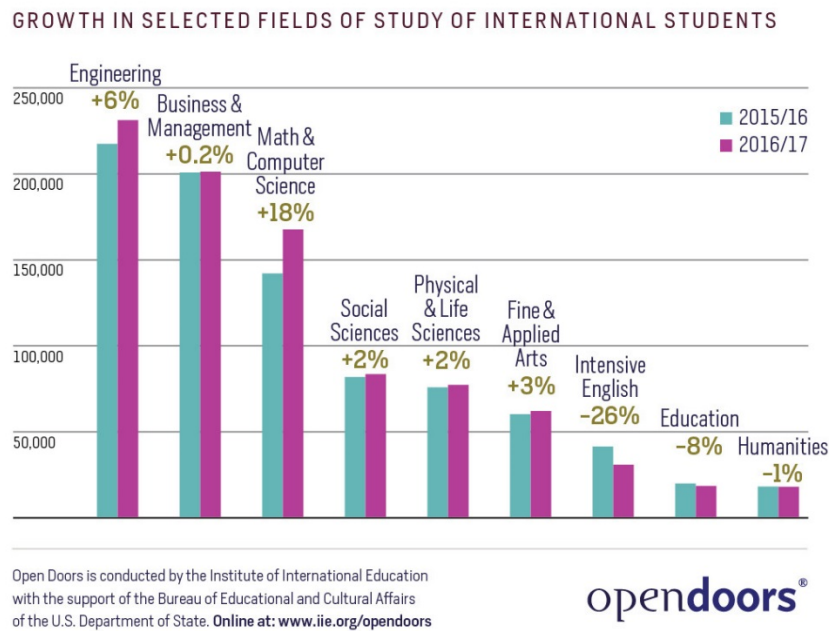

Figure 1. Growth in Selected Fields of Study of International Students. Adapted from the *2017 Open Doors Report on International Education Exchange.*

Doctoral Education

"A learning-centered view of doctoral education means that every academic department should be a lively intellectual community, celebrating the advancement of learning and knowledge."

Walker, Golde, Jones, Bueschel, & Hutchings, 2008, p. 116

In many higher education disciplines, the doctoral degree is considered to be the terminal degree and "the business of asking hard questions, pushing frontiers, and solving problems" (Walker et al., 2008). The goal of doctoral education is to train students to become the future generation of scholars (Gardner & Barnes, 2007; Lee, 2011). As noted by Walker et al. (2008), "the Ph.D. is a route to many destinations" (p. 8) and prepares the labor force for academia, training faculty, administrators, and scientific researchers (Regis, 2014). Moreover, doctoral graduates will also enter the labor market outside of academia (Gardner, Hayes, & Neider, 2007; Lee, 2011). Bowen (2005) argued that doctoral students have to be engaged in reading, writing and research in order to successfully complete their doctoral studies. Regis (2014) outlined that self-determination and basic preparation empower doctoral students to move forward in their programs.

U.S. doctoral education is extremely important to this country's current and future prospects, but there are particular salient challenges such as high attrition rates. Walker et al. (2008) outlined that "about half of today's doctoral students are lost to attrition — and in some programs the numbers are higher yet" (p. 2). This is still valid today. While discussing why the attrition issue matters, Gardner (2008) indicated that doctoral student attrition is extremely expensive for institutions when it comes to financial costs. In addition, as Lovitts (2001) argued, attrition "can ruin individuals' lives" (p. 6). While taking into consideration these damaging

effects, there is a need to explore and better understand the reasons leading to doctoral attrition. Several factors might influence doctoral degree completion and they are identified in the literature as follows: funding, department fit, advisor selection, academic advising, academic mentoring, and the socialization component (Bair, Haworth, & Sandfort, 2004; Gardner & Mendoza, 2010; Golde, 2005; Kraska, 2008, Lee, 2011).

Doctoral Advisors

Research clearly points out that doctoral supervisors have a critical role in doctoral education (Gardner, 2008; Golde, 2000; Golde, 2005; Halse & Malfroy, 2009; Ku et al., 2008; Lee, 2011; Schlosser & Gelso, 2005; Walker et al., 2008). The literature underlines the strong connection between the quality of doctoral supervision, student advancement, and attrition rates (Halse & Malfroy, 2009; Ives & Rowley, 2005; Sadlak, 2004). Advisors have a crucial role in U.S. higher education institutions and are considered as "pivotal to any effort to improve doctoral education" (Halse & Malfroy, 2009, p. 80).

Walker et al. (2008) devoted ample space in their book discussing *The Formation of Scholars* when addressing the importance of doctoral advising and described its ramifications as forms of apprenticeship – "it can fairly be said that apprenticeship is the signature pedagogy of doctoral education" (p. 89). The authors, however, indicated that very often apprenticeship means dependence on the advisor who might get to the point of neglecting or abusing the student. Advisors who sponsor their students might often lead students to think that they have no recourse when the advising relationship becomes dysfunctional. Moreover, as Walker et al. (2008) noted, the culture of privacy is very prevalent thus "faculty members and departmental leaders are reluctant to intervene in dysfunctional situations" (p. 90). On the other hand, students who experience positive relationships with their advisors consider themselves to be lucky,

indicating an almost random access to quality advising. On this note, Walker et al. (2008) argued

that "effective teaching and advising of doctoral students should not be a matter of luck!".

Accordingly, Walker et al. (2008) proposed a shift regarding apprenticeship in doctoral

education in order to develop doctoral students as stewards of the discipline: "from a system in

which students are apprenticed *to* a faculty mentor, to one in which they apprentice *with* several

mentors" (p. 91). In these authors' view, apprenticeship should be understood as a theory of

learning that includes a set of practices informing and strengthening all aspects of doctoral

education. In this sense, as proposed by Walker et al. (2008), apprenticeship demands active

participation by students and faculty and implies five features:

- *intentionality* – faculty are self-conscious and intentionally create opportunities
  for their students for practice and development, while students take responsibility
  for practicing what they are learning in order to improve;

- *multiple relationships* – it is rare that one advising relationship can meet all
  students' needs, hence students are best trained by several intellectual mentors;
  nonetheless, successful apprenticeship *with* requires multigenerational
  approaches, thus roles and responsibilities must change for both faculty and
  students;

- *collective responsibility* – this form of apprenticeship requires a culture of shared
  responsibility for students' learning and a shared vision of the program's purposes
  and central goals regarding student development; hence, a shared understanding
  of norms and standards across the program is paramount;

- *recognition* – an essential step is effective mentoring is to focus on recognition
  and reward; when faculty invest in their students they reap benefits from their

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students' scholarship, but it is also possible to shift the culture between these

roles;

- *respect, trust, reciprocity* – apprenticeship relationships are likely to develop

    when based on these three qualities that are important and necessary conditions

    for learning. Several strategies that foster these qualities are knowing one's self

    and each other well, communicating clearly, providing regular feedback, and

    investing time in this relationship.

In sum, Walker et al. (2008) indicated that their recommendations regarding

apprenticeship "require letting go of the notion of sole 'ownership' of a student and recognizing

that students are better served with multiple mentors, albeit with one or two taking primary

responsibility for the team" (p. 115). Nonetheless, bringing this vision into practice is not easy

because of the program structures; for example, in many science departments it is common that

research funding ties students to a particular faculty member and that might cause pressure to

produce certain results. On the other hand, in humanities and social sciences different practices

are used, such as, for example, committee-based mentoring (Walker et al., 2008). It is critical to

note that students and faculty can always take individual actions that can lead to collective

cultural change in doctoral education.

A distinction that should be considered is the one concerning the terms advisor and

mentor that are occasionally used interchangeably when discussing the relationships between a

faculty and a doctoral student (Barnes & Austin, 2009). On this topic, Nettles and Millett (2006)

argued that the advisor has an official role such as approving coursework, while the mentor is

engaged in a deeper working relationship with a student and "shepherd[ing] her or him through

the doctoral process completion" (p. 98). Hence, an academic advisor might be a mentor, but a

mentor might not necessarily be that student's academic advisor. Mentoring relationships enclose "a mutual emotional investment that develops naturally and spontaneously and cannot be legislated" (Rose, 2005, p. 56).

Disciplinary Differences

Institutions, departments, and faculty can improve doctoral students' wellbeing but not all graduate programs are structured in the same way, hence advising practices might differ as well. Huang (2009) indicated that the disciplinary differences influence the departmental policies and practices in doctoral education, especially at the dissertation level. For example, in disciplines such as science and engineering, doctoral students are conducting research with faculty and advisors on funded projects and this might guide their dissertation research (Huang, 2009; Turner, Miller, & Mitchell-Kernan, 2002). On the other hand, in social sciences or humanities doctoral students are expected to be more independent when developing their research agendas (Huang, 2009). Turner et al. (2002) argued that academic disciplines are inclined to have their own cultures. Hence, the experiences of doctoral student might vary, depending on their disciplines and departmental practice. Doctoral students' experiences might also vary if they are analyzed from the perspective of their cultural background.

Moreover, according to the Survey of Earned Doctorates sponsored by six federal agencies (the National Aeronautics and Space Administration, National Endowment for the Humanities, National Institutes of Health, National Science Foundation, U.S. Department of Agriculture, and U.S. Department of Education), U.S. universities awarded 54,070 research doctorates in 2014, the highest total in 58 years since this survey has been conducted. The data presented in the report titled Doctorate Recipients from U.S. Universities points out important issues in doctoral education that will be further discussed in the sections dedicated to

international doctoral students in STEM and Social Sciences, Arts, Humanities, and Education fields.

Overall, as previously stated, the completion of the terminal degree for any doctoral student is affected by the academic and advisor issues that can either hinder or help. Furthermore, these issues can be compounded by an adverse college or departmental culture. When further compounded by the status of the international student, the road to completion is indeed rocky. The first section of this literature review discussed the growing number of international students who enroll in doctoral programs in the United States. University competition for these students has increased as well (Taylor & Cantwell, 2015), and powerful academic systems such as the one in the U.S. tend to dominate the production and distribution of knowledge (Altbach, 2006). It is critical to understand the cultural barriers that might impact these students' degree completion as, according to Huang (2009), "the most frequently discussed social impacts on international sojourners in the U.S. concern cross-cultural adjustments and adaptation to overcome language barriers and social isolation" (p. 29). Altbach (2006) also contended that efforts should be made in order to understand the social impacts of foreign study on individuals facing isolation and cross-cultural adjustment, and what are the implications of these challenges on individuals' post-doctoral careers.

International Doctoral Students in STEM Disciplines

The Doctorate Recipients from the U.S. Universities 2014 Report indicated that each year the Survey of Earned Doctorates has been conducted, the number of doctoral degrees awarded in science and engineering fields has been greater than the number of non-science and engineering fields. The gap between graduation numbers in these disciplines has widened over the past 40 years, "with the proportion of science and engineering doctorates rising from 58% in 1974 to

75% in 2014" (www.nsf.gov). The report also pointed out that in 1994, 29% of all science and

engineering doctoral degrees were awarded to temporary visa holders, meaning international

students. Between 2004 and 2014, the number has rapidly increased, and 85% of the doctorates

earned by temporary visa holders were in science and engineering fields, as shown in Figure 2.
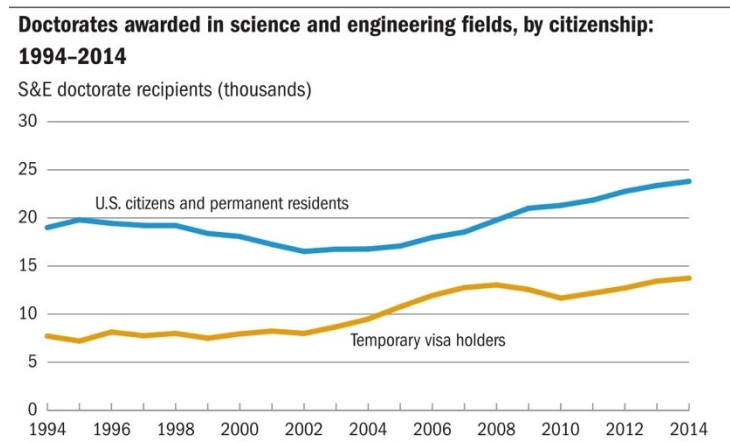
Figure 2. Doctorates Awarded in Science and Engineering Fields, by Citizenship: 1994-2014.
Adapted from the *Doctorate Recipients from U.S. Universities 2014.*

The report also indicates that ten countries accounted for 70% of the doctoral degrees

awarded to temporary visa holders from 2004 to 2014 (Figure 3).

Figure 3. Top 10 Countries of Origin for U.S. Doctorate Recipients, 2004-14. The number of
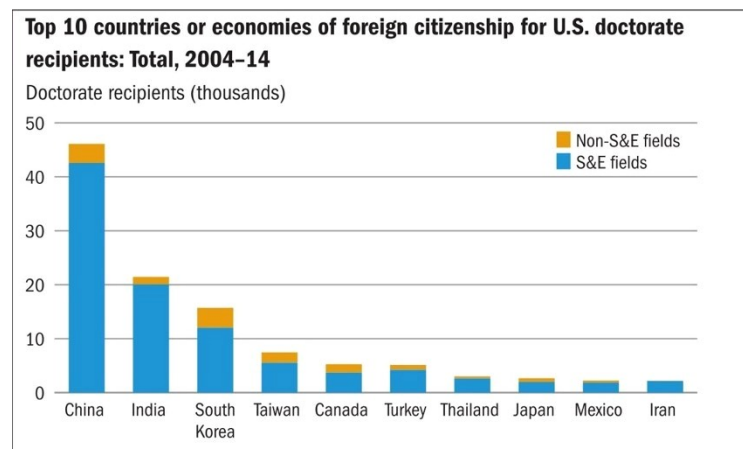U.S. doctoral recipients and their country of origin, between 2004 and 2014, in science and
engineering, and other academic fields. Adapted from the *Doctorate Recipients from U.S.
Universities 2014.*

Stephan (2012) argued there is a need to pay attention to STEM students' doctoral journeys and to the factors that might impact their academic success, since these students bring an important contribution to the U.S. scientific and technical research. Moreover, the U.S. labor market is benefitting from international students' abilities in STEM disciplines, as there are students who decide to remain in the country after the completion of their degrees. (Galama & Hosek, 2009; Maskus et al., 2013). Chien's (2013) study on international student STEM enrollment also indicated that the U.S. is one of the countries that welcomes international students in STEM fields to continue their stay after graduation and become part of the workforce. Critical evidence supporting this idea is represented by the fact that students in STEM fields have additional benefits after graduation. As mentioned in a previous section of this literature review, USCIS allows only students in STEM fields to apply for a 24-month OPT authorization. These regulations support Chien's (2013) findings, stressing the idea that international student enrollment in STEM fields has implications for educational policies and practices at both national and institutional levels, as "human resources in science and technology are necessary for participation in the global scientific network" (pp. 141-142). Komura (2013) further asserted that stakeholders and policymakers are concerned that "a high percentage of international students and scholars in STEM do not remain in the U.S. as employees, resulting in the shortage of scientists and engineers in the American labor force" (p. 32).

Komura's (2013) dissertation study explored the internationalization of higher education in STEM. The status of STEM education was analyzed through surveying two student populations: U.S. students who studied abroad and foreign students who studied in the U.S. Out of 93 international students who participated in this study, 61 were enrolled in STEM graduate programs. The study aimed to understand how international experiences could be improved in

order to increase domestic STEM students' interest in studying abroad, and how to attract more international STEM students to study in the U.S. Several forms of multivariate analyses were performed on data gathered from surveys at seven public and private U.S. universities. The findings revealed that U.S. students place greater value on socio-cultural experiences gained abroad, while international students place greater value on academic and professional development opportunities. Also, almost all international students who responded to this survey indicated that they are highly satisfied with their STEM studies in the U.S. (98.9%). One important recommendation discussed in Komura's (2013) study was informing STEM faculty about the significant influence of their advising and mentoring.

Han et al. (2015) postulated that the U.S. higher education system is the first option for students seeking graduate degrees in science and engineering, and the country "continues to attract some of the world's top technical talent, thus remaining a beneficiary of the high level of skills and unique perspective offered by the world's top international students" (p. 14). The same authors state that promoting advanced education in STEM fields has become a key strategy for U.S. policy makers aiming to ensure the position of this country as an economic leader. The findings of their study on international STEM graduate students in the U.S. enforce the idea that the U.S. is seen as a world-class destination for students pursuing graduate degrees in these fields. The 166 questionnaires completed by international students representing 32 different countries matched very closely to the distribution of international student population across the country, and even though their study was performed at a single institution, the results indicated that the international student population is composed of talented individuals adding critical value to the U.S. higher education setting. Providing significant connections to international

professionals and bringing diverse viewpoints are only two of the main benefits brought by their presence in this country.

Han et al.'s study (2015) pointed out that international graduate students in STEM fields are concerned about the U.S. immigration policies that hinder their ability to succeed and impact their decision to remain in the country after graduation, particularly because the complex process of obtaining a green card discourages their attempt to seek employment. Important aspects that influence international STEM graduate students' decision to pursue a research-oriented career in the U.S. depended on their perceptions of their current U.S. advisor and their professional network. Han et al. (2015) also found out that:

> Students who want to remain in research, who do not believe they will receive overwhelmingly better treatment upon returning to their home country, who believe there are better job opportunities in the U.S. and have adjusted well to the educational culture in America had an 83% probability that they will remain in the U.S. (p. 9)

The majority of international graduate students seeking employment in industry or in a non-governmental organization (NGO) stated they are willing to remain in the U.S. after graduation (Han et al., 2015), due to the fact that the country is perceived as attractive in terms of science and research-oriented careers. Students also indicated that one of the main differences between the U.S. and their home countries is the great emphasis on critical thinking and active participation in discussions. Huang (2009) also indicated that doctoral graduates in applied sciences (industrial engineering or computer science) will probably pursue non-academic careers. Despite having a small sample size, Han et al.'s study (2015) provided findings that are enforcing the literature focused on international students in STEM disciplines (Chien, 2013; Huang, 2009; Komura, 2013). Their research pointed out several aspects that impact

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international STEM graduate students' decision to remain in the U.S. after graduation: career opportunities, quality of mentorship and relationships with advisors, quality of professional network, perception of treatment by peers in their home country, and social-cultural factors such as adjustment to the U.S. educational culture. Han et al. (2015) contend that:

> Foreign scientists and entrepreneurs play an important role in the U.S. economy because they not only help create new businesses and jobs, but are also a key source of American innovation: foreign-born scientists and engineers contribute to more than half of the international patents filed by U.S. based multinational corporations. (p. 12)

Taking into consideration the benefits provided by international doctoral students' talented minds, especially in STEM disciplines, host countries such as the U.S. definitely have an incentive to retain these students (Han et al., 2015; Komura, 2013). Hence, there is a continuous need for studies focused on understanding foreign students' experiences in STEM disciplines.

International Doctoral Students in Arts, Humanities, and Social Sciences

Research on international doctoral students enrolled in programs pertaining to Arts, Humanities, and Social Science (AHSS) disciplines at U.S. universities do not include a variety of studies focused on this topic, such as the literature examining international doctoral students in STEM fields. For the purpose of this literature review, particular attention was paid to the following studies: Huang, 2009; Jang et al., 2014; Lee, 2011.

The Doctorate Recipients from U.S. Universities report comprising data from 2014 shows that there is a large gap between the percentage of doctoral degrees awarded in STEM and non-STEM fields, as indicated in Figure 4:
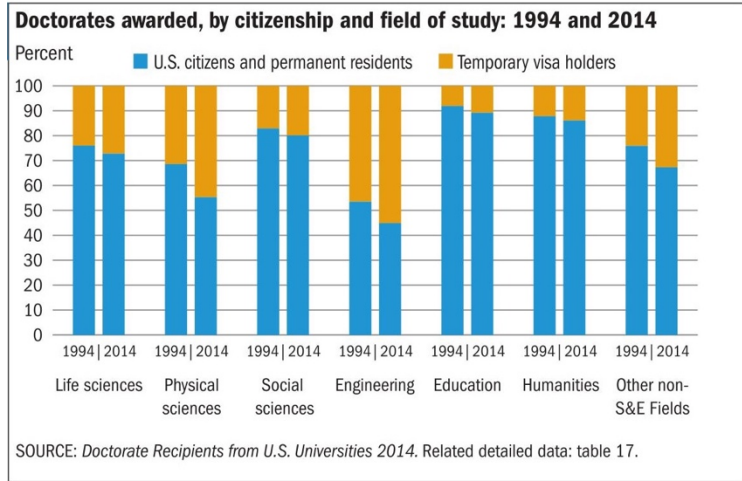
Figure 4. Doctorates Awarded, by Citizenship and Field of Study: 1994 and 2014. Adapted from the *Doctorate Recipients from U.S. Universities 2014.*

The data shown on Figure 4 supports the literature regarding international doctoral students in STEM fields, and it makes it clear that temporary visa holders are most prevalent in physical sciences and engineering. Moreover, the report points out that the number of non-science and engineering doctorates declined by 2.4% between 2013 and 2014. Over the past decade, the percent of doctoral degrees awarded in education has dramatically decreased, from 16% in 2004 to only 9% in 2014. Figure 5 outlines the share of doctoral degrees in these fields:
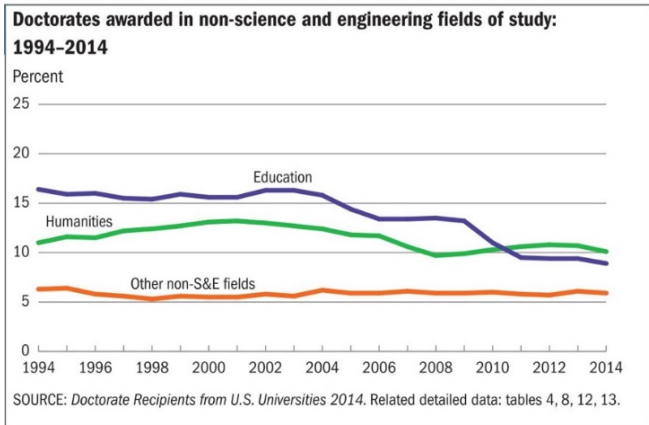
Figure 5. Doctorates Awarded in Non-science and Engineering Fields of Study, 1994-2014. Adapted from the *Doctorate Recipients from U.S. Universities 2014.*

Huang's work (2009) explored the experiences of both international and domestic students in STEM and social science departments. A mixed-method approach was used including an online survey and follow-up interviews. The surveys provided a general idea of students' lived experiences in regard to professional socialization and career goals, while the interviews provided rich data by describing, contextualizing, and validating the quantitative data.

Huang (2009) argued that international doctoral students have been traditionally under-represented in social science disciplines such as history, philosophy, and anthropology, because the nature of the knowledge orientation might not present high interest to foreign students. Disciplinary contexts play a critical role for international students, mainly because of particular cultures in which students were embedded (Huang, 2009; Turner, 2002). Huang (2009) pointed out that "a pronounced distinction between a social sciences department, such as Economics, and an engineering department, such as Computer Science, highlighted contrasting patterns of doctoral studies that might apply widely across the spectrum of disciplinary fields" (p. 81). The findings of this study suggest that engineering departments invested in their students who were working as junior researchers. On the other hand, social sciences departments provided teaching assistantships; thus international students were teaching undergraduate students. Another important finding was related to funding. Funding sources in engineering were more common than in social science disciplines, thus this aspect influenced significantly international students' experiences in their doctoral journeys. Conducting research with faculty provided an avenue for international students to build strong relationships, and Huang's (2009) findings revealed that:

> Graduate students in Engineering were significantly more likely than Social Sciences students to agree that they had had opportunities to engage in collaboration with advisors (if they had at least one or more), professors or other researchers, or student peers. (p. 86)

The highlights of Huang's work (2009) emphasized the collaborative opportunities provided for international doctoral students in STEM fields (particularly engineering), while in social science disciplines students worked more individualistically. Huang's (2009) study clearly argued that the disciplinary culture shapes international doctoral students' experiences.

While studying the experiences of international doctoral students in counselor education, specifically during supervisor training, Jang et al. (2014) also pointed out the critical influence that faculty/supervisors can have on students' academic journeys. Jang et al. (2014) used a qualitative research methodology and semi-structured interviews were conducted with eight participants from different countries who were attending doctoral program in counselor education at different universities in the U.S. The methodology for this study was well though-out and suitable for this type of investigation. Jang et al.'s (2014) findings revealed that international students perceived their course instructors as insensitive to cultural issues, and thus they faced several difficulties due to cultural unresponsiveness. These findings were striking because, according to Jang et al. (2014), research in the field of counselor education has shown that multicultural elements are important in supervisor training. Dealing with a cultural gap in relation to U.S.-born supervisees was one of the main challenges discussed by the participants in Jang et al.'s (2014) study, and this challenge was augmented by "an unfriendly learning environment in which they felt frustrated with U.S. instructors and peers due to a perceived lack of understanding of the challenges unique to international students" (p. 568).

Lee's (2011) study focused on the experiences of international doctoral students in social science and humanities programs with their dissertation chairs and provided recommendations regarding student-advisor relationship. A qualitative methodology was used, and eight international doctoral students from social science and humanities programs were interviewed.

The findings of this study pointed out that advisors can have a positive impact on international doctoral students' experiences by providing academic and personal support, funding opportunities, and setting clear expectations for their students. In addition, advisors can help these students better understand the values, norms, and expectations of the U.S. universities. Another important finding of this study was in regard to policy changes at departmental level in order to ensure that faculty advisors will guide students who share similar research interests. Lee's (2011) dissertation provided a series of recommendations for universities that would enhance international doctoral students' experiences: provision of additional funding opportunities such as scholarships, fellowships and assistantships; implementation of new policies that would allow students to pay lower tuition rates; orientation programs for new international students that highlight department-level policies; allowing faculty from other departments to serve as dissertation chairs; professional development training for faculty advising international students.

Challenges for International Students

Research over the years has demonstrated that international students have a great number of obstacles and barriers to overcome in order to successfully complete a degree in the U.S. As shown in the literature, these are mainly issues related to socio-cultural adjustment (Brown, 2008; Byram & Feng, 2006; Erichsen, 2009; Kim, 2006; Klineberg & Hull, 1979; Lee & Rice, 2007; Lee & Green, 2009; Lee, 2011; Ogbonaya, 2010; Myles & Cheng, 2003; Sovic, 2008; Poyrazli & Grahame, 2007; Poyrazli & Lopez, 2007; Wang, 2004), affecting students' behavior and, consequently, the successful completion of their programs. The list of challenges also includes language barriers, possible miscommunication with faculty/advisors, and culture shock (Klineberg & Hull, 1979; Ku et al., 2008). The importance of collaboration, socialization and

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mentorship should be examined (Lee, 2011), as the social impact of foreign study might include issues such as social isolation, cross-cultural adjustment and adaptation (Altbach, 2006; Huang, 2009).

As discussed in this literature review, research over the years has focused on international students' experiences because they bring numerous benefits to the U.S. higher education institutions. Moreover, students with positive experiences might eventually become ambassadors conveying favorable attitudes toward the U.S. as they return to their home countries (Ku et al., 2008). International students' adjustment to the host country has been studied in various countries and contexts, and not only in the United States. Klineberg and Hull's book published in 1979 described an international study of foreign students' adaptation and coping when studying abroad. The committee that was interested in conducting this study consisted of heads of universities in 13 different countries and Hong Kong. The investigators believed that research was needed in order to determine the impact of international education exchange, and the decision to proceed was taken in 1970. The research design was constructed internationally, and data were obtained from 11 countries: Brazil, Canada, The Federal Republic of Germany, France, Hong Kong, India, Iran, Japan, Kenya, the United Kingdom, and the United States. During the investigation, the same techniques were applied and the same questions were asked across countries. The methodology had to be clear and simple, because it was essential to be applied in all foreign contexts. International students were to be surveyed and interviewed. A questionnaire including 155 items was designed and sent in 1976 and 1977, depending on local academic calendars. The survey was followed by three personal interviews when the student was in different stages: beginning, mid-term, and end of the academic year. 20 students from each country were randomly selected in order to be interviewed. This enabled the researchers to

examine the gradual adjustment to the new academic and socio-cultural environment. All data gathered were transmitted to the University of California at Santa Barbara, where they were verified and coded. According to Klineberg and Hull (1979), there were 2,536 respondents studying in the 11 countries mentioned above. Overall, Klineberg and Hull (1979) pointed out that the two factors which were most important with regard to international students' coping process were "social contact with those local to the sojourn culture and area, and prior foreign experience" (p. 182). Nonetheless, the findings of this study revealed various difficulties for international students, and some of the most prevalent were the lack of access to faculty who might give students the advice required, adapting to life in the new setting, the problem of culture shock, the feeling of having been the object of discrimination, personal depression, and financial difficulties.

Klineberg and Hull's (1979) book discussed these challenges faced by international students almost 40 year ago. However, as the literature has shown, international students continue to struggle with some of the same difficulties even nowadays and there is a strong line of literature addressing this topic. For example, if we refer to dissertations focused on international students, in 2016 only there were 139 graduate dissertations and theses published in ProQuest (Bista & Gaulee, 2017). Bista and Gaulee (2017) pointed out that the common themes explored in these dissertations were the following: acculturation (32), writing/academic skills (16), retention (13), language (9), counseling (9), global awareness (8), social media technology and online education (6), discrimination (6), identity (7), recruitment (5), teaching assistants (4), community engagement (4), career (4), college choice and mobility trends (4), community college (3), and miscellaneous (9). Stakeholders in education should pay attention to the issues discussed in these dissertations and other numerous studies focused on international students.

It is essential to note again that the U.S. remains the top destination for students willing to study across their national borders, thus it is crucial to continue exploring the experiences of this student population in order to address the challenges they are facing and assist them in the completion of their degrees, particularly in a time of salient political tensions. Over the past months particular attention was given by higher education stakeholders and the media to the recent decline in new international applicants reported by U.S. universities; this decline was generated by changes in the U.S. political climate that are discussed in the section below.

The Impact of the Political Climate

A timely issue that has impacted international students in this country is the recent political climate. A series of immigration regulations first initiated at the beginning of 2017 have also affected this segment of student population. Nguyen and Kebede (2017) noted that:

> The recent election of President Donald Trump has sparked an escalating and intense debate over the future of immigrants broadly, and of immigrant students, specifically. Throughout his 2016 presidential campaign, Trump promised to take immediate action to control the flow of immigration by building a wall on the Mexican border, banning Muslim refugees, ending sanctuary cities, deporting millions of undocumented immigrants, and terminating former President Barack Obama's Deferred Action for Childhood Arrivals (DACA) program. If he makes good on these promises, the lives of millions of immigrant students and their families will be significantly impacted. (p. 717)

As this dissertation is being finalized, many of these initiatives have been issued or are in the process of being implemented. One of these initiatives is related to immigration regulations. Immigration is a hot topic on today's political stage, as the new U.S. administration has created political tensions regarding travel policies for foreigners willing to enter this country. On January

27, 2017, the U.S. president issued Executive Order 13769 titled *Protecting the Nation from Foreign Terrorist Entry into the United States*, restraining entry for 90 days for citizens from Iraq, Iran, Syria, Yemen, Somalia, Sudan and Libya, lowered the number of refugees admitted into the U.S., and suspended the entry of Syrian refugees. Many travelers were detained, and there were numerous protests and legal challenges. The courts eventually halted implementation of the executive order. On March 6, 2017, a new Executive Order (Executive Order 13780) signed by the U.S. president replaced the previous one. The new Executive Order removed Iraq from the list of banned countries. The courts halted implementation once again. In June 2017, the Supreme Court "allowed parts of a revised ban to go into effect, allowing the exclusion of visa applicants without a *bona fide* connection to the U.S." (Quinn, Hopkins, & Bedolla, 2017, p. 707). In September 2017, the U.S. administration released a presidential proclamation aimed at enhancing vetting processes, and issued travel restrictions for citizens from Chad, Iran, Libya, Somalia, Syria, Yemen, North Korea and Venezuela. This list included five of the Muslim-majority countries that were included in the first and second travel bans issued in January and March of 2017.

Whether successful or not, these initiatives have had a negative impact on immigrants and communities. A divisive political discourse has led to confusion and anxiety. Because these proposed changes in immigration and education are relatively new and this is an ongoing political process, at the time of writing this dissertation, there are not very extensive scholarly articles concerning this topic. However, it is critical to indicate that one segment of population that has been affected by these executive orders are international doctoral students.

Rose-Redwood and Rose-Redwood (2017) stated that "the international student community is currently living in a precarious world of insecurity in which international students

are increasingly becoming the targets of violence and discrimination based on race, religion, ethnicity, and national origin" (p. II). The IIE White Paper released in 2017 explained how, as a reaction to the immigration executive orders, hundreds of U.S. college presidents spoke out about the value of international students and faculty on U.S. campuses, and the essential role they play in the success of their institutions. Both at U.S. colleges and in the media, there has been a prompt recognition of international students' and scholars' contribution to the academic community and surrounding communities. As noted in the IIE White Paper (2010), international students:

> enrich the academic dialog, expand perspectives of their American classmates, contribute to research and teaching while here, and to ongoing academic collaboration after graduating. After returning home, U.S.-trained alumni strengthen their own countries' economies and societies and sustain ties with American companies and communities. Those who remain in the U.S. create new enterprises and drive innovation, as documented in several studies on the number of new companies and new jobs created by immigrants who first entered the U.S. as foreign students. (p. 3)

In response to concerns over the U.S. political climate and its implications for undergraduate and graduate international students in this country, several higher education associations came together and launched a survey in February 2017 titled *Trending topics survey: International Applicants for Fall 2017 –Institutional & Applicant Perceptions*. This joint survey was initiated by the American Association of Collegiate Registrars and Admission Officers, IIE and four other associations (College Board, International Association for College Admissions Counseling, National Association for College Admissions Counseling, and NAFSA: Association of International Educators). The results of this survey provided a glimpse of students

and their families' concerns about the U.S. political and educational environment. The 294 respondents in this study were institution-based professionals focused on international student recruitment in the U.S. who were in touch with prospective students and their families. As reported by participants in this survey, the recurrent concerns discussed by international students and their families were the following: a possible rise in student visa denials at U.S. embassies, a less welcoming climate to foreigners, possible changes of restrictions around visas, travel regulations and employment opportunities, and concerns that the Executive Order regarding travel restrictions might include additional countries. Several concerns revealed in this survey were also discussed in this dissertation about international doctoral students in the U.S.

As a follow up to the initial survey, in May 2017 IIE affiliated again with AACRAO, the Council of Graduate Schools, the National Association for College Admission Counseling, and NAFSA: Association of International Educators to conduct a survey of U.S. higher education institutions looking at the next steps in the admissions process: offers of admission and yield rates. The report (Farrugia & Andrejko, 2017) outlining the findings of this survey was titled *Shifting Tides? Understanding International Student Yield for Fall 2017*. The institutions' concerns regarding international student enrollment for Fall 2017 were also explored. This survey's key findings indicated that despite fears of a large drop in international student applications, interest among international students remains steady overall. According to this survey, securing and maintaining a visa was described as the top concern among these students and was reported by 46 percent of institutions, while feeling welcome in the U.S. was an almost equal concern, with 41 percent of institutions noticing that from their discussions with students. Farrugia and Andrejko (2017) stated that "survey respondents reported a 2 percent decrease in

the number of admissions offers given to international undergraduate students for Fall 2017 compared to the Fall 2016 admissions cycle" (p. 9).

A similar survey was conducted by the Council of Graduate Schools (CGS) in May and June, 2017 targeting the graduate education community. It is critical to note that nearly one out of five U.S. master's and doctoral students are international students (Okahana, 2017). CGS developed a short survey to be distributed to its member deans, asking them to report changes in admission yields for 2017, compared to 2016. The survey was sent to all 464 graduate deans or their equivalents at CGS member institutions based in the U.S. between May 22 and June 7, 2017. This survey found that deans noted a decline in admission yields of prospective international graduate students. This might be considered as an indicator that the international appeal for U.S. graduate education may be diminishing. Graduate schools noted a greater decline in admissions yield of prospective international master's students than for domestic students. Also, 46% of graduate deans reported a substantial decline in admission yield for international graduate students, and only 24% indicated a similar decline regarding domestic student applications.

These studies anticipated a slight decline in international students' interest to study in the U.S.; this trend was confirmed by a report from the National Science Foundation, "Science and Engineering Indicators" released in 2018, showing a 5.5 % decrease in international graduate student enrollment from fall 2016 to 2017. Although it is still too soon to assess the long-term impact of these executive orders and their implications for international student recruitment, administrators and stakeholders in education have been debating in the media and during various conferences this salient issue that has high potential to affect U.S. higher education and have started focusing on strategies to remedy the situation.

In sum, while examining the literature concerning international students' experiences in the host country, it was observed that the multitude of studies tended to concentrate on issues such as adaptation and coping from a deficit standpoint, rather than aiming to examine the positive aspects of students' journeys. Also, there seems to be little published research focused on finding academic support mechanisms for a particular segment of international student population, namely doctoral students. Together with students enrolled in master's programs, international doctoral students usually fall under the generic umbrella of "international graduate students." Therefore, it is necessary to fill in the gaps in the literature and focus on this important segment of student population that might eventually become part of the U.S. workforce. It is crucial to do that also because the recent political climate has impacted not only their current experiences in this country, but also their job prospects after graduation.

Figured Worlds

"Figured worlds rest upon people's abilities to form and be formed in collectively realized "as if" realms."

Holland et al., 1998, p. 49

Figured worlds is a core concept of this study, thus particular attention is paid to its genesis and meaning. This section will discuss identity and culture theories informing the concept of figured worlds developed by Holland et al. (1998). The body of literature exploring this concept is still scarce, thus, when providing background and definitions of this concept, the literature review mainly focused on Holland et al. (1998) and Gee's (2000) work.

On Identity

In today's globalized world, researchers argue that identity has become a critical tool for understanding society. For the purpose of this literature review, the perspectives on identity

taken by Gee (2000) and Holland et al. (1998) were particularly explored, as there are commonalities among their views that inform the concept of figured worlds. Gee (2000) pointed out that the body of literature concerning identity is extremely complex, thus he chose to focus on one approach stressing the idea that any human being acts and interacts as a certain "kind of person." The author explains that "the kind of person one is recognized as being, at a given time and place, can change from moment to moment in the interaction, can change from context to context, and, of course, can be ambiguous or unstable" (Gee, 2000, p. 99). Gee (2000) also pointed out that "all people have multiple identities connected not to their internal states but their performances in society" (p. 99). Nonetheless, the author does not deny that human beings might also have what he calls a "core identity that holds more uniformly, for ourselves and others, across contexts" (Gee, 2000, p. 99).

According to Holland et al. (1998), "identities – if they are alive, if they are being lived – are unfinished and in process" (p. vii). The authors argued that identities are shaped in social practice, they are not static, thus cultural studies on identity should focus on the process, on the development of identities, discourses, embodiments and imagined worlds. In this context, discourses might be seen as what Gee (2000) considered to be "ways of being certain kinds of people" (p. 110). Exploring the social role of discourse is critical in order to get a better grasp of the complexity of identity. Taylor, Appiah, Habermas, Rockefeller, Walzer, and Wolf (1994) discussed the influence that communicative interaction has on individuals' perspectives:

> We become full human agents, capable of understanding ourselves, and hence defining identity, through… rich modes of expression we learn through exchange with others… My discovering my own identity doesn't mean that I work it out in isolation, but that I

negotiate it through dialogue, partly overt, partly internal, with others. My own identity

crucially depends on my dialogical relations with others. (pp. 32-36)

Aiming to understand the processes of identity, Holland et al. (1998) drew upon the ideas

of two scholars of society, Lev Vygotsky and Mikhail Bakhtin, who had "a thoroughly socio-

centric view of human thought and feeling, and both saw speech, language, literature, and art as

the pivotal media through which consciousness and subjectivity develop" (p. viii). Vygotsky

(1978) emphasized the unique qualities of human beings who change in the context of culture

and history, implying that human life is culturally elaborated. Accordingly, "an individual has

the capacity to externalize and share with other members of her social group her understanding

of their shared experience" (Vygotsky, 1978, p. 132). Holland et al.'s (1998) take on identity was

also informed by George Herbert Mead's perspective on individuals' ability to coordinate their

activities while considering social life as an important context. From Holland et al.'s (1998)

standpoint, "identity is a concept that figuratively combines the intimate or personal world with

the collective space of cultural forms and social relations" (p. 5). Mead (1934) divided the self

into the "I," constituting the self proper, and the "me," representing the individual's capacity to

mirror himself/herself in the perspectives that others have on him/her. Erichsen (2009) explained

that, from this standpoint, "the me aspect of the self enables an individual to anticipate the

reactions of others and then to learn from the situation and modify his or her behavior

accordingly" (p. 41). In this context, according to Sarup (1996), identity becomes both the story

we tell of ourselves, and the stories that other people tell of us, as we have various contradictory

selves, and not a homogeneous identity. Thus, identities are being shaped by the compatibility

between self-perception and the perception of others (Erichsen, 2009).

Further elaborating on the idea of a socially constructed self, Holland et al. (1998) pointed out that the categories dominant in a society "are inscribed upon people, both interpersonally and institutionally, and […] within them" (p. 26). Hence, selves are socially constructed through societal discourses and artifacts. This idea is particularly important to note because international doctoral students' identities are shaped in foreign social and educational settings.

On Culture

Holland et al. (1998) noted that culture deeply shapes selves, thus "self-discourses and practices must be scrutinized, for they are clues to the contours of the bottle – the culture – that shapes the malleable self" (p. 22). Nonetheless, it is also pointed out that self-discourses and practices do vary across cultures and "persons are now recognized to have perspectives on their cultural worlds that are likely to differ by gender" (Holland et al., 1998, p. 31) and other indicators of social position. Accordingly, researchers need to closely examine personhood directly, as individuals might not always be considered as ramifications of core cultural themes.

There is a need to study how these discourses and worldviews are produced and examine the diverse mechanisms of cultural understanding (Balkin, 1998). In the context of this study, it is critical to understand that international doctoral students' academic journeys and cultural expectations are considerably influenced by their past experiences and cultural software (Balkin, 1998) that shape and reshape their frames of reference. Balkin (1998) argued that certain particularities of culture, and how that culture operates, could be compared to the software installed on a computer. This software allows the computer to process information, thus "enables and limits our understanding as software enables and limits a computer" (Balkin, 1998, p. 4). Balkin's focus was on the human mind's relationship to culture, and he asserted that "as we are

programmed through social learning, our physical brain structure is also changing (…) thus, it is highly misleading to think of individuals as consisting of identical hardware into which identical copies of software are installed" (p. 5). Individuals possess unique software that is shaped by their past experiences and cultural expectations, and they transmit this software to others. We are the embodiment of cultural development. Balkin's (1998) further asserts that:

> The most remarkable result of human evolution is that it is in our nature to be cultural. We are by nature cultural creatures (…) The instincts and motivations that we have inherited from our genes are not abandoned or displaced by social learning. They are refined and articulated, distorted and exaggerated, extended and supplemented by experience and social learning. (p. 5)

It is thus understood that our cultural software underlies our day-to-day actions and thought. We are in fact created by our tools of understanding and symbols. Vygotsky (1978) proclaimed that tool systems (such as specific human activity) and sign systems (language, writing, or number systems) are created by the society, and they change as the society develops. Vygotsky (1978) argued that "the internalization of culturally produced sign systems brings about behavioral transformations" (p. 7) and emphasized the unique features of human beings. He postulated that human beings constantly change in the varied cultural and historical contexts that develop. Humans differ from animals because their "culturally elaborated dimensions of human life that are absent from the social organization of animals" (Vygotsky, 1978, p. 132). Holland and Cole (1995) contended that Vygotsky offered an alternative psychology that was well suited to the variety of anthropological studies investigating culture and mind.

One of the oldest terminological debates in anthropology is related to the term culture (D'Andrade, 1984), which generated the development of various distinct perspectives (Quinn & Holland, 1987). In D'Andrade's (1984) view, culture consists of:

Learned systems of meaning, communicated by means of natural language and other symbol systems, having representational, directive, and affective functions, and capable of creating cultural entities and particular senses of reality. Through these systems of meaning, groups of people adapt to their environment and structure interpersonal activities. (p. 116)

From this perspective, cultural meaning systems are seen as symbolically created realities. Holland and Quinn (1987) further asserted that "cultural meaning systems must be adapted to the contingencies and complexities of everyday life" (p. 4). Culture is considered as shared knowledge concerned with what people need to know in order to act as they do. Accordingly, Holland and Quinn (1987) examined the complexity of cultural models and postulated that "cultural models are presupposed, taken-for-granted models of the world that are widely shared (…) by the members of a society and that play an enormous role in their understanding of that world and their behavior in it" (p. 4). These cultural models explain how individuals can learn culture, communicate it, and transmit it to others in order to share the same understandings of the world.

The sections discussing identity and culture theories provided foundational information about the theoretical underpinnings of this study's conceptual framework informed by the concept of figured worlds. The next section provides an in-depth understanding of figured worlds, what they are, their features, and why they are important in relation to international doctoral students' experiences in the U.S. academic setting.

Theorizing the Figured Worlds

Figured worlds are socially and culturally constructed settings in which individuals' identities are forming; they are "rooted in our actual experiences in the world" (Gee, 2014, p. 97). The concept of figured worlds was first developed by Holland et al. (1998) while drawing upon Bourdieu, Bakhtin, and Vygotsky. According to Vygotsky (1978), individuals develop conceptions of who they are as actors in worlds that are socially and culturally constructed. Holland et al. (1998) further postulated that it is critical to situate identity in collectively formed worlds, or activities. The identities Holland et al. (1998) focused on are the ones tracing individuals' agency in the socially and culturally constructed activities called figured worlds. Agency from this standpoint is considered as the capacity for action in society.

Building on Holland et al.'s (1998) considerations, Gee (2014) indicated that "a figured world is a picture of a simplified world that captures what is taken to be typical or normal" (p. 89). Nonetheless, what is considered to be typical varies by context and by people's social and cultural belonging to a certain group. Gee (2014) also noted that as society changes, what people consider as typical can change as well because figured worlds are not static. Moreover, as Gee suggested (2014), typical stories are not right or wrong, but they are "simplified theories of the world that are meant to help people go on about the business of life" (p. 89) without spending time researching before acting. People perform on the basis on these mental schemes that help them react to and deal with the complexity of the world. Gee (2014) pointed out that the term "figured world" has had in fact different names such as "cultural model," "discourse model," "frame" and "script." As humans, we "store these figured worlds in our heads in terms of stories, ideas, and images" (Gee, 2014, p. 95) and we run simulations in our mind that help us make sense of and act in the real world.

The concept of figured worlds is informed by Leontiev's notion of activity seen as a reaction, as the way individuals "respond to what they encounter in their environment in the context of a historical, socially and culturally constructed form of social (inter)action" (Holland et al., 1998, p. 39). Holland et al. (1998) presented several particularities of this concept. First, they contended that "figured worlds are historical phenomena, to which we are recruited or into which we enter, which themselves develop through the works of their participants" (p. 41). Second, "figured worlds, like activities, are social encounters in which participants' positions matter" (p. 41). It is essential to note that relationships play a crucial role in this ongoing process and individuals might not be allowed to enter particular figured worlds due to their social position or rank. Third, the authors made an eloquent consideration:

> Figured worlds are socially organized and reproduced; they are like activities in the usual, institutional sense. They divide and relate participants (almost as roles), and they depend upon the interaction and the intersubjectivity for perpetuation. The significance (indeed the existence) of cultural worlds in our lives does not derive from holding them "in mind" as some whole image (we may or may not do this), but from re-creating them by work with others. (p. 41)

Holland and her colleagues also contended there are two kinds of identities constructed in figured worlds: figurative (narrative) identities that are part of the general storyline and positional identities which might relate to one's power, status, and privilege within the figured world. According to Chesanko (2014), while studying the experiences of college students "these identities encompass sexuality, class, race, culture, ability, status and position within the university, and any other positionality that is relevant for the participants" (p. 52).

Figured worlds are "stable, shared idealized realms involving identifiable character types and actions" (Bartlett, 2007, p. 217) and they are stimulated by cultural artifacts. According to Vygotsky (1978), these cultural artifacts play a critical role in individuals' abilities to regulate their thoughts and actions. Figured worlds, as a realm of interpretation, create a context of meaning and "provide the loci in which people fashion senses of self—that is, develop identities" (Holland et al., 1998, p. 60). According to Robinson (2007), a different way to describe this fashioning of self is that "figured worlds, as a context of meaning, enables individuals to figure out who they are within this context" (p. 193). This figuring is influenced by the interactions with other participants who are part of these worlds (Holland et al., 1998).

Accordingly, for the purpose of this study, international doctoral students are considered as participants performing in the figured world of U.S. academia that is socially organized and reproduced; here, advisors play a particularly important part. In these culturally and socially constructed settings, international doctoral students are introduced to prescribed roles, often struggling to manage their own feelings and actions, as their identities "are not located solely in the individual, but rather are negotiated in social interactions that take form in cultural spaces" (Nasir & Saxe, 2003, p. 17). In her study on college students' figured worlds, Chesanko (2014) argued that it is important for higher education institutions to understand students' experiences on campus in relation to their identities. The conceptual framework of this study will further emphasize the idea that the role of relationships in figured worlds is crucial to international doctoral students' identity development and successful navigation of their studies.

Transformative Learning Theory

This section explores transformative learning theory and aims to provide a broader perspective on international doctoral students' personal transformations in figured worlds,

particularly in the figured world of academia. Transformative learning can be connected to the theories of self that were presented in the previous section; transformative learning is viewed as a reorganization in the way individuals perceive themselves and their relationships. As noted in the previous section, relationships play a significant role in figured worlds.

Transformative learning theory, introduced by Jack Mezirow in 1978, is generally understood as the process of learning and integrating new frames of reference (Mezirow 1978, 1991, 1992, 2000, 2012; Taylor, 1997, 2005), and provides a powerful lens that can be used to examine how international students' adjustment to the culture of the host country can catalyze personal transformations (Erichsen, 2009). Mezirow's theory of transformative learning has been debated over the past decades and the literature comprises a diversity of theoretical standpoints. Merriam, Caffarella, & Baumgartner (2007), drawing upon Taylor's (2005) perspectives of transformative learning theory, explored this theory through seven lenses divided in two groups, outlining the holistic view of transformative learning:

> The first group comprises those perspectives whose locus of learning concerns the individual – namely, the psychocritical, psychodevelopmental, and psychoanalytic perspectives. The second group is composed of approaches where the focus of learning is sociocultural, including the social-emancipatory, cultural-spiritual, race-centric, and planetary approaches. (p. 131)

Merriam et al. (2007) stated that the three individualistic conceptualizations are represented by the works of Jack Mezirow (the psychocritical perspective of adult learning), Laurent Daloz (the psychodevelopmental approach and the importance of stories in the transformative learning process), and of Robert Boyd (the psychoanalytic approach explaining the importance of symbols). Meriam et al. (2007) further argued that the four sociocultural

perspectives are as follows: Paulo Freire's social-emancipatory view of transformational learning paying particular attention to radical social change; Tisdell's cultural-spiritual view of the transformative learning process, outlining the connection between peoples' race, class, and gender and their knowledge construction through storytelling; Sheared's (1994) race-centric view focusing on the experiences of individuals of African descent in the socio-cultural, political and historical setting; and the planetary view explained by O'Sullivan, meaning the "interconnectedness between the universe, planet, natural environment, human community, and the personal world" (Taylor, 2005, p. 462).

In their *Handbook of Transformative Learning*, Taylor and Cranton (2012) presented various perspectives considering the meaning of transformative learning theory and aimed at bringing together the lenses used in examining this process under the same theoretical umbrella, as these perspectives can coexist. Taylor and Cranton (2012) argued that, depending on the context, transformative learning can be seen as a rational endeavor, it could be emotional and intuitive, social change may need to precede individual change, or individual transformation might drive social transformation. In all these contexts the outcome is similar: a deep shift in individuals' perspectives, as suggested by Mezirow (1978). For the purpose of this dissertation, Mezirow's (2000) standpoint on the meaning structures was taken into consideration when aiming to understand how international doctoral students navigate and make sense of the U.S. figured world of academia:

> Transformative learning refers to the process by which we transform our taken for-
> granted frames of reference (meaning perspectives, habits of mind, mindsets) to make
> them more inclusive, discriminating, open, emotionally capable of change, and reflective
> so that they may generate beliefs and opinions that will prove more true or justified to

guide action. Transformative learning involves participation in constructive discourse to use the experience of others to assess reasons justifying these assumptions, and making an action decision based on the resulting insight. (pp. 7-8)

Mezirow (1991) postulated that reflective discourse is the avenue by which adults change their meaning schemes. Building on Mezirow's idea, Erichsen (2009) noted that individuals' participation in discourse requires "social competencies like empathy (…) and social skills-adeptness in getting desired responses from others, self-regulation and control, trustworthiness, cooperation, listening, and looking to form informed opinions and decisions" (p. 30). These insights emphasize how the social dimension and dialogues with other people can contribute to the transformation of our personal perspectives. Erichsen (2009) contended that these communicative interactions are critical in the constructions of everyday life. Hence, for international doctoral students these interactions are paramount in order to make sense of their experiences while studying in a foreign country. As noted in this dissertation, the advisor's role is critical in helping students understand what is expected from them in the figured world of academia.

The Disorienting Dilemma

Taylor (2008) also argued that transformative learning theory explained the process of constructing the meaning of an experience, and he provided the example of a person moving to a foreign country. Mezirow (1991) pointed out that feelings of disorientation are opportunities for reflecting upon undisputed assimilated values and beliefs, so they become opportunities for transformative learning to occur. Building on Mezirow's transformative learning, Ritz (2010) emphasized that "in new multicultural and academic classroom environments, divergent points

of view may be expressed, meaning-making processes might be challenged, and feelings of disorientation may be generated" (p. 159).

According to Mezirow (1991), the transformational process begins with a disorienting dilemma, an event that for international doctoral students might be interpreted as living and functioning in a new cultural and academic setting. Indeed, the transformational process might vary, but Mezirow (2012) argued there are ten phases of this process:

1. A disorienting dilemma

2. Self-examination with feelings of fear, anger, guilt, or shame

3. A critical assessment of assumptions

4. Recognition that one's discontent and the process of transformation are shared

5. Exploration of options for new roles, relationships, and actions

6. Planning a course of action

7. Acquiring knowledge and skills for implementing one's plans

8. Provisional trying of new roles

9. Building competence and self-confidence in new roles and relationships

10. A reintegration into one's life on the basis of conditions dictated by one's new perspective (p. 86)

While considering these ten phases and the complex transformational process, it is critical to take into consideration the fact that international doctoral students experience disorientation because the cultural context and cultural resources that were taken for granted are being replaced by a foreign context. Further, this disorientation is augmented by a series of difficulties such as language barriers, cultural and social adjustment, homesickness, stereotypes, and financial issues. Erichsen (2009), drawing on Mezirow's transformative learning as a piece

of her theoretical framework for her dissertation, studied the experiences of seven female international graduate students, and the findings of her study revealed that when living in a foreign setting, students try to adjust and embrace new orientations out of necessity. Erichsen (2009) contended that "our perspective transformations may only pertain to certain aspects of the world or ourselves, but the cumulative effect over time within an international context is transformative as we renegotiate our identities while straddling our multiple worlds" (p. 171).

Transformative experiences and personal change are strongly related to an individual's identity and multiple selves (Erichsen, 2009). It is critical to examine transformative learning from a perspective that takes the multiple dimensions of identity into consideration, and how these identities are shaped and reshaped within an individual's changing contexts, particularly in the case of international students. For this reason, it may be useful that people surrounding them, universities specifically, are aware of the struggles international students are facing, and the transformations that occur throughout this process of learning to adjust to living in a foreign setting (Ritz, 2010). In this context, international students are constructing meaning through their personal experiences, while cultivating cultural competencies (Erichsen, 2009). The new settings in which transformative learning processes occur can be thought of as what Holland et al. (1998) call figured worlds. The disorienting dilemma begins when international students arrive in the host country and have their first contact with the new academic, social, and cultural environment. In these new socially constructed settings they develop and learn to navigate relationships with their advisors. Cultural expectations in figured worlds play an essential part in students' personal transformations, and these transformations will indeed occur if students critically reflect on and embrace their new identity roles.

International Doctoral Students as Adult Learners

Adult education is commonly known as the practice of educating adults, and "knowing who participates in adult education activities and why adults are participating (or not) is necessary information for both providers and policymakers" (Merriam et al., 2007, p. 53). It is known that adult learners bring to classroom a great volume of past learning and life experiences, have various roles they need to balance, and come motivated and ready to learn (Knowles, Holton, & Swanson, 2012; Meriam et al., 2007).

Adult learners' motivation. There are a number of theories and models that attempt to capture the complex aspects of adult learning. The best-known theory of adult learning is Malcolm Knowles's *andragogy*. In 1968, Knowles proposed a new concept of adult learning based on several assumptions about the adult learner: the need to know, the learner's self-concept, the role of the learners' experiences, readiness to learn, orientation to learning, and internal motivation (Knowles et al., 2012). This andragogical model presents different assumptions about adults' motivation to learn. Knowles at al. (2012) argued that "adults tend to be more motivated toward learning that helps them solve problems in their lives or results in internal payoffs" (p. 197). Nonetheless, the authors pointed out that external payoffs such as pay increase, still have relevance, but a more powerful motivator is the internal need satisfaction, such as quality of life and self-esteem. On a similar note, Wlodkowski (1985) outlined that there are four factors motivating the adult learner: success, volition, value, and enjoyment. In Wlodkowski's (1985) view, adults' goals are to be successful learners, to feel a sense of choice in the learning process, to learn something that has value to them, and to experience pleasurable learning. More specifically, "the learning that adults value the most will be that which has personal value to them" (Knowles et al., 2012, p. 198).

According to Merriam et al., (2007), researchers' examining adult learners' motivations to participate in adult education have developed a line of inquiry on this topic. In Cyril O. Houle's (1961) investigation on *The Inquiring Mind,* the author conducted in-depth interviews with 22 adults engaged in different forms of adult education and examined their history of learning, how they viewed themselves as learners, and what directed them to be continuing learners. Merriam et al. (2007) indicated that analysis of these interviews disclosed three learning orientations: "goal-oriented learners, who use education as a means of achieving some other goal; activity-oriented learners, who participate for the sake of the activity itself and the social interaction; and learning-oriented participants, who seek knowledge for its own sake" (p. 64). Houle (1961) implied that often these orientations might interact. While discussing Houle's orientations, Long (2004) noted that "the individual who is primarily goal oriented may reflect an activity or learning for learning sake's orientation also" (p. 27).

In order to test Houle's typology, Boshier conducted an extensive study using his forty-two item Education Participation Scale (EPS). Using cluster analysis, Boshier and Collins (1985) analyzed the responses of 13,442 adult learners from the United States, Africa, Asia, New Zealand, and Canada. The authors presented a three-cluster solution "loosely isomorphic with Houle's typology" (Boshier & Collins, 1985, p. 125):

- Cluster I involved Cognitive Interest items and was congruent with Houle's learning orientation
- Cluster II consisted of items labeled as Social Stimulation, Social Contact, External Expectations, and Community Service, thus was connected to Houle's activity orientation

- Cluster III was composed of Professional Advancement items and resembled Houle's goal orientation

The literature has shown that learners' motivations to participate in adult education are complex and varied because adults add the role of the learner to other roles and responsibilities. Adults' motivation to learn arises from their life-contexts that are strongly tied to the socio-cultural setting in which they function. Jarvis (1992) outlined that "learning … is about the continuing process of making sense of everyday experience" (p. 11). The author draws the attention to the connection between motivation and context: "the reason for participation does not always lie within the learner, but in the dynamic tension that exists between the learner and the socio-cultural world" (Jarvis, 1983, p. 67). Thus, as Merriam et al. (2007) pointed out, "learning in adulthood is characterized by an interaction between the adult and his or her lifeworld and the duties and responsibilities inherent in the adult roles of worker, spouse, partner, parent, and citizen" (p. 428).

Adult learners aim to be effective at what they value (Wlodkowski, 2004); this is what increases their motivation to engage in the learning process. Culture influences adults' motivation to learn. Our cultural software (Balkin, 1998) underlies our actions and thought. Consequently, culture influences individual motivation and these two are inseparable. As Wlodkowski (2004) claimed, "intrinsic motivation is an evocation; it is energy called forth by circumstances that connect with what is culturally significant to people" (p. 143). What elicits motivation might differ across cultures, as each culture possesses unique software. Thus, international doctoral students' motivation to pursue a doctoral degree might differ depending on their cultural background. Nonetheless, there is a human need to be purposeful and there are global motives for adult learning.

In sum, transformative learning asserts that learning is about fundamental change (Merriam et al., 2007) in the way we perceive the world and who we are. For the purpose of this literature review, Mezirow's psychocritical approach on transformative learning is used as a lens through which international doctoral students' experiences and relationships in figured worlds are explored. International doctoral students are complex adult learners who attend doctoral programs abroad in order to advance their careers. Moreover, they also have to "fill multiple roles within both their home and host contexts, alongside their role as international students" (Erichsen, 2009, p. 12). It is critical to recognize and explore the various difficulties these students might face while functioning in the academic and socio-cultural setting of their host country, and the transformational experiences that could shape their identities, because, as adult learners, "international students naturally tend toward the process of transforming their understanding of the world and themselves" (Erichsen, 2009, p. 3).

Conceptual Framework: International Students' Figured Worlds

Ravitch and Rigan (2012) noted that "a conceptual framework both shapes the design and direction of your study and guides its evolution" (p. 4). Indeed, the conceptual framework has shaped the research design and procedures employed in this study. The conceptual framework is informed by a developing body of literature focused on the concept of figured worlds (Holland et al., 1998), transformative learning theory (Mezirow 1978, 1991, 1992; Mezirow, 2000; Taylor, 1997, 2005), and relevant studies exploring the challenges faced by international students in the U.S. academic setting. Several of these studies were discussed in the previous sections. In addition, my personal experience as an international doctoral student in the U.S. informed this conceptual framework. My personal journey has cultivated my empathy and interest in studying issues related to international doctoral students' experiences, and I strongly believe that research

using this framework reveals how stakeholders in higher education, particularly faculty, can assist students who deal with multiple layers of cultural novelty and experience personal transformations during their studies. While these experiences are particularly salient and compelling for many international students, the conceptual framework developed is also applicable to the experiences of all doctoral students as they transition from student to scholar. Nonetheless, this dissertation will focus on the advisor-advisee relationship because this relationship and its ramifications are critical in doctoral education.

The concept of figured worlds is a theory of self and identity that can be strongly connected to the lived experiences of international doctoral students. This concept outlines that individuals are considered subjects of socially constructed worlds, and these worlds are sites where identities are developed (Urrieta, 2007). Robinson (2007) noted that:

> A figured world is a system of meaning that is at once collective and individual. There are historically produced norms and practices that create a realm of interpretation, but there is also individual sense-making as one figures one's self into this realm of interpretation. As such, figured worlds must link culture and mental structure. (p. 194)

It is thus essential to pay attention to the figured worlds in which international students perform as these worlds are organized by cultural artifacts (Holland et al., 1998) where people are introduced to prescribed roles which might not be very familiar to international students. This poses a challenge for students seeking answers or mentorship in the figured world of academia. Accordingly, for this conceptual framework I will focus on the figured worlds of mentoring relationships. It has been argued that figured worlds are not necessarily set on static cultural layers (Holland et al., 1998; Gee, 2014); however, for international doctoral students, who are adult learners coming from various cultures and having different needs and goals, the figured

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worlds they enter might encapsulate a mixture of cultures, confusion regarding prescribed social roles, and might generate feelings of vulnerability.

In the attempt to better understand and capture international doctoral students' experiences, the literature selected was mainly focused on relevant qualitative research studies focused on international students and outlined expectations, benefits, concerns, and barriers that had an impact on their lives in a new cultural and academic context. The literature analyzed provided perspectives that created the basis of this conceptual framework addressing the complexity of figured worlds of mentoring relationships.

The Figured Worlds of Mentoring Relationships

These figured worlds stress the idea that the role of academic relationships is essential (Lee, 2011; Mtika, 2009), specifically the faculty-student relationship. This relationship could be informed by two advising approaches drawing upon Mikhail Bakhtin's (1981) view of the novel and epic as two opposing genres with tendencies toward cultural transformation and cultural stabilization (van Eijck & Roth, 2011).

Van Eijck and Roth (2011) used Bakhtin's approach of novel and epic as a conceptual framework for examining representation practices in science lessons. The two authors articulated *epicization* as a unitary culture and language and *novelization* as a pluralized culture and language. For the purpose of this dissertation's conceptual framework, novelization outlines the importance of caring mentorship incorporating sensitivity to cultural diversity and epicization features a hierarchical academic setting in which the role of the faculty could be the one of a gatekeeper, who stays at the doors of knowledge and pulls out individuals who do not belong to the scholarly community.

Novelization. The novelized figured world of mentoring relationships offers a frame that explains the impact that faculty have on international doctoral students' advancement in their professional and personal lives, while being inclusive and supportive. Bakhtin (1981) defined the novel as a hybrid of languages, necessarily anticanonical, thus it would not allow a generic monologue. The novel displays the importance of speech diversity and is inclusive. Bakhtin (1981) also provided the historical European context in which the novel evolved as a genre, pointing out:

> The new cultural and creative consciousness lives in an actively polyglot world (…) The period of national languages, coexisting but closed and deaf to each other, comes to an end. (…) Languages throw light on each other: one language can, after all, see itself only in the light of another language. (p. 12)

For Bakhtin (1981), the novel "is plasticity itself. It is a genre that is ever questioning, ever examining itself and subjecting its established forms to review" (p. 39). Accordingly, novelization means pluralizing culture and language, and incorporating alternative and various forms of knowledge that generate cultural diversity. This approach promotes a society and culture in transformation, where multiple voices are allowed to be heard. Drawing upon Bakhtin's (1981) notion of the novel and calibrating it to international students' context, I argue that international students' identities are shaped into a novel figured world that accepts cultural diversity and takes into consideration students' voices. Faculty who embrace characteristics of the novel emphasize the notion of "a culture in fervent transformation" (van Eijck & Roth, 2011) and open the scholarly idea to all graduate students, regardless of their cultural background. Hence, in this novelized figured world of mentoring relationships, faculty guide international students (Lee, 2011) in the process of shaping their identities and help them assign meaning to

cultural resources found in academia; they assist international students in their development and help them find solutions by providing them feedback and being available. Hence, as van Eijck and Roth (2011) argued, "novelization therefore models a process of cultural change toward democracy" (p. 830).

Hence, these caring relationships between faculty and students lead to students' development in the figured world of academia. Mtika (2009) stated that relationships with professors and advisors play a significant role in students' quest to acquire their education. However, Lee (2011) argued that there is little research focused on this kind of relationship, and the expansion of these studies would inform the development of academic advising relationships between faculty and international doctoral students and facilitate faculty and advisors' understanding of the critical role they have as guides. Lee (2011) noted that the mentoring role means "providing support, encouragement and guidance, facilitating access to resources and opportunities, providing information, protection and sponsorship and serving as a role model" (p. 23). Ku et al. (2008) indicated that the mentor/mentee relationship is essential for international doctoral students, as they are struggling with cultural and language barriers and are also attempting to understand the American culture of academia. The authors determined that academic mentoring includes at least three components: "(a) emotional and psychological support, (b) role modeling, and (c) career guidance" (Ku et al., 2008, p. 366).

An eloquent example of a faculty mentor is the one described by Mohammed (2010) in her autoethnographic study, Professor Z is considered to be a facilitator; he is a resource for learning, rather than a didactic instructor. He encourages students to discover knowledge, creating and establishing a safe learning climate. Mohammed (2010) considered this the role of the instructor-facilitator, to be a mentor who influences students' direction in their doctoral

journeys. At the opposite end, Ku et al. (2008) argued that many of the negative experiences occurring in international students' academic lives could have been avoided or at least minimized if faculty would have cared about their students. In this context, caring "may be interpreted as being available, working with the students, and showing extra patience" (Ku et al., 2008, p. 375). In fact, availability and caring are two components that faculty and advisors should embrace while interacting with all students, and particularly with international students who experience cultural adjustments and who might sometimes feel isolated.

Feedback given to international doctoral students is also considered important for their learning. Wang & Li (2011) examined why formative feedback plays such a vital role in guiding students throughout their doctoral journey. They argued that faculty should "take into account their students' cultural backgrounds and prior learning experiences, and render critical feedback in culturally sensitive and constructive ways" (p. 103). The findings of their study indicated that there are two tendencies of feedback reaction from students: frustrated/uncertain and inspired/confident experience. The negative feedback experience was caused by the unequal power relationship (apprentice and master) students had with their instructors/advisors, while the students who had a positive feedback experience characterized the relationship as one of mentor and mentored. International doctoral students who learned in systems where critical feedback in academic writing was discouraged may feel frustrated and have difficulties in adopting a critical view (Wang & Li, 2011). Nonetheless, open communication between faculty and international students is vital for effective feedback.

Epicization. The opposing pole of novelization is epicization. According to Bakhtin (1981), epic is a rigid and completed genre "with well-defined generic contours" (p. 4). Bakhtin (1981) further argued that "the world of the epic is the national heroic past, a world of fathers, of

firsts and bests" (p. 13). This genre is characterized by "epic heroization" (Bakhtin, 1981, p. 11),

featuring the national epic past and the national tradition, but not personal experiences and free

thought. The epic distance separates the epic world from contemporary reality, thus it is not

adjusting to the author's real life; it is a poem about the past, and not the present. This approach

promotes a unitary culture and language, hegemonic and static structures, and contributes to

cultural centralization (van Eijck & Roth, 2011). This cultural centralization celebrates only the

heroes of a specific culture that in most cases are not the heroes of other cultures. As van Eijck

and Roth (2011) asserted, epicization refers to "a heroic character foundational of a particular

cultural or linguistic form. The epic tends to be a monologic, one-sided, dogmatic, and serious

genre that comes with re/producing a unitary language" (p. 829).

 Drawing upon Bakhtin's (1981) concept of epicization, the epic doctoral classroom

allows certain people to be considered scholars (the heroes of that culture). For this reason,

coming from cultures where the absolute authority of the teacher is emphasized (clear hierarchy),

international doctoral students may find it challenging to communicate openly with their

supervisors, articulate their expectations and handle the tensions (Lee, 2011). Najjar (2015) also

noted that the advisor can act as a gatekeeper who has the power to provide or deny funding, and

also as one who advises on publications and conferences.

In the figured world of mentoring relationships characterized by epic approaches,

international doctoral students are educated to believe that there is only one way, one answer,

and the faculty-student relationship tends to be hierarchical. Faculty might embrace banking

education practices (Freire, 1970), consisting of information deposits and transfers. In Freirean

view, banking education describes a non-egalitarian relationship between teachers and students.

Boclair (1976) argued that the concept of banking education "dichotomizes the actions of

teachers and learners, and alienates students from both teachers and knowledge as an act of knowing" (p. 119). While describing the banking transaction concept, Freire (1970) explained that in this context "teachers, as the Subject-Actors, possess the knowledge which they narrate to the listening Student-Objects" (p. 57). Thus, from this standpoint, faculty have the role of epic national heroes who emphasize one way and one answer as critical directions in advising. Hence, the figured world of mentoring that emphasizes epic approaches does not necessarily celebrate diverse voices, like novelization. In these epic relationships international students need to adapt to certain cultural meanings that are celebrated in the figured world of academia. Accordingly, they might not be encouraged to critically reflect on their experiences, but to adapt to a canonized world of academia in which a scholarly culture rooted in Western European practices is being celebrated.

Summary

This literature review attempted to present several key aspects regarding international students in the U.S. doctoral education. A brief section providing background information about international students in the U.S. pointed out the increasing number of this student population over the past decade, followed by a discussion about doctoral education and doctoral advisors. Next, a few studies focused on international doctoral students in STEM and Arts, Humanities, and Social Sciences programs were presented. Also, some main challenges faced by international students were discussed, with particular focus on the recent impact of the political climate and changes in immigration regulations. The remaining sections of the literature review provided information about the concept of figured worlds and transformative learning theory. These theories of identity and learning informed the conceptual framework for this study. Finally, the elements of the figured worlds of mentoring relationships were described.

The conceptual framework developed included various aspects that influence international doctoral students' experiences in the host country and points to the need for more supportive advisors that would embrace more novelized than mainly epicized approaches (Bakhtin, 1981) while considering their relationship with international doctoral students. International doctoral students' identities are shaped in a new and expansive academic environment, where their personal and professional growth is strongly tied to the relationships developed with their advisors.

CHAPTER 3. METHODOLOGY

This chapter presents the methodology and procedures I used in my research study. It reiterates the purpose of the study and includes the rationale for the research design selected, the theoretical orientation I adopted, my perspective and methodical structure, information about study participants, and data collection and analysis.

The purpose of this qualitative study was to gain a better understanding of adult learners' experiences abroad as international students, in this case as international doctoral students in the U.S.; how they develop and navigate relationships with their advisors; and how these relationships impact their learning and personal transformation. Looking into international doctoral students' experiences and how they make sense of these experiences and themselves in a foreign context provides an interesting avenue for looking at personal transformation, identity development, and the significance of professional relationships in doctoral education. To be specific, this qualitative study investigated the study abroad experience of international doctoral students and their transformative learning in the figured world of academia. The purpose of the research was to examine how international doctoral students make sense of their experiences and how they develop relationships with their advisors across disciplines.

Research Design

The most appropriate methodology for an in-depth examination of international doctoral students' narratives and of relationships they develop with advisors is qualitative research. The research design for this study is informed by Maxwell's (2005) interactive model (Figure 6), which has a definite, but interconnected structure. Maxwell (2012) indicated that a research design conceptualized as an interactive process, as opposed to a design that is more fixed in its method, is a good fit for qualitative research. Thus, "qualitative research is necessarily inductive

in its approach to design, and this inductive strategy means that the research plan itself is

constantly changing in response to new information or changing circumstances" (Maxwell, 2012,

p. 76).
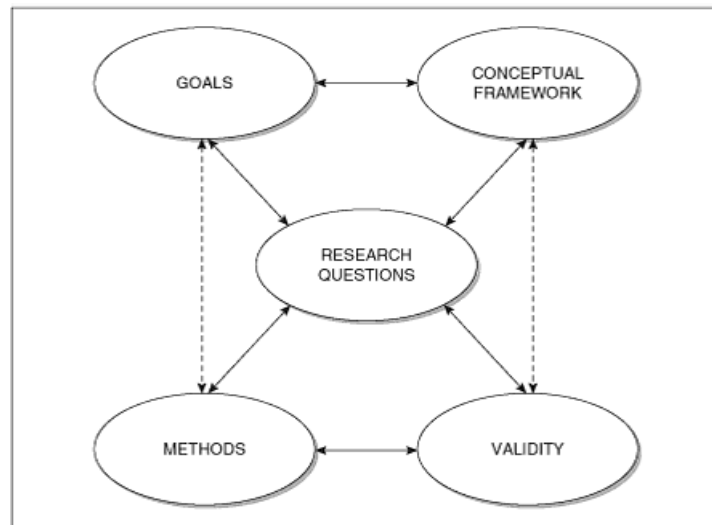
Figure 6. An Interactive Model of Research Design. This interactive model presents the interconnected research design components. Adapted from *Qualitative Research Design. An Interactive Approach*, by J. A. Maxwell. Copyright 2005 by Sage Publications, Inc.

Maxwell (2012) noted that the five components of this model are real phenomena and are

related as an interacting system, illustrating that planning the research design means "thinking

about the connections between the pieces" (p. 80) and consequences for the research. This

theoretical approach informed the way I designed my study; I took into consideration these

components that are interconnected, starting with the goals that influenced the research process

and questions. The piece that I found very useful while studying this model was the author's

suggestion that the components are not necessarily fixed in advance. One example he provides is

the research question. Maxwell (2005) argued that the research questions are at the heart of the

research design but developing them is an ongoing process focusing on the conceptual

framework. As the conceptual framework develops, the research questions might be revised. The

author further indicated that "well-constructed, focused questions are generally the result of an

interactive design process, rather than being the starting point for developing a design"

(Maxwell, 2005, p. 66). Accordingly, the refined research questions for my study are the

following:

- How do international doctoral students experience relationships with their advisors?

  (overarching research question)

  The two sub-questions are:

  o   How do those relationships impact how they make sense of and navigate their

      academic and cultural worlds in which they find themselves?

  o   What are the commonalities and differences in the experiences across disciplines?

This study adopted a qualitative research design including semi-structured, in-depth

interviews and focus groups. Before the interview meetings, respondents were encouraged to

send five photos that best described their academic experiences in the U.S. This was helpful

given that most international students' first language is not English, so they might face language

barriers when it comes to oral communication. I opted for qualitative methods for my study in

order to better get to know international students' stories and academic figured worlds since they

began their doctoral journeys in the U.S. Students possess diverse cultural backgrounds, thus

using qualitative methods I had the opportunity to discover and interpret their typical stories as

international doctoral students.

Qualitative research is a relativist type of inquiry (Yin, 2011) that accepts multiple

realities and outlines participants' different perspectives, while locating the researcher in the

world (Mertens, 2010). This type of research is particularistic, uses an inductive approach and is

in a constant search for meaning (Yin, 2011), without imposing preexisting interpretations. I

strongly believe that the research design selected is appropriate for my dissertation because it

provides well thought-out venues to investigate international doctoral students' figured worlds of their academic journeys.

Theoretical Orientation

Guided by Denzin and Lincoln's (2011) statement that "qualitative research is endlessly creative and interpretive" (p. 14), my approach in this study was informed by hermeneutic phenomenology. Phenomenology is both a philosophical orientation and a range of research approaches. For this study, the term phenomenology is considered as an interpretive theory (Denzin & Lincoln, 2011) with a focus on "how human beings make sense of experience and transform experience into consciousness, both individually and as shared meaning" (Patton, 2002, p. 104).

Building on Edmund Husserl's philosophy that individuals are able to explain things as they experience them through their senses (Patton, 2002), phenomenological inquiry offers a framework for understanding people's lived experience. Van Manen (1990) amply discussed phenomenological research and considered it "a search for what it means to be human" (p. 12) that "aims at gaining a deeper understanding of the nature or meaning of our everyday experiences" (p. 9). The definition provided by Schwandt (2015) further strengthens this argument; he noted that phenomenology, as discussed in qualitative research, "aims to identify and describe the subjective experiences of respondents. It is a matter of studying everyday experience from the point of view of the subject, and it shuns critical evaluation of forms of social life" (p. 235). Hence, as Patton (2002) stated, the researcher is able to gather data about the lived experience through interviews with individuals who have directly experienced a certain phenomenon. The phenomenon that is the focus of this inquiry is what international doctoral

students directly experience as they study in a foreign country and navigate academic relationships in figured, or culturally constructed, worlds.

As previously noted, the approach for this study was informed by hermeneutic phenomenology. Elaborated by Friedrich Schleiermacher in the nineteenth-century and further theorized by Martin Heidegger (1889-1976) and Hans-Georg Gadamer (1900-2002), the notion *hermeneutics* refers to the means of interpreting a text. Accordingly, the methodological interpretation of this dissertation was informed by the hermeneutic circle. Schwandt (2015) defined the hermeneutic circle as a methodological process in which "construing the meaning of the whole meant making sense of the parts, and grasping the meaning of the parts depended on having some sense of the whole" (p. 135). Hence, while aiming to explore international doctoral students' experiences with their advisors I took into consideration various pieces of their overall experience as foreign students in the United States. The interview and focus group questions included prompts about different aspects of their experience; these questions were also informed by my background as an international doctoral student. Consequently, data was analyzed and meaning was assigned while considering the various parts of their overall academic and cultural experience. Schwandt (2015) discussed differences in interpreting the hermeneutic circle. On the one hand, Schleiermacher and other conservative hermeneutics adhere to a methodological interpretation considering that the circularity of this process is temporary; this means that the researcher could "get outside of or escape the hermeneutic circle in discovering the 'true' meaning of the text" (Schwandt, 2015, p. 136). On the other hand, Heidegger and Gadamer offer a more ontological interpretation of the hermeneutic circle and consider it as a critical feature of all understanding, in which efforts to interpret a text take place within some background that cannot be transcended, such as historical tradition or a set of practices and beliefs.

Accordingly, hermeneutic inquiry "reminds us that what something means depends on the cultural context in which it was originally created as well as the cultural context within which it is subsequently interpreted" (Patton, 2002, p. 113); thus, it informs qualitative inquiry. Eichelberger (1989) noted that hermeneutic researchers are:

> much clearer about the fact that they are constructing the 'reality' on the basis of their interpretations of data with the help of the participants who provided the data in the study … If other researchers had different backgrounds, used different methods, or had different purposes, they would likely develop different types of reactions, focus on different aspects of the setting, and develop somewhat different scenarios. (p. 9)

Hence, my experiences as an international doctoral student became part of the interpretive lens as I analyzed the data provided by my study participants. I understand their lived experiences in terms of what I already know about performing in the figured world of academia as an international doctoral student. In addition, as I focused on interpreting their experiences with their advisors, I had a grasp of the overall meaning of their narratives and the context in which those relationships were formed, as we spent a considerable amount of time discussing their experiences in the U.S. academic, cultural, and social settings. Nonetheless, although phenomenology implies that the researcher has to "suspend judgment about the existence of the world and *bracket* or set aside existential assumptions made in everyday life" (Schwandt, 2015, p. 22), hermeneutic phenomenology allows moving beyond just a reduction or bracketing. As Sinclair (2013) pointed out, "the researcher is still aware of experiences, biases, and assumptions but these become a part of the interpretive lens instead of things to be set aside" (p. 33). Hence, while interpreting the lived experience of my study participants, I look back and

examine my bracketed assumptions in order to better understand the phenomenon under investigation.

Further, as Van Manen (1990) argued, the phenomenological research question does not seek to provide definitive answers, but "teaches the reader to wonder, to question deeply the very thing that is being questioned by the question" (p. 44). The research question must be "lived" by the researcher and his/her task is "to construct a possible interpretation of the nature of a certain human experience" (p. 41). Van Manen (1990) asserted that phenomenological research questions are "unsolvable" meaning that there are no generalizable answers and we can always understand more. Accordingly, this study aims at deepening our understanding of international doctoral students' experiences in the figured world of academia.

Researcher's Lens

In order to provide a transparent and more in-depth understanding of my researcher lens, it is essential to discuss some background information about my personal transition from student to scholar. In 2013 I started my doctoral journey as an international student in the U.S. in the Occupational and Adult Education track, after earning my previous degrees in my home country, Romania. I am familiar with the Romanian higher education system because I used to work at my former university while pursuing my degrees in communication and public relations. I have always been passionate about studying and developing my skills and abilities through formal education, thus pursuing a doctoral degree was a natural choice. I was extremely motivated to move to the U.S. and embark on an enriching learning journey but was not sure what to expect. Hence, after my arrival, I discovered a new academic world, a new cultural world, and a new social world in which I was supposed to perform. I entered these worlds without knowing exactly

what was expected from me, how I was supposed to act and interact with my advisor, faculty and peers, or other individuals on campus.

An Autoethnography

A critical moment of my journey was an assignment for a qualitative research course focused on examining my scholarly identity. Hence, I worked on an autoethnographic project and analyzed my transition from the Romanian education system to the one in the U.S., asking the overarching question *How am I shaping my identity as an emergent scholar?* It was then that I discovered the concepts of novelization and epicization and incorporated them into the conceptual framework for that project. Hence, the subsequent question was *What allows me to make the transition from epicization to novelization?* These two concepts were discussed in the second chapter of this dissertation. For the purpose of that project, I analyzed several documents such as my statement of purpose, written in Romania, at the time I was applying for the Ph.D. program, and various reflection papers, some of them written as "letters back home" to my mother; in fact, they were real letters, as I sent them to her.

The findings indicated that I was making the transition from an epic education system, with a unitary culture and language, to a system where characteristics of the novel were found, incorporating alternative and various forms of knowledge that generate cultural diversity. For the first question — *How am I shaping my identity as an emergent scholar?* the pieces of data revealed that I was furthering my knowledge and working very hard to meet the expectations for the scholarly work required in my doctoral program. I was constantly making connections between concept/courses/fields, and comparisons between the cultures familiar to me, and also between education systems (especially the American and the Romanian ones). In addition, I was shaping my identity as an emergent scholar by working with passion and accountability. The

second research question — *What allows me to make the transition from epicization to novelization?* found its answers in the variety of alternative and new forms of knowledge that I discovered as a doctoral student and in the new teaching practices that offered me the opportunity to share my experiences with my peers and instructors in a safe classroom environment opened to multiculturalism. Group discussions, presentations, debates and other assignments made me feel I was part of a pluralized education program where I could fit. Furthermore, intercultural communication with other international students offered me the stability I needed as a foreign student and helped me realize that I was not the only scholar who was struggling to adapt in a new cultural setting. Hence, I understand first-hand how culture influenced me as a human being and emergent scholar. I was making my transition from *epicization* to *novelization* by building new cultural software (Balkin, 1998) integrating both previous and existent knowledge. As an emergent scholar, I found myself in a process of formation, of shaping and reshaping my identity, questioning what others are taking for granted, trying to push away negative emotions such as missing my loved ones and my old life, and struggling to work hard and do my best in order to advance and obtain a Ph.D. degree, the highest accomplishment I could have sought.

Later that year I started working on an independent study and reviewed the literature in the field to find out more about how international students in the U.S. make sense of their experiences. This is how my interest in studying these students' narratives evolved and I started developing the conceptual framework used in this dissertation.

Methodical Structure

Van Manen (1990) defined hermeneutic phenomenological research as the study of human existence; phenomenological because it is the descriptive study of a lived phenomena and

hermeneutics because it is the interpretive study of the expressions and texts (objectifications) of lived experience. As the author argues, "the idea of text introduces the notion of multiple, or even conflicting, interpretations," hence "if all the world is like a text then everyone becomes a reader (and an author)" (p. 39). Van Manen (1990) discusses six methodological themes to be considered by researchers when outlining a hermeneutic phenomenological study and these are described below in the context of the study. As a researcher who has also experienced the same phenomenon as my participants, I considered it essential to address each of these research activities. Nonetheless, it is important to note that Van Manen (1990) cautions against considering these research activities in isolation, as they rather "animate inventiveness and stimulate insight" (p. 30).

1. Turning to the Nature of Lived Experience. I presented above my background and how the idea of this dissertation emerged. It was rooted in concerns and interests I have held since I began my doctoral degree in the U.S. as an international student. Van Manen (1990) argued that a hermeneutic phenomenological inquiry must be born out of the researcher's particular interests, as "phenomenological human science begins in lived experience and eventually turns back to it" (p. 35). I cannot just treat the topic of studying abroad "as solely an academic or research issue. I am not *just* a researcher who observes life" (Van Manen, 1990, p. 90), but I am also an international doctoral student and adult educator who is deeply interested in improving advising strategies regarding these students. My orientation as an educator and my personal curiosity to examine how other international doctoral students transition to the U.S. higher education setting have ignited a genuine interest in researching these students' lived experiences. Furthermore, my view of the world is informed by the constructivist paradigm thus I identify myself as a social constructionist who accepts that reality is socially constructed (Guba

& Lincoln, 2005) and I am interested in studying how individuals construct meaning in a particular context.

2. Investigating Experience as We Live It. Van Manen (1990) argued that "the lifeworld, the world of lived experience, is both the source and the object of phenomenological research" (p. 53), hence the notion of data is ambiguous in human sciences. Van Manen (1990) further asserted that the researcher should use personal experience as a starting point; in my case, I presented my autoethnography as a piece of data presenting my insights on the phenomenon of studying abroad. Next, gathering data for this study meant seeking an understanding of other students' lived experience through photographs, interviews, and focus groups. A more detailed description of these accounts of personal experience is presented in a later section of this chapter.

3. Hermeneutic Phenomenological Reflection. As Van Manen (1990) noted, the goal of phenomenological reflection is to interpret the fundamental meaning of something and take into consideration that "the insight into the essence of a phenomenon involved a process of reflectively appropriating, of clarifying, and of making explicit the structure of meaning of the lived experience" (p. 77). My understanding of these students' lived experiences with their advisors in a different culture is filtered through my own lens as an educator who aims at providing safe educational settings for all students to succeed. However, I understand that as a researcher it is crucial to not impose my own understanding on students' interpretations, thus when analyzing the focus group and interview transcripts I made sure that my participants' voices were heard, because their unique challenges are the focus of this study. I kept a journal including all the steps of my research process in order to strengthen my study. After each interview and focus group I made sure to jot down personal feelings and be conscious about similar experiences that I might have had and keep them separate from my participants' stories.

The idea of the figured world of academia gave me language to read what those students communicated and uncover thematic aspects regarding their lived experience.

      4. Hermeneutic Phenomenological Writing. "Human science research *is* a form of writing" (Van Manen, 1990, p. 111) that requires the art of being a sensitive listener able to listen in silence how the world speaks to us. Van Manen stresses the importance of writing and rewriting as a process of re-questioning our interpretation and measuring our thoughtfulness. This approach builds on the hermeneutic circle considering the parts and the whole as a cyclic interpretation process. Writing is a process of creation that exercises the ability to see and to show something; in essence, "to write means to write myself, not in a narcissistic sense but in a deep collective sense" (p. 132). I learned to do much of my writing in my head first and double check with myself if I am clear enough. Writing in English as a second language while researching international students has been a complex process of interpreting and re-interpreting human experience. I asked myself numerous times if what I was writing was making sense. I wrote and re-wrote my codes and themes so many times in a search for understanding — my own understanding of this phenomenon and then understanding how to write it down for others.

      Committing to this research and the process of interpretive writing meant asserting something right from the beginning. International doctoral students need more support systems. But was that the right thing to assert from the beginning? In fact, the writing process for this study began years ago when I wrote my autoethnography and started reviewing the literature about international students. I eventually developed the conceptual model and continued adding pieces to it. Nonetheless, putting this dissertation together as a main document was an overwhelming process. It was difficult because as I was doing preliminary analysis I wrote other papers that did not seem to fit in the main document anymore. Thus, I checked again all that I

had written before, the dissertation proposal, my notes, papers and transcripts, and hoped to merge them in a unitary document that would make sense. I was even more overwhelmed when I realized that I had hundreds of pages of transcripts; those transcripts were pieces of students' lived experiences and perceptions. How could I decide what to keep for this dissertation and what to leave out? Writing this dissertation then seemed a never-ending process. Hence, the final product addresses only a glimpse of my participants' lived experiences as international doctoral students. Inspired by Sinclair's (2013) dissertation, I have been thinking about this study as taking the form of a spiral that started with my own interest and vision for study and attracted to it other students' narratives that generated more meaning of this phenomenon: experiencing the figured world of academia.

5. Maintaining a Strong and Oriented Relation. Van Manen (1990) argues that hermeneutic phenomenology is a philosophy of action demanding of its practitioners, specifically in a pedagogical context. The interpretations we produce as researchers indicate how we stand pedagogically in life. In simpler terms, like Sinclair (2013) argued, what is the point of thinking about all these issues if we do not take action? Accordingly, the focus of this dissertation is of interest to me both personally and pedagogically. I want to better understand international doctoral students' experiences because I am an international doctoral student and also an educator. My goal is that this inquiry will not only help me have a better grasp on how fellow students experience the figured world of academia but also will offer recommendations for improving advising.

6. Balancing the Research Context by Considering Parts and Whole. As Van Manen (1990) suggested, the researcher needs to "constantly measure the overall design of the study/text against the significance that the parts must play in the total textual structure" (p. 33). Very easily

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we can get buried in writing, not knowing what to do next, thus we need to often pause and remember the research question, and then continue the process. As noted previously, this dissertation took the form of an expanding spiral aiming to generate an in-depth understanding of the lived experience of international doctoral students. For this interpretation to be written, I have been in a constant process of relating the parts and whole of this study while textually organizing my work.

Study Participants

The focus of qualitative research is not to provide generalizable answers to lived phenomena, but rather to interpret the diversity and depth of human experience. Hence, the focus of this study was not to strive for a very large number of participants, but to recruit, if possible, international doctoral students from various disciplines and countries in order to examine the diversity of their lived experiences as they develop relationships with their advisors.

Sample and Selection of Participants

The participants of this study are 25 international doctoral students at North Dakota State University (NDSU). At the time data was collected, the university offered 47 doctoral programs. According to Spring 2016 enrollment reports provided by the International Student and Study Abroad Services (ISSAS) Office at NDSU, there were approximately 337 international doctoral students at this institution when data was collected. For the purpose of this study, the sample was composed of international doctoral students in STEM-related and Arts, Humanities, and Social Science disciplines at NDSU.

At first, the study used a purposeful sampling strategy (Creswell, 2013; Mertens 2010; Patton, 2002). My initial goal was to recruit 10 participants enrolled in STEM doctoral programs, and 10 participants from Social Sciences, Arts, Humanities, and Education. At that time, the

study aimed to explore the diverse experiences of international doctoral students from several countries; thus, I planned to recruit, if possible, an equal number of respondents from various countries. Before starting data collection, I checked the updated reports of NDSU international doctoral student enrollment, student country of origin and doctoral programs. Throughout this process, I kept in contact with the ISSAS director and asked for permission to send the invitation letter for this study via the ISSAS listserv, which included all NDSU international students' e-mail addresses. As a member of various student associations, including NDSU International Student Association and Graduate Student Council, I attended numerous meetings and events, and invited international doctoral students to participate in this study.

After sending the invitation letter via the ISSAS listserv, I received emails from international doctoral students interested in participating in the study. I then provided them further information about the study and the informed consent document, sent them the interview questions, asked them to provide photos representing their graduate student experience and set a date for the interview meeting. After the interview, a number of participants recommended friends from other countries or programs as potential participants, hence a snowball sampling technique was used as well (Mertens, 2010). After reaching the initial goal of interviewing 20 international doctoral students, I found out that another two students were interested in participating in the study, thus I continued data collection. By the end of the data collection period, I had interviewed 25 international doctoral students, 18 from STEM-related disciplines and seven from Arts, Humanities and Social Sciences. After sending the photos and participating in the interview, each study participant received $10 in a thank-you card with a personalized thank-you message. Then, after attending the focus group each participant received another $10

in a thank-you card with a personalized thank-you message as compensation for their participation.

Description of Participants

Participants in this study were from 15 different countries: Algeria, Bangladesh, Chile, China (3), Germany, India (5), Iran (4), Japan, Nepal, Nigeria, Pakistan (2), Sri Lanka, Tajikistan, Turkey. Zimbabwe. They represented 14 different doctoral programs across six colleges: College of Human Development and Education; College of Arts, Humanities and Social Sciences; College of Science and Mathematics; College of Agriculture, Food Systems, and Natural Resources; College of Engineering; and College of Business. The majority of participants were from STEM disciplines. Nine participants were females and 16 were males. Participants ranged from 27 to 41 years of age. Students were at various stages in their programs, from first semester to final semester (very close to graduation); eight had completed their Master's degree in the United States. Each participant chose a pseudonym that was used for data analysis purposes.

Participants came to the U.S. under diverse circumstances. Several students had experienced studying abroad, either in the U.S. or in another country, prior to starting their doctoral programs. Students who completed their Master's degrees in the U.S., either at NDSU or elsewhere, transitioned to a doctoral degree at NDSU. Most of the students came to the U.S. by themselves, some came with their spouses and children, and others left spouses and children in their home countries; a couple of students had children born in the U.S. as they were working on their degrees. Participants who were not married and did not have children had close family members in their home countries. While most of the students mentioned they visited their family at least once a year, some students disclosed they did not have the opportunity to travel to their

home countries for various reasons. Students coming from countries in which obtaining a U.S. visa was problematic preferred to not leave the U.S., because they were afraid they might not be allowed back. In fact, one student from a Middle Eastern country revealed that he had not seen his parents for five years because of visa issues. Other students mentioned that it was difficult to visit their countries due to financial considerations. These conversations took place during a sensitive time for international students. On January 2017, the U.S. administration issued an executive order regarding immigration policy, followed by a second one in March 2017. These immigration regulations generated an unsecure climate for all international students, as revealed by participants in this study.

In terms of advising, the dynamics of the mentoring relationships also varied because some students had one main advisor, while others had one main advisor and a co-advisor. As discussed in one of the sections below, some students could choose their advisors, while for others the advisor was assigned by the program. Some advisors were foreign-born and had the experience of being international students in the U.S., while others were domestic. In order to better capture the complexity of these students' experiences and advising relationships, I recruited participants from different stages in doctoral programs—from first to final semester. Some students were in the U.S. for one year, while others for more years (one student has been in the U.S. for ten years).

Data Collection Procedures

Data were collected at NDSU between February and June of 2017. NDSU is a land-grant university serving over 14,000 students; approximately 800 are international students. In Spring 2017, when data were collected, there were 337 international doctoral students enrolled at this institution. After approval from the Institutional Review Board (IRB) was secured, all NDSU

international doctoral students received an invitation to participate in the study via the ISSAS

listserv. Participants who replied to that email and showed interest to participate in the study

received further information, interview questions, and informed consent form via email.

Participants were also encouraged to send photos representing their student experience prior to

the interview meeting. During the interview meeting, I started data collection after receiving

permission from the respondents to use their stories for the purpose of my study. Participant

confidentiality was assured, and each student was asked to choose a pseudonym that was used

for data analysis purposes.

Photographs

According to Mertens (2010), qualitative research "consists of a set of interpretive,

material practices that (…) turn the world into a series of representations" (p. 225), including

photographs. Prior to our interview meeting, students were asked to send me five photos that best

represent their experiences as international doctoral students in the U.S. I explained to them that

it was important to send the photographs in advance as a way for me to get to know them before

the interview. These photos were used only for discussion purposes and are not published in this

dissertation. The photos did not necessarily have to be recent, but they needed to depict several

experiences in this country, be they positive or negative. I asked each participant if they were

able to meet this task but mentioned that was not mandatory if they did not feel comfortable

sharing photos. Students were also instructed to add a short caption, either in the digital name of

the photo or in the e-mail. After receiving the photos, based on their captions, I developed

personalized questions that were added to the interview guide. I also printed the photos including

the personalized questions and brought them to the interview meeting. I sent via e-mail a couple

of reminders for sending the photos and encouraged participants to send them prior to our

interview meeting.

Twenty-two participants sent the photos prior to the interview, one participant shared

them with me during the interview, and two participants did not share any photos. The photos

represented several common themes: participation at conferences; participation at different

university events, including international events; working spaces, either campus offices or home

desks; social activities; and hobbies or relaxing activities. The majority of students noted that

choosing photos was an interesting exercise since "there is a lot of story behind each picture"

(Jeffrey). One student in particular disclosed that he "got emotional when [he] choose the

photos" (Sky).

Semi-structured Interviews

The interview is the most common form of data collection in qualitative research

(Lichtman, 2006). For the purpose of my study, I used semi-structured interviews; thus I

designed an interview protocol including several open-ended questions (see Appendix A).

However, the interview did not rigorously follow the questions listed in the protocol as I often

reframed the questions and followed Yin's (2011) suggestions about conducting qualitative

interviews, because my goal was to understand how my respondents made meaning of their own

experiences. Yin (2011) also noted that when doing qualitative interviews, the researcher aims to

understand the participant's world, and "the line of questioning (…) requires the researcher to

exert continual mental energy" (p. 135).

The semi-structured interviews included in-depth questions that were sent to students in

advance. Sending the questions in advance allowed respondents time to think about the topics

and recall experiences that impacted their journeys and academic success. As the researcher, I

ensured that the questions were clearly developed. I discussed the questions with my advisor and committee members, refined them for clarity, and then pretested them with an international doctoral student and an international student pursuing master's studies. The interview followed a conversational mode, and the questions in the interview protocol provided a framework for discussion. The interviews lasted between one hour and two hours forty minutes.

To get a sense of the characteristics of the student sample, a student demographic survey was completed during the interview meeting (see Appendix C). This survey included questions about home country, length of presence in the United States, time elapsed from the beginning of their doctoral programs, number of years studying English or in English, marital status, position held before arriving in the U.S., etc. As adult learners, all these factors may have significant influences on their experiences.

Students participated in semi-structured, in-depth interviews that were audio-recorded with two devices. Twenty-three interviews were conducted in university study rooms and two interviews were conducted in my office. The interview started by briefly reviewing its purpose and the information sought. Although the informed consent was sent by email in advance, participants also had time to read it and sign it at the beginning of the interview. Some participants signed two copies and kept one, while most of them signed one copy that I eventually scanned and sent it to them by email. Confidentiality was assured and participants were encouraged to choose a pseudonym that was used for data analysis purposes. I constantly focused my attention on what my respondents were sharing and asked for clarifications where needed. Due to the fact that both the researcher and the participant are non-native English language speakers, it was established from the beginning that asking for clarifications from both sides was critical. I avoided asking several questions embedded in the same sentence (Yin, 2011)

and demonstrated my interest in the participant's responses, while staying neutral and not imposing my own views during the discussion. I mentioned I was open to responding to any questions and providing further clarifications.

Moreover, I offered the option to talk "off the record" (Mertens, 2010) regarding particularly sensitive issues, telling participants that I could pause the recording if needed, carefully listen to what they share, and would ask for permission to restart the recording and continue to take notes when they will go back "on the record." According to Mertens (2010), various questions can be asked during the interview about students' background, experiences, opinions, feelings, and knowledge, so I made sure to guide the conversation around different topics and issues.

When concluding the interview, I asked if there was anything that the participant might still want to discuss. I then explained that the next steps were to transcribe and codify the data and asked if I could contact him or her for further clarifications. Many participants were not familiar with qualitative research, hence we spent some time discussing how these studies are conducted and how the data are analyzed. At the end of the interview I handed them the card including the $10 compensation and thanked them for their time. I also asked them if they were interested in participating in a focus group and provided information about that as well. I eventually followed up with an e-mail thanking the student again for their participation and sending a scanned copy of the signed informed consent.

Focus Groups

As noted by Krueger and Casey (2000), focus groups are group interviews that rely on the interaction between participants, while the researcher creates a safe environment in which participants are encouraged to share their points of view. The authors suggest that small groups

composed of four or five individuals offer more opportunity for discussion, and they typically use four to six groups. According to Merton, Fiske and Kendall (1990), these groups are "focused" because the participants have some common experiences or they presumably share some common points of view.

Four focus groups were conducted in this study with 19 participants that also had participated in the individual interviews. The focus group questions guided the discussion about the commonalities and differences between students' experiences in their doctoral programs (see Appendix B). The questions were refined according to the data gathered from the interviews. The groups were heterogeneous, composed of four to five international doctoral students from different disciplines and countries. Mertens (2010) noted that "systematic variation across groups is the key to research design with focus groups" (p. 240) and that the criteria for group composition will vary depending on the purpose of the study. For my research study, I analyzed students' experiences across disciplines and noted if there were any patterns that indicated differences and/or similarities that were tied to their program of study. I encouraged all participants to share their insights and monitored the ones who tended to dominate the discussion (Creswell, 2013). For example, during one of the focus groups I noticed there was one student who was speaking extensively, while another one barely shared his experiences. Hence, each time I was posing a question I was making sure to also encourage the quiet student to engage in the conversation.

The focus groups were conducted in a media studio at the NDSU Technology Learning and Media Center and were audio and video-recorded. They lasted between one hour and two hours ten minutes. Taking into consideration the fact that English is not the respondents' first

language, a video-recording enhanced the transcription process and helped me identify the participants.

My empathy and experience as an international doctoral student helped tremendously in creating a bond and trust with my respondents. Moreover, the international students' reflections on their experiences was beneficial, not only for the purpose of this study, but also for the participants themselves, since these interviews and focus groups allowed students to critically examine their academic, social, and cultural journeys in the U.S. A very large number of participants indicated that they enjoyed participating in the interviews and focus groups because they had an opportunity to reflect on their experiences and engage in conversations with other international doctoral students. In this sense, Michael shared:

"I have never thought of these questions, but I mean, these are kind of day to day life questions, issues that we face, but frankly I didn't have any time to think deeply about these questions, so I think it's good to have this kind of conversation with each other. I mean it's always nice to talk to other students who are facing the same issues, so then we can realize that ok, I am not the only one who is facing this issue. We, all of us together sharing the same situation so it's kind of giving me the strength to do the work that I am carrying out, so I think it's good to have a conversation with fellow doctoral students."

Students also expressed their enthusiasm about this study via email and thanked me for providing them the opportunity to reflect on their experiences. For example, I received the following message after one of the interviews: "Thank you Corina for giving me this opportunity to flash back my old memories and help me in evaluating my life lessons." This kind of feedback convinced me that this dissertation was not only meaningful to me, but to the study participants as well.

Data Analysis Procedures

Creswell (2013) argued that data analysis processes "conform to a general contour" (p. 182) that take the form of a spiral (Figure 7). This spiral highly informs data analysis procedures used in my study as, according to Creswell (2013), I enter with data composed of text and photographs, and exit with a narrative, or what he has referred to as an account, presented in Chapter 5.
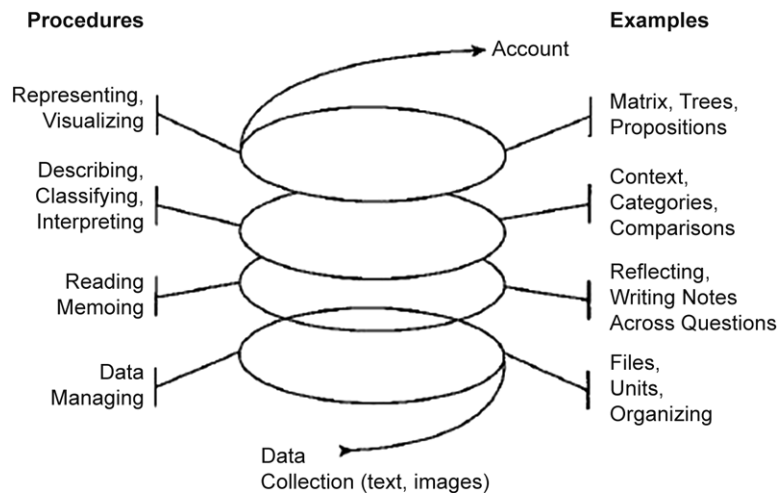
Figure 7. The Data Analysis Spiral. The data analysis spiral presents data analysis procedures and examples. Adapted from *Qualitative Inquiry & Research Design. Choosing Among Five Approaches*, by J. W. Creswell. Copyright 2013 by Sage Publications, Inc.

The interviews and focus groups were transcribed and all photographs were collected. After verbatim transcription, data were organized and analyzed using the NVivo software package (version 11) for qualitative data analysis. NVivo provides different tools for organizing and coding the data, but the principles of analytical process are still decided by the researcher.

I started by reading through all my interview and focus group transcripts while listening again to the audio and video recordings and making corrections where needed. I sent the completed transcripts to participants and asked them to double check for clarity. I went through the photos sent by participants and the notes taken while collecting data. I added annotations and wrote extensive memos while reading all transcripts. I added all data pertaining to participants

under different cases for each. I eventually came up with main themes and created nodes for each. Hence, for the first coding cycle a deductive analysis approach was used and I coded the transcripts while taking into consideration the types of questions asked and topics connected to those questions.

The second coding cycle used an inductive approach as I looked for general patterns that were eventually categorized in themes (Patton, 2002; Saldaña, 2013). Under each main topic I created child nodes including *in vivo* codes (verbatim) for each child node or subtheme. Many passages illustrated more than one theme, thus were coded at different nodes. In order to develop codes and categories, I looked for "recurring regularities" (Patton, 2002, p. 465) in my data. These regularities revealed patterns that were sorted into categories. The final step was to go back to my respondents' individual stories and relocate the patterns found in their personal contexts (Creswell, 2013; Denzin & Lincoln, 2011; Maxwell, 2005; Saldaña, 2013; Yin, 2011). As Van Manen (1990) argued, "themes have phenomenological power when they allow us to proceed with phenomenological descriptions" (p. 90), thus each theme relates to a description of what international doctoral students' experiences as a result of their relationship with their advisors.

Furthermore, in order to ensure the validity and reliability of the study, I did peer debriefing (Cohen, Manion & Morrison, 2011) and discussed my coding procedures and themes with my advisor and committee members. We had extensive conversations about the analysis and I eventually incorporated their recommendations. In order strengthen my study and enhance trustworthiness, I used methodological triangulation in the form of multiple sources of information (Creswell, 2013): photos, interviews and focus groups. These three sources of data determined the strength of evidence in support of the findings (Patton, 2002, p. 467) reported in

the chapter that follows. Nonetheless, it is important to note that although the advisors certainly have important stories to relate, this was a one-sided study looking solely at students' experiences. The results of this inquiry may be transferrable, but they may not be generalizable.

Summary

This chapter provided a detailed description of the rationale for the research design selected and the theoretical orientation informing this study. The researcher's lens and methodical structure were extensively discussed, as my positionality as a researcher was an important piece to be addressed in this dissertation. Then, the methods and procedures used for data collection were presented in detail: the use of photographs, individual interviews and focus groups. Then, data analysis procedures were described. The following chapter reports the results of this study.

CHAPTER 4. RESULTS

"Themes are the stars that make up the universes of meaning we live through. By the light of these themes we can navigate and explore such universes."

(Van Manen, 1990, p. 90)

The initial goal of this study was to explore the experiences of international doctoral students across disciplines, how they navigate the cultural and academic U.S. settings while studying at a Midwestern university, and how they develop relationships with their advisors, faculty, and peers. Due to the complexity of these students' stories, this dissertation presents only a glimpse of their transformative experiences while performing in the U.S. academia, hence it focuses on providing an understanding of the figured world of advising relationships as experienced by international doctoral students. It was not an easy task to decide what to choose to report in this chapter so that it would be a natural extension of the previous chapters. Using the data collected from the photographs, individual interviews and focus groups, this chapter presents paramount factors impacting international doctoral students' lived experiences: their motivation to embark on a doctoral journey in the U.S., how they navigate the relationships with their advisors and what is the significance of those relationships, and what are the commonalities and differences of these students' experiences across disciplines.

The rich data sources generated more than 700 pages of transcripts enclosing their journeys as international doctoral students. The factors discussed in this dissertation revolve around the center of the methodological spiral that begins with my own experience as an international doctoral student and my vision for this study. The spiral starts with my autoethnography that broadened my interest in looking at the lived experiences of other international doctoral students and generate in-depth knowledge about this phenomenon. The

goal is that this spiraling will generate more meaning and stimulate reflection and further inquiry.

Thus, this chapter will present the findings from the analyses across the 25 interviews and four focus groups that attempt to isolate the key features of the phenomenon under examination – – living and studying abroad, into common themes, and to address the following overarching research question and two sub-questions:

- How do international doctoral students experience relationships with their advisors?
  - How do those relationships impact how they make sense of and navigate their academic and cultural worlds in which they find themselves?
  - What are the commonalities and differences in the experiences across disciplines?

Accordingly, the purpose of this chapter is to discuss the main factors impacting their narratives and explore the themes, grounded as they are in the participants' accounts of their lived experiences, and to provide an explanation of these themes with meanings that are true to that experience. As noted previously, through in-depth interviews and focus groups the participants in the study shared their past and present experiences to illustrate how they are living and navigating relationships in the figured world of doctoral education in the U.S. Participants' emotions revealed during these in-depth conversations were taken into consideration while categorizing these themes. Throughout this process of interpretation, I followed Van Manen's (1990) methodical structure discussed in the previous chapter while taking into account that "phenomenological themes are not objects or generalizations; metaphorically speaking they are more like knots in the webs of our experiences, around which certain lived experiences are spun and thus lived through as meaningful wholes" (Van Manen, 1990, p. 90). These students shared with me the dynamic processes they experienced, their accomplishments and their sorrows, thus

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my hope is that these findings are a window through which we can gain a better understanding of these students' meaning making systems.

Keeping a diary of notes throughout the interview process helped me acknowledge my biases and thoughts about the complexity of these students' experiences. I did my best to not overlap the meaning of my own experience when reporting the results, thus participants' voices are presented through numerous quotes denoting pieces of their lived experiences as international doctoral students. In order to preserve the participants' authentic messages in their responses, the quotes attributed to them below have not been edited for proper voice, tense and syntax.

In the sections that follow, the results are described as part of several factors that comprise the lived experiences of international doctoral students: motivation to pursue a degree in the U.S., advising relationships, and students' experiences across disciplines.

Motivation

In the beginning of the interview, respondents shared what motivated them to pursue a doctoral degree and why they chose the U.S. Hence, this section documents international doctoral students' motivations to pursue doctoral studies in the U.S. In order to better understand the lived experiences of these students it is important to analyze their intrinsic and extrinsic motivation to embark on a doctoral journey in a foreign country.

Why the U.S.?

An inductive approach was used when analyzing participants' discussions about their decisions to choose the U.S. as an academic destination, and several themes emerged.

Uniqueness [of the U.S. education system]. A few students shared that one of the factors that convinced them to study in the U.S. was the uniqueness of U.S. universities. Sadib, who came to the U.S. from a South-Asian country, mentioned that at the time he was pursuing

his Master's studies abroad, he was impressed by professors who earned their doctoral degrees from U.S. universities. He also had discussions with friends who studied in different countries such as Canada and Australia and realized that the U.S. education system was unique. On a similar note, White, who came from a different Asian country, shared that she chose the U.S. because she was looking for a unique program in her field and at that time there were only 20 universities in the world offering what she was interested in, and 17 of those universities were in the U.S.

Reputation of U.S. universities. Mary, who is from a North-African country, disclosed that her brother had already been in the U.S., thus she knew from him about the opportunities offered by universities. She was aware there were "good universities with good reputations worldwide. Also like, you know, there would be programs that would offer a variety of classes in the area of interest." She also liked the idea of practicing her English. William, who is from an Asian country, chose the U.S. because of his field of expertise and the reputation of the U.S. university system. Geoff, also from an Asian country, mentioned he considered this to be a good opportunity to be exposed to "some good world class faculty members and new facilities."

More opportunities. Mumu, whose home country is located in Asia, stated that she wanted to pursue studies in the U.S. because she had thought she would have more opportunities:

> *"I have been wanting to come to U.S. since my Bachelor's, because in my field I think U.S. was the country where we get more opportunities, so I always wanted to do my Ph.D. here and I was thinking if I don't get accepted for Ph.D., then for post-doc I will come here."*

Shyam, who is from an Asian country as well, had already completed his Master's degree abroad, but in a different country, and he indicated that he chose the U.S. for this doctoral studies because "in terms of opportunity the U.S. had the best opportunities in that period of time."

Conversations with university faculty. Sadib shared that during his graduate studies he had a chance to network with individuals from his current home institution, thus they discussed the admission process. White also started communicating with an NDSU faculty prior to applying: "felt like a connection and that's why I applied here." Similarly, May, who is from an African country, recalled that, while finalizing her Master's studies at a different U.S. institution, her previous advisor introduced her to a faculty member at NDSU who convinced her to apply for a doctoral program. Geoff did not plan to come to the U.S. from the beginning, but his current supervisor invited him to NDSU:

> *"It wasn't well planned because I always like to do study and I feel that's my passion to study, to teach, to help others, and to create some interesting knowledge. That's my passion so I would do graduate study anywhere in [home country] or in the United States, so it wasn't well planned until I got in contact with my supervisor."*

Batman, who is from a Middle Eastern country, shared a similar story. He applied to NDSU because he got in contact with a faculty member there. Shyam also chose the U.S. at the suggestion of a professor who recommended a faculty member at NDSU. On a similar note, Carlos, a student from a South-American country, chose to come to the U.S. because he had been in touch for "four or five years" with a faculty member that later became his advisor: "he had almost all the papers, the old papers that no one can get. So, I started to ask him, and yeah. So, then we started the relationship and emails back and forward." Catherine, who is from an European country, remembered that:

"my motivation to come here was in part by wanting to have that experience, but also because the faculty members were very… well, seemed very supportive. […] I remember how many emails I got from them during that summer before me coming here, which really made my decision or supported my decision to come here and test myself out because I felt well, you know, they seem to be really supportive and it sounds like they believe in me more than I believe in myself so let's try it out."

Hence, a number of students decided to pursue a doctoral degree in the U.S. because they had the opportunity to communicate with their faculty and advisors prior to initiating an application process.

Funding support. It is important to note that, after admission, all participants received funding support from the university in the form of a research and/or teaching assistantship. Only one student disclosed that he did not have an assistantship during the first semester, but he eventually received a research assistantship. Several students mentioned that one of the decision factors to pursue studies in the U.S. was financial support. Sky, who is from a Middle Eastern country, applied to doctoral programs in different countries, but he received a funding opportunity at NDSU and, therefore, he chose the U.S., even though it was not his first choice. He admitted that: "Yeah, it was not my own decision 'oh, I want to come here' you know, it happened." On the same note, Batman stated that he received admission with very good funding. Shyam also shared that one of the factors that convinced him to choose the U.S. was the financial support:

"In the U.S. and particularly in North Dakota, they seemed to have a lot of funding, at least in 2013, the state was doing well, the funds were there to support research and I mean to a large extent they were doing quite well compared to other states. And that

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played a huge role, also in addition to finding the right opportunity that sort of fits the

profile that I was looking for, so all these factors coming together led me to the U.S."

Exposure to a new culture. Dacky, who is from an Asian country, came to the U.S. not

only to enhance his research, but also to learn a new culture. On a similar note, Geoff saw this

"as a great opportunity to get exposed to the new environment." Batman also shared that the

chose the U.S. because it allowed him exposure to new experiences:

"In the U.S. I don't have any kind of relatives over here, so it will be a very unique

experience for me and I'm kind of an adventurous person, I'm looking for different and

new experiences. I would say that was the main reason for me."

A couple of students also mentioned that another factor for choosing the U.S. was

English as a means of instruction, because they were already proficient in English as a second

language. Other students shared that they had family members and friends living in the U.S. and

they encouraged them to apply.

Why a doctoral degree?

An inductive analysis of international doctoral students' motivations to pursue a doctoral

degree generated a number of themes presented below.

Building expertise. Mary graduated with her Master's degree in the U.S., then continued

her studies and enrolled in a Ph.D. program because she wanted to enhance her knowledge in her

field and do more research. Geoff shared that his motivation to pursue a Ph.D. degree implied to

be specialized in a field so that he could contribute to society:

"The internal motivation, I feel like I want to create something new and I want to learn

deeply to eventually contribute to my country or my school, hometown people […] That's

the responsibility for my generation, talking about new things and how to do new so we

have to earn an advanced degree, get specialized in a field and be skillful so we can

create new things. That's my internal motivation, that's how I was educated to be."

Rose, who is from a Middle Eastern country, was interested in pursuing a Ph.D. because in her home country she was an instructor at a university and she considered that her Master's studies were insufficient, thus she wanted to enhance her knowledge: "That was something that pushed me all the time to do something to improve my knowledge about my major or other major, so that was the main reason for me to continue my education and get my Ph.D."

William completed his Master's degree in the U.S. at a different institution, then continued with his doctoral degree at NDSU. He decided to enroll in a Ph.D. program in order to "stick to the education system and to experience more, learn more, to have some supporting theories and skills set for me into the job market."

An academic career. Like other participants in this study, Mumu was hoping to have the opportunity to work in academia:

"Regarding job opportunities in my country, having a Ph.D. would ensure me that I get a

job in university, which is actually, I always wanted to work in a very safe environment

because, you know, academia is considered very safe, and you get to pursue the things

which you like, so that's why I wanted to do a Ph.D."

After completing his Master's studies, Sadib decided his objective was to pursue a career in academia, thus he needed a Ph.D.: "in the end I thought, I concluded that my aptitude is towards education, towards academia, towards teaching. So, teaching without Ph.D., no way, no way to survive." Tiger, a female student from an Asian country, also aimed for a college teaching career: "in the future, for my career, I want to be a college teacher, so I think this study abroad experience is very important, and also this Ph.D. degree." Similarly, Batman shared that

he had a strong inclination to work in academia: "I love teaching. I really love teaching and here I actually teach [...] and I love it, so I always wanted to get a job in academia, I wanted to be a teacher, I wanted to be a professor."

Improve their socio-economic status. Sadib's motivation to pursue a Ph.D. was also influenced by his family's condition. Being a first-generation college student, he wanted to set a very good example for his family and became their inspiration. When getting close to graduation during her Master's studies, Catherine was advised to apply for a doctoral program in the U.S. She was flattered by her advisor's suggestion, but she thought that would not be possible due to financial constraints:

> "I wanted to show that I can achieve things, that I wouldn't pass any chances that come my way to improve my economical position, or my career, so I, of course it was flattering that he asked me about that, but I thought that I will probably not find any financial support."

Catherine was not sure about the direction she wanted to go, but she applied to various universities and received financial support as a graduate teaching assistant. At the time of the interview, Catherine was in her final semester, very close to graduation. Another student, Dacky, shared his motivation to improve his socio-economic status:

> "I want to go back home, I want to be an entrepreneur so any funding you write from the government agencies they would treat you like an expert only if you have a Ph.D. degree, so that is another motivation. When I go back home I don't want to be financially crippled, I want my government to support me, that's a dream, I want to be that distinguished student going back with the suffix of Dr. in front of my name and do some good for the society."

Ann, who is from a Central Asian country, disclosed that she chose to pursue a doctoral degree in order to enhance her resume and have an opportunity for a job in the U.S., because she:

"started noticing that education system in my country is not the same. The country is getting more corrupted, everywhere you want to go on to good, I mean to get good things, let's say, education, health and social wellbeing things you need to deal with someone or to pay some extra money so all these things that suddenly like, came to my mind. I'm like, okay, I wanted different future for my kids so even though it was very hard I said - okay, let me apply."

Value of the doctoral degree. Sky's motivation to pursue a Ph.D. degree was strongly related to the value that a doctoral degree had regarding his professional goals: "In my major when you have Master you cannot make any decision. And I like to make decision, especially in research." On a similar note, Julie, who is from an Asian country, was interested in a doctoral degree because universities in the U.S. have strong research departments and also because "getting a degree in United States or several best European countries is also really valuable when you return to your home country. It is also another reason for me to continue Ph.D." In addition, in some fields, as Shyam explained, "having a Ph.D. would be a prerequisite, especially under very good advisor." System, a student from a South-Asian country, also shared that a doctoral degree was important because "I had to get a higher education and that's the only want to be able to learn all these things and be able to help progress your life. So that's how I decided that I need Ph.D."

A dream. Mumu wished this for herself since she was a child. She had a genuine interest in enhancing her education from a young age. Mumu also wished to fulfill her mother's dream who did not have a chance to pursue a Ph.D. Like Mumu, Dacky also wanted to pursue a Ph.D.

since he was a child: "doing a Ph.D. has always been a dream right from my childhood. I always wanted to have that prefix in front of my name." In a similar fashion to Mumu and Dacky, White disclosed that: "I always wanted to, I don't know why, I just I always like, since I was a little kid, I was interested in studying so I just wanted to do Ph.D." Han, another student from a South-Asian country, shared similar thoughts, explaining that he had always dreamed to come to the U.S. but it was very difficult to do that because he was from a middle-class family and did not have sufficient financial support in order to pursue a degree in the U.S. However, he received a scholarship and was able to apply.

Love for learning. Mary shared that a strong motivation to pursue a doctoral degree was her love for learning: "I always wanted to do the full thing, like get as much high education as I can. I am a learning person. I just like to keep learning and school is obviously the best institution for that." When prompted to share if there was a specific professional reason she had in mind at the time she applied for her doctoral studies, White stated:

> *"I am open to whatever because I did not start my life with the goal of living in a certain country, I started when I had this understanding that I have to make something out of my life it was more about experiences, it was more about learning and it was never about living in a certain country or not living in a certain country."*

Along the same lines, Ann indicated that "learning is always great" and Julie mentioned that "I always like to learn more, and I am also person that always continues learning." In the same way, Sean, who came from a country in East Asia, noted that a doctoral degree represented for him the highest goal, thus after finalizing his Master's studies he decided to continue with a Ph.D. degree because of his love for learning.

Dacky recalled that before coming to the U.S. he had won a couple of international awards and wanted to enhance his research and continue learning:

"I really wanted to do my highest research, but I didn't want to do it in [home country] because I wanted to learn a new culture, I want to add a new sense in my life, I want to expand."

In sum, these findings show that international doctoral students' motivations to pursue a doctoral degree in the U.S. are numerous and context-related. However, the findings also indicate that there are certain global motives that inspired their decision, such as career goals and improving their socio-economic status. For the purpose of this study, attention is given to the number of students who stated that they chose to attend a doctoral program in the U.S. because they had prior connection to university faculty and several of them later became their advisors.

Advising Relationships

The core of this dissertation is to explore the advisor-advisee relationship and how international doctoral students across disciplines experience this relationship and learn to navigate it. During the interviews and focus groups, participants shared their unique experiences with their advisors and how those relationships impacted their learning experiences and personal development. Data analysis was a constant process; after each interview I went back and reflected on students' responses to have an in-depth understanding of how to approach this topic in the focus groups. The central themes presented in this section emerged from the analysis of both interviews and focus groups, and they all fall under the overarching theme of advising as intercultural and inter-educational experience:

Table 1

Advising as an Intercultural and Inter-Educational Experience

Central theme	Subtheme
Advising as mentorship	Advisor as a role model
	Advisor as guide
	Advising as professional development
	Advising as personal development
Advising as support	Advisor as motivator
	Advisor as sponsor
	Availability
	Freedom
Advising as employment	Advisor as boss
Advising as dysfunctional relationship	Mismatching background
	Micromanagement
	Lack of openness
	Anxiety to switch
Advising as caring	Caring advisors
	Culturally sensitive advisors

These central themes fall under the overarching theme of advising as an intercultural and inter-educational experience. These themes discuss the advisors' roles, traits, and interactions with their advisees, as perceived and described by participants in this study. A thorough interpretation of how participants experience these relationships is also provided.

This study's findings show that international doctoral students consider the advisor-advisee relationship to be an intercultural and inter-educational experience, because they were familiar with different education systems prior to their arrival in the U.S. Some students studied in the U.S. or other countries before starting their doctoral degrees thus they were somewhat familiar with navigating various education systems. Other students came to the U.S. with the sole purpose of pursuing a doctoral degree, hence the learning environment was totally new to them. Therefore, an overarching theme that emerged was informed by the intercultural and inter-educational components of navigating advising relationships at the doctoral level.

Sean stated that although he earned a Master's degree in the U.S., he was still adjusting while trying to figure out how to communicate with his advisor:

"I don't know how to say it, but…I'm still adjusting. I think that this may be a cultural thing, but [country of origin] or Asian people are trying to think about what the other think and try to adjust our own approach […] Anyway, I am trying to adjust. I'm trying to think about how she would respond when I say."

During the interviews, participants offered various examples of how mentoring relationships were perceived in their home countries or in other countries where they studied prior to their arrival in the U.S. For example, Batman shared that in his home country the advisors usually mainly taught theory, while in the U.S. his advisor taught him how to be organized and "be able to communicate things that I learned" and that "prepared me to be a good professor, a good teacher." Mumu shared that back in her home country professors were not as transparent as they are in the U.S. Another technical difference regarding advising was shared by William, who mentioned that in his country it was very hard for students to enter doctoral programs because of the very high student population compared to the number of advisors:

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"some advisors are so good that there are millions of people fighting for them and you need to wait in lines and even if you get as much of score that you might need at the entrance exam it's pretty dependent on the advisor himself whether to enroll you or not. In the States if you're good enough the program will just enroll you and then you can continue your research here so that is a huge difference."

Advising as an intercultural and inter-educational experience meant that students performed in a new culture of respect received from their advisors in the U.S., comparing to the academic relationships that they experienced in their home countries. A large number of students indicated that in their home countries advisors were "strict and hard" (John). On a similar note, White disclosed that she appreciated the fact that in the U.S. advisors did not shout at their students, like they used to do in her home country where the professors where the authority figure. Likewise, Mary stated that in her home country advisors were "like Godly beings" and students were terrified by them. She shared that in the U.S., on the contrary, advisors "are professional and really simple […] they're really approaching, that's really different." In a similar fashion, Dacky, who is from a different country, shared that "back home if you look at teacher you are treating them like God, you know, you can't talk, you can't speak, you can't eat." Michael also indicated that faculty members were highly respected in his home country and students always had to stand up when meeting with them:

Rose also mentioned that in her home country students "try to respect our professors, most of the time even we cannot dare to ask them any question" and "there was some kind of wall between students and professors, but here we don't have such thing. The relationship here is still respectful, but somewhat closer." Strongly related to the issue of asking questions, Jeffrey indicated: "what I like most is that here it really makes it a free environment to ask questions,

and to learn, and to know your mentors well, something I think I didn't see much of back at home."

As part of the intercultural and inter-educational advising experience, the vast majority of study participants discussed that in the U.S. the advisor-advisee relationship was less hierarchical; it was surprising that they could address their advisors by their first name and it was a bit difficult for them to do that because in their home countries that was unusual.

One exception regarding less hierarchical relationships was Sky's situation, who declared that his advisor was elder, came from a different country but with a cultural background similar with his, thus he did not accept to be called by his first name. With the exception of this example shared by Sky, most students discussed that less hierarchical relationships with their advisors were very different from what they experienced in their home countries. That, together with other examples of cultural and educational differences shared by students, transformed advising into an intercultural and inter-educational experience.

Theme 1. Advising as Mentorship

Advisor as a role model (apprenticeship). When prompted to respond what they would like to share about their relationships with their advisors, several participants mentioned that they viewed their advisors as role models with strong professional background, as experts in their fields who were dedicated to their research. Mary stated that her advisor was a rock star in her field because she had a large number of publications in major journals thus she was "a good model to follow." Sadib mentioned that his main advisor was "very talented and very cooperative" and his co-advisor was "a very experienced guy". Similarly, Shyam expressed his admiration for his advisor who:

"is extremely experienced in his line of work again, and which is why I want to do work with him. He is got over 20 years of experience doing what he does, and he has travelled extensively, he is sort of done a bunch of different things through his career. When a person like me is under him and when, every opportunity that I have to ask questions he does not hesitate to answer, he has always an answer at the end of the day, so that is something that I really appreciate about him."

Shyam shared that he was amazed by his advisor's expertise and he appreciated his support, particularly because "to have someone who knows what they are talking about it is absolutely essential, and that I something that I can attribute to my advisor." Likewise, Tiger mentioned she respected her advisor because of her vast experience: "I think she's a strong woman. She has really good education background and she also has working experience in big international company, so I respect her a lot. I plan to learn a lot from her." As an apprentice, Julie shared that besides her advisor's expertise, she also appreciated her advisor's work ethic:

"He's also really good for one point, still I don't have that behavior, how can I say, he is making everything according to the rules. He doesn't like to pass the rules, I think that this is really important behavior and everybody doesn't have it."

When discussing the advisors' impact on students, Sean also commented that "they can be a role model for us." Han, a student on a J1 visa who had one year to select an advisor, shared that he made the decision according to his advisor's research background:

"she is very good in research, that's why I selected her. Because I was having a choice, for most of the F1 students they have some advisors selected already. But I selected her; in the first year I was having no advisor, I just focused on my research. In our program, for J1 students, you have an option, you can select any advisor."

Participants commented that their advisors' research expertise was admirable. For example, Batman was stunned by his advisor who "is 100% dedicated to his research." Their dedication and strong research background was reflected in their advisees', or apprentices', accomplishments. Geoff, who was very close to graduation at the time of the interview and had the same advisor for seven years disclosed that his work not only reflects his own efforts, but his advisor's efforts as well.

Advisor as guide. Faculty who are experts in their fields are not by default good mentors. Nonetheless, the majority of participants in this study described their advisors both as experts and good mentors. The in-depth interviews and focus groups provided complex data that indicated the advisors' main role: the advisor as mentor. This was a recurring theme and the quotes below represent only a glimpse of the lengthy conversations regarding mentorship.

While discussing what advising means to him, Sadib shared that:

"Ph.D. is not a kind of program which you will pass by…there is not set path of this. You have to craft all your ways and mechanisms and all this stuff. For crafting all this, you need time, you need patience, you need guidance, so the most important thing our supervisor can give to his students is all about guidance and confidence, and trust that you can do it, that's why you are here. So, I am lucky."

Sadib came to the U.S. to pursue his doctoral degree as a self-funded student during his first semester. He managed to find funding from a different advisor, so he switched. He then had a main advisor and a co-advisor who provided funding. When sharing his experiences with his co-advisor, Sadib explained that even though he was a highly-ranked faculty member engaged in extensive travels, he still received valuable guidance. Michael, who is from a South Asian country, described his advisor as "a good mentor" who always responds to his questions and "he

always accepts me, his door is always open and even on a very worse day of his life when I go into his office, he always treats us, his students, he doesn't bring his family problems or anything to his office." Likewise, Shyam said that his advisor "is more of a mentor" who has highly inspired him: "one of the main reasons that I am where I am today is because of my advisor. He was a key driving force in that." Jeffrey also described a healthy mentoring relationship with his advisor:

> *"Very professional, very well-structured, and very intentional. Intentional in the sense that we have specific goals we want to achieve, some of them are programmatic goals, if you look at assistantship, because my advisor also is the person who is my assistantship advisor, so there are program needs, and I have the support I need to plan my role in meeting the program's needs."*

System also discussed about the importance of structure and setting goals together with the advisor, in order to advance in the program and maintain a good relationship. Similarly, Dacky shared that his advisor had a set of plans for him to ensure he could balance coursework and research. When discussing the advisor-advisee relationship, May shared that her advisor was a pivotal factor in her success as a student: "I think it is very important. I feel like my advisor has been critical in me knowing what is what, what to do, where to go." John also mentioned that, through constructive feedback, his advisor provided direction: "When it comes to the homework, it definitely provides very strong feedback, that 'this is your mistake, you didn't do the discussion properly,' and when I go to ask a question he supports me very much."

Tiger, a student who started her doctoral degree without having prior background in that discipline, discussed how her advisor helped her step by step to become familiar with the field:

"my advisor, she taught me hand by hand with every single, every single step with too

much details about how to use the instrument. Because in this field, I have no idea and I

have no background, I don't know how to use this, use that, so I started from zero, but

she has a lot of patience."

Tiger also recalled that her advisor guided her on how to develop a conference poster and

after just one month in the program, she participated in a conference and had the opportunity to

get familiar with academic events in her field: "so I want to thank my advisor, she thought it's a

good chance for me to learn, to see what kind of the academic meeting looks like."

Nonetheless, a few students mentioned this relationship goes beyond just mentorship.

Shyam, Catherine and Jeffrey in particular discussed how some advisors treat them as

colleagues:

"they treat you as a colleague […] A person who is sort building up, polishing the

technical skills and they don't look down upon you, they treat as equal, and that I think is

a good work ethic, and that sort of, is good when you start working, that just carries on,

*that's good." (*Shyam)

Sun also noted that these mentoring relationships go beyond just advising for their

doctoral degrees, thus advisors' roles as mentors imply more than that: "my advisor has more

experience than me, so I think that she can help me a lot in my family problem, in my work

problem or when we want to work at this specific company or university". Sun discussed that the

role of his advisor is critical because she can guide him in a variety of aspects.

For a number of students, these mentoring relationships had always been healthy and

positive. On this topic, Shyam stated: "I am sure different students, depending on their

circumstances, have different things to say, but I personally, I've never had an irrationally

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negative experience, something that I couldn't make sense of at the end of the day." Sun and William shared the same feeling on this topic and mentioned they were never frustrated with their advisors. Similarly, Michael shared that he and other students in his program are very satisfied with their advisors' guidance:

"nobody is talking about the fact that they're having problems with their advisor or any faculty members like, very small incidents, forgetting something like that or I think it's my program is a very positive one for the international students overall."

Sadib was also one of the students who revealed he was pleased by the guidance he received from both advisors: "I think my supervisors are a big blessing for me, so they give me time, they give me confidence, they give me trust that you can do it, which is very important."

Advising for professional development. The majority of international doctoral students revealed that the advising relationship had a critical role in their learning journeys and professional development. In this sense, Batman shared:

"It actually, it has a profound and significant, it plays a profound and significant role in my academic experience here because I know some friends over here, not a good relationship with their advisors and it can be life changing. Some people change their advisor because of all those problems. So, I'm really thankful and grateful for having such a good advisor and please tell him."

Study participants mentioned that the advising relationships were paramount in their professional development because they received the guidance needed to navigate their doctoral degrees, as William stated:

"Because the advisor is the person that you need to contact with your dissertation so it's very important for him to give some valuable advice and also maybe some guidelines for

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you to follow. Without the advisor I can say it's a bit difficult for me to finish the

dissertation myself. Also, his research experience and his teaching experience may kind

of help us to balance the coursework, research work, and also teaching work, which is

good."

Shyam also shared the idea that the advisor played an important role and directly impacted students' professional development, and that goes beyond earning a doctoral degree:

"Oh, tremendously. I think their willingness to help, they are willing to meet students

half way, and this is not just with me, this is true with any student that goes into that

program. […] They are good educators, which is a very great thing about them, and

when they are willing to come forward and be helpful, it also inspires students to put in

that effort and inspires us to learn, want to learn more about this, rather than just want to

get a degree."

Sadib explained that his advisors provided a positive learning environment and he felt they were "a big blessing for me, so they give me time, they give me confidence, they give me trust that you can do it, which is very important." Jeffrey said that these mentoring relationships provided him the support and training needed to succeed and enhanced his learning experience. Similarly, Catherine mentioned that her mentors became sources of inspiration impacting bot only her personal development, but also her learning about the world of academia:

"I want to mimic some of them, you know, I want to come across as empathetic or as kind

or as professional as some of them, so sometimes I watch them closely, how do they

present during a presenting, how they interact with students, and you know, and what are

their work ethics."

In addition to providing a supportive learning environment leading to professional development, a number of students also discussed how mentoring relationships were also impacting their careers after graduation. In this sense, Geoff shared that his advisor impacted every aspect of his graduate life, "from personal life to professional development or even for future projection she encourages me to look for academia jobs." On a similar note, Carlos disclosed that he talked very often to his advisor about future plans and he was allowed to take extra courses that were not on his plan of study, in order to enhance his understanding in different areas. Green also mentioned that both his previous and current advisors were assisting him in preparing for his career after graduation and took the time to send him job advertisements

Although the majority of students agreed that relationships with their advisors played an important role in their professional development, students who were experiencing dysfunctional advising relationships mentioned that these relationships did not necessarily have a positive impact on their learning experiences. White commented that it was hard to answer that question "because I don't know if it has impacted or not. I think I was pretty much on my own."

In sum, study participants discussed that the advisor support received during their doctoral studies not only impacted their academic experiences with the sole purpose of degree completion, but also prepared them for their future careers after graduation.

Advising for personal development. After discussing how the advisor-advisee relationship supported their professional development, participants also shared how these relationships impacted their personal development. Several students noted how the academic support and the expertize acquired from their advisors also translated into advising for personal growth. Mary shared: "definitely that becomes important because of that, because you don't really have all of the support that you could have, only you have some. It just transfers to your

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personal life, it doesn't stay in one box, it just does." Rose stated that "for my personal life most of the time he just tries to help me and answers some of my problems and that gives me very good sense of living with other people from all around the world actually."

Sadib explained that the fact that his advisors were flexible also permitted him to get involved in different extra-curricular activities and that enhanced his personal skills. Sean also shared that "this relationship gives me an opportunity to develop social skills with American supervisors." Similarly, Dacky discussed that his advisor was an inspiration regarding interpersonal manners:

"As I said I have so many things to learn from him, interpersonal manners because I've never seen someone who never gets angry, I don't know, it's like he's a saint or something, but that is something which is something I'm trying to learn from him because even I don't get…anger is not something that comes naturally to me, but when I look at him he's so nice, you know."

A number of students shared they admired their advisors on different levels. Shyam talked about being inspired by advisors' dedication as teachers, while Batman admired the fact that his advisor was very organized. John disclosed that he learned from his advisor to be "a little bit more strong and more independent", and Julie learned how to be more positive. Michael learned from his advisor how to balance his life: "you have to work hard on your research and my advisor, he shows that yeah, meantime you are working on you how to be much creative and you have to enjoy your life." Another student, Sun, revealed that his advisor's behavior motivated him to become more self-confident and curious. Carlos said that his advisor's support went beyond just professional training that was research-related, but also focused on aspects such as ethics and real-world situations: "In that way, he not just teach me about bugs but try to

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always put me in situations, like, "You will probably be in this situation someday so what you think?"

Again, a few students who seemed to have dysfunctional relationships with their advisors mentioned that these mentoring relationships did not necessarily impact their personal development. Mumu shared "I don't know, it doesn't affect my personal life, I mean like the way… how I am. It doesn't affect me". Similarly, White commented: "I think I'm much of a person who just keeps reflecting on myself and keep moving, keep improving so yeah that's everything on my own."

Hence, most participants who had positive relationships with their advisors indicated that these relationships impacted both their professional and personal development, while the few students who did not experience very positive advising relationships, one of them in particular, shared that these relationships did not necessarily make a difference in their professional and personal advancement. While experiencing advising as mentoring, participants in this study felt more confident to ask questions, self-confident in their abilities, they felt valued and trusted. Also, some students were feeling lucky to have only positive experiences with their advisors.

Theme 2. Advising as Support

In this study, mentorship and support are considered as two complementary aspects in the advising relationship, as indicated by the data collected, thus they are presented in different sections. Advising support can take many forms and they are presented below.

The word "supportive" was mentioned several times by study participants when sharing their insights on the relationships with their advisors. This section is organized according to the type of support provided by advisors.

Advisor as motivator. Advisors were described as encouraging by a number of students. White, for example, was frustrated with her advisor due to issues that will be discussed in a different section. However, she acknowledged that her advisor was always encouraging:

"Very encouraging. Rarely do I get discouraged. Proposing any idea. And I'd say really good human being and emotional support, so even if I don't get that kind of help in terms of content, I still have a huge emotional support because I've had some difficult things happen during my Ph.D. program and she would always be supportive."

Sun also mentioned that his advisor was very supportive and "encourages me to improve my prospects, my work prospects." System shared that his advisor constantly motivated him to participate in different professional events:

"she encourages me to participate in other conferences, she will provide money for it, and she will encourage me to do committee organized stuff. She asks us to volunteer in stuff, […] she will lead at some things and we'll go and follow her, so we will do that. Also, she's very engaging."

Advisor as sponsor. For international doctoral students in this study, the advisor's ability and willingness to sponsor them was a critical aspect regarding support. Even though some participants shared a series of negative experiences with their advisors, they still appreciated the financial support they received for attending professional events. Mumu was one of them:

"So sometimes, you know, he is not being able to guide me very well, he cannot guide very well, so that is one problem. But apart from that, I think he is a good advisor because he supports the students very well. Like for example, if there is no research fund, we would never let us having no funding or something. He would always manage the funds for us. That is the positive thing about him."

Mumu, Michael, Green and System also shared that they were able to attend conferences when their advisors were able to sponsor them. Geoff said that he had received funding for seven years from the same advisor, as both a Master's and a doctoral student: she still chooses to fund my research so it's my research and her funding. […] She knows that I can get along well with the professors there and she sponsored me to be there so that's great." In addition to offering an assistantship and funding to travel to conferences, Michael also recalled that his advisor did not cut his funding while he traveled back home to see his family, even though other advisors do that.

During the interview, Rose was very reflective when sharing her experiences as an international doctoral student from a Middle Eastern country. She talked about how due to export control regulations she was not allowed to work with a particular microscope and, in addition to providing her an assistantship, her advisor was paying other students to use that microscope.

Hence, the advisor's role as sponsor is often times critical for international students. On the contrary, other students shared that their advisors do not provide an assistantship or financial support to attend conferences: "Not so much because it's a budget situation that we have" (White).

Availability. When discussing the support received from their advisors, a number of students mentioned their availability as valuable resource. Julie and Michael stated that their advisors are always available if they have questions: "he's directly trying to give it time for me which is also really important" (Julie). Meeting frequently with their advisors was a component discussed by a number of students when describing their advisors as being supportive. Sean, for example, stated that his advisor meets with every week: "I regularly meet her, once a week, so

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she was very nice, like in terms of giving, making […] time for us." System was also satisfied with his advisor's availability:

"I have a weekly meeting in regular semesters for half an hour. In summer we don't have a meeting, but I can walk in anytime. Having said that I can walk and talk to her anytime, so everything is organized, we have a goal set, an outcome set, and we try to work on that."

Participants appreciated their advisors' availability and prompt feedback, as indicated by Julie ("for example, when I send any papers to review or correction definitely he's sending me after 1 day, which is really good for me, he's a quick person and I will always try to be quick"), Green ("they are very active to give me feedback. Sometimes they have personal problem, sick, outside, but their try their best"), and William ("prompt feedback, also rapid and effective").

Freedom. Freedom was another theme that emerged from the data. A large number of students contended that they appreciated having a flexible schedule. Sadib, for example, shared that his co-advisors were task-oriented and not time-oriented, thus they were not expecting him to be in the office at certain times, but to complete the tasks at his own pace.

Similarly, Carlos commented that his advisor was focused on the outcome:

"He gave me the freedom to do whatever I want so I published papers, and I'm working here with the [program related] but I'm doing stuff with the spiders. Totally different things. So, he just let me do whatever I want, even said, "Well, if you want to come to the lab, it's okay. If you want to work in your home, it's okay, as long as the job's getting done."

Jeffrey also noted that he enjoyed the flexibility of his work under his advisor's supervision:

"My work is very flexible, so I have tasks I need to complete, people I need to train, and activities I need to do, and I enjoy the flexibility to do that in a way that works for me. Sometimes, due to how things are structured, flexibility can be extremely limited, but we have done it in such a way that I am flexible to do my work."

In addition to being supportive and flexible regarding assistantship-related duties, some students shared their advisors gave them the freedom to focus on aspects that mattered to them. Sadib was one of the eloquent examples in this sense:

"She has given me very much freedom to work on all these social aspects and even meet my family, actually. I visited my family this winter break and I spent 50 days, and when I talk to any of my friends, they can't leave. This was the first impression to whoever I share this, nobody can believe it that any supervisor can spare you 50 days straight. This is too much. So this is the freedom and liberty, this is why I am enjoying while working with my supervisors. They both are very friendly, both are very cooperative, and they understand what my situation is."

Rose disclosed that during one particular semester she was extremely busy because she had both teaching and research assistantship plus coursework and labs, and she did not spend sufficient time on her research project. However, her advisor was very understanding and flexible. Michael also described his advisor as "being very supportive to his students, it has made our life very easy, but I know that there are some advisors that's not the way they are." Participants who had positive experiences with their advisors admitted that other students might not receive the same kind of support.

A number of students commented that, as part of their valuable support, advisors were open-minded regarding research topics they could explore. Jeffrey, Geoff and Han, for example,

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were pleased that their advisors gave them freedom to choose their topics of interests and supported them:

> *"I would say the same thing, openness. In our research area, you can, she always said to look at my own interest and then come… "If you will come with your own idea, I will be there for you." She is open in research area and she is also very professional."* (Han)

Carlos, whose advisor was very respected in their field, also mentioned that he was allowed to collaborate with researchers worldwide: "I can do whatever I want, so getting in many different projects with people all over the world, they don't question anything, whatever you want it's OK."

In sum, the advisor's support was considered to be critical; participants expressed their appreciation for their advisors' continuing support that took different forms: advisor as motivator, advisor as sponsor, availability, flexibility, and openness to their research interests. Hence, international students felt supported and motivated to pursue their research interests. Also, being encouraged and supported to attend conferences lead to a validation of their hard work.

Theme 3. Advising as Employment

> *"Here the advisors are so powerful. If they want, they can just destroy your career."* (Mumu)

Advisor as boss. A large number of students received funding for their assistantships directly from their advisors. In these instances, the advisor takes the role of a boss. The advisor has power over his advisee not only from an academic standpoint, but from a financial perspective as well.

Sky was one of the study participants who indicated his advisor was close to retirement and was stricter than other faculty members in the department. When talking about the relationship with his advisor, he added:

"He was not a very friendly, friendly, so he has a discipline and he likes to be like a boss, even with his technician, with everybody, so you figure out these things in your first year, you figure out "oh, okay" so then you know how to behave."

Mumu claimed that advisors in the U.S. "have superpowers" and sometimes exploit their advisees; this was one of the negative aspects she had witnessed in other departments, where students were working more than they were paid for. She believed that advisors in the U.S. are very powerful and "if they want they can just destroy your career."

System noted that some advisors might yell at students if they are not satisfied with their work, thus he mentioned that it is important for advisees to "get a feel about how the advisor is because just because he or she is a Ph.D. doesn't mean they are a good person. They can yell at you if something doesn't work, so you don't want that." Similarly, Batman contended that advisors have high expectations from their students because they are funding them, hence students had to do valuable work.

Han has a J-1 visa and received funding both from his country and the department, but he talked about other students' experiences: "some of my friends […] if you got funding from some advisor and he actually gives you money and you have some commitment, you came to U.S. to him, then you cannot change it." Michael observed that: "everything is connected to the financial." He had plans to go back home and visit him family, "but suddenly yesterday my advisor told me that he can't pay the same amount that he used to pay so we changed the plans."

Even though she was not directly funded by her advisor, Mary described the advisor-advisee relationship as being based on micromanagement and her advisor had control over her decisions:

> *"It's like she knows what's right and you have to fall right in, so I always have to get like, I always have to make a case for myself. Well, I want to explore this other thing. Maybe I want to work in non-profits, I may not even go to academia, so I want to take classes in business or something. I always have to make that case with her and I feel like I'm challenging her and that's not comfortable for me."*

The advisor's role as a boss came to the surface throughout this study for a few students in particular. In this sense, students were feeling controlled and intimidated by their advisor. Another aspect discussed by students was the fact that many of them worked for their assistantships more than 20 hours per week, and that exceeds the federal regulations for international students. During the breaks, international students are allowed to work 40 hours per week, thus I asked those participants who declared they exceeded the 20-hour work limit if their advisors paid them more during those breaks, but their response was negative – "It's like a fixed assistantship". Hence, some of them felt frustrated, while others said they understood they needed to work more because they were also investing time in their own research projects.

Theme 4. Advising as a Dysfunctional Relationship

> *"It's basically like being in a bad marriage; you got to make it work."* (White)

The findings in this study mainly revealed positive relationships between international doctoral students and their advisors. Nonetheless, a small number of students shared their struggles and frustrations of having to navigate dysfunctional advising relationships, as labelled by Walker et al. (2008) in a previous chapter. There were a few, but powerful aspects related to

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the advisor-advisee relationship that generated feelings of isolation and disappointment for some student participants: mismatching background, micromanagement, inaccessibility, lack of courage to communicate openly, and anxiety to switch advisors.

Mismatching background. Mumu had two co-advisors, but she had issues with one of them because his background did not match her research subject, so often times he was not able to offer proper guidance. Another example is White, who started her doctoral degree under the supervision of a different advisor who later left the program, and her new advisor did not have the same background, so it was extremely hard for her to receive guidance. Her frustration was not only pointed towards her new advisor, but also towards her program. She commented that situation was "more like a contract marriage" and she was looking forward "to get out of it" after graduation. Catherine also shared that her first advisor did not have the background she expected, and after a couple of years she switched advisors.

Micromanagement. A few participants extensively discussed how their advisors preferred to micromanage and that caused them internal tensions. Mumu argued: "my advisor micromanages a lot, and that is one of the most important things that I would want him to change, but of course, I cannot say this to him." Both in the interview and during the focus group, Mumu explained that her co-advisor was supporting her from a financial standpoint, but that support came at the cost of micromanagement.

Mary continued Mumu's thought as she had a very good understanding of how micromanagement could lead to a dysfunctional relationship, because she was experiencing the same feeling:

"I don't like micromanagement or to be micromanaged […] I think she's that type, just

the micromanager, like everything has perfect little details and that's great, but I think

that, I wish I could communicate that differently and I can't tell her that right now, so I

don't know."

Mary lived a frustrating experience with her advisor and that made her think about leaving the program. She decided to stay, but she was affected by that incident and felt her advisor did not trust her:

"That's my issue with it, is that she didn't care what the issue was and just reacted

right away and took it to all kinds of blown proportions for me. I felt like I wasn't good

enough and I looked through all the documents for leaving the program."

Mary was very reflective when discussing these issues during the interview and acknowledged that in advising relationships there is always a potential for conflict because people might have different goals, but she would have liked to have the opportunity to express her feelings and have an open conversation with her advisor about her frustrations.

Inaccessibility. A few students mentioned they were a little bit frustrated because of their advisors' unavailability. Mumu disclosed that her other main advisor "is a nice man, his background matches my background, but he's actually very busy, so we don't get time to talk much." Sean also mentioned that his advisor did not respond to his emails, and he thought that: "She is busy, or I don't know. I guess she prioritize her tasks, so the email from graduate student is a very low priority. […] Even though I send some email, she doesn't read it." However, he was able to meet with her and discuss the issues raised in the emails.

Ann's situation was a bit different as her advisor was in a high-ranked university position and he was always busy, thus she had to navigate her studies by herself and with the help of other doctoral students in her program:

"For example, I was all by myself, all by myself, right? Asking other students, sometimes American students, sometimes international students, sometimes I had a feeling that I'm asking these questions, but they don't like it. Sometimes I felt that I'm asking a question, but it seems maybe they think it's just stupid, she doesn't know, you know?"

Ann shared that she was affected by this situation also because of her personality and the fact that she was living far from her home country. She admitted that she could easily be touched by improper remarks because she had become more sensitive after her arrival in the U.S. At one point during the interview, Ann said that it must had been her fault that her advisor did not collaborate with her: "It's my fault, I'm sure if I brought an idea like, this is an idea, let's work on it, I'm sure he would say let's do it, but I didn't do that." She admitted that she had been in touch with another international doctoral student in the program and she was following the advice that student received from her advisor: "I learn many things from her, you know, she shares things, you know 'my advisor said this' and I said 'oh, this makes sense.' I'm following rather than like my advisor says, you know."

Lack of openness. The few students who experienced dysfunctional relationships with their advisors stated that they could not communicate openly about those issues. Mumu, for example, mentioned:

"Like for example in my case, I can just go and talk to my co-advisor about whatever things are happening to me in the lab and it's not right, but I don't want to do it because you know, letter of recommendations is a big thing, so I don't know. I don't want him to feel that "she's complaining all the time".

Mary also stated that she could not have an open conversation with her advisor about the fact that she was struggling in that relationship and she was feeling frustrated: "I just feel like it's

too confrontational to go and be like "oh… like" you know? That's just not, I can't do it. […] It's like that, we never really talked about that openly, yes."

Anxiety to switch. While discussing the issues they had faced in the relationships with their advisors, participants were also prompted to share if they thought about switching their advisors. As shown above, lack of openness to communicate these issues was strongly connected to students' anxiety to take a step further and switch their advisors. Mumu shared that in her program switching advisors was not something common. Mary disclosed that she could not have an open conversation with her advisor about that because her advisor was a kind person, but she had in mind to switch to another advisor when getting close to dissertation stage. Ann also indicated that she was not able to change her advisor, even though in her program she had the option to do that:

"I had a choice to change my advisor, which I didn't do, and I think I still cannot do that, I don't know. […] I feel like it's just… how to say… I don't know first of all how to do it. Second, I have no courage to do it because I think maybe it's not appropriate, he will be disappointed, you know? He will not understand it, or I will explain it in a way that he will not understand…"

While extensively discussing this issue, Ann mentioned: "How to come and tell him, right? […] Come to him and like, you know? "I decided to go with somebody…" Nonetheless, other students mentioned they switched their advisors and that decision was beneficial. Sadib explained that when he started his doctoral program he was a self-funded student (he was the only student in this study who started the program without an assistantship). He shared that his advisor was not very supportive in that sense, hence he looked for possible funding opportunities and he found an assistantship under the supervision of a different faculty member, thus he

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changed his advisor after a couple of months. He shared that switching his advisor was a very good decision. Catherine also disclosed that switching advisors was beneficial for her. Her second advisor was very patient and more knowledgeable about her area of interest.

In sum, a few study participants discussed dysfunctional relationships with their advisors that affected both their academics and peace of mind. As indicated in this section, an advisor-advisee dysfunctional relationship was caused by a series of issues: advisor's background did not match with student's area of interest, advisor as a micromanager who overly controlled his/her advisee, advisor's unavailability, students' lack of courage to openly discuss these issues, and their anxiety to switch advisors. These factors made students feel frustrated, isolated, and anxious.

Theme 5. Advising as Caring

"I would like to imagine that I am one of the most fortunate graduate students I know, because I have such a caring advisor." (Jeffrey)

The majority of study participants disclosed that their advisors were caring and friendly, and that was a very important aspect in the advisor-advisee relationship. Even students who shared negative aspects impacting their mentoring relationships, such as Mary, indicated that their advisors were kind and cared about them:

"she really cares about me. She asks about everything, she asks about my family and how I am doing and about my summer plans, which include academic stuff, but also include just like where I am staying and things like that. That is also one of the reasons why it's hard to talk about our difficulties, is that she is super caring."

White, another student who was not very satisfied with her advisor because of mismatching background and lack of proper guidance, also shared that her advisor "would

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always ask about my family and show concern and check in with me basically." Sean, who had completed his Master's degree at a different U.S. university and who said that his advisor rarely responded to his emails and that made him feel uncomfortable in the beginning, mentioned that "I know they care about us. Care about us and care about the quality of learning. And it is easy for me to ask any questions, any concerns. So, having good, close relationships help me have better learning compared to my previous program." Julie also indicated that her advisor "is always very kind to me, I mean if I really need to ask him and I need to do something really short time, he always meets with me."

The majority of study participants mentioned that their advisors also cared about their personal life and their families. For example, Sun revealed that his co-advisor "usually sees me as his family" and Rose mentioned that:

> "Fortunately, I really, really like my advisor here. He's really nice guy and most of the time I'm feeling that he's one of my family members, he cares about his students all the time, he's so nice and kind. Most of the time you'd think that you can talk to him and explain all of your problem with him and he'll find some kind of way for solving and addressing those kinds of problems. I think I can rely on him most of the time, I really like him."

Michael also disclosed that his advisor not only cared about his academic journey, but also about his personal life. In a similar fashion, Green shared that his first advisor considered him as family and even offered to lend him money, if needed:

> "The first time I came here my first supervisor told me, "I am like your elder brother. If you need anything, even money, come to me". I mean, he would borrow me money. "So, don't hesitate, come to me anytime".

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Caring and kind were considered as similar advisor traits, as many students used these terms interchangeably when describing their advisors. William was very enthusiastic about his relationship with his advisor, saying "lucky me, my advisor is a kind person." Similarly, Catherine said that her advisor "has been very kind and very patient with me", and Batman shared "if I want to describe my advisor first I would describe him as a kind man". Julie explained that her advisor was very kind and that made her feel guilty if she did not spend sufficient time working.

It is critical to also report the multitude of instances when participants specifically described their advisors as being friendly, such as Rose: "my advisor is really friendly and helpful.", Sean "she is very friendly", Sadib: "she is very cooperative, she is very friendly", Sun: "so friendly, supportive, and also reliable. It's important if I can trust her and she can trust me. It provide me so convenient environment to cooperation." John also said that "I don't think my professors are my professors, I mean I still respect them, but they are a little bit more my friends, I can discuss with them anything vey freely." Similarly, Dacky shared that his advisor "is more friend than an advisor, I would say. So, in that context I feel like I am very fortunate and blessed to have such an amazing advisor." When describing his relationships with his advisor, Jeffrey noted that "I enjoy knowing that I have an ally and a friend in this student-teacher relationship."

Culturally sensitive advisors. Closely connected to the subthemes previously described, caring advisors and friendly advisors, advisors' trait of being culturally sensitive or cross-culturally competent was also mentioned by a number of students. Mary shared that her advisor "is very inclusive. She's hyper aware sometime". During the focus group participants also shared their advisors were either foreign-born or they had travelled extensively, so they were aware of cultural differences. In one program in particular, two students mentioned that at the beginning

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of their doctoral degree they took a test so that faculty would know their level of English and made sure they receive support. Julie, who is in that program, shared that her advisor was always giving her time to improve her writing because he understood she was facing language difficulties as an international student.

To summarize, advising as caring was one of the main themes that emerged from data interpretation. The majority of participants were explicit when describing their advisors as caring about both their professional and personal lives, being kind, friendly, and culturally sensitive. This advisor immediacy thus becomes a critical key finding in this study, as most of the study participants felt nurtured, understood, and valued. Nonetheless, it is important to note that when discussing their first month in the program, many participants in this study recalled feelings of disorientation.

Study participants also discussed what kind of advice they would give to new international doctoral students, suggestions for their advisors and how they perceived the importance of advisor-advisee relationship in doctoral education. The findings are categorized in the table below:

Table 2

Participants' Advice to Others

Central theme	Subtheme
Advice for new students	Expectations
	Selecting and switching advisors
	Communication
Advice for advisors	More time together
	Be more strict
	Be aware of cultural differences
	Know basic immigration regulations
Advising importance in doctoral education	Successful degree completion
	Career after graduation
	Modeling behavior

Advice for New Students

Participants in this study were prompted to offer advice to new international doctoral students regarding advising relationships. Several subthemes emerged in this regard: expectations to perform highly, selecting and switching advisors, and communication with advisors.

Expectations. Prospective students were advised to be prepared to highly perform because faculty had high expectations from them; in this sense, Batman mentioned, "the main reason they're funding you to come here is to do research as a Ph.D. student, so you should know that faculty members and professors over here expect you to do a real research, which is valuable." On a similar note, System indicated that new students should "know why you are

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coming to the department and who you are going to be working with and why you are going to be working with. Don't come here after the fact and start complaining."

Selecting and switching advisors. Another subtheme regarding advice for new students was selecting and switching advisors. Many study participants encouraged new international doctoral students to switch advisors if they notice they have mismatching expectations. For example, White advised new students who would attend her program to "basically, take your classes in the first year and see who you like. […] By the end of the year you have to choose your advisor. […} When you come in you have interim sort of advisor." Mary also shared that students should take the time to know their assigned advisor early on and discuss if they align in goals; then, if they feel that "something is not clicking", they should consider switching.

Communication. Several participants indicated that new students should meet frequently and communicate directly with their advisors in order to seek proper guidance, and not be tempted to seek advice from their peers, as the input they receive might be biased:

"simply talk to the advisors directly, because sometimes talking to other students may have some biased opinion, maybe they have some difference due to any reason, but if you talk to the supervisor directly, it will help you understand better. Sometimes it is convenient to us to ask students of that professor how he is doing, they don't, they must have some kind of biasness, either positive or negative." (Sadib)

Another advice for new students was to be tactful and avoid conflict. Mumu suggested that as new international doctoral student:

"You have to be frank, but at the same time there is this small catch, even though you can talk to them freely, but make sure you don't kind of offend them. […] You have to be very tactful with your advisors. Be free with them, but at the same time you have to know

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when to stop yourself. So, I would just recommend that. Maybe it's not the correct thing

to do, maybe, but this is what I feel."

In sum, study participants shared a variety of suggestions for new international doctoral students: making sure they will highly perform, as that was expected from advisors; being thoughtful when selecting and switching advisors; and communicating directly with their advisors to receive proper guidance while making sure they were tactful.

Advice for Advisors

"Just because I might speak fluently, doesn't mean that I am not struggling, and that I least I should have a little more lenience with people like me, with international students." (Catherine)

Participants in the study were also asked what they would like to change about their advisors and what their advisors should know about them. The findings discussed under this theme provided glimpses of students' lived experiences translated into suggestions for their advisors.

What students would change about their advisors. When discussing what would be the things they would have liked to change about their advisors, students shared a variety of aspects, such as the fact that they did not share similar research interests and some of them seemed to have a large number of advisees and "they can't help all of them" (Sun). Sean also wished his advisor would be more prompt in responding to emails.

A number of students also mentioned the fact that they would have liked to spend more time with their advisors. Mumu stated that her co-advisor was very busy and they "don't get time to talk much"; she felt that her co-advisor did not spend sufficient time with her and she felt hurt.

During one of the focus groups Jeffrey noted that he would have liked to "have more time together, I think for the writing process" and all other students in that group agreed.

Several students indicated they would have liked to be pushed more by their advisors and set deadlines so that they would be more productive. In this sense, Dacky shared that:

"I would say that he doesn't push you like a lot, he just tells you like "this is what you are supposed to" and then he doesn't actually push you a lot. It's up to me to decide if I should be taking up, so I think that is something I would actually like to do, that's, at least to some extent."

Very similarly, Catherine commented that she wished her advisor would be stricter:

"I wish my current instructor was a little more pushy with me, and that really, definite, deadlines. Everybody else keeps saying 'you have a so, you are so lucky to have such a good mannered and just very kind and compassionate professor,' but, and I enjoy that very, very much, but I just wish he was a little bit stricter, a little bit."

During another focus group, three of four participants agreed that they wished their advisors would push them more towards working on their research. Nonetheless, while a high number of students discussed about the fact that they would have liked their advisors to be stricter, System noted about his advisor that she was asking too much from him because she wanted him to be competitive.

What advisors should know. Study participants were particularly asked what advisors should know about them, as international doctoral students, and they shared suggestions for improving the advisor-advisee relationship and stressing the importance of mentoring that goes beyond only instruction: "you want someone who can kind of guide us overall" (Shyam).

One of the topics discussed, particularly during one of the focus groups, was the need for advisors to know basic immigration regulations. In this regard, White, who is in a program that does not host a high number of international students, stated: "The rules that apply to us, so visa rules, stay, credit requirements, there's so many things that I can confidently say that nobody in my department knows about international students. Nobody." White and Catherine disclosed that their departments should collaborate with the graduate school and the international student office to provide support to international doctoral students. On the contrary, Sadib argued that in his department, because they hosted a large number of international students, faculty were knowledgeable about those issues.

Another recurring advice was the critical need for advisors to be aware of cultural differences when working with international doctoral students. For example, throughout a focus group discussion, participants stated:

Shyam: *It would be good to kind of come to an understanding that the system, the teaching systems are quite different around the world, and there is no set, uniform pattern, and even within the same field, as we've spoken. So, to kind of come to spend some time at least initially to sort of orient everyone in the same direction and be very explicit about the expectations and how things are done here, just get on the same page, I think that would be highly beneficial.*

Dacky: *I think the cultural differences, I think they should respect their cultural differences. And initial help would be a huge help for all of us. That's what I think.*

Catherine: *And because of the cultural differences, sometimes it is very difficult for us to speak about a problem, because in our culture you have to project the image of success*

because of your status as a graduate student, so sometimes it's very difficult to

approach a problematic subject.

In order to ensure that advisors were aware of cultural differences when mentoring international doctoral students, Catherine discussed the need for advisors to participate in workshops or "some sort of seminar that would expose them to the challenges that graduate and undergraduate students face here". Shyam agreed that this sort of program would be beneficial, however he was skeptical about it because different advisors have different ways of dealing with their students depending on their background and experience, thus it would be difficult to impose a certain advising model. As they continued this conversation, Catherine mentioned that it was in the "university's interest to handle international students, they come here to raise the profile of this university" thus assisting them properly did not mean chancing advisor's characters, but pointing out "some things and some challenges we face when we come here, when we stay long term, that they might not even be aware of." Shyam then suggested that it would be beneficial "to have faculty members also engaged in the orientation program, because faculty members are not a part of that."

Another suggestion for advisors was to also advise students for careers after graduation. A few students from programs in arts, humanities, and social sciences shared that their advisors had the tendency to push them towards a career in academia and did not provide guidance on different career opportunities outside the professoriate.

Participants also shared that advisors should be knowledgeable about their advisees' professional and personal background. Regarding their personal background, Carlos noted that advisors should know if students came to the U.S. with their families. William mentioned that advisors:

"should know our situation, that we are more than 6000 miles away from our homes, and

we might need five to seven days to travel back to our home country and then come back,

visit our families and it will not harm most of our jobs here."

In all, the findings indicate that study participants would suggest their advisors to spend more time together, be stricter in setting deadlines, know basic immigration rules that apply to international students, be aware of cultural differences and how those impact international students, and provide mentoring for career after graduation as well.

Advising Importance in Doctoral Education

The last, but not the least critical theme regarding advising relationships is the importance of advising and advising relationships in doctoral education. Participants discussed how they perceived the importance of advising relationships, while taking into consideration their lived experiences as international doctoral students. The findings indicate several reasons why students considered these relationships to be important.

Successful degree completion. Advising relationships were considered to be central in successfully navigating the doctoral degree. System stated these relationships were important "Because we need to know what the exact objectives are. If we don't know what our objectives are and what our timeline is how are we going to complete it?" Sadib also shared that "If you want to really contribute in research and want to complete in time, you should be having very, very healthy relationships, otherwise I see these true challenges, extension of your degree, or not a quality work." Although she was still at the coursework phase, Mary considered the advising relationship to be highly important and anticipated that "thinking ahead for when I have to have weekly meeting with this person and they will direct my work, like in which direction it's going to go, you know, their version and my version would have to match." In her case, this

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relationship was very important also because she was close to leaving the program because of a dysfunctional relationship with her advisor.

Ann explained that the advising relationships was important because it is "the last stage of education, first of all. So, if I don't learn and if I don't make necessary lessons learned now, who else can help me with it?" John also indicated that the advising relationship was critical in navigating his degree because:

> "If I don't have a good relationship, so what I am going to do? How am I going to make a discussion with them? So, I think the relationship is very important, if I have to talk to t hem, if I have to discuss something, then I have to maintain a very good relationship with them."

When prompted to discuss the importance of advising relationships, William briefly stated "that is very simple. If you go bad with your advisor you're done. I would just put the simple answer for this question, it's too simple. If you're doing bad with him you're doomed to be done, that's it."

Career after graduation. Participants also pointed out that advising relationships are important because they can impact their careers after graduation, particularly because advisors are usually listed as references. Sky shared that "it's very important. As you know it's very important especially after getting a degree and finding a job because they are your reference, so they can help you after that." On the same topic, Mumu noted the importance of recommendations written by advisors. Similarly, Geoff acknowledged the critical role his advisor had for his job prospects after graduation, particularly for academic position:

> "So that's critical, as I said, and important. Without her permission, she's the ticket issuer, she gives that permission, without her I'm not able to apply for any schools and I

have to give up my dream to be a professional instructor and instead go into industry, so

it's critical, very important at a Ph.D. level."

Modeling behavior. Study participants also shared that advising relationships were

paramount because advisors were also their role models, as it was discussed extensively in a

previous section. On this aspect, Sadib commented that advising relationships "are critical,

absolutely critical. I cannot, I simply cannot overstate how critical they are". Similarly,

Catherine, who aimed to pursue an academic career, noted that as a student you are also

"expected to learn from faculty members, from senior colleagues on how to behave towards your

students, toward your peers, how to just carry yourself around."

Other participants shared that advising was also important because it could morph into a

nurturing relationship. An eloquent example in this sense is Rose's testimonial:

> *"whenever you are working with someone and you might have some problem in your*
>
> *world or your study, sometimes you need to explain your problem and you need to have*
>
> *someone that can accept your excuse and things like that because of that I think it's not*
>
> *bad, it's super important to have a close relationship with your advisor most of the time*
>
> *because whenever you have some kind of trouble or some kind of problem he would be*
>
> *able to help you."*

When prompted to indicate the importance of advising relationships on a scale from one

to ten, the majority of study participants mentioned a minim of seven and a maximum of ten.

Once more, White shared a neutral position regarding the importance of these relationships:

> *"I think I answered that, that might be helpful, I mean obviously any relationship that*
>
> *you have in your life is helpful in who you are, like it shapes who you are so obviously it*
>
> *would be important, but I don't have the experience to say anything else."*

Summing up, the findings indicate that a vast majority of international doctoral students revealed that advising relationships are crucial in doctoral education because they not only influence the successful completion of the doctoral degree, but they can also impact students' job prospects after graduation. Also, findings in this section reiterate the important role that advisors have in modeling behavior for international doctoral students.

In conclusion, this chapter section discussing advising relationships revealed that the advisor-advisee relationship is critical in doctoral education and it has multi-layered implications for international doctoral students. The themes described in this section are comprehensive, yet they are not exhaustive. These themes can be considered as separate or complementary aspects in doctoral education, as experienced and perceived by international doctoral students in this study. This section intended to interpret students' lived experiences while interacting with their advisors and the variety of feelings generated within these interactions.

Experiences Across Disciplines

Data collected from the photographs, interviews and focus groups indicated that international doctoral students' experiences vary among disciplines. Students in this study were from the following colleges and departments or programs:

Table 3

Participants' Field of Study

College	Department/Program
College of Agriculture, Food Systems, and Natural Resources	Cereal Science; Plant Sciences; Agricultural and Biosystems Engineering; Entomology; Microbiological Sciences; Food Science
College of Arts, Humanities and Social Sciences	Communication; English
College of Business	Transportation and Logistics (Interdisciplinary)
College of Engineering	Mechanical Engineering; Electrical and Computer Engineering; Civil Engineering
College of Human Development and Education	Human Development and Family Science
College of Science and Mathematics	Mathematics

The findings indicate a series of different elements that impact international doctoral students' overall experiences and relationships with their advisors across disciplines: program structure, funding opportunities, and advisors' background and experience.

Program Structure

Program organization. Several students in STEM-related fields indicated that they had a clear program handbook indicating the program requirements and expectations, and that helped them as they navigated their degrees. On the other hand, students in arts, humanities and social sciences shared they did not receive this kind of support. An excerpt from one of the focus groups comprised of students from different programs is presented below; Dacky, Shyam and

Rose were in STEM disciplines, while Catherine and Sean were not. This excerpt summarizes a discussion about this issue:

Dacky: *My department has that, they have a graduate handbook. It is handed by the graduate coordinator himself. We also have a one credit course, on how to approach people, how to approach research, what are the deadlines, when do you start your research, your coursework, how to approach your advisor, what to do, what not to do. In that context, my program has done a good work.*

Catherine: *Maybe because they have more international students than our department.*

Shyam: *It's all based on the graduate handbook, my department has that too. It is an overarching set of guidelines that each department can adapt, according to their circumstances.*

Catherine: *See, that bit with adapting…My department kicks me to the grad school, grad school kicks me back to my department, then department says "oh, you better go and check with the office of international programs," because of my visa. Especially when I moved on to dissertation stage, figuring out how many credits I should sign up for, I was just running in this, not a circle, but triangle, yes.*

Sean: *Especially in a small department, I think more care…I am lucky because I have a senior international student in our program, so I can ask him about something happening, but if I hadn't have that kind of person in our department, it's quite difficult to handle that. In your program there are many international students, that's good, but especially in a small department maybe that kind of handbook or additional care for the international students maybe…*

Catherine: *And we do have a handbook, but it's not finalized. And a lot of adaptation possible,*

               so…

Rose: *We have one, too.*

Students shared the need for this type of guidance and Catherine indicated that a program

handbook should exist in every graduate program. On a similar note, White, also from an arts,

humanities and social sciences program, shared that "there are three different camps on this

campus: one is your department, the other is the graduate school, and the third is the international

office and they don't talk to each other." White was very thoughtful when sharing her

experiences, and she often brought up this issue and the differences in students' experiences

across disciplines:

> "*I also feel that in Ph.D. programs, more particularly in this department and maybe in*
>
> *general too, there are no set guidelines, there are no directions unless you are probably*
>
> *joining somebody's lab or something, I don't know. I haven't worked in those*
>
> *departments, but what I hear is that when other Ph.D. students join these ongoing*
>
> *experiments it's pretty much formal for them to do stuff as opposed to humanities and*
>
> *social sciences where there are no real directions for anything and it's very, very*
>
> *subjective, so I basically felt that pressure and I felt like I didn't belong in there and*
>
> *nobody understood me and everybody is judging me and many other things.*"

Participants in this study often talked about their program requirements and expectations;

programs are organized differently: students might take courses, do research in laboratories or

teach as part of their assistantships, and/or work in groups as part of their research projects.

Some programs have different requirements in terms of course load and research productivity. A

student from a STEM program indicated he is only required to take five courses: "they have a

specific protocol where they say that if you have five 700 level courses, that's it, your coursework is done" (pseudonym not mentioned for confidentiality purposes). Another student from a program in arts, humanities and social sciences mentioned her program had unique requirements in terms of research productivity.

Programs are diverse in a variety of areas. For example, William shared that his program was very strict in permitting students to leave the country, hence he did not take the risk to go back home and visit his family, because his contract stated that students may be rehired, and not they will be rehired automatically: "Not that *we will rehire you*, but *you may be rehired*. So, you would be suspended." Conversely, when discussing about leaving the country, Sadib indicated that his advisor was very understanding and allowed him to leave the country for an extended period of time to see his family:

> *"I visited my family this winter break and I spent 50 days, and when I talk to any of my friends, they can't leave. This was the first impression to whoever I share this, nobody can believe it that any supervisor can spare you 50 days straight."*

The discussion revolving around program requirements was not one of this study's pillars, however students shared their experiences concerning specific structures or requirements that impacted their lived experiences. During one of the focus groups, students from STEM and arts, humanities, and social sciences agreed that their programs were not very open to non-academic opportunities for students during their studies or after graduation. Jeffrey and Mary were from different programs in social sciences and shared related experiences. Adding to this, Geoff, a STEM student, stated that in his field there was no related industry and he traveled to a different state in order to use research facilities.

Assigning, selecting and switching advisors. An important aspect that varies across disciplines and doctoral programs is the process of selecting advisors for international doctoral students. A thorough description of the advisor-advisee relationship was provided in the section above, but it is also noteworthy to report the process of assigning, selecting and switching advisors, as discussed by study participants. Some students had one advisor and others had a main advisor and a co-advisor. As found in this study, it is more common for students in STEM fields to have co-advisors.

In STEM disciplines advisors are usually assigned when their research background matches the students' research interests. Having similar research interests is usually mandatory in these disciplines. Tiger indicated that "before I come here I applied for the program, I can also choose the professor, I just generally applied for [program name] and my professor chose me." Sadib had a similar experience.

It is common that students contact their prospective advisors prior to applying to the doctoral program. As discussed at the beginning of the chapter, several participants chose to enroll in a doctoral degree in the U.S. because they had prior contact with NSDU faculty members who later became their advisors. An example is System:

> *"how I got at NDSU was that I emailed personally to my advisor that I want to get in her lab, so I read her research and her response was of interest to me, and I emailed her and I emailed one other professor in the department, too, but I heard back from only her and that's how we knew each other and that's how I got here."*

Geoff also stated: "I contacted my professor when she was in Hong Kong, and she moved here, I moved with her, I have no idea how other students do. I was pretty determined." Dacky admitted that "I came to NDSU because of my advisor, so we were constantly in touch." Carlos,

another STEM student, specified that "My program is very different. You have to have an agreement with your own advisor before applying, so if the advisor doesn't accept you, you cannot send application."

In STEM disciplines a number of advisors provided funding for their advisees in the form of a research or teaching assistantship. Sun recalled that "before coming here, I know the professor, because I know that several professors accepted me, but one professor had funds, so I worked with that professor."

In social science disciplines and in interdisciplinary programs selecting the advisor is a more flexible process. Jeffrey shared that he came in his department based on mutual interest with his advisor, but students can generally switch later on. White stated that in her department "they assign a temporary advisor for the first semester or the first year maybe, and then you could choose, you can stay with that advisor, or you can choose a different one." Han also mentioned that in his program he had an assigned advisor in the beginning "but later on, like after one year, you can change." Similarly, Mary shared that in her program the advisor was first assigned, but students could choose to switch; she was glad that her program had recently changed the advisor selection process, as she was planning to switch her advisor due to micromanagement issues:

> *"I wanted to switch my advisor since last year and I didn't, because I am terrified of the results. [laughing] I know that it's going to create some kind of negative energy for sure, because we have worked together so far and we selected classes, I just don't think it will work constructively for me."*

Catherine, also from a program in arts, humanities and social sciences, shared that she switched her advisor because "the second person was more knowledgeable about the area that I

wanted to go into and he's been very, very patient with me." When discussing about switching advisors, Catherine admitted that other international students might not have the courage to switch advisors. An example of someone whose program accepts switching advisors, but she does not have the courage to do that, is Ann:

"I feel like it's just… how to say… I don't know first of all how to do it. Second, I have no courage to do it because I think maybe it's not appropriate, he will be disappointed, you know? He will not understand it or I will explain it in a way that he will not understand, and then finally, what's the difference between all these professors, you know?"

However, several students in STEM fields disclosed that switching advisors was not as common as in arts, humanities and social sciences. For example, Mumu shared that:

"In our department it's assigned. We are not allowed to switch advisors. If people have done that before, but they ended up in trouble for switching advisors. […] trouble means they would not allow other professor to take the student. It's a big mess. In our department, you know, people don't generally change advisors."

When talking about switching advisors, Sun discussed one of his friend's experiences: "It's difficult situation, one of my friend wanted to switch advisors from one department to the other department, and advisor didn't accept and so he left NDSU and went to another university to change the advisor." Tiger disclosed that "If we already started our project and we didn't have a good relationship with our advisor and I would want to switch to another it's much complicated."

As discussed in this section, the process of assigning, selecting and switching advisors varies across disciplines and impacts international doctoral students' learning journeys.

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According to these findings, this process has different nuances for international doctoral students in STEM and arts, humanities and social sciences.

Number of international doctoral students. While discussing their experiences and relationships with faculty and other students in the program, study participants indicated the homogeneity or heterogeneity of their programs regarding the number of international doctoral students. Several students in STEM disciplines stated that there was a large number of international students in their programs. Below are a few examples:

Dacky: *"I would say like 60% of them are international students and I'd say 40% would be US citizens."*

William*: "90% international, 10% American if Native American, I think there's only 2 who's Native American and there's another lady from Nigeria got US citizenship."*

Michael: *"My program is mostly like 90% international students."*

Batman: *"I guess in [program name] we only have 4 or 5 grad students who are American and all others are international students. […] 60 maybe."*

Participants stated that they enjoyed their program diversity because that was a good opportunity to learn about different cultures and they felt more comfortable with other international students because they were "almost on the same page" (Dacky). Also, Michael disclosed that his program had a vast majority of international students and

> *"nobody is talking about the fact that they're having problems with their advisor or any faculty members like, very small incidents, forgetting something like that or I think it's my program is a very positive one for the international students overall."*

On the other hand, in arts, humanities and social sciences there are not too many international doctoral students. White indicated that in her program "at the Ph.D. level we are

just like 3 or 4 are international right now." Other six participants in these fields also mentioned there was a low number of international students in their programs. Hence, there are fewer international doctoral students in AHSS disciplines than in most of the STEM programs. The composition of these programs also has an implication for advising international doctoral students, because, as White mentioned during a focus group, some faculty are not aware of basic immigration regulations that affect international students. Shyam, who was part of the same group discussion, replied to White's concern arguing that he had a different experience: "I am the opposite of your situation, because engineering college has so many international faculty and they are mostly dealing with international graduate student, so they are pretty much familiar with them, so basically they help a lot." In contrast, White shared that in her department:

"If anybody goes and asks them what are the rules, how many credits should they be enrolled in, basic questions, they would not know. I can guarantee they don't know it. They don't know anything about OPT, CPT, Visa status, they don't know anything about number of hours you can work anywhere, nothing."

Hence, the findings indicate that programs who host a large number of international doctoral students are usually in STEM-related disciplines and they are more prepared to offering advising support to international students.

Funding Opportunities

Assistantships. The findings of this study reveal the complexity of students' experiences among disciplines also from a financial standpoint related to assistantships. All participants in this study were graduate assistants. According to NDSU policy, graduate assistants are full time students who engage in research, teaching, or administrative activities on campus and receive

financial support from the university. Assistantships can vary in length and remuneration, depending on the program.

As shown in this study, some students are research assistants (RAs), some are teaching assistants (TAs), some are both RAs and TAs. Even as TAs, some students might have different teaching responsibilities, particularly in arts, humanities, and social sciences. In these programs, some students can have full responsibility of the courses taught (including course design). All the TAs in the arts, humanities and socials sciences indicated that their assistantship supervisors were not their advisors, because teaching assistantships are usually offered by the department. For example, when asked if the assistantship supervisor was her advisor, White stated: "No, that's not how it works in your department. […] Yeah, I understand when they have labs and they work in a lab, but not in our case." On the other hand, the majority of students in STEM fields had either TA or RA assistantships supervised by their main or co-advisor. As discussed in a previous section in this chapter, the dynamics of the advisor-advisee relationship is different when the advisor is the assistantship supervisor or the direct funding provider. Another difference is that while most RAs in STEM fields sometimes work during breaks, TAs get breaks such as winter break and spring break. William, who is an RA, commented on this issue:

> *"I am guessing we are all student employees with no benefits, we don't have any leaves, or sick leaves. We need to report anything that we do out of our working position and when and where we'll be coming back, we need to report that".*

Also, the stipend received by graduate assistants varies depending on the program or depending on the advisor when the advisor is the funding provider. For example, Julie mentioned that "our salary might be different, might change, depending on our advisor". Michael also indicated that "it can be different from advisor to advisor" and shared that his advisor "is now

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having a hard time and probably he cut my assistantship, is not only for me, even for everybody in my group, so it depends on the situation and the advisor". The stipend and the availability of these assistantships is program-related. In one department in the arts, humanities and social sciences students can only receive funding for four years, as disclosed by one of the participants; after four years, they are not eligible for funding from that department and they need to look for assistantship opportunities outside their department:

> *"Well, it's not an official, but that's said in the handbook that they expect to finish in 4*
> *years. They guarantee funding for four years, they are simply denying my funding for the*
> *5th year even though they have given funding to other people for the fifth year."*

Conferences. When asked to send photos prior to the interview meeting that best represented their experiences as international doctoral students, the majority of study participants sent photos from conferences and talk about great networking opportunities. Most of the students in STEM field mentioned they received funding support from their departments, advisors, and the graduate school in order to attend these events. Some of them particularly talked about the funding support they receive from their advisors to attend conferences (such as Mumu, Michael, System, and Geoff).

Compared to international doctoral students in STEM fields, students in arts, humanities and social sciences do not receive considerable funding support for attending conferences. A student from one of these programs shared that she received limited funding support when going to conferences. In order to protect her identity, the pseudonym will not be shared. This student stated that she recently went to a conference that:

> *"cost me a couple thousand dollars, but the department just gave me $200 which was*
> *barely the registration cost of the conference. These are the weird things about the*

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department. If they don't have money they should not be having a requirement that says

that you have to present at a national or international conference. You cannot make it a

requirement, it should be left as a choice, although people will attend because they want

to build their CV, they want to have good networking."

Advisors' Background and Experience

Participants in this study were from different disciplines, thus their advisors had complex

professional experiences. In addition, advisors also possessed unique cultural backgrounds, as a

large number were foreign-born. As shown in this study, the majority of foreign-born advisors

were faculty members in STEM-related disciplines. Some student participants shared that the

fact that their advisors were foreign-born was beneficial because they were able to empathize

with their international advisees. For example, Mumu stated that was beneficial because:

"he understands my struggle, he understands about the financial things, and those issues,

so that's why his interest that everyone in his lab has funding. […] Another one is, he

pushes us a lot to be more productive because he feels that being productive would be

beneficial to international students here, because that's the way we can survive here."

Nonetheless, Mumu also mentioned there was a downside of having an international

advisor because she heard that "American advisors are very cool", whereas her advisor was from

her home country and he was stricter: "back in my country the attitude of professors are like…

they are very strict." Sky shared a similar story about his advisor who was from a country with a

similar cultural background and he was stricter that American advisors. Another student, Tiger,

mentioned that "luckily my advisor is also woman and she also comes from my country" and she

greatly respected her. She also shared that they were usually speaking in their native language

but, as she revealed, that was not always an advantage: "*Sometimes, if I want to express some*

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kind of my feeling, like anger or sad, it's better to use English. […] If I use it in [native

language] I think I will cry. But if I use English, I will not cry."

Dacky's advisor was also international and he considered that to be an important aspect because he was knowledgeable about what are the implications of being an international doctoral student:

> *"My advisor is international too, but now he's an American citizen, so he knows why needs to be done. So, he has all international students as phd students, he knows, so I think that is an important part for our understanding."*

Other students shared that although their advisors were not foreign-born, they had traveled extensively and that has influenced their understanding of cultural differences. Hence, as found in this study, the advisor's national origin does not necessarily enhance all international doctoral students' experiences. Many participants agreed that was an advantage, but a few students indicated that was sometimes a downside.

Hence, program requirements and structure vary across disciplines and that has implications for international doctoral students and, implicitly, for the dynamics of their relationships with their advisors. A summary of the differences across disciplines is presented in the table below:

Table 4

Differences Across Disciplines

STEM related disciplines	Arts, Humanities and Social Sciences
Funding support	Funding not always available
Mainly research assistantships	Mainly teaching assistantships
12-month assistantships	Usually 9-month assistantships
Stipends usually decided by advisors, the amount can vary	Fixed stipends decided by department
The advisor is usually the assistantship supervisor	The advisor is rarely the assistantship supervisor
Matching research backgrounds	Research backgrounds are not always matching
Might not be accepted in the program if the advisor does not have funding	Accepted in the program regardless of advisor's lack of funding
Advisor selected by student	Usually advisor is assigned
Not very common to switch advisors	Common to switch advisors
Regular/frequent advising meetings	Irregular/not very frequent advising meetings
A well-planned graduation timeline	Graduation date is usually extended
Advised to pursue careers in industry and academia	Advised to pursue careers in academia
Large number of international doctoral students	Low number of international doctoral students
Coursework, labs, field work	Mainly coursework

While comparing participants' experiences across disciplines, the findings indicate that students in STEM and students in arts, humanities and social sciences might navigate their learning journeys and mentoring relationships differently due to a series of factors such as program structure, funding opportunities, and advisors' background and experience. The findings

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reveal that there are also program differences within these two complex categories of disciplines. Regarding mentoring relationships, the majority of participants agreed that their advisors were caring, but some students received more support than others also because of discipline-related requirements and funding opportunities, and how the program is structured. Their advisors' national origin may or may not necessarily enhance their experiences, but that varies among study participants' experiences.

Nonetheless, several similarities across disciplines also emerged, such as the fact that a number of participants completed their Master's degrees in the U.S. or other foreign country prior to starting their doctoral degrees and a large majority disclosed their advisors were caring and they received mentoring for both personal and professional development. Other similarities among study participants were that some would prefer to find a job in the U.S. after graduation, others at home, and, despite their program culture, they were facing universal challenges such as funding (mainly generated by mandatory health insurance), strict and sometimes hard to navigate immigration regulations, and missing their families.

Summary

This chapter reported the findings emerging from a rigorous and complex process of data analysis. Because of the complexity of participants' lived experiences, their cultural and educational adjustment, this chapter only provides a glimpse of international doctoral students' narratives. The data collected through photographs, interviews and focus groups comprises in-depth conversations about different layers of novelty experienced by these students, thus this chapter focused on three critical pillars: 1). students' motivations to pursue doctoral degrees in the U.S., 2). how they manage to navigate advising relationships, 3). how that process translates across disciplines.

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CHAPTER 5. DISCUSSION

The purpose of this study was to examine how international doctoral students build meaning-making systems and perform in the figured world of academia, and what they experience as they develop relationships with their advisors. Furthermore, the study was intended to investigate whether students' fields of study and doctoral programs influence their academic journeys, and to explore the commonalities and differences of these students' experiences across disciplines.

In order to achieve this purpose, the following overarching research question and two sub-questions were formulated:

- How do international doctoral students experience relationships with their advisors?
    - How do those relationships impact how they make sense of and navigate their academic and cultural worlds in which they find themselves?
    - What are the commonalities and differences in these students' experiences across disciplines?

Summary of Findings

Study participants sent photos best representing their journeys as international doctoral students in the U.S., then discussed those photos and their lived experiences during individual and group interviews. For the purpose of this dissertation, analysis of data was focused on their motivation to pursue a doctoral degree in the U.S. and how they navigate the relationships with their advisors. Data regarding disciplinary and program-related differences was interpreted as well.

First, analysis of this data revealed that international doctoral students' motivations to study in the U.S. are various and context-related. The findings also indicate that there are certain

broad reasons that inspired their decisions, such as career goals and improving their socio-economic status. Special consideration is given to the findings indicating that a number of students chose to attend a doctoral program in the U.S. because they had a prior connection to university faculty, several of whom later became their advisors. This is a critical finding for international recruitment purposes.

Second, the findings related to the advisor-advisee relationship revealed that international doctoral students considered this to be an intercultural and inter-educational experience. Under this overarching theme, advising was experienced as mentorship leading to personal and professional development; as support in terms of motivation and sponsorship, leading to students feeling valued; as employment or a managerial relationship in which the advisor took the role of a boss who sometimes intimidated students; as a dysfunctional relationship in which students were controlled and experienced frustration, isolation, and anxiety; and as a caring and humanistic relationship in which students felt nurtured and respected. In turn, the findings generated some advice for other international doctoral students and for advisors. Finally, study participants provided their perception on the importance of advising in doctoral education, as a result of their personal experiences.

Third, data analysis also revealed disciplinary differences in students' experiences, but several similarities across disciplines also emerged. It is important to note that these findings only present students' views on their program and departmental culture. On the one hand, students in STEM and students in arts, humanities and social sciences often navigate their learning journeys and advising relationships differently due to factors such as program structure, funding opportunities, and advisors' background and experience. The findings revealed that there are also program differences within these two complex categories of disciplines. On the other

hand, several similarities across disciplines were noted, such as the fact that a large number of students experienced caring advising and received mentoring for both personal and professional development.

The complexity of these students' experiences will be later revealed in a book including their unique life stories and relationships with peers. Nonetheless, for the purpose of this dissertation, I decided to solely focus on findings describing their lived experiences as they negotiate academic relationships with their advisors in the figured world of academia. After long discussions with my committee members about the complexity of my data I decided to provide only a glimpse of these students' experiences as part of this disquisition. The next step will be to conduct more identity work and discuss the findings addressing their identities developed in the different figured worlds they perform in as international doctoral students.

Discussion

The findings of this study reinforce the idea that international doctoral students across disciplines experience many layers of cultural novelty as they navigate the figured world of academia. Before delving deeper into this complex phenomenon, it is important to highlight a few aspects about international doctoral students as adult learners and what motivated them to embark on an academic journey in the U.S.

On Motivation

International doctoral students' motivations to pursue a doctoral degree in the U.S. are context-related, but there are certain general reasons that inspired their decision, such as career goals and improving their socio-economic status. The themes that emerged in this study may also be connected to Houle's (1961) typology of adult learners' motivation. First, *goal-oriented* adult learners aim to become experts in their field, to improve their socio-economic status, have an

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inclination towards a career in academia, and take into consideration the value of the doctoral degree. Second, *activity-oriented* learners might be considered those who dreamed to pursue a doctoral degree since childhood and who strive to make a contribution to society by participating in this learning activity. Moreover, activity-oriented learners were motivated to experience the uniqueness of the U.S. academic system. Third, *learning-oriented* adults are those who decided to enroll in a doctoral degree for the love for learning. In addition, the socio-cultural context informs the themes related to the improvement of learners' socio-economic status and exposure to a new culture. Nonetheless, the findings indicate that these orientations interact with and overlap one another. Several international doctoral students who were mainly goal-oriented also revealed they were motivated by the activity itself, namely pursuing a doctoral degree while experiencing a new culture, and by their love for learning.

These findings are supported by current research literature suggesting that learners' motivations to participate in adult education are complex not least because adults add the role of the learner to other roles and responsibilities. Merriam et al. (2007) reinforced this idea and argued that "adult students in particular have to be adept at juggling multiple responsibilities and demands on their time" (p. 94). Several international doctoral students in this study had to balance various roles, some of which they had to manage from a distance. In addition, adult learners are unique in that they have a certain knowledge background, experience, and motivation. An important aspect in this regard is learners' socio-cultural context that informs their motivations to engage in doctoral education. Nevertheless, for international doctoral students in the U.S., the situation is more complex as they are confronted with cultural novelty that impacts both their academic and non-academic experiences. Consequently, documenting

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their motivations to pursue adult education across borders highlights the complexity of their experiences and stimulates reflection and further inquiry.

On Advising Relationships

As Holland et al. (1998) argued, "culture profoundly shapes selves" (p. 22) and identity formation occurs in social sites. The figured world of academia is a historical phenomenon; international doctoral students enter this world while already possessing a certain cultural software (Balkin, 1998) ingrained in their frames of reference (Mezirow, 2000). Hence, they need to figure how to build meaning-making systems in order to perform the way it is expected from them and often experience feelings of disorientation. This is particularly challenging for international doctoral students as compared to domestic students because as they start their doctoral journeys they are not only entering the figured world of U.S. academia, but they are also learning how to function in the new social and cultural settings they find in this country. Regarding the figured world of academia, the advisor's role is critical. The advisor is not only a guide, but a mentor who provides students the cultural resources needed in order to assign meaning to their experience.

This study contributes to the body of knowledge regarding international doctoral students in the U.S. by providing an in-depth analysis of the advisor's critical impact on this underrepresented student population. For these students, advising is not only an educational experience, rather it represents an intercultural experience that has the power to facilitate or hinder the successful completion of their degrees. Indeed, this study confirms previous scholarship examining the important role of the advisor in doctoral education but offers a more in-depth understanding of the peculiarities of this relationship when students possess various cultural backgrounds and strive to find new cultural resources in order to perform in academia.

Accordingly, the study provides an examination of doctoral advising through a close analysis of the figured world of advising relationships and the lived experience of international doctoral students in that context.

As indicated by Holland et al. (1998), figured worlds entail culturally created, socially produced constructs in which individuals perform and develop personal and collective identities. These typical worlds, in Gee's (2014) terms, construct and assign meaning and values to certain actions and define social relationships (Holland et. al, 1998; Urrieta, 2007). This dissertation outlines that the figured world of advising encompasses mentoring as a predominant novelized advising approach embracing multiple voices (Bakhtin, 1981). Nonetheless, mentoring is not always novelized and it might also include certain levels of epicization. This dissertation makes the case that even though novelized advising approaches should predominate, good mentoring is both novelization and epicization. Also, a critical aspect is international doctoral students' lived experience born from these relationships. How can we truly understand the ramifications of advising without gaining a deeper understanding of the meaning of these students' experiences? This study aimed to provide some answers to this complex question.

To reiterate Van Manen's (1990) argument that interpreting the lived experience does not imply that we provide definitive answers, this study presents possible interpretations of international students' experiences with their advisors. These interpretations are informed by a hermeneutic phenomenology approach that was amply discussed in Chapter 3. As a researcher who is also an international doctoral student, presenting my methodical structure was paramount in order to describe the parameters of this study and my ethical considerations. I distanced myself from my own experience while interviewing my respondents and gained their trust to share their life stories. I coded and recoded, interpreted and reinterpreted, revised the literature

and the research questions a number of times in order to provide a valid interpretation of my data.

Many international doctoral students enter the figured world of academia while experiencing feelings of disorientation or what Mezirow (2012) calls a "disorienting dilemma" (p. 86). These feelings of disorientation are opportunities for international doctoral students to reflect on their previous cultural software (Balkin, 1998) and assign meaning to new cultural resources they find in this figured world. As they enter this world they engage in a transformative learning process and try to adjust and embrace new orientations (Erichsen, 2009) or cultural artifacts out of necessity. In this process, they also have to perform in the figured world of advising, where their identities are being shaped through interactions with their advisors. As Holland et al. (1998) pointed out, "a figured world is peopled by the figures, characters, and types who carry out its tasks and who always have styles of interacting within, distinguishable perspectives on, and orientations toward it" (p. 51).

In this study's context, the advisor is the critical character who orients international doctoral students and points out meaningful artifacts that are part of the figured world of the U.S. academia. Advisors help students build meaning-making systems and learn how to perform in this socio-historic world. While enacting certain levels of epicization, the advisor helps students become familiar with the Western European scholarly practices informing the U.S. academia and structure their plans of study. The advisor is the agent who assists students in assigning significance to certain acts and understand what "particular outcomes are valued over others" (Holland et al., 1998, p. 52). For example, assigning meaning to certain artifacts such as conference presentations or publications is one of the roles attributed to the advisor. As findings in this study suggest, the advisor is the agent who is modeling behavior and becomes the cultural

resource that mediates international doctoral students' identities as scholars. Moreover, the advisor is the agent deciding if students can or cannot visit their families, and for how long. This has a powerful impact on students' wellbeing. The advisor is not only a cultural resource, but also an employer who has the power to determine international doctoral students' present and future in the U.S. The advisor can provide funding and assistance for career preparation. As one of the participants shared: "here the advisors are so powerful. If they want, they can destroy your career" (Mumu).

In the figured world of advising, international doctoral students get to sense an intercultural and inter-educational experience. This ability to sense this figured world and understand how to perform becomes embodied in their mental structures over time (Holland et al., 1998), that is, students understand the happenings in that figured world, what they are expected to do or not do, and "learn to author their own and make them available to other participants. By means of such appropriation, objectification, and communication, the world itself is also reproduced, forming and reforming in the practices of its participants" (p. 53). In other words, it means trying new roles and integrating them into their perspective, which leads to transformative learning (Mezirow, 1991). Participants' advice to advisors and other students is an indicator of students' ability to reproduce this figured world of advising in their own way. For example, some students recommend others to switch their advisors if needed, even if that certain act might not always be considered acceptable in certain programs. Indeed, students mentioned that in some programs that was not acceptable, but in others the main issue was the fear of being stigmatized. In this context, study participants encouraged students to reform their practices of participation in the figured world of advising and to take a more active role in deciding their paths.

The use of Bakhtin' (1981) epic and novel is essential in the advising model discussed in this dissertation because international doctoral students experience advising as a foreign culture. Moreover, advising practices represented through cultural artifacts are hardly theorized in the literature. On the one hand, epicization exhibits centralizing and homogenizing tendencies towards culture and language. On the other hand, novelization engenders a pluralization of culture and language (van Eijck & Roth, 2011) and an embrace of cultural diversity. The advising model emerging from this study underscores what international doctoral students experience while navigating relationships with their advisors in the figured world of academia, and what feelings are generated by different advising approaches. Hence, novel approaches to advising that incorporate alternative ways of knowing arising from cultural diversity (van Eijck & Roth, 2011), such as advising as mentorship, advising as support, and advising as caring, in which advisors are culturally sensitive lead to positive experiences: international doctoral students feel nurtured, respected, valued, supported, and motivated. The majority of study participants experienced positive relationships with their advisors that enhanced their doctoral journeys and helped them become more self-confident. Advising relationships that are more hierarchical and informed by epic approaches in which advisors are seen as heroes who have control over students do not often lead to positive experiences. In these situations, international doctoral students feel frustrated, controlled, intimidated, isolated, and anxious to share their feelings. Indeed, in this study there were only four students who reported the latter kind of experiences. However, a number of students also noted they wanted a little more structure and rigorous deadlines, thus they seem to expect a bit more of the epic approach in the advising relationship. Nonetheless, the focus of this study is personhood; each student's voice is important. Each advising experience is unique and taken into consideration. Ideally, advisors

should embrace novelization and celebrate the diversity and uniqueness of their international doctoral students, but also include some levels of epicization that would provide more structure for their advisees.

In sum, this advising model discussing international doctoral students' experiences with their advisors in the figured world of academia emphasizes the impact of different advising approaches on international doctoral students' lived experience. The goal of this discussion is to sound the alarm regarding advising as an intercultural and inter-educational experience, and to generate further reflection and inquiry in this regard.

Across Disciplines

After a thorough interpretation of international doctoral students' experiences across disciplines, this study's findings support current scholarship in the field discussing disciplinary differences that influence practices in doctoral education (Han et al., 2015; Huang, 2009) and therefore impact students' experiences. The novelty of this study is the profound nature of these disciplinary differences as experienced and discussed by study participants during the interviews and focus groups. The focus groups provided a platform for conversation and exchange of information. Participants were surprised to learn about the variety of departmental differences, as shared by their colleagues. The photographs also generated useful explanatory data on this topic: in a contrasting fashion, a large number of students in STEM- related fields chose photos of their laboratory or field work, while students in arts, humanities, and social sciences sent photos related to their teaching experience. As discussed in this dissertation, international doctoral students in STEM and students in arts, humanities and social sciences very often navigate their doctoral journeys and advising relationships differently due to several factors such as program structure, funding opportunities, and advisors' background and experience.

In terms of program structure, students shared various experiences and how the lack of organization can sometimes hinder their progress. One of the reasons for this disciplinary discrepancy discussed in this study is the fact that STEM programs usually have a large number of international doctoral students, thus faculty, advisors, and staff are used to working with international students. Students in STEM fields shared that international students represented 60% or even 90% of doctoral students in their programs. These numbers are not surprising, taking into consideration the fact that the largest number of international students in the U.S. are enrolled in STEM-related programs. Nonetheless, this study revealed that there are also program differences within these two complex categories of disciplines. Not all STEM-related fields offer the same kind of support and not all advisors use the same practices. However, it is important to note that students in AHSS did not experience as many positive experiences as students in STEM fields because their programs are not always aware of regulations regarding international students. That leads to confusion among international doctoral students as they always need to check with three administrative entities before taking decisions: their academic department, the Graduate School, and the international student office.

Another aspect that varied across disciplines regarding program structure and organization was assigning, selecting, and switching advisors. This study's findings generate interesting future directions for research regarding advising at the doctoral level. It was revealed that, usually, international doctoral students in STEM-related fields are stuck with their advisors who commonly provide them funding. Hence, this becomes an employment relationship. This is particularly important for international doctoral students because their assistantships are their only source of income in this country. Also, the stipend level and other benefits, such as funding

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for participation to conferences were often provided by their advisors, in addition to their departments and/or the graduate school.

Immigration regulations do now allow international doctoral students to work more than 20 hours/week during the academic year, and 40 hours/week during vacations. Consequently, even if the advisor-advisee relationship might not be ideal, switching advisors is an uncommon occurrence for students in STEM-related fields, particularly after the first year of studies. At the opposite pole, students in AHSS and students in an interdisciplinary program indicated that they could switch their advisor if needed. In these cases, the advisor was not usually their assistantship supervisor. Nonetheless, even if switching was possible, a few international students commented that they did not have the courage to do so because they were afraid of being stigmatized. They felt frustrated and trapped in a dysfunctional advising relationship, but were anxious to discuss those issues with their advisors. Five students, however, shared their stories about switching advisors and how those decisions enhanced their experiences. These experiences may be related to disciplinary differences: in STEM-related fields it was very common for the advisors' and students' backgrounds to match, while a few AHSS students indicated that mismatching backgrounds was a challenge.

This study's findings also revealed that the advisors' background and experience was an essential element in the advisor-advisee relationship. Sixteen participants had foreign-born advisors or co-advisors. It is important to note that many advisors in STEM-related fields were foreign-born and were familiar with the peculiarities of being an international doctoral student. A number of students found it beneficial to be assigned to foreign-born advisors who were able to empathize and better understand their situation. Nonetheless, a few students mentioned that having an international advisor was not necessarily an advantage, because they were stricter than

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American advisors. As one of the participants mentioned, there was a rumor that "American advisors are very cool" and international advisors were stricter. Nevertheless, there was no general agreement that having an international advisor was necessarily an advantage. For example, a few students stated that their American advisors were well-traveled and culturally sensitive, thus they felt understood and nurtured.

On the other hand, several similarities of international doctoral students' experiences across disciplines emerged, such as the fact that a large number of students experienced caring advising and received mentoring for both personal and professional development. In this respect, students from both STEM and AHSS discussed the need for advising regarding career preparation beyond just academia. Some study participants expressed preference for landing a job in the U.S. after graduation, while others intended to find employment at home, regardless of their discipline. Despite the differences in their departmental cultures, international doctoral students across disciplines were facing universal challenges such as funding, strict and sometimes impenetrable immigration regulations, and missing their families.

Implications

There is a limited number of studies presented in this dissertation's literature review that discuss advising relationships as experienced by international doctoral students in different disciplines. This dissertation presents an analytical model discussing the figured world of advising as a critical subset in the figured world of U.S. academia, and what international doctoral students experience while navigating advising relationships across disciplines. This holistic view of advising as an intercultural and inter-educational experience generates several suggestions for advisors working with international doctoral students. The overall recommendation is a critical need for training advisors and acknowledging their work as cultural

resources. At the time this study was conducted, the university that served as the research site for this study did not offer a formal training program for doctoral advisors working with international students. Moreover, often advising is given peripheral importance as part of the faculty load that includes research, teaching, and service. This idea is reinforced by Tincu's (2008) dissertation findings examining the experiences of international doctoral students and faculty advisors. She argued that while faculty considered advising as an important component, the fact that the university did not recognize it for promotion and tenure influenced faculty's attitudes towards advising. Indeed, faculty are often overworked and their main concern is producing quality research. However, international doctoral students' research productivity should not be underestimated. For this research to flourish, an interculturally-proactive advising should be emphasized.

Interculturally-proactive advising. It is essential to note that this dissertation does not attempt to propose a one-size-fits-all interculturally-proactive advising model. On the contrary, it argues that international doctoral students should be considered for their unique personhoods; there is no advising model that equally works for all students. There is no general checklist that advisors could and should use. Similar to domestic doctoral students, international students have different backgrounds, needs and aspirations that do not fit a certain model. Hence, the core attribute of an interculturally-proactive advising process is aimed at fostering familiarity with each student's world and, as a cultural resource, to facilitate their performance in the figured world of academia. A foundational element in this advising construct is empathy. Empathy is not ingrained in each of us, but it can be learned if advisors commit to assisting their advisees throughout their academic journeys. For international doctoral students in particular, the

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advisor's empathy is a sign of caring and cultural sensitivity that leads to mutual trust and respect.

Good mentoring includes certain levels of novelization and epicization; these approaches should not be treated as binary due to the complexity of the advisor-advisee relationship. The recommendations below provide ways of enacting a more novelized approach to advising, but epic approaches such as setting rigorous deadlines and structure are mentioned as well. If advisors act as mentors, as cultural resources and support systems who facilitate international doctoral students' personal and professional development, then students feel nurtured, respected, valued, supported, and motivated to succeed. This is what, ideally, international doctoral students should experience in the figured world of advising. The following suggestions emerged from this study's findings, as discussed by participants during the interviews and focus groups:

- *Put assumptions aside when it comes to your international advisees*. Some students might struggle with issues that might not necessarily be obvious. For example, the use of the English language. For some students, English is a second language, for others it is their third or fourth language. Avoid the assumption that if students speak English fluently, they do not struggle. Communication plays an essential role in international doctoral students' learning journeys and interactions, particularly in the advisor-advisee relationship. As Catherine argued, "Just because I might speak fluently, doesn't mean that I am not struggling, and that I least I should have a little more lenience with people like me, with international students." Make sure to check in with your international advisees that they clearly understand what you communicate, particularly when discussing critical aspects, in order to avoid misunderstanding.

- *Be clear if there is an option to switch advisors*. It was revealed in this study that one of the main struggles some international doctoral students faced was the anxiety to switch advisors, even though they were struggling in those advising relationships. They might feel frustrated and want to switch due to certain issues, but they might lack the courage to have an open conversation about those issues because they draw on their previous educational experiences where, in most cases, the advisors were seen as "Godly beings." If your program policy allows students to switch advisors, explain from the beginning that can be an option that would not stigmatize them. If your program does not allow switching advisors, have a conversation about that and encourage students to openly discuss any advising related issues that might hinder their progress, or give them someone they can bring these issues to if they do not feel comfortable talking to their advisor.

- *Learn about basic immigration regulations*. As discussed by study participants, international doctoral students sometimes struggle with ambiguity and confusion regarding their plans of study due to the peculiarities of immigration regulations. In the context of this study, this issue was prevalent for a few students in AHSS. In order to provide mentorship, there is a need for advisors to be familiar with basic regulations such as credit requirements, maximum working hours, mandatory health insurance and other visa rules that impact international doctoral students' current stay and employment prospects after graduation. Knowing basic information about these regulations can better equip faculty when advising international doctoral students. Indeed, there should be a constant collaboration between departments, the Graduate School, and the international student office, but the advisor's role is critical as s/he is the one providing directions. If

there are no workshops organized by the department or the graduate school on this topic, the advisors might want to take the initiative and ask their international advisees about basic information regarding their status. Faculty advisors might also want to visit the international student office and keep in touch with their advisee's international advisor to make sure they receive updates on their status. Advisors might not know, for example, that if their advisee is not able to pay the mandatory health insurance, his/her enrollment is subject to cancelation.

- *Be aware of cultural differences*. Be curious about who they are. It is paramount to be culturally sensitive when advising international doctoral students, as cultural differences are by default part of these students' experiences. Nonetheless, advisors should be aware of the fact that international doctoral students are not a homogeneous student population; they belong to different cultures and, even within those cultures, each person is unique. In this study, participants urged advisors to respect their cultural differences and help them understand the system or the figured world of academia. As Catherine argued, cultural differences might inhibit them from speaking up about certain problems "because in our culture you have to project the image of success because of your status as a graduate student, so sometimes it's very difficult to approach a problematic subject." This suggestion aligns with Tincu's (2008) findings discussing the importance of knowing and understanding the advisee's cultural and educational background. Hence, as discussed by a number of participants in my study, advisors should participate in professional development workshops that would expose them to the variety of challenges that international doctoral students are facing.

- *Set regular meetings with your international advisees, so they will not feel excluded*. A number of participants indicated they would have liked to spend more time with their advisors, particularly to work together on students' research. Indeed, it is understandable that advisors have busy schedules and multiple responsibilities. However, as shown in this study, some advisors make the effort to hold regular individual and group meetings with their advisees and that was beneficial for students. In addition, students who felt that email communication with their advisors was rather inefficient had the opportunity to address those issues during face-to-face interactions.

- *Set rigorous deadlines*. Again, this is not a one-size-fits-all advising model, but a number of international doctoral students mentioned they would have liked their advisors to be stricter on setting deadlines regarding their research, as that would motivate them to be more productive. Perhaps drawing on their previous educational experiences where the advisor was dictating what students should do, a number of study participants indicated they would appreciate it if advisors would push them more towards reaching their research goals. This is an indicator that students also expect certain levels of epicization.

- *Advising for careers after graduation*. When discussing suggestions for their advisors, study participants also mentioned they would appreciate receiving advice for careers after graduation that go beyond strictly academic positions. As international students, they are not always knowledgeable about the variety of job opportunities available in the U.S., thus they would appreciate to receive guidance from that perspective. Nonetheless, a number of participants expressed their appreciation for the career training they received from their advisors, particularly for academic positions, as their advisors became their role models. Therefore, interculturally-proactive advising goes beyond just guidance; it

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takes the form of mentorship impacting students at different levels in their scholarly journeys.

Advice to administrators and graduate enrollment professionals. International doctoral students do not navigate advising relationships as a separate layer of their overall academic experience. There are a variety of aspects influencing their learning journeys and academic interactions that construct a holistic view of their experience. Accordingly, this study's findings also provide insight on how administrators and graduate enrollment management professionals can assist students as they enter and perform in the figured world of academia. First and foremost, administrators such as deans and department chairs should work collaboratively with advisors in order to support international doctoral students. An avenue to ensure that support is organizing professional development workshops for advisors and expose them to the variety of challenges faced by this segment of underrepresented student population. As Walker et al. (2008) argued, "being a good mentor is not an innate talent, or a function solely of 'chemistry'. It also involves techniques that can be learned, recognized, and rewarded" (p. 99). These techniques, several of which are described in the section above, can be presented in a series of workshops discussing the importance of interculturally-proactive advising.

Another recommendation for administrators is making available more avenues for international doctoral students to obtain assistantships, fellowships, and scholarships, based on academic performance and/or financial need, as usually in STEM fields advisors have the role of a boss who not only controls students' academic path, but also their financial stability. From this perspective, the advisor has the supreme power.

Sustaining and increasing international graduate student enrollment implies meeting these students' needs and supporting their success. These findings show that international doctoral

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students across disciplines are facing various challenges and, in order to enhance their experiences, stakeholders in education should strive to understand and find ways to address these challenges. As international students are attempting to adapt to the U.S. academic system, higher education institutions should also be willing to adjust their support strategies for these students and aim to address their needs. As shown in this study, the structure of university programs, departments, the graduate school and international office can sometimes make it difficult for international doctoral students to navigate their studies. The complexity of these students' experiences is exacerbated by various immigration regulations; the office of international programs and its international advisors is the only resource providing student support in regard to immigration compliance. International students' doctoral advisors are not always knowledgeable of those regulations, which can make it harder for students to plan their studies and careers after graduation.

Consequently, how can graduate enrollment management professionals and stakeholders in education contribute to creating an equitable environment for all students? How can they address international doctoral students' needs? This dissertation offers several suggestions: admission professionals might interview current international doctoral students and discuss their needs in order to addressed those issues in the recruitment process; organizing training sessions for faculty advisors and other staff members regarding fundamental immigration regulations for international students, in order to ensure these students will not feel confused when receiving guidance; encouraging the development and sustainability of international and domestic student support groups; organizing events for students to share their culture and making sure American faculty, staff, and students attend those events. It is paramount that universities show interest in getting to know their student population. As discussed in this dissertation, the current political

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climate in the U.S. has had damaging implications for higher education institutions and international graduate student recruitment. Therefore, universities should continue to support their international students who are faced with numerous challenges, as they play an essential role in the prosperity of U.S. higher education.

Limitations

One of the main limitations of this study was that its findings were limited to these particular international doctoral students, from these particular countries, at this particular time in one state, at a Midwestern, land-grant university. The institutional culture and geographic area usually has an impact on international doctoral students' experiences, and this study was limited to these students' stories. Thus, this sample did not necessarily represent the variety of international doctoral students' experiences in the U.S. A further limitation of this study was the low number of participants from AHSS. Out of 25 participants, only seven were from these disciplines. While this representation mirrored to a certain extent the number of international doctoral students in these fields at the university and national level, a high number of students from these disciplines would had strengthen the findings of this dissertation. Additionally, future research in other parts of the country, at different universities is needed in order to explore the diversity of these students' doctoral journeys and how they navigate advising relationships across disciplines.

Recommendations for Future Research

As pointed out by the review of the literature, despite the rich scholarship exploring international students' experiences, with particular focus on the adjustment process, few studies have examined international doctoral students' academic journeys and relationships with their advisors. International doctoral students usually fall under the generic umbrella "international

students" or "international graduate students," even though their experiences and aspirations are often more complex. For international doctoral students, this is their terminal degree; their next step is to seek employment either in their home country, in the U.S., or in other parts of the world.

This study as a represents a stepping stone for future research in this area, the objectives of which is to explore the following aspects:

- A comparative analysis of international doctoral students' advising experiences at different U.S. universities, in different geographical areas;

- A comparative analysis of international doctoral students' advising experiences at different international universities; explore similarities and differences not only across international students' cultural backgrounds and disciplines, but also examine the university culture or the figured world of academia as shaped in that certain country;

- Continue analysing the data gathered from this study's participants and focus on identity work, or how international doctoral students shape their identities in the figured world of academia. The current study mainly provided a description of this figured world and the role of the advisor as a cultural resource impacting their lived experience. Nonetheless, the complex set of data gathered includes rich information about how international doctoral students perceive themselves;

- A follow-up study at the same institution based on interviews with faculty advisors who work with international doctoral students;

- A comparative study looking at both international and domestic doctoral students' advising experiences;

- An extensive book presenting each of these students' stories, as they have unique

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worldviews. This book will provide critical insight regarding adults' identity development in cultural worlds.

Conclusion

This dissertation attempted to provide a window for understanding how international doctoral students perform in the figured world of academia. The central character in the figured world of advising, a subset of the figured world of academia, is the advisor. Relationships with advisors directly impact the lived experience of international doctoral students. The majority of study participants disclosed they felt nurtured, respected, valued, supported, motivated, while few of them indicated they felt frustrated, controlled, intimidated, isolated, or anxious. Nonetheless, these feelings sometimes overlapped. As in any other relationship, there are positive and negative moments. The journey might get bumpy in students' attempts to figure out how they perform and develop as scholars, but the advisors are the resource they draw on in order to continue. Furthermore, disciplinary and program cultures have an impact on how this journey unfolds. This study revealed that international doctoral students in STEM-related disciplines often have more support systems and resources than students in AHSS. One rationale for this disparity, as the literature review and this study's findings have shown, is that STEM-related fields host a large number of international doctoral students. Therefore, administrators and faculty in those disciplines are more familiar with these students' needs. In addition, for international doctoral students in STEM fields, more funding opportunities are available and avenues to enter the U.S. workforce after graduation.

The findings of this study inform various actors in higher education: faculty and staff, policy makers, current U.S. and international students, and prospective international students. The study raises awareness about how international doctoral students experience advising

relationship and aims to inform changes to university policies and the implementation of mentorship training for advisors working with international students. The participation of all stakeholders in higher education is critical for international doctoral students' learning and advancement (Mtika, 2009). Gaining a more in-depth understanding of international doctoral students' experiences in the socially and culturally constructed world of academia can assist educators and institutions in expanding their perspectives and views on doctoral education (Ku et al., 2008). Exploring these students' experiences provides critical perspectives on issues such as advising and teaching international doctoral students in the United States. It also informs recruitment and retention practices. Furthermore, the study offers information on the commonalities and differences among international doctoral students' experiences across disciplines and provides suggestions on how advisors can nurture safer learning spaces as international doctoral students enter and perform in the figured world of academia.

CHAPTER 6. CODA[1]

To me, this study has meant more than a dissertation leading to a doctoral degree. Studying international doctoral students' experiences in the U.S. is not only dissertation work but has also become part of my social responsibility. Aiming at first to broadly describe international doctoral students' attempts to navigate the U.S. education system, this dissertation study took a more complex stance and also aimed at providing a platform for students to critically reflect on their experiences and engage in conversations with other peers. Hence, this chapter is two-folded and presents two additional topics: the impact of the political climate on international doctoral students and students' reflections on their participation in this study.

The Impact of the Political Climate on International Doctoral Students

Data for this study were collected in the wake of the U.S. government's executive orders released in January and March 2017 that, at that time, restricted travel from six Muslim-majority countries (Iran, Syria, Yemen, Somalia, Sudan and Libya). Participants' perspectives on this issue also emerged, even though this was not an initial intent of the study. Even though only four participants were from one of the countries mentioned in the travel ban first initiated on January 27, 2017, the majority of participants expressed concerns regarding this issue during the interviews and focus groups. This study offered a platform for students to discuss this highly debated issue. The findings discussing the impact of the political climate on international doctoral students emerged from the four focus groups and outlined several principal themes: insecurity and stress, travel uncertainty, university support, job prospects, and hostile climate.

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[1] Part of the material in this chapter was co-authored by Corina Todoran and Dr. Claudette Peterson. Corina Todoran had primary responsibility for collecting data and she was the primary developer of the conclusions that are advanced here. Corina Todoran also drafted and revised all versions of this chapter. Dr. Claudette Peterson served as proofreader and checked the data analysis conducted by Corina Todoran.

Insecurity and Stress

The majority of participants in this study expressed their concerns and feelings of

insecurity and confusion that arose due to the travel ban first released in January 2017, then

revised in March 2017. Some participants feared the rules might suddenly change and would

affect their immigration status, or that their countries might unexpectedly be added to the travel

ban list. Other participants mentioned that they had not suffered a significant impact due to these

executive orders; however, during the focus groups they agreed the situation was generally

uncertain.

White, one of the female participants whose country was not on the travel ban list,

argued: "But everybody feels like, today these are these six countries, tomorrow there could be

any other country, who knows. Like one day this person wakes up and says "OK, today I am

going to say Nigeria, tomorrow I am going to say something else", like who knows". On the

same note, Sadib contended:

"This is a sense of insecurity which is prevailing in international students in general. I

know many of my friends who just cancelled their conferences, international conferences,

or international experiments going on in some other countries. They bought the air

tickets to go there and just collect data and come back and analyze it. They just cancelled

their flights, they are not getting reimbursed for this, but they are not leaving United

States, just because of this insecurity. They are taking the penalty of $1000 or maybe

more than $1000, but they are not taking the risk of leaving United States, just because of

this insecurity."

Due to this insecure climate, some students preferred to change the university and move

to Canada. Rose shared that "two of my friends, they have decided to further their education in

Canada instead of the U.S. because they believe it's much easier to travel and to live in Canada instead of the U.S.". Her friends were from Iran and Sudan.

Michael, whose country of origin is not on the travel ban list, was also challenged by this situation and mentioned that "even being a Ph.D. student, you might need to go home, I mean, so having like a travel ban, then it makes it so stressful…" All participants in the focus groups agreed that this political climate has created an insecure and stressful environment for international doctoral students, and international students in general. One particular source of stress for these students was uncertainty around travel.

Travel Uncertainty

A large number of participants mentioned they had to change their travel plans to conferences or to visit their families because of the political climate and possible unexpected changes to immigration regulations. Some students had to cancel their flights, others had to postpone their home visits. Michael shared that:

"Even in my case, my country was not even close to the travel ban, but we had a conference in Canada at the same time he put the travel ban, and that was kind of nobody knows what the travel ban was, what countries were affected, he explained what countries, but even with the international office they couldn't explain what it actually was. So I was kind of afraid and kind of gave up the chance to go to Canada because I was afraid whether can I come back, yeah. Because my wife is here, if I go to Canada whether I'd be banned coming back."

It was interesting to notice that even students from countries that were not on the travel ban list feared to go back home in the summer, considering this to be a high danger. Students mentioned they did not want to risk their whole careers by going home and eventually not being

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allowed to enter the U.S. Han noted that "yes, I had planned to go in the summer to my country, but now I'll go in December, I'll just wait, I cannot take the risk". Mary, a student from an African country, also said she was planning to go home in the summer, but she changed her mind:

"I was going to go home, and everybody is like "Your country is not on the list", but it doesn't have to be on the list, you know. It's in North Africa, it identifies as Arab-Muslim, and that's enough, you know. (…) Somebody could just be like not know what they were doing and they could think "passport with Arabic letters, you are not allowed in this country" or like find some kind of weird reason and if somebody just asks me what religion I am in an airport, I would be so angry. I don't have to answer that question, and I don't want to be in that situation. So I am avoiding it. (…) It really doesn't matter which country anymore, it's just is…who are you and why are you here? You're not white and American."

Jeffrey, another student from an African country was supposed to return to his home country and bring his family in the U.S., but he mentioned that "we had to find a different way for them to come here without me going back, because I don't know with this immigration thing, it's…". Shyam also stated that:

"If international students would have travelled to Canada, for example, there is no guarantee that they would be allowed back in. And it's not necessarily because you belong to a certain region, it's just the way things are. The things is, there is no way of saying it will happen, the international office says if you don't have to travel, if it's not a pressing issue, if it's not something like a conference, don't take the chance because there is just no way to say may or may not happen to you."

William, a student from an Asian country, shared his concern that "with this president, sometimes you are staying in the airport, high risk, and you might never go back because of papers that are signed by somebody. It makes less sense to me". Several participants feared that U.S. immigration officers who are not familiar with students' field of study or who consider them to pertain to a certain religion might not allow them to reenter the country.

University Support

Despite the uncertain and stressful climate generated by the travel ban executive orders, several of the participants mentioned they appreciated the support they received on campus. Many students agreed that, with one exception, university administrators were concerned about this issue and got in contact with international students traveling abroad to make sure they can reenter the country in case they were abroad at that time. The International Student and Study Abroad Services and the Graduate School showed their support and sent several emails to international students to let them know about the implications of this executive order. Sadib discussed how he was abroad when the first travel ban was initiated, and he received a personal email from one of the Deans, saying "come back, [whether or not] you are getting a flight tomorrow, just come back". Participants also remembered that the university had a march supporting international students and faculty on campus, and also had a dedicated webpage from the international office providing details about this issue. Referring to the international office, White remembered that:

> *"They emailed everybody, they also went to the extent of saying that if you have any*
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> *plans, don't leave the country. So I think I appreciate that, because it is their country,*
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> *and they are still taking care of the facts that the decision of the President is affecting*

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international students and they go out to make a statement like that, "Don't leave the

country. If you have any plans, don't do it."

White also mentioned that even American people were alarmed about this situation and they contacted her:

"And not just international students, but even American people were concerned about

this. I was leaving for my home country early this semester and I had to go for a week

and one of my students she emailed me and said that "you should double check, you

should not go this time," because that was the time when for the first time this

announcement came in, and I said "I don't really care, my mother is dying, I need to

go." I mean (…) If they don't let me back, they don't let me back, I'll face it later, but I

just want to give an example that it made Americans concerned about international

students as well. So it's not just the international students who are getting affected."

Sun, one of the students whose home country was on the travel ban list, was pleased by the support he received from the university administrators. He mentioned that one of them in particular even went to the airport to welcome students who reentered the U.S. those days. He found that to be interesting and he appreciated the university support.

Job Prospects

Participants were also worried that these changes in the political discourse might affect their job prospects after graduation. After finishing their studies, international doctoral students might obtain a working visa called H-1B. According to USCIS, the H-1B visa allows U.S. employers to temporarily employ foreign workers in specialty occupations. H-1B specialty occupations include fields such as science, engineering, and information technology. The new

administration has planned to bring changes to H-1B visa regulations as well. Rose, who is from one of the banned countries, admitted that:

> *"I think the new political law which we recently had on H1 visa, that put some kind of limitation for all international students, because all of us need to change our status after graduation, so it makes more uncertain future for all of us and for students who are from those seven countries."*

Other students from countries who are not on the travel ban list also feared that this political climate might impact their chances to get hired after graduation. Shyam stated: "I think in my case it could have some bearing on what happens after I graduate, because the whole issue about companies being reluctant to sponsor your H-1B, that does cast a huge shadow on future prospects". Mary also argued that "there is an executive order to hire less and less H-1B, like that's a law. I mean, it's just… they can directly refuse in your face because of this and it's fine". On a same note, Mumu disclosed that:

> *"I think there is a negative attitude towards you know, immigrants, because I have seen, you know, like all of my friends who wanted to go for a job, like you know, you need sponsorship, you are not going to get hired. They just tell that person on their face that, you know, we do not hire immigrants."*

Hostile Climate

The last overarching theme that emerged from these focus groups when discussing the political climate and its implications for international doctoral students in the U.S. is the hostile climate that was generated by these executive orders regarding the travel ban. Jeffrey mentioned that the political discourse created a more hostile climate for international students:

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"The political climate in the U.S. has made it a little more difficult. There are times I wonder what people feel towards me. Do my American friends, not necessarily here at NDSU, but people in the community, when they see me, do they think I am here to take their job? Do they wonder what religion I belong to and if I mean them harm, if they like me, if they are happy about me being here? Those thoughts have crossed my mind, so I feel that the climate has become a little more hostile towards international students, even though I believe we bring tremendous value to American society and culture, and the fields that we are studying and contributing towards."

Other participants also shared some instances of discrimination and the acute feeling of hostility that had emerged after the travel ban initiative. Shyam offered his perspective on why and how this hostile climate developed:

"There is technically a lot of misconception about political ideology and people are just confused, to be honest. And I think it's quite appalling that the vast majority of fellow students, domestic, I mean, they barely put in the effort to understand what really is going on, beyond what CNN or Fox News tells them. Because the world is not served by just these TV channels, obviously. I faced instances when I used to wear a beard and I was mistaken for a different nationality, and I find that really stupid. I don't think anyone should be facing discrimination of any form. It doesn't matter if I am brown, or whoever it is, not just to me, it shouldn't happen to anyone. And the simple fact that someone has an issue just because a certain person looks a certain way, is dumb and very, very unfair. (…) But this simple effort that goes into understanding different worldviews and appreciating that there are different to life, I think that is a good place to start for many people, it could serve them very well to start learning about the world beyond the U.S."

In summary, the travel restriction that was first mentioned in January 2017, and later revised in March 2017, has had significant implications for international doctoral students. Even though the revised executive order included only six banned countries, its repercussions went on a higher scale, and a large number of students who were not from those countries were feeling anxious and oppressed. The majority of participants in this study agreed that these immigration regulations and political tensions generated a more hostile and uncertain climate. This led to a feeling of otherness as students started to question their fit and place in this society; that feeling has the potential to affect their work and intellectual disposition and, implicitly, the ability to interact with others, such as their advisors.

Participants' Reflection on this Study

The second section of this final chapter aims at presenting international doctoral students' reflections on their participation in this study. I believe that categorizing these reflections into common themes and attempting to rephrase them might somehow dissipate the emotion attached to their meaning. Hence, I choose to simply present a few examples below:

Michael: *"I have never thought of these questions, but I mean, these are kind of day to day life questions, issues that we face, but frankly I didn't have any time to think deeply about these questions, so I think it's good to have this kind of conversation with each other. I mean it's always nice to talk to other students who are facing the same issues, so then we can realize that ok, I am not the only one who is facing this issue. We, all of us together sharing the same situation so it's kind of giving me the strength to do the work that I am carrying out, so I think it's good to have a conversation with fellow doctoral students."*

White: *"This study basically gives you a chance to reflect and be able to say that yes, there was a time when I didn't understand a thing in the class, there was a time when I got a really bad grade, and look what I have become because of it, and what are the positive things, look at the pride that we feel being an international doctoral student. So, I think that's in a sentence this whole experience helps you create that narrative about your own life, which is really important. And people do not stop and reflect to make room for that."*

Shyam: *"It's interesting to see how much in common we have as, in terms of our experiences as graduate students, doctoral students, regardless of what background we come from and I mean in terms of programs, in terms of nationalities, in terms of circumstances, so I think this should sort of give a hope, this gives you a good understanding where we stand as a community and what the challenges are as a community and how we can address them as a community. That's what will last, that will be a good approach for the future."*

William: *"And for me, I would say, for the first stage it's very good for me to have somebody to talk about all the things that I had in the past, especially for those problematic things. And it feels very nice to have people in the room, you can have communication, sharing your opinion, especially we are from similar academic level, like Ph.D. programs. Sometimes you cannot share those problems with a college kid, so that is way different."*

The excerpt below presents part of a focus group conversation:

Sadib: *"Yes, it was very helpful for me. I really enjoyed your study in a sense that you made recall all those good memories and extract a lesson from those. In a routine life, I*

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sometime do not have the chance to look back at my experience and extract one or two sentences out of it. So that's a very good lesson. I learned from this and the past interview we had, just to extract one or two sentences or lesson out of that experiences."

Sun: *"It's good and we have a flash back from the beginning and what has happened and…"*

Sadib: *"For the future…"*

Sun: *"Make a plan for the future. So it's good."*

Carlos: *"Knowing myself a little bit…"*

Sadib: *"Yes, exactly."*

Carlos: *"And see or think about things that I used in the past, and to me it's very special because I am preparing to go back now [graduate] and having this to recap everything it was nice."*

Tiger: *"Yes, before I participate in your study we might have some difficulties or some problems and the way we tried to figure it out, or we tried to solve it by ourselves. But after this, we know that we are not alone and we share maybe different people have different solutions, but you have something in common. So that is a good support."*

These are just a few examples of student testimonials at the end of the focus groups. I spent time with each group of students to ask for feedback about data collection and how they felt throughout the process. These testimonials point out that study subjects did not necessarily reflect on their experiences prior to their participation in this study, and they found this to be a safe space to share their stories and engage in conversations with other international students.

When prompted to share how they felt during the interviews and focus groups, the majority of them indicated they felt comfortable. Another brief example in this regard is the focus group excerpt presented below:

Jeffrey: *"I think you are doing a good job […] I mean that from my heart."*

Han: *"Really, like first interview was…"*

Mary: *"It is more like a conversation, it is not intimidating. You make it more like a conversation. That's much easier."*

Geoff: *"You carefully chose the sample, different age, different country, background. Awesome job!"*

The final page of this disquisition does not in fact represent the end of my study. These international doctoral students' stories enclose more than just their motivation to study in the U.S., experiences with their advisors across disciplines, and how the 2017 political climate affected them. The complex set of data collected will later be presented in the form of a book that will attempt to shed light on the complexity of these students' lives while studying and performing in the various figured worlds they encounter in the U.S.

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APPENDIX A. INTERVIEW PROTOCOL

Topic: International Doctoral Students' Figured Worlds of their Doctoral Journeys

Date:

Time of interview:

Place:

Interviewee (Pseudonym):

Guiding questions:

Thank you for your willingness to participate in this interview! Please feel free to ask for clarification when you feel that you do not understand my questions. You can choose a pseudonym for privacy purposes, or I can assign one for you.

1. Tell me a bit about yourself. Where are you from? When did you come here to start your doctoral degree?

    - How is that you chose the United States?

2. *Discuss the photos they sent before the interview.* How do these images represent your doctoral experiences?

3. How is the learning environment in the U.S. different from what you are used to?

    - How are expectations different?

4. How would you describe the relationship with your faculty? What about the relationship with your advisor?

    - How do you think these relationships impact your academic experiences?

    - Do you think these relationships are important at the doctoral level?

5. How would you describe your relationship with other students in your program?

    - How do you think these relationships impact your learning?

- Do you think these relationships are important at the doctoral level?

6. Would you share a story related to your doctoral program or advising experience when you felt like an outsider?

    - What made you feel that way?

    - Were particular individuals or situations relevant in making you feel that way?

7. Would you share a story related to your doctoral program or advising experience when you felt like an accepted part of the group?

    - What made you feel that way?

    - Were particular individuals or situations relevant in making you feel that way?

8. Are there any differences between the way you interacted with your faculty and peers from your home country, and the way you interact now with those in the U.S.? In what sense?

9. What is your overall experience in your doctoral program or classroom? Do you feel like an accepted member of the group or like an outsider?

10. How do you manage to understand who you are as an international doctoral student?

    - What are some of the main challenges you have been facing?

    - How have you managed to overcome these challenges?

11. What are some of the resources and support that this cultural and academic environment offers you?

12. How do you make sense of events happening around you in a different cultural and academic environment? Do you take some time to reflect on what is happening around you?

    - Do you think these experiences are unique to you? If so, why? How do they challenge previously held assumptions about the world you knew?

- Do you think that now you think or act differently than how you did before starting your doctoral program? In what ways you feel like a different person?

13. Imagine that I am a new doctoral student in your program. What kind of advice would you give me to help me get adjusted?

14. Would you share the most important things that new international doctoral students should know at the beginning of their program?

15. What haven't we discussed in this interview that matters to you in regard to your academic experiences in the U.S.?

APPENDIX B. FOCUS GROUP QUESTIONS

I propose we start by introducing yourselves, if you agree to do that. Tell us your name, where you are from, your department, the year you started your doctoral program, and what you enjoy doing the most when you are not studying or working for your degree.

1. Take a minute to think about your first month in your program. What were the main things that surprised you? What did you find more difficult? What did you like most?

2. Can you tell me what do you most appreciate about your faculty?

   - What would need improvement?

3. How are advisors being assigned in your program? Is it common to switch advisors?

4. Can you tell me two positive things about your advisor?

   - If you could change one thing about your advisor, what would that be?

5. What is the most important thing that faculty and advisors should know about international doctoral students?

6. What role have your colleagues in your program had in your success as a student?

   - *Let's think about what it means to be an international doctoral student vs a domestic doctoral student. What do you think are some of the differences between international doctoral students and domestic doctoral students? What are the similarities?*

7. If you could change one thing about your experience as an international doctoral student, what would that be?

8. What do you think are the challenges unique to your program, as an international doctoral student?

9. What do you think are universal challenges for international doctoral students?

   - *Has the recent political climate affected you in any way?*

10. What does it mean to be an international doctoral student?

11. What do you think about the idea of implementing an International Doctoral Student Support group on campus? Monthly meetings, seminars, workshops, guest speakers, invite faculty, American peers, etc.

12. What should your program/university start to do, or continue to do, in order to assist your needs as an international doctoral student?

13. What would you like to share about your participation in this study? Has it helped you in any way? Have you ever spent time thinking of your experiences as an international doctoral student?

14. Have we missed anything? Is there anything else that you might want to share on this topic?

APPENDIX C. DEMOGRAPHIC SURVEY

1. Country of origin

   _____

2. Degrees earned in your home country

   _____

3. The number of years studying English before your arrival in the U.S.

   _____

4. Position held before your arrival in the U.S.

   _____

5. Length of presence in the U.S.

   _____

6. Month and year when you started your doctoral program

   _____

7. Program of study

   _____

8. Do you have a formal advisor?

   _____

9. Stage in your doctoral program (coursework, comps, or dissertation stage)

   _____

10. Gender

    _____

11. Marital status

    _____

12. Race/ethnicity

    _____

13. Age

    _____

APPENDIX D. EMAIL INVITATION

Dear International Doctoral Students:

My name is Corina Todoran, and I am an international doctoral candidate in the School of Education at NDSU. I am working together with my advisor, Dr. Claudette Peterson, on my dissertation study titled *Figured Worlds: A Comparative Analysis of International Doctoral Students' Experiences in the U.S. Academic Setting*. We are focusing on the way we, as international doctoral students, make sense of the new cultural and academic environment in which we function.

You are eligible for this study if you are an **international doctoral student** at NDSU on an <u>F-1 or J-1 visa</u>. If you agree to participate in this study, you will be asked to send via e-mail five photos that best depict your academic experiences, complete a brief demographic survey, participate in an audio-recorded face-to-face interview, and/or participate in a video-recorded focus group comprised of four to five NDSU international doctoral students. The researchers will keep private all identifiable records.

I know that as an international doctoral student your time is valuable, so **after you participate in the interview you will be compensated with $10, and after you participate in the focus group you will receive $10.**

Participation is completely voluntary. **If you are willing to take part in this study, or you have any questions or comments, please contact Corina Todoran –** corina.todoran@ndsu.edu.

Further information will be provided once you express your intent to participate in the study.

If you have any questions about the rights of human participants in research or to report a problem, contact the NDSU IRB office at 701-231-8908, 1-855-800-6717 (toll-free), or ndsu.irb@ndsu.edu

IRB #HE17124
Expires: 2/6/2018

Sincerely,

Corina Todoran

APPENDIX E. INFORMED CONSENT

Title of Research Study: *Figured Worlds: A Comparative Analysis of International Doctoral Students' Experiences in the U.S. Academic Setting*

This study is being conducted by: Dr. Claudette Peterson, associate professor in the School of Education, and Corina Todoran, doctoral candidate in the School of Education at North Dakota State University.

Why am I being asked to take part in this research study?
You are invited to take part in this research study because you are an international doctoral student at NDSU, on an F-1 or J-1 visa.

What is the reason for doing the study?
The study aims to explore international doctoral students' experiences in the U.S. academic setting, and focuses on the relationships that these students develop with their faculty and academic peers.

What will I be asked to do?
If you agree to participate in this study, you will be asked to send via e-mail five photos that best depict your academic experiences (photos will not be published, only used as discussion points for the interview), complete a brief demographic survey, participate in an audio-recorded face-to-face interview, and/or participate in a video-recorded focus group comprised of four to five NDSU international doctoral students. The questions for the interview and focus group are related to your doctoral journey in the U.S. academic and cultural environment. Your answers to these questions will be used to explore your experiences and relationships developed with your faculty and academic peers, and how these relationships impact the completion of your degree. For the interviews, participant confidentiality is ensured. For the focus groups, participants will be instructed to maintain privacy and confidentiality of the discussion.

Where is the study going to take place, and how long will it take?
The study will take place at a convenient location for you, on or around the NDSU campus. The NDSU campus locations might be the library, the Memorial Union, and/or the Teaching Learning and Media Center (Quentin Burdick Building). The interview will last for approximately 90 minutes. The focus group session will last for approximately one hour.

What are the risks and discomforts?
Some of the questions regarding challenges you have faced may be very personal and private to you. You can choose not to answer any question, for any reason.

What are the benefits to me?
By participating in this study, you will have an opportunity to reflect upon your experiences and inform various groups of people in higher education, such as faculty, domestic and international students, staff, and policy makers about international doctoral students' academic experiences in the U.S., and how to better assist them in the completion of their degrees.

Do I have to take part in the study?
Your participation in this research is your choice. If you decide to participate in the study, you may change your mind and stop participating at any time.

Who will have access to the information that I give?
Only the researchers will have access to the data gathered in this study, and they will keep private all records that might identify you. Regarding the focus groups, we ask you to respect the privacy of your fellow focus group members and not disclose any information about the discussion you had.

Will I receive any compensation for taking part in this study?
Yes. After sending the pictures and participating in the interview you will be compensated with $10, and after participating in the focus group you will receive $10.

What if I have questions?
If you have any questions about the study, you can contact Dr. Claudette Peterson at claudette.peterson@ndsu.edu or Corina Todoran at corina.todoran@ndsu.edu or 701-793-8783.

What are my rights as a research participant?
If you have questions about your rights, or complaints about this research study, you may contact the researchers or the NDSU Human Research Protection Program at:
- Telephone: 701-231-8995 or 1-855-800-6717 (toll-free)
- Email: ndsu.irb@ndsu.edu
- Mail: NDSU HRPP, 1735 NDSU Research Park Dr., NDSU Dept. 4000, PO Box 6050, Fargo, ND 58108-6050

More information about your rights can be found at: www.ndsu.edu/research/irb .

Documentation of Informed Consent:

You are freely deciding whether to participate in this research study. Signing this consent form indicates that you have read and understood this consent form, you have discussed any questions you might have, and you have decided to be in the study.

A copy of this consent form will be provided to you as well.

_____   _____
Your printed name   Date

_____
Your signature

_____   _____
Researcher's printed name   Date

_____
Researcher's signature