FIRST-GENERATION DOCTORAL STUDENTS, IMPOSTORISM, AND BELONGING:

A TRANSCENDENTAL PHENOMENOLOGICAL STUDY

by

Karen Sullivan Pore

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

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Abstract

The purpose of this study was to explore the experiences of first-generation doctoral students as they relate to their feelings of belonging, impostorism, and otherness. The study was guided by use of Tajfel social identity theory which provided insight to how an individual evaluates their identity within their environment and groups. The research design used was qualitative and the approach was transcendental phenomenological. The qualitative design allowed the first-generation doctoral students to share their experiences and behaviors during their doctoral journey. The participants were 10 self-identified as first-generation doctoral students who experienced impostor feelings during their doctoral journey. The data was collected during individual interviews, focus groups, and a reflective letter-writing activity. The results of the research findings included discussions of barriers first-generation doctoral students face, the impact impostor feelings had on belonging feelings, and the need for relationship building within doctoral programs to increase belonging feelings for first-generation doctoral students. Practice implications were discussed as a result of the findings.

Keywords: first-generation doctoral students, impostorism, belonging

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Dedication

  To all the first-generation students who dream of a terminal degree. I pray the experiences shared within this study inspire you. To my husband, thank you for always supporting me in my goals and dreams. Your encouragement was instrumental on my journey. To my children, break through the limits that you put on yourself and dream big.

Acknowledgments

Throughout this extended process, there were so many who helped me along the way in my journey. It may have been a listening ear, a kind word, an encouraging smile, or a quiet steady prayer. To everyone who prayed and encouraged me, I thank you ALL.

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This work is the result of watching others go before me and do the hard work of doctoral education and do it well. Many thanks to Dr. Jamie Kipfer and Dr. Rhonda Belton for checking in on me, for all the sanity checks and interview tips and for listening to me process for all these years.

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CHAPTER ONE: INTRODUCTION

Overview

First-generation college students have been the subject of a wide range of studies as a population identified as a minoritized social identity population in higher education (Bettencourt et al., 2020; K. Campbell & Narayan, 2017; Engle & Tinto, 2008). The challenges identified as significant for first-generation students produce barriers to both access and student success (Engle & Tinto, 2008). For example, first-generation students are more likely to come from low-income and minority backgrounds, be older than traditionally college-aged, have dependent children or family responsibilities, and be financially independent (Engle & Tinto, 2008; S. K. Gardner, 2013; Roksa et al., 2018). Many of the challenges are not eliminated as first-generation students complete their undergraduate studies. Doctoral students who identify or have been identified as first-generation students continue to carry these characteristics along with additional experiences of being part of a minoritized population that has experienced historic and pervasive deficit stereotypes about lack of academic ability or capabilities (Bentrim & Henning, 2022). These experiences could lead to the internalization of the stereotype characteristics and impact first-generation doctoral student (FGDS) experiences with impostorism and sense of belonging within their doctoral programs (Handforth, 2022; Mack, 2019; Mitic, 2022; White & Nonnamaker, 2008; Wofford et al., 2021). This study explored first-generation doctoral student experiences within their programs concerning their sense of belonging and impostorism.

Background

Although challenges exist and remain for first-generation doctoral students, almost 30%

of those graduating with doctorate degrees in 2020 were first-generation (National Science Foundation, 2020). To understand their experiences within their programs and their feelings regarding belonging and impostorism, it is important to investigate the historical, social and theoretical context that is unique to the first-generation doctoral student journey.

Historical Context

Historically, it has been a widely accepted concept that educational attainment leads to a wide range of economic and social benefits for individuals and society (Engle & Tinto, 2008; Toutkoushian & Paulsen, 2016). Higher education leaders and stakeholders have long tried to find ways to promote access, student retention, and success for a wide range of students (Tinto, 2000; Toutkoushian et al., 2018). One retention and recruitment strategy is to address the needs of certain populations of students who may need specific interventions and support (Tinto, 2000, 2017). The term *first-generation student* was birthed from the desire to potentially reduce inequalities between selected groups of individuals and mitigate the effects of family background on a person's access to degree attainment (Covarrubias et al., 2019; Forrester, 2022; Patfield et al., 2021; Takimoto et al., 2021; Toutkoushian et al., 2018). According to the Center for First-generation Student Success (Baldwin et al., 2021), nearly 1 in 3 undergraduate students identify as first-generation. While definitions may vary for first-generation students the most commonly used definition is a student who is the first in their family to attend a 4-year college. For this study of doctoral students, first-generation doctoral students are defined as students who were first-generation college graduates and are now enrolled in doctoral program-specific studies (Baldwin et al., 2021).

Research shows that first-generation graduate students, which would encompass the doctoral level, continue to benefit from intentional support from their family, faculty mentorship

with those with similar backgrounds, and that impostor syndrome is a common occurrence (Baldwin et al., 2021). Impostor syndrome, also known as impostor phenomenon or impostorism, was first studied by Pauline Clance (1985) among successful, high-achieving women. Since the initial study, impostorism has become a topic in both academic and non-academic environments. Impostorism is characterized as the feeling of being a fraud and the fear of being "exposed" as a fraud (Clance & Imes, 1978; Clance & OToole, 1987; Mack, 2019; Mak et al., 2019). Impostorism has been studied for multiple populations in higher education including minority groups, and groups facing challenges like first-generation students from many angles including self-efficacy, access and barriers to success, stereotyping, perfectionism, identity, and social implications (Bothello & Roulet, 2019; Edwards, 2019; Gardner, 2013; Holden et al., 2021; Lee et al., 2021; Ramsey & Brown, 2018; Wester et al., 2020). Among the chief characteristics of impostorism behaviors is the feeling of being an impostor, of tricking others into believing that they belong (Clance, 1985). The impostor feeling and the fear of exposure that follows connects research of impostorism behaviors with sense of belonging research concepts.

A student's sense of belonging within their academic environment is a research area that has become popular as it relates to student success. While Tinto (1974) developed theories regarding academic integration and student attrition, sense of belonging has been utilized largely in the context of co-curricular functions (Bentrim & Henning, 2022). Belonging is tied to one's social identities and many institutions have utilized strategies to foster a sense of belonging for identified groups on their campuses including students identified as first-generation students (Bentrim & Henning, 2022; Strayhorn, 2012; White & Nonnamaker, 2008). However, both sense of belonging and impostorism are internal feelings and motivations that institutions have tried to

influence by external means. This contrast and the institutions' attempts at influencing student belonging may or may not be effective in increasing feelings of belonging among students as research continues to develop in this field (Bentrim & Henning, 2022; Gopalan & Brady, 2020; Strayhorn, 2012; Walton & Brady, 2017).

Social Context

The impacts of studying first-generation doctoral students and their experiences with impostorism and sense of belonging reach into several areas of society. The first impact is the career trajectory of doctoral students and its impact on academia. Individuals with earned doctoral degrees contribute to not only the literature in their field but oftentimes have careers that influence and impact the academic systems within higher education (Campbell, 2018; Ma & Shea, 2021; Mulholland et al., 2022; Sims & Cassidy, 2019). Academia traditionally was where newly minted doctoral graduates were employed. However, the National Science Foundation's (2017) research indicated that for the first time the private sector employed nearly the same amount (42%) of recent graduates as educational institutions (43%). This shift in career placement began the practice of universities beginning to track and collect data on doctoral students' job placements to help with the recruitment of new students. The declining number of tenure track positions on campuses may also be contributing to the shift into the private sector. Tenure density, a term used to describe the proportion of faculty members in tenured and tenure-track positions within an institution has been declining over the last several decades. This decline along with the rise of first-generation students with diverse backgrounds seems counter-productive to faculty diversity and inclusion iniatives in higher education (Domingo et al., 2022; Stein, 2023). Considering that first-generation doctoral students represent nearly 30% of doctoral graduates in 2020, a study that is focused on impostorism and sense of belonging within the

academic environment could shed light on these behaviors as a possible influencing factor for this shift out of academia.

For those doctoral graduates who stay within academia, they are most likely in positions of influence to current students. Their experiences with impostorism and sense of belonging become factors that if continued impact their scholarship, motivation for promotion, and even their interactions with students and faculty (Ma & Shea, 2021; Sims & Cassidy, 2019; Wester et al., 2020). First-generation graduate students indicated that faculty mentorship, especially with someone with similar life experiences, is one of the key factors to their feelings of success and belonging (Baldwin et al., 2021; Bentrim & Henning, 2022). Having a pipeline of successful, first-generation faculty and administrators in leadership positions will provide a perspective that is inclusive of the first-generation student experience at all levels of the institution, including within doctoral programs.

Another social area that could be influenced by this study is doctoral programs and their recognition of the feelings and experiences of doctoral students as it relates to impostorism and sense of belonging. Graduate programs may have a false sense that students enrolling in their programs are well experienced and well acclimated to the academic environment, however, more attention and support to onboarding or academic integration may be needed (Crowe, 2020; McKinnon-Crowley, 2021; Means & Pyne, 2017; O'Meara et al., 2017). This study will share the perspectives of first-generation doctoral students and how the academic environment affected their feelings of belonging or otherness which could influence programmatic decisions and add to the body of literature regarding how the academic environment influences internal thoughts about ability and belonging.

Theoretical Context

Theories related to impostorism and belonging explore how individuals' perceptions of themselves and their self-identity related to others impact their feelings and behaviors. Tajfel's (2012) social identity theory indicates that three constructs determine an individual's social identity (Zakiryanova & Redkina, 2020). An individual's social identity is made up of social categorization, social comparison and social identification (Tajfel, 2010). Social categorization is one's understanding that the social environment is made up of different groups (Zakiryanova & Redkina, 2020). The individual's choice of groups and communities based on comparing them and becoming a part of the group is social comparison (Tajfel, 2010; Zakiryanova & Redkina, 2020). Social identification is achieving full awareness of belonging to the selected group or community (Zakiryanova & Redkina, 2020). Belonging as a developmental process is rooted in basic human needs to be safe and respected and is tied to social identity (Bentrim & Henning, 2022). Therefore, student who self-identify or are identified as first-generation students in their undergraduate experience may carry a social identity that could imply they are not prepared or have characteristics that imply they are less prepared than continuing-generation students (Bentrim & Henning, 2022; R. G. Gardner et al., 2019; Takimoto et al., 2021).

In addition to belonging feelings, first-generation doctoral students often feel that their success is not attributed to anything that they possess or have accomplished but that they have charmed or fooled others into thinking they belong, in contrast to their feelings (Bothello & Roulet, 2019; Craddock et al., 2011; Mack, 2019). Impostorism theory originated with a study of high-achieving women but the theory and the work that followed regarding impostorism characteristics could be easily transferred to many other groups of achievers who may not believe their success (Clance & Imes, 1978; Clance & OToole, 1987; Mak et al., 2019). First-generation doctoral students have already overcome obstacles to be successful as the first in their

family to complete an undergraduate degree but it is not known if the external evidence of their success is enough to give them the internal confidence to support their belonging feelings in their doctoral journey. Extending the literature that has begun to bring light to the first-generation doctoral experience with an exploration into both impostorism and belonging will give insight that is imperative to gain a better understanding of these theories in practice (R. G. Gardner et al., 2019; S. K. Gardner, 2013).

Problem Statement

The problem is that first-generation doctoral students (FGDS) experience feelings of impostorism, and otherness as they continue their advanced academic work (Chakraverty, 2020; R. G. Gardner et al., 2019; S. K. Gardner, 2013; Howard, 2017). Research indicates that first-generation students come from lower socioeconomic backgrounds and enter higher education with lower levels of confidence and lower self-perceptions than continuing-generation students (Holden et al., 2021; Ma & Shea, 2021; Markle & Stelzriede, 2020). These characteristics can prove to be foundational in the student's perception of their place within their academic community when they begin to compare their self-perceptions with how they perceive others within the academic environment (Ma & Shea, 2021; Means & Pyne, 2017; Zakiryanova & Redkina, 2020). Feelings of otherness, low sense of belonging, or impostor experiences are rooted in the individual's perception of themselves within their environment (Mulholland et al., 2022; O'Meara et al., 2017). Since academic integration and sense of belonging have long been considered indicators of student success, it is important to further explore student experiences that provide insight into how sense of belonging and impostorism tendencies impact FGDS. Current research reveals similar traits that were displayed at the bachelor's level for FGDS (Cisco, 2020; R. G. Gardner et al., 2019; Mitic, 2022; Wollast et al., 2018). However, the field of

research lacks a study that would specifically expand the literature around the feeling of "otherness" by exploring sense of belonging and impostor phenomenon among FGDS. Many doctoral students become professionals in academia and their backgrounds influence their behaviors and interactions and have professional impacts beyond their time as doctoral students (Clance & Imes, 1978; S. K. Gardner & Holley, 2011). While studies exist exploring impostorism within the academic profession, studying the thread of the feeling of otherness that may continue from when they were students could provide insight into why the behaviors persist. This study provides insight into a significant portion of the doctoral experience for first-generation students which includes their feeling of otherness and lack of belonging.

Purpose Statement

The purpose of this transcendental phenomenological study was to understand the experiences of first-generation doctoral students within educational leadership or leadership programs as it relates to their feelings of belonging, impostorism, and otherness. This study defined a first-generation doctoral student as a student who is the first in their family to earn a bachelor's degree and continue their academic journey through the pursuance of a doctoral degree.

Significance of the Study

The current study has empirical significance in that the study of impostorism and sense of belonging has not been jointly examined in first-generation doctoral students. What is known is that impostorism has been reported in first-generation students, at both undergraduate and graduate levels (Chakraverty, 2020; S. K. Gardner, 2013; Mulholland et al., 2022). Also known among first-generation students is that sense of belonging impacts student success and

persistence and can be influenced by the social identity carried by the individual (Bentrim & Henning, 2022; Bettencourt et al., 2020; Takimoto et al., 2021). Moreover, previous research on first-generation doctoral student studies is limited but has demonstrated a need to further study this population's lived experiences to gain an understanding of how internal and external pressures may affect their academic journey (R. G. Gardner et al., 2019; S. K. Gardner, 2013; S. K. Gardner & Holley, 2011). This study will allow the voices of first-generation doctoral students to be heard and their shared experiences told.

Theoretically, this research explored theories of social identity theory as it related to impostorism, the hierarchy of needs, and academic integration theories. While theories specifically around belonging are currently being connected and developed in the literature, the basis for many of the theories is in the historic work of student attrition, needs, and social identity (Clance & Imes, 1978; Maslow, 1954; Tajfel, 1982; Tinto, 1982). However, no theory is specific to the first-generation doctoral student population.

Practically, this studyprovided information to doctoral programs about first-generation doctoral students' needs and experiences. This information could be used by doctoral programs to help them develop and evaluate programs of support for this population to increase retention and foster belonging within the academic environment (Means & Pyne, 2017; O'Meara et al., 2017; Strayhorn, 2019; Wollast et al., 2018). The research findings will also be a benefit to other first-generation students who feel alone or "other" within their programs (Mitic, 2022). The study shed light on similar circumstances and experiences among the population to counteract some impostorism behaviors or sense of belonging challenges among the first-generation doctoral student community. Lastly, if there is support in this population of students to become successful, it could translate into more first-generation doctoral student mentors within the

academic environment (Bentrim & Henning, 2022; Wollast et al., 2018). The success of first-generation doctoral students could translate into a larger pool of first-generation doctoral completers employed at colleges and universities. The demonstrated success of these individuals in mentoring roles for first-generation doctoral students could greatly impact the feelings of belonging and impostorism among the student population (Al Makhamreh & Stockley, 2020).

Research Questions

The phenomenon was explored by researching first-generation doctoral students using the following research questions as a guide for the study.

Central Research Question

What are the experiences of first-generation doctoral students related to impostor phenomenon and sense of belonging?

Sub-Question One

How does social categorization of first-generation student influence sense of belonging feelings for first-generation doctoral students?

Sub-Question Two

How does social categorization of first-generation student influence impostorism for first-generation doctoral students?

Sub-Question Three

How do feelings of belonging relate to impostor phenomenon behaviors in first-generation doctoral students?

Definitions

Terms pertinent to the study and prevalent within the literature on first-generation doctoral students, impostorism, and sense of belonging are defined as follows:

1. *First-generation students* – College students whose parents did not attend or complete college (Baldwin et al., 2021; Means & Pyne, 2017; Toutkoushian et al., 2018)

2. *First-generation doctoral students* – Students who were identified as first-generation students and are now pursuing a doctoral degree (Baldwin et al., 2021).

3. *Impostorism (Impostor Phenomenon or syndrome)* – An internal experience of feeling or believing that they are intellectually a phony and have fooled anyone who thinks otherwise (Clance & Imes, 1978). Along with the feeling of phoniness, fear often is present because of the perceived risk of being exposed or found out by a significant individual (Clance, 1985; Clance & Imes, 1978).

4. *Sense of Belonging*- The subjective feeling of deep connection with social groups, places, and individual and collective experiences (Allen et al., 2021; Bentrim & Henning, 2022). For this study, the environment and physical place will be largely the academic environment.

5. *Otherness*- An experience or feeling of being different in appearance or character from what is familiar, expected or accepted (Allen et al., 2021; Bahack & Addi-Raccah, 2022a; R. G. Gardner et al., 2019).

Summary

In summary, while first-generation doctoral students are achieving doctoral degrees, their experiences are marked with internal and external struggles. While previous research has developed around first-generation students at the undergraduate level, some of that research has been stereotypical and utilized deficit thinking around the student's background. The social identity around first-generation students may continue to influence students who are successful and decide to pursue advanced degrees. Internal factors like impostorism and a decreased sense of belonging can result from those experiences. There is little to no research to give a voice to first-generation doctoral students to explore their lived experiences. This research study will provide an opportunity to give voice to first-generation doctoral students. Additionally, the study provides an opportunity to give institutions insight into the populations' experience with doctoral programs and provides the opportunity for other first-generation doctoral students to feel less alone in the future.

CHAPTER TWO: LITERATURE REVIEW

Overview

A systematic review of the literature was conducted to explore the problem of first-generation students (FGS) who have advanced to doctoral education with experiences with impostor phenomenon behaviors and a sense of belonging. In the first section, social identity theory is discussed, followed by a synthesis of recent literature regarding impostor phenomenon, first-generation college students, the experiences of first-generation doctoral students and sense of belonging feelings. In the end, a gap in the literature is identified, presenting a viable need for the current study.

Theoretical Framework

The guiding theory for this study is Tajfel's (2010) social identity theory. Social identity theory indicates that three constructs determine an individual's social identity: social categorization, social comparison, and social identification (Tajfel, 2010). Social categorization is an individual's understanding that the social environment is made up of many different groups (Zakiryanova & Redkina, 2020). Social comparison is when individuals chose groups, communities by comparing them and becoming part of a group that is related to themselves (Zakiryanova & Redkina, 2020). Social identification is achieving full awareness of belonging to the selected group or community (Zakiryanova & Redkina, 2020). Social identity is part of a person's concept of themselves. Self-concept is determined by belonging feelings within a group or groups (Zakiryanova & Redkina, 2020). The social identity constructs of categorization, comparison, and identification can impact an individual's behaviors outside and inside of their groups. Social identity combines ideas regarding individual self-categorization to a group and the social identity of individuals within a group (Burke & Stets, 2009; Stets & Burke, 2000). Self-

esteem, self-monitoring, and negative self-evaluation may prove to be commonalities in an individual's perceptions and behaviors of their standing within their group (Allen, 2011; Tajfel, 2010; Zakiryanova & Redkina, 2020). According to self-identity theory a person's awareness of their place in the social world is due to their belonging within a certain group or category (Tajfel, 2010; Zakiryanova & Redkina, 2020). In the case of this research, the behaviors of first-generation doctoral students experiencing impostor syndrome could show commonalities with their sense of belonging within their programs and impostor behaviors that demonstrate internalized negative belonging feelings within the academic environment.

Categorization within social identity theory is a process of positively identifying certain categories within the social world and self-identifying one's belonging within those categories (Zakiryanova & Redkina, 2020). Tajfel (2010) asserted that categorization is a crucial piece in social identity formation. Categorization allows individuals to order the social environment into communities and identify a community that is personally significant to that person (Zakiryanova & Redkina, 2020). A positive identity categorization results in positive feelings of belongingness. Within the categorization process, individuals also identify other membership categories and the individuals within those categories which expands an individual's perception beyond their identity group (Zakiryanova & Redkina, 2020). As other groups are identified it is human nature to begin to compare one's "own" group to "others" group according to the shared or learned perspective of the "own" group (Zakiryanova & Redkina, 2020). Individuals intrinsically begin to look for ways to highlight positive differences of their group to show favoritism toward their membership group (Zakiryanova & Redkina, 2020). The positive differences show an increase in feelings of belongingness. However, if an individual's self-

identity assessment is negative toward a group, individuals may begin to look for ways to leave the group to find harmony and belonging with another group (Zakiryanova & Redkina, 2020).

Social identity theory during times of transition or change for individuals, like when transitioning away from a known group into a less known group can effect an individual's perception of the balance of the environment (Zakiryanova & Redkina, 2020). During times of transition, the process of internal and external group interaction contributes to whether the individual sees the environment as stable or positive (Tajfel, 2010; Zakiryanova & Redkina, 2020). Individuals make choices regarding their behaviors based on their understanding of their environment, so a positive view would impact positive behavioral reactions but a negative view, like feeling "other" within the environment may elicit negative behavioral reactions.

Social identity theorists argue that, in many social situations, individuals think of themselves and others as group members rather than unique individuals (Stets & Burke, 2000; Tajfel, 2010). Social identity refers to the self-categorization of individuals into groups. Individuals' self-identity is impacted when they are categorized either by society or in a self-selected manner (Tajfel, 1982). Tajfel (2010) asserted the groups people associate with were an important source of self-esteem and a sense of belonging. However, the grouping of in-group (us) and out-group (them) categorization, leads in-group members to find negative aspects of an out-group as a way to increase their self-image through their ingroup (Tajfel, 2010; Zakiryanova & Redkina, 2020).

Individuals with strong affiliations to their groups, however, are more likely to garner self-esteem from the group (Tajfel, 2010). Individuals require a certain level of regulation in their daily life, interaction and community with others is a primary source of this regulation

(Zakiryanova & Redkina, 2020). Tajfel (2010) asserted that the social orientation that the individual within a group influences their view of the world. Positive self-evaluation as a group member can be achieved by conforming to the group norms (Allen, 2011; Tajfel, 1982). However, negative self-evaluation of individual roles within their in-group affects affiliation and sense of belonging (Burke & Stets, 2009; Crocetti et al., 2018; Zakiryanova & Redkina, 2020). Tajfel (2010) described that the level of group belonging transfers to how individuals view how they fit in the larger society. For a person to have a sense of belonging to a community, they need to compare their "own" community to the community with others. In this process, individuals within a social community compare against someone from another group and begin a framework of "us" and "they" among groups in the larger community (Zakiryanova & Redkina, 2020). These comparisons leave room for behaviors of "otherness" or fraudulence for individuals who perceive their identity does not belong in the community.

Related Literature

One intersection point where otherness feelings and identity theory can be explored in related literature is by exploring experiences of impostor phenomenon with first-generation college students in doctoral programs. The literature intersects in areas related to how the individual self-evaluates their place within the in-group of their program and how that self-evaluation in comparison with others in the group affects their impostor behaviors and tendencies. The students' place within the program and group can be categorized as a sense of belonging (Shavers & Moore, 2019). Self-evaluation is confirmed if the evaluation and feedback are clear to the individual and determination can be made as to their status and success in the group (Cohen & McConnell, 2019). Students who question their ability to belong or fit in based on their first-generation status have seen themselves as social outsiders because they have a

different background and ideology from other doctoral students (Chakraverty et al., 2022). In an evaluation culture like a doctoral program, first-generation doctoral students with limited higher education backgrounds may not have the information necessary to feel confident in the feedback of others which leads to negative self-evaluation despite positive external evaluation (Cohen & McConnell, 2019). As a doctoral student and researcher the expectation is for the student to transition to an expert in a field, often this expectation is met with anxiety for students experiencing feelings of not belonging or feeling like a fraud (Chakraverty et al., 2022).

Socialization into doctoral programs require students to advance beyond the socialization they achieved in undergraduate and master's level work. Socialization frameworks in graduate programs include stages such as identity development and cultural development within the university climate and program climate (Cohen & McConnell, 2019; Fernandes et al., 2017). In addition to acquiring knowledge and skills required to perform well as a doctoral student, students must also learn the attitudes, values, norms and perspectives needed to interact with others and determine appropriate behavior within the system (Fernandes et al., 2017). The student moves from being a consumer of information as an undergraduate to creators of knowledge as a doctoral student (Cohen & McConnell, 2019; Howard, 2017). The progression is a result of faculty engaging the students in critical analysis, structured academic activities and professional development (Cohen & McConnell, 2019; Howard, 2017). These activities require different skills and allow students to internalize the language, norms, values and expectations of transitioning from student to professional during the doctoral "rite of passage" (Fernandes et al., 2017; Howard, 2017). This socialization process is new to all students in doctoral education but can be particularly challenging to first-generation students with no role model in doctoral education and limited understanding from support systems regarding the pursuit of an advanced

degree (Cohen & McConnell, 2019; R. G. Gardner et al., 2019). Literature related to impostor phenomenon, first-generation students including those pursuing advanced degrees, and sense of belonging are reviewed in this section.

Impostor Phenomenon

Impostor phenomenon was first identified by Clance and Imes (1978) in a study regarding high achieving women who had feelings of phoniness even with evidence of success. Impostor phenomenon is the perception of an individual that they are an intellectual and professional fraud (Clance & Imes, 1978). The original work of Clance and Imes (1978) resulted in impostor phenomenon, sometimes called impostor syndrome or impostorism, to be studied in many different groups and environments. Individuals with impostor behaviors experience worry and anxiety about their abilities within the group and fear that their fraudulence will be exposed to those that have perceptions of them that do not match their impostor self-perceptions (Holden et al., 2021). Impostor phenomenon suggests that a person does not internalize their success but feels that success was due to luck or circumstances (Gardner et al., 2019; Holden et al., 2021; Takimoto et al., 2021; Wilkinson, 2020). As the concept began to be applied in research to other populations and demographics, self-report measurement scales were developed to measure impostor behaviors. Oftentimes, the measurement scales were based on varying definitions and applications of the original impostor phenomenon framework (Clance, 1985; Mak et al., 2019). The Clance Impostor Phenomenon Scale (CIPS), a 20 item scale that addresses a fear of evaluation and feeling less capable than peers is the most commonly used scale by researchers and practitioners (Mak et al., 2019). Another commonly used scale is the Harvey Impostor Phenomenon scale which was the first scale created and was used by Clance in the development of the CIPS (Clance, 1985; Mak et al., 2019). As research has continued regarding the impostor

phenomenon other scales have been developed to incorporate variances to the definition of impostor phenomenon which has been called "impostorism", "perceived fraudulence" and "impostor syndrome" in recent years (Mak et al., 2019). A 51-item Perceived Fraudulence Scale reflects the characteristics outlined by Kolligian and Sternberg (1991). The Leary Impostor scale, a 7-item instrument focuses solely on the sense of being an impostor or fraud and is centered on Leary's (Mak et al., 2019).

To date, most research on the impostor phenomenon has been focused on individual behaviors of those within marginalized groups (Mack, 2019; W. L. Sims & Cassidy, 2019; Stone et al., 2018). However, a re-framing of research is lacking on how environmental factors, like categorization into a marginalized group or lack of affiliation within an associated group impact impostorism for individuals (Feenstra et al., 2020). By pairing the social identity theory framework with impostor phenomenon research can begin to question if impostor syndrome arises from within individuals or if external factors, like context and social structure, create impostor feelings (Feenstra et al., 2020; Schubert & Bowker, 2019). Additionally, exploration of how impostor syndrome interplays with sense of belonging within the academic setting will be conducted.

The cause of impostor phenomenon is an area that has also received the attention of researchers. An important causal component that has application for this study is the influence and impact of familial and parental factors may have on those experiencing impostor phenomenon. Adults with impostor experiences were found to be associated with family characteristics of high parental control, low parental support and emotional expressiveness (Patfield et al., 2021; Takimoto et al., 2021; Yaffe, 2021). Low parent support environments

include common themes for individuals that highlight the importance of ability and where

communications and are rule-governed producing parental over-control and criticism.

.There are some positive aspects of impostorism. Those experiencing impostor behaviors

tend to work harder to prove themselves (Holden et al., 2021; Wester et al., 2020). It can provide

motivation and build perseverance skills (Mulholland et al., 2022; Vaughn et al., 2020).

However, those experiencing impostor behaviors also battle feelings of depression, anxiety, and

procrastination (Maftei et al., 2021). Another alternative approach to discussions on impostorism

is found in research from Leonhardt et al (2017) in which distinguished groups called "strategic

impostors" use the negative self-evaluation as a means of appearing modest or less self-

promoting to disguise the fear of exposure experienced by those with impostorism. However,

results from Leonhardt et al's (2017) work did not show significant differences of impostorism

feelings between the group of true or strategic impostors in their results, it just exposed different

mechanisms of working through the impostor behaviors may differ.

Impostor Phenomenon Within the Higher Education Environment

Research applying impostor phenomenon theory to the academic environment in higher

education has been conducted on students, faculty, and administrators (Bothello & Roulet, 2019;

Lee et al., 2021; MacInnis et al., 2019; Mak et al., 2019; W. L. Sims & Cassidy, 2019; Stone et

al., 2018; Vasil & McCall, 2018). The higher education environment is by culture and history an

environment of evaluation, assessment, and intellectual pursuits (Bothello & Roulet, 2019;

Gardner et al., 2019; Holden et al., 2021; Mulholland et al., 2022). Impostor phenomenon

behaviors can center on feelings of "intellectual phoniness" may include ideas that luck, working

harder than others, charm and personality instead of talent or skill are the contributors of success

for the "impostor" (Grubb, W Lee & Grubb, 2021; Holden et al., 2021; Leonhardt et al., 2017;

Maftei et al., 2021; Vaughn et al., 2020). These feelings of intellectual self-doubt can often occur when individuals are in challenging new roles or when individuals experience an event of personal success (Schubert & Bowker, 2019).

While impostor phenomenon is considered a psychological construct instead of a clinical diagnosis it is related to clinical symptoms and conditions such as depression, anxiety, low self-esteem and burnout (Hutchins et al., 2018; Schubert & Bowker, 2019). Often impostor phenomenon could be seen as a form of self-harm to academic success, and in the original definition of self-evaluation and self-esteem, that concept remains present in both student and academic professional applications (Leonhardt et al., 2017; Mack, 2019; Vaughn et al., 2020). If students with impostorism initiate self- imposed limitations to harm their success and to avoid failure, they can blame the self-handicapping instead of low ability. If success is still the result then the student's ability is given even more prominence because they overcame the self-handicap to succeed. The self-evaluation and self-esteem related to academic success often mimics or find their roots in perfectionism or achievement orientation in high achieving students (Clance, 1985; Grubb, W Lee & Grubb, 2021; Holden et al., 2021; Lee et al., 2021; Maftei et al., 2021). The lack of self-confidence feeds into stress which can trigger perfectionism in high achieving individuals to counteract their lower confidence. These strategies could lead to burnout which would impede future success (Grubb, W Lee & Grubb, 2021; Holden et al., 2021).

First-generation College Students

Research on students categorized as first-generation college students is prevalent among studies of undergraduate student populations (Baldwin et al., 2021; Beattie, 2018; Bettencourt et al., 2020; Ma & Shea, 2021; McKinnon-Crowley, 2021). The definition of first-generation college students can vary by institutional purpose or study. There are times when first-generation

student is defined as students enrolled in 4-year colleges with neither parent holding a bachelor's degree (Beattie, 2018; Toutkoushian et al., 2018). Other definitions include a student whose parents did not attend college, in using this definition does not exclude those with older siblings who may have college experience (Toutkoushian et al., 2018). Some definitions include wording that the student is "first in family" to attend college, which further narrow's the definition to distinguish those who are the first out of the generation to attend the University (Ilett, 2019). For this literature review, either distinction of first-generation or first in family applies. However, the first-generation student definition that will be used in this study will be students that neither parent holds a bachelor's degree.

Researchers have found the study of first-generation students important because these students often faces barriers to access and educational disadvantages over continuing generation students (Luzeckyj et al., 2017; Phillips et al., 2020). First-generation students are more likely to come from lower socio-economic backgrounds than continuing generation students (Beattie, 2018; Luzeckyj et al., 2017; Markle & Stelzriede, 2020). First-generation students are more likely to be low-income, female, mature-aged, have a disability, come from minority backgrounds, have dependent children, and be financially independent of their parents (Ilett, 2019; Luzeckyj et al., 2017; Phillips et al., 2020; Roksa et al., 2018; Toutkoushian et al., 2018). Other characteristics of first-generation students include lower standardized test scores, lower levels of confidence, and lower self-perceptions of being academically prepared than continuing generation students (Holden et al., 2021; Ma & Shea, 2021; Markle & Stelzriede, 2020). First-generation students are often categorized in a manner that does not differentiate characteristics of sub group backgrounds for individuals identified as first generation (Ma & Shea, 2021; Peck, 2017; L. R. Sims & Ferrare, 2021; Takimoto et al., 2021). Additionally, first-generation students

have different cultural values, practices and goals from continuing-generation students (Azmitia et al., 2018; L. R. Sims & Ferrare, 2021). These values and goals are often tied to upward mobility for the student to allow for more choice in occupational, housing, health care opportunities for the student and their families (Azmitia et al., 2018; Covarrubias et al., 2019). These familial responsibilities impact the choices and color the experiences that first-generation students have regarding their academic endeavors (Azmitia et al., 2018; Covarrubias et al., 2019, 2020). Studies are beginning to determine if access and success in college shift the behaviors of the individual as they potentially benefit by the social mobility that is attributed to college success (Bahack & Addi-Raccah, 2022b; Ma & Shea, 2021; Phillips et al., 2020). Student transition strategies for universities include expectations for students to separate from family and pursue their individual paths with a central focus on academic goals. However, for first-generation students a challenge for the student may be a cultural focus on interdependence within their family which includes maintaining relationship and familial obligations (Covarrubias et al., 2019). These interdependences are largely a result of the culture around limited resources and environmental constraints on families that require groups to work together for support and survival (Covarrubias et al., 2019). A pressure to not be pulled away from family or be changed too much by the college experience has been expressed by first-generation students and families (Azmitia et al., 2018; Covarrubias et al., 2019).

Most colleges and universities, however, allow the characteristics traditionally linked with first-generation students to influence programing and well-meaning approaches to assist first-generation students in their academic acclimation to the educational environment. Some research has pointed to these types of programs to impact sense of belonging in first generation students (McKinnon-Crowley, 2021; Richards, 2022). When the student feels as though the

programming is aligned with aspects of their identity there are positive impacts to belonging feelings. However, if the programming reenforces differences between the student and the academic community it can have negative impacts on belongingness (Fassl et al., 2020). Many institutions focus more on the demographic or quantitative pieces of a student profile and less on the values and cultural backgrounds of first-generation students. These programs while successful in integration can also promote stereotyping of students that are identified or self-identify as first-generation (Edwards, 2019; McKinnon-Crowley, 2021). However, first generation students do come from a variety of backgrounds and educational experiences that can often be overlooked (Fassl et al., 2020; Sims & Ferrare, 2021). The cultural mismatch between home and university settings can impact attrition for first-generation students (Covarrubias et al., 2019; Sims & Ferrare, 2021). Additionally, the programs can be met with resistance if the student becomes anxious about what belonging to the college environment might mean to their belonging within their family and previous identity structures (Covarrubias et al., 2019; Stephens et al., 2012; Takimoto et al., 2021).

Barriers

First-generation students report barriers that include issues with family, finances, and lack of college-educated role models (Bahack & Addi-Raccah, 2022b; Gibbons et al., 2019; Ma & Shea, 2021). Much work in FGS research has used Bourdieu's (1986) social capital theory which focuses on the cultural capital of an individual to help provide access to social and economic rewards, in this case, higher education, that can be passed from one generation to another (Beattie, 2018; English & Bolton, 2021). Cultural capital has been defined as an individual's familiarity with the culture within a society (Farkas, 2018). School related cultural capital includes the skills, habits, identities worldviews and values that students use in schools

that impact their success (Farkas, 2018). For first-generation students, they are building cultural capital that will be passed along to their siblings or future generations by achieving a degree that contributes to social mobility (Phillips et al., 2020; Roksa et al., 2020; Takimoto et al., 2021; Wallace, 2022). Other large areas of research focus on attrition and persistence to a degree and academic and student involvement theories as framework (Markle & Stelzriede, 2020; Takimoto et al., 2021).

Family Barriers. Family support and dynamics are a barrier often cited in research as a primary challenge for first-generation students. Being first in family to go to college can be met with support from family as a means for social mobility (Covarrubias et al., 2019; Gibbons et al., 2019; Ma & Shea, 2021). In these situations, students expressed that their family supports their college attendance but also indicate the pressure that they have to do well or contribute back to the family (Covarrubias et al., 2019; Patfield et al., 2021; Takimoto et al., 2021). Many times family responsibilities continue in the daily life of first generation college students which differs from the experience of continuing generation students (Covarrubias et al., 2019; Markle & Stelzriede, 2020). Location of college can be effected by these responsibilities as well as the level of participation and integration of students with strong familial ties and responsibilities (Johnson & Wiese, 2022). Students may opt to be home more or may have a harder time participating in extracurricular activities due to their family's needs or views on college (Covarrubias et al., 2019; S. K. Gardner & Holley, 2011; Gibbons et al., 2019; Johnson & Wiese, 2022; Takimoto et al., 2021).

Other first generation students cite that they do not have the support of their family in attending college (Gibbons et al., 2019; Roksa et al., 2020). These students often express their need show the value of their education in comparison to earning income to their families

(Gibbons et al., 2019; Roksa et al., 2020). Students say the pressure to succeed and support themselves during their academic journey without the understanding of family is a factor that reduces their connection with home (Covarrubias et al., 2020; Gibbons et al., 2019). Lack of family support can make other barriers to the first-generation students seem even harder to overcome.

Financial Barriers. Financial stressors on college students are not unique to first generation students. However, generally first-generation students come from lower socioeconomic backgrounds that align with financing challenges for not just tuition but living expenses. Financial pressures drive choice and location of colleges. First generation students often have responsibilities to their family unit or employment priorities which influence their college choice (Covarrubias et al., 2019; Gomez et al., 2023; Johnson & Wiese, 2022; Roksa et al., 2020). College choice is also attributed by many first generation students in reference to the scholarships received or the ability to bridge the costs needed to attain a degree (Gibbons et al., 2019; Gomez et al., 2023; Johnson & Wiese, 2022). Financial challenges stretch beyond tuition costs as first-generation students often have limited income or have additional responsibilities including employment to support themselves or their families. Additionally, first generation students can view college as more transactional then students who may not be supporting themselves through their academic journey (Gomez et al., 2023). These transactional ties may influence the student's expectation of courses, experiences and overall academic outcomes.

Knowledge Barriers. Another barrier cited by first generation students is the lack of knowledge of the college environment. First generation students cite not knowing how things work or feeling as those students from continuing generation families have a head start on the

academic environment (Gibbons et al., 2019; Markle & Stelzriede, 2020). Students cite not seeing others who look like them or have similar backgrounds as a barrier to their sense of belonging within the academic environment (Gibbons et al., 2019; Markle & Stelzriede, 2020; Phillips et al., 2020). Peer or faculty mentors who demonstrate success have been found to be helpful to first generation students who cite a mismatch in knowledge to increase successful integration into the academic environment (Azmitia et al., 2018; Gibbons et al., 2019; L. R. Sims & Ferrare, 2021; Wallace, 2022).

First-generation students who are academically involved in their academic environments are more likely to persist (Luzeckyj et al., 2017; Ma & Shea, 2021; Markle & Stelzriede, 2020; Phillips et al., 2020). For example, first-generation student involvement in learning communities reported higher levels of academic engagement and involvement (Markle & Stelzriede, 2020). In a study that compared continuing generation students, first-generation students and first-generation students who participated in a first-year learning community, participating in the learning community led to higher levels of reported involvement and positive changes in sense of belonging feelings over the course of a semester than their counterparts who did not participate in learning communities (Markle & Stelzriede, 2020). Academic involvement and integration are important as first-generation students typically complete fewer credits, value involvement less and attain credentials at a lower rate (Ma & Shea, 2021; Markle & Stelzriede, 2020). Researchers are finding that access to higher education is not enough to bridge the cultural norms that seem to continue for first-generation students while they continue their journey (K. Campbell & Narayan, 2017; Engle & Tinto, 2008; Phillips et al., 2020). First-generation students who consider dropping out say they are overwhelmed by college and home responsibilities and feel lonely and homesick (Azmitia et al., 2018; Vasquez-Salgado et al., 2015). Additionally, students who drop

out often state they felt "unwelcome" or didn't fit in at college linking the importance of belonging for first-generation students (Azmitia et al., 2018).

First-generation Doctoral Students

Over one-third of doctoral students enrolled in 2010 identified as having a first-generation student background (Engle & Tinto, 2008; S. K. Gardner, 2013). First-generation doctoral students can be defined as students who are pursuing or have received a doctoral degree and who were first-generation students when they received their bachelor's degree (Gardner et al., 2019; Vasil & McCall, 2018). While both continuing-generation and first-generation doctoral students face challenges in doctoral programs each group represents different experiences. Continuing generation students reported emotional challenges and relied on cultural capital or familial support to help them address the challenges (Bahack & Addi-Raccah, 2022b). First-generation doctoral students are more likely to expect direct, skill-based guidance while researching while continuing-generation students expect support for specific needs and independence (R. G. Gardner et al., 2019; Handforth, 2022; Wofford et al., 2021). First-generation students have an expectation that they will learn how to "become" a researcher and scholar while being directed to do these tasks within their program through relationships with their advisors and faculty members (Handforth, 2022; Wofford et al., 2021). This expectation reveals a characteristic that shows intrinsically the first-generation student feels they do not possess the necessary skills and characteristics to belong. Continuing-generation students articulate that they are supposed to grow and work independently to become a researcher with feedback from advisors and faculty (Wofford et al., 2021). The continuing generation students expected to use skills they already possess, like critical-thinking skills, to grow and become a scholar with limited external guidance. In most doctoral programs, program design and faculty

mentor relationships are aligned more closely with the expectations of the continuing-generation population creating an expectation gap for first-generation doctoral students (Vasil & McCall, 2018; Wofford et al., 2021).

Barriers

First-generation doctoral students reported a variety of challenges including academic, economic and cultural barriers (Bahack & Addi-Raccah, 2022b). Some first-generation students report difficulties with loneliness and limited family support (Bahack & Addi-Raccah, 2022b; S. K. Gardner, 2013). Cultural isolation as a result of not seeing themselves or their culture represented within the doctoral community has also been cited by many first-generation doctoral students of color (Howard, 2017; Shavers & Moore, 2019; Wallace, 2022). If school-related capital consists of the skills, habits and identities of the student, the capital used by many first-generation doctoral students was intrinsic and included aspirational capital and grit (Farkas, 2018; Handforth, 2022). Additional forms of capital used by first-generation doctoral students include spirituality/faith, family values, persistence in the face of discriminating policies or culture and survival mindsets (Wallace, 2022; Wallace & Ford, 2021).

Cultural Barriers. Graduate school challenges are amplified for first generation doctoral students because they are not aware of the systems and environments involved in graduate education (Beattie, 2018; R. G. Gardner et al., 2019; Takimoto et al., 2021). Students pursue doctoral programs in large part because they were successful students at other levels. However, being a good course-taker and completing prescribed coursework does not prepare individuals to the transition to researcher and generating a contribution to knowledge in a subject area (Lovitts, 2005; Wofford et al., 2021). First-generation doctoral students, in the large part, are coming from institutions without doctoral programs and without role models from home or cultural capital to

inform them of doctoral expectations (Luzeckyj et al., 2017; Vasil & McCall, 2018). Many students are learning graduate program structures and practices as they go. Often first-generation doctoral students tend to enroll in less prestigious universities and fields for their pursuit of doctoral degrees than continuing generation doctoral students (Bahack & Addi-Raccah, 2022b).

Graduate education settings are environments of evaluation by peers and faculty but also a time of self-evaluation of students in comparison with peers and faculty (Collins & Brown, 2021; Donovan & Erskine-Shaw, 2020). Fear of evaluation, professional identity formation, minority status and experiences with program transition are common themes demonstrated by doctoral students who identify with impostor behaviors (Chakraverty et al., 2022). Additional layers for first-generation students involved internally questioning competence and belongingness (Chakraverty et al., 2022). In social identity theory, this process of comparison is critical to identity as an in-group or out-group member (Zakiryanova & Redkina, 2020).

Social Barriers. Research categorized an additional challenge for first-generation doctoral students as "feelings of otherness" (Bahack & Addi-Raccah, 2022b; R. G. Gardner et al., 2019; Shavers & Moore, 2019). The feeling described in multiple studies of first-generation doctoral students was a sense of in-between (Bahack & Addi-Raccah, 2022b). By exploring the feelings of in-between with the lens of impostor behaviors and sense of belonging characteristics further understanding will be gained into the social barriers described in previous studies. The barrier that first-generation doctoral students had different experiences and knowledge of graduate systems as their continuing generation peers which lead to socialization challenges within the program (Roksa et al., 2018) is another area that will be explored with the internal concepts of impostorism and belonging. Race and gender may also complicate the graduate school experience for students. Findings indicate barriers exist for Black females including

feelings of social isolation and oppressive classroom climates (Fernandes et al., 2017; Handforth, 2022; Howard, 2017; Shavers & Moore, 2019; Stone et al., 2018).

Family Barriers. First-generation doctoral students had difficulty fitting in with their families and explaining what and why they were pursuing advanced degrees (Bahack & Addi-Raccah, 2022b; Farkas, 2018; Forrester, 2022; S. K. Gardner, 2013; Patfield et al., 2021). Often at the undergraduate level, families are supportive of the student pursuing education beyond the level of the parents but there begins a shift when pursuing advanced degrees sometimes including expectations that the student "use" their undergraduate degree to secure employment and not more education (Patfield et al., 2021; Vasil & McCall, 2018). Many families pressure first-generation students to forego advanced degrees to focus on pursing jobs with higher income (Forrester, 2022). These familial pressures are linked to the socio-economic benefits associated with a college degree but often lead to pressure to succeed and feelings of otherness for first-generation doctoral students (Bahack & Addi-Raccah, 2022b; Covarrubias et al., 2019; Forrester, 2022; Takimoto et al., 2021). The lack of familial support can lead students to keep their pursuit of a doctoral degree from their family or minimize the challenges that pursuit of a doctoral degree may be having on their life (Farkas, 2018; Vasil & McCall, 2018). The challenge of feelings of otherness in the academic and non-academic facets of first-generation doctoral students' lives can lead to feelings and behaviors that mirror impostorism leading to research being compared with studies of those who experience the impostor phenomenon.

Impostorism and First-generation Doctoral Students

Impostor phenomenon feelings are prevalent in many participants in doctoral programs. Doctoral students are at the cusp of academia in a state of "becoming" as they pursue completion of their degree which would "legitimize" them as an academic (Handforth, 2022). It is already a

time when doctoral students are internalizing perceptions of feeling "other" in comparison to

either the ideal doctoral student or to the perception of a fellow student (Fassl et al., 2020;

Handforth, 2022). However, for first-generation doctoral students, the feelings are enhanced as

they evaluate themselves against others in their program considering their identity and limited

academic background (Holden et al., 2021; Miner, 2022; Ramsey & Brown, 2018; Roksa et al.,

2018). After hearing of educational and professional backgrounds of others within the program,

first-generation doctoral students expressed that their backgrounds in comparison are not

adequate or out of line with their colleague. These feelings trigger a sense that the student was

wrongly accepted or inadequate to be part of the program (Cohen & McConnell, 2019a; Markle

& Stelzriede, 2020). Comparative activities for self-evaluation against peers is one area that

triggers feelings of impostorism among students (R. G. Gardner et al., 2019; Handforth, 2022;

Pervez et al., 2021; Roksa et al., 2018). While socialization activities are designed to integrate

the student into the academic environment, they tend to leave first-generation students focusing

on a lack in their own educational background since traditionally doctoral students are more

likely have parents with advanced degrees (Covarrubias et al., 2020; Howard, 2017; Markle &

Stelzriede, 2020). Even in environments that are built by faculty to reduce comparison, the

intergroup comparison still exists (Zakiryanova & Redkina, 2020). Students reporting

impostorism point back to comparison activities in describing their feelings (R. G. Gardner et al.,

2019). Comparison among doctoral students can be related to their abilities or perceived abilities

to understand existing literature, create research projects and communicate about research

projects clearly and confidently (Handforth, 2022). Perceived confidence of other students

exacerbates feelings of low confidence among those with impostor feelings. The fear of not

belonging continues the internalization of the doubt cycle for the student making them feel that

their pursuit of the doctoral degree must be a fluke (Cohen & McConnell, 2019a).

Additionally, students experiencing impostorism have even attributed their acceptance into programs to their race or lower socioeconomic status as to why they are in the program and not to their successful accomplishments in undergraduate or master's level education (Maftei et al., 2021; Takimoto et al., 2021). In these cases, students are going back to an identity group that they feel comfortable or have long identified with as a source for their uncomfortableness in the current community. Other examples of external attributes students with impostor feelings associate their acceptance or success within the program to include their ability to put in mor effort or hard work, their charm or luck or simply just being at the right place at the right time (Maftei et al., 2021).

Coping with Impostor Phenomenon

The self-comparison among their group compounds impostorism behaviors by isolating individuals from their peers because of fear of being found out as an impostor (Fassl et al., 2020; R. G. Gardner et al., 2019). First-generation doctoral students are less likely than their continuing generation peers to feel they understand the systems of programs which leads to more seeking less support from their programs (R. G. Gardner et al., 2019). Students found that reaching out to faculty members, other students and their social support networks helps them cope with impostorism feelings (Bahack & Addi-Raccah, 2022b; R. G. Gardner et al., 2019). However, research shows that first-generation doctoral students have challenges in doing these activities which could then increase the impostor behavior cycle (Cohen & McConnell, 2019a). First-generation doctoral students may find support resources outside their programs but within other associated groups (R. G. Gardner et al., 2019; Vasil & McCall, 2018). Since first-generation doctoral students have been found to be from underrepresented groups, often students find

support with groups associated with other students from similar racial or ethnic backgrounds especially when they feel a lack of support from their family (Howard, 2017; Shavers & Moore, 2019; Vasil & McCall, 2018). However, seeking belonging outside of the doctoral program could re-enforce feelings of otherness and lack of belonging within the doctoral program for first-generation doctoral students.

Sense of Belonging

The concept of belonging dates back to Maslow's (1954) hierarchy of needs. Belonging and love needs are right behind physical and safety needs within Maslow's hierarchy and outline the psychological need for interpersonal relationships for individuals (Maslow, 1954; Walton & Brady, 2017). According to Maslow (1954), the need to belong is a motivating factor for an individual's behaviors and actions. Belonging is rooted in human needs to feel safe, respected and comfortably fit into the community as an authentic individual self (Bentrim & Henning, 2022; Johnson & Wiese, 2022). Transferring the belonging concept to higher education, student belonging has been defined as the extent that a student feels personally accepted, respected, included and supported within their school environment (Johnson & Wiese, 2022; Wu et al., 2022). Student belonging has been identified as an indicator that promotes success, engagement, and student well-being (Gopalan & Brady, 2020; Strayhorn, 2012). The sense of belonging that a student feels is a combination of their attachment to the academic community and their cultural and academic adaptation to that environment (Wu et al., 2022). A positive result with high levels of belonging is an increase in academic resilience and increased cultural intelligence (Wu et al., 2022). Academic resilience is positive for students because it reenforces students' feelings that they can succeed despite disadvantaged situations (Azmitia et al., 2018; Donovan & Erskine-Shaw, 2020; Wu et al., 2022). Negative factors for students who do not feel high levels of

belonging align with impostor feelings by resulting in feelings of inadequacy or fraudulence often resulting in students internalizing a sense that their acceptance into their academic program is a result of luck or error instead of their abilities (Wu et al., 2022). When students experience setbacks or challenges with low sense of belonging their experiences lead them to feel that their weak academic performance is associated with their worth as a student (Schubert & Bowker, 2019; Wu et al., 2022).

Student belonging is not limited to undergraduate students, however, the majority of existing research on belonging and community is centered around the undergraduate experience and particularly first-year integration (Gopalan & Brady, 2020; Strayhorn, 2012). Research indicates that students feel as though they belong in an academic environment when they have the support of peers and strong connections with faculty (Crowe, 2020; McKinnon-Crowley, 2021). These two factors are important for students to feel that they are part of a group of students. Student satisfaction, student success factors and persistence rates have been shown to be influenced by integration with peers and mentoring by faculty members (Al Makhamreh & Stockley, 2020; Gopalan & Brady, 2020; Strayhorn, 2012; Wu et al., 2022). Finding ways to incorporate activities that establish these relationships in curricular and co-curricular support systems provides an integrated system that fosters belonging among the student populations and subgroups (Strayhorn, 2012). Students with a stronger sense of belonging also tend to have more academic self-confidence, more motivation to study, better academic adjustment and are high achievers (Gillen-O'Neel, 2021).

First-generation Students and Belonging

Much of the research on first-generation students has historically centered on persistence and student success (Bentrim & Henning, 2022; Chakraverty, 2020). Sense of belonging among

first-generation students has been found to be a predictor of academic engagement (Duran et al., 2020). Persistence has been generally attributed to academic and social integration into the academic environment (Phillips et al., 2020; Takimoto et al., 2021). A correlation can be found between academic integration into a program and student's feelings of belonging within their academic environment (R. G. Gardner et al., 2019; Roksa et al., 2018; Strayhorn, 2012). Students sense of belonging is positively shaped when they have access to people with similar backgrounds and experience, when learning is made relevant or provides service to their communities, when their backgrounds are validated and when campus values are grounded within their orientation to the environment (Museus & Chang, 2021). However, in looking at social identity theory, first-generation students may have a stronger identity with their socio-economic background, racial identity, or working-class characteristics than with what they experience when entering and within the college environment (Duran et al., 2020; Howard, 2017; Means & Pyne, 2017). Belonging for first-generation students maybe tied to their social identity as a minoritized identity group on their campuses that may have negative connotation for the individual (Bentrim & Henning, 2022; Johnson & Wiese, 2022; Ma & Shea, 2021; Mitchall & Jaeger, 2018; Ramsey & Brown, 2018). First-generation students at the undergraduate level report a lower sense of belonging and uncertainty about belonging than their peers (Duran et al., 2020; Gopalan & Brady, 2020; Means & Pyne, 2017). Many first-generation college students feel more comfortable with the subgroup labeling that they brought into their college experience than with the "newer" external label of first-generation student when navigating their academic identities (Bettencourt et al., 2020; Ramsey & Brown, 2018). First-generation students are often members of several identity groups especially related to race and socio-economic status so a

single identity approach to belongingness feelings may not reveal the full picture (Duran et al., 2020; Johnson & Wiese, 2022; Nguyen & Nguyen, 2018).

Negative stereotypes can be associated with first-generation students and their level of preparedness for the academic environment. These deficit stereotypes about lack of academic ability or capacity add a level of complexity to the students' sense of belonging (Bentrim & Henning, 2022; Vaccaro & Newman, 2016). Both privileged and minoritized students defined belonging as being comfortable and fitting in (Johnson & Wiese, 2022). However, minoritized groups, like first-generation students, also listed safety and respect as essential to their belonging (Bentrim & Henning, 2022; Vaccaro & Newman, 2016). Students gain respect and safety through relationship with both peers and faculty. Institutions can increase belonging feelings among identity groups by incorporating identity-based organizations, faculty interactions and learning centers (Duran et al., 2020; Means & Pyne, 2017). First-generation students are less likely to seek out peers or faculty members outside of the classroom (Atherton, 2014; Means & Pyne, 2017). Insuring intentional meaningful faculty interactions with first-generation students helps to alleviate barriers of help seeking among this group (Duran et al., 2020; Means & Pyne, 2017). Students who encounter the same academic environment and programs with these different lenses have reported varying levels of belonging which indicates that higher education administrators should investigate these patterns when making decisions (Bentrim & Henning, 2022). However, when institutions take the time to develop ways for mentorship or faculty relationship with first-generation students it improves student success and the academic trajectory of the student (Al Makhamreh & Stockley, 2020, 2020; Bañuelos & Flores, 2021; Miller et al., 2019).

First-generation students are also balancing the sense of belonging within their families as they adjust to college life. As students begin to belong within their college environment, they cite feelings that they need to adjust back to their home environment and family expectations when they interact with their families (Covarrubias et al., 2019; Johnson & Wiese, 2022; Takimoto et al., 2021). The social capital that they relied on within their home community and with their families will diminish over time as they begin to build social capital within their academic environments (Johnson & Wiese, 2022; Schwartz et al., 2018). First-generation students may be local to their college environment and may have stronger bonds to the local community that overtake their "need" to become part of the college community (Johnson & Wiese, 2022; Mitchall & Jaeger, 2018). While in their home environment, students cite avoiding using "college or big" words or being perceived as "acting superior" to family members (Farkas, 2018; Johnson & Wiese, 2022; Vasquez-Salgado et al., 2015). Students may segment who they are as to the environment that they are currently in creating a complex identity status related to their student and home environments (Johnson & Wiese, 2022). Other concerns for first-generation students include when additional opportunities are available and how to communicate changing goals with their family members who may already have limited understanding or support for pursuing a college degree (Covarrubias et al., 2020; Vasquez-Salgado et al., 2015). First-generation students who cite sense of belonging as a challenge may feel that they are playing a role or changing their identities to meet the needs of their environments and responsibilities.

First-generation students are also less likely to initiate interactions with faculty and use support resources, even if they are aware of the resources exist (Johnson & Wiese, 2022; Schwartz et al., 2018). Faculty interactions could be simple class discussion participation,

emailing or attending office hours, while support services like tutoring center resources and learning centers are often not utilized. In doctoral programs, faculty interaction is required in several milestones including hallmark requirements like capstones and dissertation processes. (S. K. Gardner & Holley, 2011; Roksa et al., 2018).

First-generation Doctoral Students and Belonging. The need to belong and first-generation characteristics do not fade for first-generation students who move forward to doctoral education (R. G. Gardner et al., 2019; S. K. Gardner, 2013; White & Nonnamaker, 2008). Graduate education tends to have the opportunity for more group categorization for individuals (O'Meara et al., 2017; White & Nonnamaker, 2008). The complexity can contribute to students feeling like outsiders within their programs due to subgroups or their identity within an outgroup (Shavers & Moore, 2019; Tajfel, 1982, 2010; Zakiryanova & Redkina, 2020). First-generation doctoral students enter into the advanced degree track having already been categorized in their previous experiences as a first-generation student, a grouping they become more comfortable in as they navigated undergraduate and graduate level degrees (Bettencourt et al., 2020; Ramsey & Brown, 2018). This categorization along with the fact that most first-generation students also come from other social and economic backgrounds that have been determined to have academic barriers can influence the internalization of activities that support feelings of belonging within their program (Bettencourt et al., 2020; Howard, 2017; Johnson & Wiese, 2022; Means & Pyne, 2017; Ramsey & Brown, 2018; Roksa et al., 2018). First-generation college students are arriving at college with fewer effective coping methods, learning strategies and reasoning skills to process new information at a postsecondary level (Antonelli et al., 2020; Schwartz et al., 2018; Wallace, 2022). This is a challenge because doctoral program experiences are highly complex and much different than the undergraduate experience that traditionally focuses on community

building and social integration (Shavers & Moore, 2019). First-generation doctoral students often come from smaller, less research-based institutions for their undergraduate work and have little to no experience with advanced degree environments, impacting their sense of belonging and place within the program (Johnson & Wiese, 2022).

Impostor Phenomenon and Sense of Belonging

Impostorism is based on the self-perception that the individual is a fraud and that others have been misled to overestimate the individual (Handforth, 2022; Wu et al., 2022). These feelings are impacted by how the individual evaluates themselves about others in their group or other's expectation of their performance in a group (Fassl et al., 2020; Gillen-O'Neel, 2021). Since comparison within the social identity process converts perception of one as compared within a group and to other groups into attitudes and actions that make one feel similar within a group and different from other groups, impostor or fraudulent feelings can impact students and their sense of belonging withing their academic environment (Fassl et al., 2020; Tajfel, 2010; Zakiryanova & Redkina, 2020). Individuals are always looking for information about themselves and have an inherent need to self-evaluate and comparing themselves to others provides data that transfers to their own identities (Fassl et al., 2020). The necessity to compare one's 'own' community with other communities during the comparison process allows for belonging but also leads to feelings of 'otherness' when a person feels they are participating in environments outside of their ingroup (Takimoto et al., 2021; Wu et al., 2022; Zakiryanova & Redkina, 2020). Social comparison occurs for everyone when they are pursuing belonging but individuals with lower self-esteem or confidence tend to enter into comparison cycles more often which means those with impostor behaviors may have higher tendencies to compare within groups (Fassl et al., 2020). The need to belong and the perceived sense of ingroup integration can

establish a perceived environment where one is an outsider leading to those with impostor tendencies to be motivated to impostor behaviors (Cohen & McConnell, 2019a; Craddock et al., 2011; R. G. Gardner et al., 2019).

Using doctoral programs as an example of an environment, comparisons can be made that students who feel out of place within the educational environment and experience a lower sense of belonging would be more likely to feel as though they must hide their lack of understanding (R. G. Gardner et al., 2019; S. K. Gardner, 2013). Original research by Clance (1985) described comparison within her study as the identification of other's perceived strengths to the individuals' perceived deficits. If the student perceives their academic success is attributed to external factors and not as internal characteristics while perceiving others as having internal characteristics that lead to success, their feelings of belonging will not be met. If the environment is conducive to cycles of impostor behaviors the perception of 'otherness' will continue (Craddock et al., 2011; Fassl et al., 2020; R. G. Gardner et al., 2019; Shavers & Moore, 2019; Zakiryanova & Redkina, 2020). First-generation doctoral students' characteristics lead to both impostorism behaviors and a lower sense of belonging within their programs (Craddock et al., 2011; R. G. Gardner et al., 2019; White & Nonnamaker, 2008). However, limited research is available that explores the interaction between first-generation doctoral student characteristics, impostorism, and sense of belonging.

Summary

Researchers have explored the impostor phenomenon as it relates to many subgroups and categories within the academic environment (Clance, 1985; Clance & Imes, 1978; Langford & Clance, 1993; MacInnis et al., 2019; Mack, 2019; Vaughn et al., 2020). Exploration of self-perceptions of the individuals displaying impostor behaviors and their attitudes regarding their

identity within groups has begun to be developed for many academic groups (Burke & Stets, 2009; S. K. Gardner, 2013; Leonhardt et al., 2017; Zakiryanova & Redkina, 2020). First-generation student research has identified barriers that are prevalent to student success (Covarrubias et al., 2019; Engle & Tinto, 2008; S. K. Gardner & Holley, 2011; Gibbons et al., 2019; Ma & Shea, 2021; Takimoto et al., 2021). These barriers are sometimes internal related to self-evaluation and impostor behaviors or as a result of comparison with others within the academic community (Craddock et al., 2011; Fassl et al., 2020, 2020; Wu et al., 2022) The barriers continue along with first-generation students pursuing doctoral education (Cisco, 2020; Cohen & McConnell, 2019a; Fassl et al., 2020; S. K. Gardner & Holley, 2011; Handforth, 2022). One barrier that consistently shows in research is an outsider feeling related to a sense of belonging (Craddock et al., 2011; Fassl et al., 2020; R. G. Gardner et al., 2019; Means & Pyne, 2017; Roksa et al., 2018; Shavers & Moore, 2019; Stone et al., 2018; Takimoto et al., 2021). However, the connection between impostorism and the sense of belonging within first-generation doctoral students has not been explored extensively. A gap in the literature exists regarding the sense of belonging and impostor behaviors among first-generation doctoral students.

CHAPTER THREE: METHODS

Overview

The problem is that first-generation doctoral students (FGDS) experience feelings of impostorism and otherness as they continue their advanced academic work (Chakraverty, 2020; R. G. Gardner et al., 2019; S. K. Gardner, 2013; Howard, 2017). Since academic integration and sense of belonging have long been considered indicators of student success, it is important to further explore student experiences that provide insight into how sense of belonging and impostorism tendencies impact first-generation doctoral students. The purpose of this chapter is to identify the components of a transcendental phenomenology study to explore the experiences of first-generational students, explain why it is an appropriate choice for the topic, describe types of data collection for the design, the appropriate analysis of data for the design and the methods used to establish trustworthiness.

Research Design

Transcendental phenomenology is an approach to qualitative research seeking to understand human experiences (Moustakas, 1994). The transcendental phenomenological approach is appropriate for the study of first-generation doctoral students because the literature lacks an exploration of the lived experiences of this particular group of students. The research centers around the experiences and behaviors of first-generation doctoral students within their doctoral program allowing for the research design to bring the participant back to their lived experience and describe that experience in a manner that helps explore the phenomenon (Creswell & Creswell, 2018; Merriam & Tisdell, 2016).

Largely rooted by the philosopher Husserl, contemporary transcendental phenomenology research is based on the work of Moustakas (1994). The transcendental approach allows the

researcher to look at the phenomenon with fresh eyes or with an open mind to acquire new knowledge regarding the essence of the experiences (Merriam & Tisdell, 2016; Moustakas, 1994). There are three techniques that are core processes to accomplish this goal. The first concept is the concept of epoché, which allows the researcher to reveal their experiences that may influence the research through bias or judgement (Creswell & Creswell, 2018; Merriam & Tisdell, 2016; Moustakas, 1994). This bracketing of the researcher's experiences sets aside preconceived ideas and allows for the research to focus on the phenomenon. While the epoché does not eliminate everything, like the reality of the world, it does allow the attitude toward the data to be adjusted b the research to see the phenomenon with fresh eyes (Moustakas, 1994).

The second concept to notate is transcendental-phenomenological reduction which is used to describe the essences of the phenomenon (Moustakas, 1994). During this stage the qualities of the experience are the focus allowing to see the meaning of experience begins to take shape (Moustakas, 1994). The process requires the researcher to look at the experiences and describe them, look at them again and describe again with reference to the textural qualities until full descriptions of come to life. The process allows the researcher to shift focus beyond straightforward and into the rich description of the phenomenon (Merriam & Tisdell, 2016; Moustakas, 1994).

The last concept described in transcendental approach is the imaginative variation used to seek possible meaning through the use of the imagination (Moustakas, 1994). The description of the structures around the experience is the major task of this stage. This stage is reflective and is when the return and reflection on the experiences are used to connect the experiences and their meaning.

The choice for a transcendental approach is appropriate to study first-generation doctoral

students because the transcendental approach would allow for the bracketing of my own experiences. While I am a first-generation doctoral student, having and acknowledging the experiences will give depth in the reflection of the stories of others once the bias and judgments are removed. Focusing on the lived experiences along with their place within the structure of a doctoral program make the match for transcendental approach even clearer. Both the experience and the context around those experiences would influence the experiences related to sense of belonging for first-generation doctoral students.

Moustakas (1994) suggested that data organization begins with horizonalizing the data in regard to every horizon or statement relevant to the topic and then finding the meaning in those data. Then clustering of the meanings into common categories or themes. The themes are then used to develop the textural and structural descriptions of the experience from which the imaginative variation is used to structure the meanings and essence of the phenomenon (Moustakas, 1994). Textural descriptions are the narration of the participants' perceptions of the phenomenon (Moustakas, 1994). Structural descriptions allow the researcher to understand the participant's experience within the phenomenon (Moustakas, 1994). A particular approach that models this process is the Van Kaam Method of Analysis of Phenomenological Data. The approach provides descriptions on how to test the expressions against two requirements: Does the expression contain something about the experience that is necessary and helps us to understanding the experience? Is it possible to label it or abstract it? This approach will assist the researcher once the data has gone through horizonalization to find the themes of the data from both the textural and structural descriptions.

In closing, the transcendental phenomenological approach as described by Moustakas (1994) is an appropriate design for the study of first-generation doctoral students' experiences

with sense of belonging and impostorism withing their doctoral programs.

Research Questions

The phenomenon was explored by researching first-generation doctoral students using the following research questions as a guide for the study.

Central Research Question

What are the experiences of first-generation doctoral students related to impostor phenomenon and sense of belonging?

Sub-Question One

How does social categorization of first-generation student influence sense of belonging feelings for first-generation doctoral students?

Sub-Question Two

How does social categorization of first-generation students influence impostorism for first-generation doctoral students?

Sub-Question Three

How do feelings of belonging impact impostor phenomenon behaviors in first-generation doctoral students?

Setting and Participants

This study used convenience sampling and then snowball sampling which provided a variety of physical setting and mobility among the participants.

Setting

As participants were obtained through convenience sampling and then through snowball sampling, a specific site was not used. The setting for exploration of first-generation doctoral

student experiences regarding sense of belonging and impostor behaviors was universities that issue doctoral degrees (Ph.D. or Ed.D.) with leadership or educational leadership program offerings. The rationale for looking at doctoral students pursuing or having received doctorate degrees in leadership subject areas is alignment with research that impostor behaviors appear in high-achieving individuals who find it difficult to accept their accomplishments (Clance & Imes, 1978). In particular, first-generation doctoral students could demonstrate the characteristics of a high achiever since first-generation students face documented challenges as they advance their education. Exploring first-generation doctoral students in a leadership program would begin to shed light on the lived experiences of these high achieving individuals. The researcher will use pseudonyms for the individual sites and programs used in the research since the focus will be on the experiences of the participant and not as a case study for the program. Pseudonyms are important for both the sites and the individual participants in order to protect the programs and individuals and to gain rich and descriptive data without bias (Creswell & Creswell, 2018).

Participants

The participants in this study self-identified as first-generation doctoral students who indicate they are experiencing or have experienced impostor phenomenon behaviors during their academic journeys. Participant selection was based on questions that outline the feelings and behaviors of impostor phenomenon so that candidates for the study were able to self-identify. The participants were currently enrolled, recently separated or completed their degrees within the last 3 years in an educational leadership or leadership doctoral program (See Table 1). The number of participants for this study was 10 first-generation doctoral students who were able to share their experiences regarding their sense of belonging and impostor behaviors while in their doctoral program. Participants were not limited by gender, age range or ethnicity but the focus

was on their identity as first-generation and their ability to relate to the feelings and behaviors of impostor phenomenon. Participants came from varied programs, demographic regions, and school settings. Initial interviews were conducted on 10 participants and no new themes were added to the data analysis after reviewing and coding interview transcripts. Once no additional themes arose, it was determined that data saturation had been met.

Table 1

First-generation doctoral participants

Participant Name	Doctoral Program	Gender	Age Range	Ethnicity
Ray	Executive Leadership	Male	55-64	White
Jack	Executive Leadership	Male	45-54	White
Amanda	Doctor of Ministry	Female	35-44	White
Lydia	Executive Leadership	Female	35-44	White
Kate	Global Sport Leadership	Female	35-44	White
Leah	Educational Leadership	Female	55-64	White
Betty	Psychology	Female	35-44	White
Jessica	Educational Leadership	Female	35-44	Hispanic/Latino
Clara	Educational Leadership	Female	45-54	White
Sally	Organizational Psychology	Female	35-44	White

Researcher Positionality

My motivation to study first-generation doctoral students began as a seed of curiosity when I read an opinion article in my email inbox. Inside Higher Education posted an article on their website that addressed the fact that first-generation graduate students had lingering feelings that aligned to those they had as a new undergraduate student even though they had successfully completed their undergraduate degree (Diaz Vazques & Lundsteen, 2021). The seed that the opinion article planted lead me to reflect on my own journey as a first-generation undergraduate and the first in my family to achieve a master's degree and begin a doctoral program. I knew in my experiences that first-generation doctoral students faced similar feelings and challenges because of the validation I felt when reading the experiences outlined in the opinion article.

Providing insight into others with similar backgrounds became an important exploration so others might fell that same validation. A phenomenological framework became clear as the correct manner to conduct research for this population . This study was guided by a social constructivism framework which is commonly used in phenomenological studies (Creswell & Poth, 2018). This section outlines how the social constructivism lens was used as a framework and then a discussion of my philosophical assumptions including the ontological, epistemological and axiological was expressed.

Interpretive Framework

Creswell and Poth (2018) define a social constructionist lens as one that the researcher seeks to understand the phenomenon and the world by relying on the study participants' views and experiences. This lens works well with the transcendental phenomenological approach where the researcher brackets out their own experiences and focuses with new eyes on the participants' experiences to get meaning from their reality (Moustakas, 1994). My goal in the research was to focus on understanding the feelings and behaviors of first-generation doctoral students through their own perspectives.

Philosophical Assumptions

My approach to research and the lens in which I view the world will be explained in the next few sections as my assumptions are discussed. As a first-generation doctoral student, college administrator, Christ follower and researcher, I will approach the study from an ontological, epistemological and axiological view based on the social constructivism framework.

Ontological Assumption

The nature of reality is the question addressed by the researcher's ontological assumption (Creswell & Poth, 2018). As a follower of Christ, I believe that God's truth is the singular

reality. This lens will always be used when I look at the world around me and the experiences of those I will be researching. This lens was used as I viewed and communicated with first-generation doctoral students for this study. Also, this lens provided the perspective of my role as an imperfect human with curiosity and biases that need to be transparently communicated to readers of this study.

Epistemological Assumption

Epistemological assumptions are centered around knowledge and how knowledge is gained. I gained knowledge of the phenomenon directly from the evidence provided by the participants. Also, I participated as the researcher in gaining trust with the participants for that evidence to be shared to lessen the distance between the researcher and the participant (Creswell & Poth, 2018). Establishing questions that allowed the participant to feel comfortable sharing their experience and facilitating interactions that prepared the participant assisted in lessening the gap between researcher and participant.

Axiological Assumption

As a first-generation doctoral student, I was transparent with those participating and reading the study that I have had my own experiences with sense of belonging and impostor syndrome as I have gone through the doctoral journey. Additionally, I disclosed my work with first-generation students in my role as a higher education administrator. By making these disclosures, I discussed the values and experiences that being a first-generation student may be influencing the study (Creswell & Poth, 2018).

Researcher's Role

I am a first-generation student as defined in this study. My parents did not attend any college and I experienced many of the financial, academic, social, and mental health challenges

that first-generation students often face. The participants in this study were selected without any previous relationship with me. However, in using the approach used for participant selection they may be associated with colleagues of mine or in similar degree programs. I decided to not chose a specific location for this study but to use listservs., social media groups and contacts at other institutions to help gather interested participants in leadership programs.

I bring bias with me to the data collection and analysis that I acknowledged as a first-generation doctoral student. I have experienced a feeling of otherness both within my doctoral program, University settings in both the student and professional roles, and within my friend and family groupings. The concept that I am pursuing a terminal degree does not make sense to many in my personal life because they do not understand that the degree does not equate directly to upward mobility in my career. My colleagues at work have pursued their doctoral degrees early in their career because in their positions as a doctoral degree was required for their work. As a student, I have often felt that I do not know the questions to ask or have any established relationships within my program. These experiences and feelings were brought with me into this study as they are brought into my life daily.

However, in choosing the transcendental approach using the epoché as a way of bracketing out my own experiences allowed me to focus on the participants' experiences. Additionally, my experiences and feelings added empathy to the study and gained the trust of those participating. I believe they added depth to my data collection approach. In the data analysis piece, using a recommended framework and reflective exercises like researcher field note, member checking and notes during coding helped to reveal and correct any bias that may occur.

Procedures

The procedures described in this section are discussed to provide the ability for the study to be replicated. Information is provided regarding Institutional Review Board (IRB) approval (see Appendix A), describes the recruitment plan, the data collection and analysis process and how data triangulation for the study was accomplished.

Permissions

Approval from Liberty University's Institutional Review Board (IRB) was obtained to conduct this study. Proof of approval is available in the appendix of the paper (see Appendix A for IRB Approval). Participants were elicited through word of mouth, social media posts, and personal and professional contacts.

Recruitment Plan

A campaign was conducted to elicit participants through word of mouth, social media posts, colleagues that teach or direct doctoral programs and personal connections. The participant recruitment email included links to self-identifying questions to confirm that they meet the selection criteria. Personal and professional colleagues were provided an email to send out to potential participants that would included a link to the survey with the self-identifying survey that was designed to determine if the potential participant was a first-generation doctoral students and if they have experienced any first-generation characteristics or impostor syndrome behaviors (see Appendix C for email). A demographic information survey was also sent to the participants with the invitation to participate. In this snowball sampling approach, if students self-identified as first-generation and exhibited the common characteristics, they were instructed to return the attached informed consent form if they were interested in participating in the study (see

Appendix B for the informed consent form). The email was intended to determine if the

participant had experienced the phenomenon being studied (Creswell & Poth, 2018).

Self-Identifying survey questions:

1.   Are you a first-generation student pursuing a doctoral degree? First-generation

      student is as a student whose parents did not attend or complete college (Baldwin et

      al., 2021; Means & Pyne, 2017; Toutkoushian et al., 2018). First-generation doctoral

      students are first-generation students pursuing a doctoral degree (Baldwin et al.,

      2021).

2.   Have you ever faced any challenges that first-generation students are commonly

      found to experience? Check any that apply:

      a. Financial need/pressure pursuing your degree,

      b. Family pressures/responsibilities while pursuing your degree

      c. Administrative hurdles while pursuing your degree

      d. Academic hurdles while pursing your degree

3.   Have you ever struggled with impostor syndrome while pursuing your degree? Please

      describe feelings you associate with impostor syndrome.

4.   Have you struggled with feeling a part of your doctoral program?

Three types of data were collected during this study including individual interviews, focus

groups and a letter to self writing exercise. Data collection began after approval from Liberty

University's IRB was obtained. Participants were required to complete an informed consent form

before participating in the study. Participants coul withdraw from the study at any time and their

participation was strictly voluntary and confidential. Individuals were invited to individual

interviews first to get information regarding their personal experiences within their academic

journey. The individual interviews were conducted and recorded via Zoom. The interview questions were designed to create trust between the participants and the researcher. The goal of the questions were to encourage the participants to discuss their experiences as first-generation doctoral students. After the interview was completed, the participants were asked to participant in small focus groups. After the focus group, the third method of data collection was sent to the participants via email containing instructions to write a letter to themselves at the beginning of their program and give advice to their former self on things about pursuing a doctoral degree as a first-generation student.

Notes were taken during the interview process and the focus groups. The interviews and focus groups were recorded and transcribed. The transcripts were sent to the participants to verify accuracy and to gain any corrections on the transcription. Identifying information was removed from all the data collected to ensure confidentiality. After all data was collected and themes emerged, the data was triangulated among the three sources following the horizonalization process and the pattern of elimination and reduction outlined in the modified Van Kaam method (Moustakas, 1994).

Data Collection Plan

To explore the experiences of first-generation doctoral students about their feelings of belonging and impostorism behaviors, three different types of data was collected and triangulated to provide insight on the phenomenon. The transcendental or empirical approach involved encouraging the participants to return to the experience to provide descriptions that were the basis for reflection of their experiences that contributed to data that was used to determine the essence of the phenomenon being studied (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Moustakas, 1994). The data collection methods were determined to support the

participants return to their experiences. The aim of the study and the data collection methods was to determine what the experience meant for the participants and provide a comprehensive description of the experiences of first-generation doctoral students (Moustakas, 1994). To accomplish this goal, the following data collection approaches were used.

Individual Interviews Data Collection Approach

Semi-structured interviews with pre-set open-ended questions allowed in-depth discussions regarding the experiences of the participants from their own point of view (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Patton, 2015). The interview questions were constructed in a way to get the point of view of first-generation doctoral students and their perceptions of both their sense of belonging feelings and their perspectives of impostor behaviors. The interviews were conducted one-on-one with the participant and researcher via Zoom and recorded and documented via transcription for data analysis. Transcripts of the interviews were made available for participant review and validation of accuracy by the participant.

Individual Interview Questions

1. Please describe your educational background and journey to pursuing a doctoral degree. SQ1, SQ2, CRQ

2. Please describe your personal background and how your family or personal experiences contributed to your journey. CRQ, SQ1, SQ2

3. How did you did you arrive at your decision to pursue a doctoral degree and your choice of program and institution? CRQ, SQ3, SQ4

4. Describe your definition of a first-generation student. SQ1

5. Describe your challenges as a first-generation college student throughout your academic career. Please consider your full experience with education (K-12 through doctoral).SQ1, SQ2

6. How have these challenges impacted non-academic areas of your life? SQ2, SQ3

7. Describe what impostor phenomenon or impostor syndrome means to you. SQ2

8. Please describe a time when you felt like an impostor while pursuing your doctoral degree? How did you respond or work through the feelings? SQ1, SQ2, SQ3

9. How would you describe 'sense of belonging" as it relates to your academics, professional or personal roles? SQ1, SQ2

10. Describe a time when you felt like you did not belong while pursuing your doctoral degree. How did you react to those feelings? CRQ, SQ1, SQ2, SQ3

11. Describe successful practices you use when you feel that you don't belong or have impostor syndrome thoughts. SQ3

12. What experiences have you had that prepared you to feel like you belong in your academic program? SQ1,SQ3

13. How did the environment or others in the program react to you when you were feeling that you did not belong? SQ1,SQ2,SQ3

14. Describe a time when your sense of belonging initiated impostor phenomenon? SQ3

15. How would you advise other first-generation doctoral students when they experience impostor syndrome? SQ1, SQ2

16. What else would you like to add to our discussion of your experiences being a first-generation doctoral student? SQ1, SQ2, SQ3,

The interview questions were rooted in the research findings that first-generation students face similar challenges (Beattie, 2018; Ecklund, 2013; Engle & Tinto, 2008; Mack, 2019). First-generation doctoral students may still experience impostorism or feelings of otherness (Chakraverty, 2020; Cisco, 2020; Cohen & McConnell, 2019; Craddock et al., 2011; R. G. Gardner et al., 2019; S. K. Gardner, 2013; S. K. Gardner & Holley, 2011). The interview questions were designed to hear the individual experiences of these students and provide a framework to connect the sense of belonging within their doctoral programs with impostor behaviors.

Questions one and two were designed to begin the interview with the participant reflecting back on their overall experience and tying those reflections into a first-generation framework. They were designed to gain trust between the researcher and participant (Creswell & Poth, 2018). Questions three and four were questions that allowed the participant to share their knowledge and experiences as a first-generation student. Knowledge questions were provided to allow the participant to share information that they know (Patton, 2015). The pattern with questions two, three and four was repeated with questions five and six but focused on impostorism in relation to their knowledge and experience. This repetition allowed for rapport-building between the participant and the researcher. Question seven repeated the pattern introducing sense of belonging feelings into the conversation and served as a foundation and continued to build rapport as the questions shifted into in depth focus on the sense of belonging feelings in questions eight through eleven. Question twelve allowed for space for the participant to explore and share if sense of belonging and impostor behaviors intermingled in their experiences. This experience question was geared toward exploring the connections between belonging feelings and impostorism. Question thirteen allowed for the participant to reflect back

on the experiences that they shared and articulate meaning and learned lessons with the researcher while question fourteen allowed for any free form discussion and reflection to be shared to adequately hear the voice of the participant (Creswell & Poth, 2018; Patton, 2015).

Individual Interview Data Analysis Plan

Full transcripts of the interview along with the field notes of the researcher are available expressions from this research event. The researcher began with the horizonalization of both pieces for each interview. The researcher began by listing all expressions relevant to the experience which is called horizonalization (Moustakas, 1994). The researcher moved into the reduction and elimination phase of analysis by using two benchmark questions to test each expression. The two questions utilized as benchmark questions were: does the expression contain a moment that is necessary for understanding the phenomenon? If the answer to the first question is positive the next question was: Is it possible to pull it out and label it? If the information can be labeled, then it is a horizon of the experience, and the data expressions were coded into the themes they represent (See Appendix D). If labeling was not a possibility, the expression was eliminated in addition, overlapping, repetitive and vague expressions were also eliminated or reframed in descriptive terms. Concerning the intent of the interviews, the researcher re-framed those descriptive elements of the data provided since the data from the interviews was designed to be descriptive of the program that the participant was in.

Once the elimination and reduction stage occurred, the coded expressions were clustered and grouped into themes. Labeling of core themes emerged from the individual interview data. These individual data pieces helped design the textural-structural descriptions of the experience of the participant. These themes were triangulated against other participants to find larger-scale themes across the participant pool and triangulated against the themes of the focus group and the

letter writing data collection results. The triangulation of the themes resulting in all three methods were synthesized together to find the meaning and essence of the experience.

The field notes along with the process of reduction of data allowed for the researcher to be reflective on the data provided. Once all elements from those data sources were listed the pattern of elimination and reduction occurred with the testing questions outlined in the modified Van Kaam method (Moustakas, 1994). Then the expressions were coded and labeled for themes and triangulated against the data of other participants and ultimately against the data brought out from the focus groups and the letter-writing exercise.

Focus Groups Data Collection Approach

Individual participants were invited to participate in focus groups after their individual interviews. The focus groups were conducted via zoom and consisted of 2-3 participants per group. The focus group structure was moderated by the researcher and 3-5 prepared questions were used to facilitate conversation among the participants related to their experiences as first-generation doctoral students and experiences with impostorism and sense of belonging. The focus groups added depth to the participants' perceived experiences by providing the participants opportunities to express their experiences with other students with similar journeys.

Focus Group Questions

1. What barriers did you face early on in your academic journey that you feel were aligned with your first-generation status? SQ1, SQ2

2. Describe any barriers that you face or have faced in your doctoral journey? SQ1, SQ2

3. How was your doctoral program structured to provide integration of students into the program? SQ1, SQ2

4. What activities within your program made you feel a sense of belonging within the program? Please describe the assignment or activity as you experienced it. SQ4, SQ1, CRQ

5. What activities within your program made you feel like you did not belong or should not be a part of your program? Please describe the assignment or activity as you experienced it. SQ4, SQ1, CRQ

Questions one and two were designed to get the participants reflecting on their own experiences and initiating if there are common barriers among the group. These questions were helpful for them to identify shared and different experiences that occurred within the group. Question three was designed to place those experiences within the context of their program and initiate conversation if the barrier was external to the program or internal due to their first-generation status. Questions four and five were designed to bring forward specific descriptive examples of the phenomenon around sense of belonging and impostorism incidents. All questions were designed to be interactive among the group.

Focus group data analysis

The focus group portion provided the researcher the ability to explore some early themes presented in the interview process by structuring focus group questions to enhance discussions among the participants. Full transcript of the focus groups along with the field notes of the researcher are available expressions from this research event the researcher began with the horizonalization of both pieces for each focus group (See Appendix E). The field notes along with the process of reduction of data allowed for the researcher to be reflective on the data provided. Once all elements from those data sources were listed the pattern of elimination and reduction occurred with the testing questions outlined in the modified Van Kaam method

(Moustakas, 1994). Then the expressions were coded and labeled for themes and triangulated against the data of other participants and ultimately against the data from the interviews and the letter-writing exercise.

Letter-Writing Data Collection Approach

In order to achieve the goal of having the participant re-visit the phenomenon and reflect on their experiences, a letter-writing data collection exercise was included in the study (Moustakas, 1994). The participant was given a prompt to write a letter to themselves at an earlier time when they first began to experience feelings of otherness or impostorism behaviors during their doctoral program. The prompt allowed the participant to express their continued or growth experience with the phenomenon in a non-verbal format which added depth to the data collected and supported the first three research questions of the study(Creswell & Poth, 2018; Patton, 2015). The letter prompt was given to the participant after the interview process and transcription review process. Participants were asked to type their letter and return it to the researcher within two weeks of receiving the prompt. The prompt that was given to the participant is:

> After reflecting on your experience in doctoral education, write a letter to yourself that
> you wish you had been able to read when you first started your doctoral program
> preparing yourself for what is to come as a first-generation doctoral student. What advice
> would you give yourself regarding belonging and impostorism feelings?

Letter-Writing Data Analysis Plan

Since transcription was not needed for the letter-writing approach the horizonalization of data began using the document provided by the participant. The expressions were listed and then

reduced with redundant statements eliminated using the Van Kaam modified approach (Moustakas, 1994). After coding occured the themes were triangulated against the focus group and interview data. One area that the letter writing provided was confirming some in-vivo statements that were heard or used during the interview portion since the letter writing prompt asked to prepare the younger self as to what was to come. Pulling out those statements added depth to the interview data that was collected.

Data Synthesis

During both the data analysis and synthesis phase the researcher employed the hallmarks of the transcendental phenomenological design described by Moustakas (1994). The data analysis and synthesis occurred with the researcher bracketing out their experiences through journaling notes and employing the epoché process which allowed for a fresh eyes approach to view the experiences (Creswell & Poth, 2018; Moustakas, 1994). Also during the syntheses portion, when the research took the findings beyond coding and into areas of meaning from their experiences, an imaginative variation approach was used so that the researcher could come to find out how the experience became what it is (Moustakas, 1994). This is where the intuition of the researcher interacted with the shared experiences of the participant to find the meaning, structural description and textural description of the phenomenon.

All of the data from the three collection methods and the coded themes were gathered to provide data and themes that supported the essence of the first-generation doctoral student's experience with impostor phenomenon and sense of belonging during their time as doctoral students. Triangulation in the study occurred during semi-structured interviews, focus groups and a letter writing exercises with the participants (Creswell & Poth, 2018). The synthesis of the data among the three data sources corroborated themes that emerge from the data and exposed any

weaknesses within the data. Triangulation of data sources increased the validity and reliability of the results from data collection.

<div align="center">**Trustworthiness**</div>

Lincoln and Guba (1985) provided guidance on the foundational concepts and terms that establish the trustworthiness of a study, specifically credibility, transferability, dependability, and confirmability. For this research study the following concepts were utilized to insure trustworthiness.

Credibility

Credibility is the confidence the reader has that the findings of the research are the "truth" (Lincoln & Guba, 1985). Techniques to prove credibility within this study included triangulation of data among varied data collection sources; peer debriefing among other researchers and member-checking where the participants had access to review and edit the transcripts of their interviews. Triangulation in the study was among semi-structured interviews, focus groups and a letter writing exercises with the participants (Creswell & Poth, 2018). The transcripts of the interviews were given to the participants to be member-checked to ensure that the researchers bias, or field notes did not influence the data collected during the interview. Allowing the feedback of the participants solidified the voice of the participant was what was being recorded and used and allowed for edits by the participants allows for a clear articulation of their experience (Creswell & Poth, 2018). Additionally, peer researchers were used to validate that field notes and observations along with the participant transcripts limited bias in the findings.

Transferability

Transferability shows that the findings of the study have application in other contexts (Lincoln & Guba, 1985). While the descriptions used in the findings showed how the findings can transfer among other areas or to other first-generation doctoral students, the reader was provided with descriptions of the feelings and experiences of first-generation doctoral students in their own words. The reader will determine if the findings are transferrable however the research design encouraged confidence that the experience and findings may be applicable in other circumstances. The potential to not be locked into a specific program site when sampling for first-generation doctoral students helped to provide similarities in feelings and experiences regardless of setting.

Dependability

Dependability is documenting the procedures of the study in a way that demonstrates the ability to have the study repeated with consistent findings (Lincoln & Guba, 1985). An inquiry audit was conducted by the dissertation committee and the Qualitative Research Director through the dissertation process at Liberty University to insure that research procedures were dependable.

Confirmability

Confirmability shows that the findings are based on the data collected by the researcher and not on the researchers own experiences and bias (Lincoln & Guba, 1985). Techniques for establishing confirmability for this study included the use of documented audit trails which are provided as an appendix, use of the Van Kaam modified method for data analysis across data collection methods provide consistency in developing themes and the triangulation of the data methods as described in the credibility section (Moustakas, 1994).

Ethical Considerations

Transcendental phenomenology is designed to showcase the voice of the participant (Moustakas, 1994). I employed the concept of epoch, by revealing my own experiences in order to bracket them out of the lens by which the participants voice is communicated (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Moustakas, 1994). Research began in full once IRB approval was received. Proof of IRB approval is provided in the study's appendix. In addition, the participants' identities were secured by the use of pseudonyms. The settings were generalized and used pseudonyms as appropriate. A robust informed consent to participate document was provided to each participant outlining the ways that information would be available to them and how the information collected would be used (Creswell & Poth, 2018). They had full knowledge of the researcher's intent for the research before agreeing to the study (Creswell & Poth, 2018; Moustakas, 1994) Additionally, the participants was given information that they could withdraw from the study at any point (Moustakas, 1994). All data collected, including the recordings of interviews, were stored and backed up in secured password protected devices and accounts. Accuracy of participants' experiences were validated and reviewed by the participant in a timely manner to ensure the data collected was a reflection of the true experience of the participant and not influenced by the researcher or others.

Summary

The purpose of this transcendental phenomenological study was to describe the experiences of first-generation doctoral students and their sense of belonging and impostor syndrome behaviors while pursuing a doctoral degree. The research questions were designed to examine participant experiences within their doctoral program. The setting of this study included various leadership and educational leadership doctoral programs. Institution profiles were included but pseudonyms will be assigned to the institution. Participants were self-identified

first-generation doctoral students in doctoral programs who identified themselves via an email

sampling. Data was collected in three ways and included individual interviews, focus groups and

a 'letter to self" writing method. Data was analyzed using horizonalization and the modified Van

Kaam method (Moustakas, 1994).

CHAPTER FOUR: FINDINGS
Overview

The purpose of this transcendental phenomenological study was to understand the experiences of first-generation doctoral students within educational leadership or leadership programs as they relate to their feelings of belonging, impostorism, and otherness. The central research question was: What are the experiences of first-generation doctoral students related to the impostor phenomenon and sense of belonging? The research questions were: *Research Question 1:* How does social categorization of first-generation students influence sense of belonging feelings for first-generation doctoral students? *Research Question 2:* How does social categorization of first-generation students influence impostorism for first-generation doctoral students? *Research Question 3:* How do feelings of belonging impact impostor phenomenon behaviors in first-generation doctoral students? Chapter Four begins with a chart and a brief description of the ten participants in the study. Each participant has been assigned a pseudonym and identified as a first-generation doctoral student who is currently pursuing or completed a doctoral program within the last 3 years. Data collection methods included semi-structured interviews, focus groups, and a letter-writing exercise. The chapter then outlines the research data and outlier findings.

Participants

The 10 participants in this study all self-identified as first-generation doctoral students who are currently enrolled or have recently (within the last 3 years) completed a doctoral program that is related to educational leadership or leadership. Two males and eight females participated. Regarding the educational programs of the participants, two completed executive leadership programs, one completed a global sports leadership program, one completed a

leadership program in divinity, two completed leadership programs related to psychology, one completed an educational leadership program and three are currently working toward doctorate degrees in educational leadership. The modalities of programs that were pursued by the participants include traditional in-person doctoral programs, fully online programs, and hybrid programs involving both online and in-person participation. The participants are described below in narrative form.

Ray

Ray completed an Ed. D. in Executive Leadership. His program was mostly online but required on-campus participation via residency requirements. Ray pursued his first degree as an online adult learner. He noted that he had always struggled in the learning environment and during the final stages of his doctoral studies underwent testing and was diagnosed as neurodiverse.

Jack

Jack graduated with an Ed. D. degree in Executive Leadership. He began his college studies as an adult learner during his military career as a Navy Seal. He noted that in high school he was not a "great student" but as he progressed professionally in the military, he saw his strengths grow and began to see that extending his education would strengthen him in areas where he perceived weakness.

Amanda

Amanda graduated with a Doctor of Ministry degree and was raised by her grandparents to value education. She pursued her undergraduate degree at a university close to her home and pursued her doctoral degree at the same university. She articulated that her first-generation status

made her feel driven to succeed and aligned the first-generation drive as being like first-child syndrome. She described being the only woman in her cohort while pursuing her doctorate and being a woman in a predominantly male profession.

Lydia

Lydia is currently pursuing her doctoral degree in educational leadership. She attended a private, faith-based school for K-12. She was a traditional-aged undergraduate student, and she attended a college that she could commute to from her home. She shared about the effects of being a commuter student as an undergraduate and how it shaped her experience and sense of belonging. Her master's experience was at a commuter university as well and was in person. She received her doctoral degree via an online program. She referenced that her need to earn an income throughout her educational journey had a significant impact on her. \

Kate

Kate completed her doctoral degree in Global Sport Leadership. She cited her parents' moral support as a strength in pursuing her goals. She attended college close to home but prioritized student involvement and belonging as an undergraduate. She pursued locations beyond her home state for internships and graduate and professional opportunities. After Kate completed her doctoral degree, she switched careers from athletic administration to full-time faculty. She describes herself as relational by nature and tries to include everyone in her environment in their shared experience.

Leah

Leah completed her doctoral degree in educational leadership in December 2021. She was motivated to continue her education when she found it hard to find a teaching position after

her undergraduate degree completion in the 1990s. She pursued her master's degree right after undergraduate to try to increase her chances of finding a teaching position.. She began the doctoral process 20 years after her Master's degree after taking classes to re-apply for a teaching license. She currently serves as a school administrator for a private K-12 school.

Betty

Betty recently completed a doctoral degree through an online program focused on psychology, community care, and leadership. Betty worked full-time during all her degrees. She began at the associate's level and continued her education while helping to support her family. She mentioned family balance as a challenge while pursuing her education as she cares for her daughter with special needs. She chose to keep her doctoral journey mostly a secret from her family and friends as she pursued the degree. Only a few members of her family knew she was enrolled in her doctoral journey. She began to tell others in her family only after her dissertation defense. She is currently working in care counseling.

Jessica

Jessica is pursuing her doctoral degree in educational leadership. She describes her background as growing up in poverty. She was from the rural Midwest and only considered college after the mentorship of a high school counselor. She described her undergraduate experience as a mixture of cultural exploration and hard work. She worked two part-time jobs while pursuing her undergraduate degree and moved out of state once she received her degree. She worked as a teacher in a low-income school district while pursuing her master's. She is a virtual school administrator for her local school district while pursuing her degree.

Clara

Clara shared two doctoral experiences as she completed coursework at one in-person program focused on library science but then lapsed enrollment and started an educational leadership program that was online several years later. Clara grew up in a rural environment with limited educational opportunities but found her passion while assisting the librarian in her school as an enrichment to the school's curriculum. She is currently in the final dissertation stages for her doctoral degree in educational leadership and serves as a librarian at a large University.

Sally

Sally received her doctoral degree in organizational leadership. She dropped out of her first undergraduate experience because she felt like she was not mature or ready for the experience. She joined the military and pursued her undergraduate degree while on active duty. She completed a master's degree using benefits from the military once she was medically discharged. She described her background as having limited opportunities because of financial resources, and her rural location and felt limited in her career opportunities after her master's degree. Sally is working remotely for the government while teaching and chairing dissertations online with her program.

Results

The research for this study was guided by one central research question supported by three additional research questions. The research questions were designed to describe the experiences of first-generation doctoral students as they relate to the impostor phenomenon and belonging feelings. The results described in this section came from data collected from individual semi-structured interviews, focus group discussions, and a writing prompt. The primary themes and sub-themes from that data are discussed in this section (See Table 2).

Table 2

Theme Organization

Theme	Subtheme	Research Question
Family	Family Influence	CRQ
	Family Support	SQ1, SQ2
Availability of Resources	Limited Educational Resources	SQ1, CRQ
	Financial Barriers	SQ2, CRQ
Self-Efficacy	Comparison	SQ3
	Self-talk	SQ2
	Work Harder	SQ1
Influence of Program	Faculty Interactions	SQ3
Characteristics	Program Structure	SQ1

Note. CRQ= Central Research Question; SQ1 = Sub-Question 1; SQ2 = Sub-Question 2; SQ3= Sub-Question 3

Family

The first theme that was discovered within the data was the level of influence that first-generation doctoral students attributed to their family, both current immediate family (spouse and children) and their family of origin (parents, siblings, grandparents). Eight out of the ten participants mentioned their family or family backgrounds as influencing their journey to a doctoral degree. The attitudes and level of family support varied for individual participants but they each shared their experience in pursuing their educations with a lens of their experiences with their families. Jessica mentioned that being "the first in my immediate family to get a degree to move forward was paving the way for my other sibling. I really kind of changed the family trajectory. I can disrupt this pattern; I can do something different." While Amanda mentioned that for her undergraduate degree, her grandparents expected her to pursue a degree and there was "no room for failure." Amanda's family mindset was "give it your best and that is an A" Regardless of the level of support received in their educational journeys, the data reflected a connection of responsibility to the family unit while pursuing their educational goals.

Family Influence

The first sub-theme that was revealed regarding family was the influence that family had on participants' experiences. When first-generation students are exploring options to further their education they often do not have any role models or social capital to draw from regarding the process. The lack of having a role model or someone they knew to influence them leads to doubt or lack of confidence in themselves. Leah mentioned that even though she had completed her undergraduate and master's degree, she "had some doubt at times. Can I do this? I don't have a family member to look to." She was not alone in her thinking, as more than half of the participants mentioned not having a reference point within their families and that feeling intensified as they continued to doctoral work. Jay mentioned that he often "felt that the process of his degree was much more confusing and harder than the classes themselves." Not having "anybody to explain it to me so I felt like I'm not good enough, I'm not smart enough, I don't really understand this."

Many times, parental influence was shifted to the influence of their spouses and children. Sally mentioned that when she was considering a doctoral degree her family held a family discussion. She stated that:

> The planning aspect of things for the doctoral degree was a bit more difficult. We all kind of looked at it as this is going to be a bit painful. We are all going to buckle down. Mom is going to buckle down and work as hard as I can as fast as I can to get this process out of the way. I am going to need everyone's help around me.

Six out of the 10 participants interviewed mentioned their spouses and children as influencing their decisions to begin, take a break, or complete their doctoral studies.

Family Support

The reaction of family members and the support study participants received emerged as a sub-theme. The support level from family influenced program choice and doctoral experiences. Amanda mentioned that she had three major barriers to be addressed before she considered pursuing a degree, one of which was family impact. Amanda verbalized her concern like this "schooling is like ministry, right? Ministry is not just a calling by one person. Schooling is almost the same way. Especially the higher level of education, it is going to take time away from your family." The time needed away from family was mentioned by eight out of the ten participants. Many verbalized how they felt overwhelmed and mentally tired by the pull to keep so many roles fulfilled while pursuing their doctoral degree. A feeling that was repeated by six of the participants was that no one in their family or friend group understood the amount of mental load that pursuing a doctoral degree required. Kate mentioned that:

Family and friends just don't understand. They don't realize the amount of time it took me to keep up. I was not trying to avoid them or miss events. There was just so much I had to do while I was in school. It was exhausting.

Clara sympathized with Kate's comment within a focus group and mentioned that sometimes her family thought she was just staring at a computer screen while she processed and balanced her roles. However, the mental load to process complex text while balancing her other roles brought a level of exhaustion that was hard to explain to those wanting to support her.

In addition, spousal support was one area for married participants stated was key to their success as doctoral students. In our discussions about impostor feelings, each married participant cited turning to their spouse and expressing doubt regarding continuing their program. As they

discussed their stories, participants each described a point in the program that they felt

inadequately prepared for an assignment or course. When that occurred, they would express their

fear of failure or impostorism to their spouse. In most cases, the spouse would validate that they

did belong, and that they were doing the work needed to succeed. This pattern was common

among the group, even when the challenges differed.

Family of origin support was not as positive for at least three participants. Jessica

expressed that:

Even though my parents said, go to school, we want you to go get a college degree and

stuff. And, when I started going to school, I was treated like an outcast by my family was

just like, "Oh, now you think you're better than us. Oh, now you think you're smarter

than us".

Leah mentioned that she often downplayed her vocabulary around her extended family.

That while they supported her pursuit of education, they did not want her to be "uppity". Lydia

mentioned that her brother often found ways to bring up schoolwork as a hindrance to the care of

their mother. Further, Jack mentioned that education was just one thing that he did that was out

of the norm for his family pattern so while there was little negative reaction from extended

family, there was also minimal positive reaction. He said their reaction was " It was just Jack

doing the next thing."

Availability of Resources

A common theme participants mentioned was limited resources throughout their

educational journey. Seven out of ten participants cited limited resources as a barrier to their

educational background. They were limited by their rural location, finances, and availability of

resources to support their pursuit of higher education. Four students expressed that their K-12 school district was so poor that their parents had them in private school which was a financial sacrifice for their families. Five participants mentioned that they went to small, rural public schools that were not staffed with support resources or college preparatory curriculum. Looking beyond their external circumstances was a theme that was evident in the letter-writing exercise for the study. Four out of the seven letters received mentioned looking back at where they came from when advising as they began their doctoral work. While the writing prompt was intended to be reflective it was common in the findings to find participants looking back further than just their doctoral years when considering their educational path. The two areas that were most common among the group were limited educational resources and limited financial resources. Only one participant did not mention at least one of these barriers when sharing their educational background.

Limited educational resources

Limited educational resources emerged as a sub-theme among participants, particularly related to their K-12 experiences. The limited resources available led them to self-categorize or compare themselves to others within the educational environment. Several of the participants in the study cited that they would not categorize themselves as a high achieving student in high school. Ray mentioned that he struggled throughout school and avoided learning situations when faced with them after high school. Jack verbalized that he was never a good writer. Betty continually referenced her limited vocabulary when speaking about her doctoral experience. Lydia mentioned during her interview that one of her undergraduate professors made snide remarks about her town and its educational level by saying that even their street signs were misspelled. Clara, Sally, and Jessica all cited rural school systems with limited resources and

opportunities. All mentioned that they noticed the difference in their educational foundation compared to other students as they advanced in their educational journey.

In several cases, the external limitations became internal struggles. Clara mentioned that she and another student had exhausted the resources available to them in their school system because they were moved up to the next year's curriculum as enrichment. Eventually, they ran out of advanced resources. She cited vocabulary as being part of her "learning curve" during her focus group participation when asked about the challenges she faced pursuing her doctoral degree. Betty mentioned in her interview that she was not exposed to the vocabulary that her classmates and peers used. She said that she started conversations with her doctoral faculty many times with justification about her limited writing skills and vocabulary.

A positive outcome of coming from a background of limited resources was the ability to adapt and seek resources. Jessica mentioned that she saw her mom advocate for free lunch and uniforms for her family each year, which helped her recognize the need to search out resources to remain in school. Jay mentioned that he knew math would be a struggle for him, so when he did not understand his professors, he sought out videos online and found curriculum in formats he could understand to supplement what was being taught in the classroom.

Financial barriers

Financial barriers were discussed by the majority of the participants both from their backgrounds but also as a barrier in their current life stage. All the participants in the study had full-time jobs while pursuing their doctorate degrees and talked about the strain and responsibility they felt to maintain their employment and income sources while pursuing their degrees. The financial need to produce income was evident in all their stories.

Lydia described how her choices at the undergraduate level were limited because she could not afford to go away to college, she had to commute, take care of her commuting expenses, and get a job. She indicated her choice of doctoral degree was impacted by money because she had to continue to work full-time. She expressed that she " doesn't have that pocket of money. Money is always a tight thing because you have to dig into your pocket to pay for it one way or another." Further, Kate mentioned that she always was grateful that her family supported her in following her dreams but there was never any available financial support. The degrees she earned were "on her" to finance. In the focus groups, she followed up on this item as she expressed the added stress of having to balance school and making a living throughout her journey and how it made things difficult to manage.

Jessica also talked about finances as she revealed in her interview that she grew up in poverty and the school she attended became her residence. She described that when she left home for school, she was not able to return home during breaks. The University became her only address and she had to find ways to either stay with friends or somewhere local during breaks and summers. She mentioned the importance of keeping her car maintained as she needed it to work. Sally mentioned similar barriers as she said being first generation was more than just about limited educational mentors, it was about limited financial opportunities. She mentioned how her parents "could not afford all of it, I was going to be paying for it myself. The financial aspect of it all was very big." Sally went on to reveal that she took extremely high courseloads for her doctoral program and tried to accelerate her time in school so she could be done quickly because of the financial strain on her family when she returned to school.

Amanda indicated in both her interview and in the focus group discussions that finances impacted her decisions and choices to go back for her doctoral degree. She would not have been

able to pursue her doctorate if she had not received a scholarship for the program. She mentioned finances as one of three main points that needed to be addressed before she pursued her doctorate. She said that scholarships were instrumental for her throughout her educational experience and felt institutional support in her pursuit of her degree because of the scholarships she was offered.

Self-Efficacy

As the participants began to share their experiences with imposter syndrome, it became evident that self-efficacy, an individual's belief in their capacity to produce specific performance attainments, was at work as they dealt with impostorism thoughts (Bandura, 1995). Impostor behaviors are generated from within and are internal, though external circumstances may trigger those feelings. A common reaction among the participants was to question themselves and their abilities within the academic environment. All of the participants had moments when they questioned their ability to complete or even participate in doctoral-level coursework. A question that was expressed by five of the ten students was "Who do you think you are?" This was often directed at themselves in times when they doubted their place in their program. Participants also questioned what others saw in them as students. Several participants verbalized that they did not understand how a faculty member had confidence that they were able to complete a challenging assignment or paper. A theme emerged within the data that self-doubt in their abilities impacted the participants' perceptions of themselves and how they thought they were perceived by others. Common themes and triggers that were evident in the stories of the participants are discussed in this section.

Comparison

Comparison as a sub-theme within their doctoral program was one of the first indications of impostor behaviors. Every participant indicated having a moment when they felt they did not measure up against their peers. For Jay, he remembered sitting in the airport after his first residency meeting. He indicated that he was sitting "outside of himself" at the airport wondering what he just got into. He indicated feeling that " if there is anybody that is the lowest in the class, it's got to be me." He did not know where the thoughts came from, but he felt that he did not belong. He indicated that throughout the doctoral program, he felt that he was comparing himself to others that he thought were more intellectual. He indicated that some of " the thoughts went back to the fact that I'm pretty hard on myself." The comparison was also evident as students began to see the work of others within their programs. Discussion threads were mentioned by several students within the focus groups as a first glimpse of how they measured their writing abilities against others in their classes. Rick indicated he felt his writing was "surface work" compared to the depth and vocabulary of others on his discussion boards.

Clara remembers coming home multiple times to tell her husband " I am like the stupidest person. He was like I am sure you are not, and that other people feel that way. But I said no, I am." She classified her peers as interning writing algorithms at Google and "I'm talking about children's literature." Clara mentioned that her first-generation status contributed to her feelings because she felt that:

> Some people who grew up in a home where you know your parents were college graduates and your grandparents were college graduates and maybe they had their PhDs or advanced degrees. My impression is that they feel more of a sense of entitlement and that is where they are meant to be.

The dissertation process brought out more recollection of comparison among the participants. Ray mentioned in his interview that when others in his cohort began to get IRB approval and begin their work, he was still much further behind them. Jack, Jessica, and Amanda all indicated in their focus group that the IRB process and concept left them all feeling stuck and insecure as they approached doing their own research. Leah mentioned that she questioned if the work she submitted to her committee was really good enough for a dissertation or if her chair and committee were just being nice to her. She asked herself:

> Besides my committee or my mentor, if it was someone different, would they have passed it? Or would they have made me redo it? I honestly, don't know. But at this point, I have to just accept it. You know the people that were looking at it- they were happy with it. So, I'm going to have to just accept it. And I really am a doctor.

Self-talk

Overwhelming thoughts and internal conversations regarding their abilities emerged as a theme for all participants. These self-talk conversations were a window into their impostor thoughts. One question that was repeated in internal dialogue among four participants was "who do you think you are?" This question was often asked to themselves after a trigger that caused them to doubt themselves. Lydia expressed the experience well when she stated:

> It's always that doubt that is lingering. Self-doubt that no matter how much you've accomplished so far, there is that little voice in the head that says. "What do you think you're doing? Who do you think you are? It's more me against myself, that inner voice that says, "What are you doing here? You're not good enough." And I still struggle with

that a little bit…And you know, some days that voice is a heck of a lot stronger than other days.

Inner conversations like the one described by Lydia were woven throughout all the participants' stories. Self-talk was often triggered by comparison with others in their programs. Ray mentioned the conversation he had with himself when others in his cohort were already in the IRB stage, and he was just beginning with his topic. Jack mentioned a self-talk episode comparing his knowledge of his intellect against his perceived measurement of others in his cohort. Sally mentioned a similar self-talk conversation when she struggled with her statistics during her dissertation process. All participants said these conversations led to thoughts of quitting the program at least once during their journey.

Work Harder

A common conclusion that came because of the self-talk conversations around doubt was the need to work harder than others. The participants brought this concept with them from their past experiences with higher education. It seemed like a given result of their status of being inexperienced in the higher education world. Clara stated in the focus group that she looked back and said " Hey, these other things I didn't know about but I figured them out and so I will figure this out too." Amanda mentioned that she was always taught that she could do anything that she wanted to do if she worked for it. She stated she bought it "hook, line and sinker… and I had to work hard." Kate also mentioned that she was told she could work for any dream she had and that has contributed to the goals she has set for herself.

Jack indicated his approach was to work hard when faced with doubts. His mindset in comparison with others shifted during his journey and he began to see a return on his time

investment in his assignments. In a focus group he revealed that if he was unhappy with his results, he would question if he had put the time in. He now advises his friends who are unsure about pursuing more education by saying "There is no magic for this. It's just good old hard work". About half of the participants mentioned that earning their doctoral degree has at times made them feel awkward because they are not comfortable with the intellectual inference of having a doctorate. Those expressing a bit of shyness about having a doctoral degree often mentioned not being "smart" or "intellectual" but being a hard worker.

Influences of Program Characteristics

The experiences of the participants were influenced by the programs they were pursuing. Participants shared many experiences they believed were integral to their specific program or school. Additionally, due to the timing of the study students were either completing or enrolled in their programs during the global pandemic. While there were differences in approach and structure, participants had some similar experiences that were common across programs and mode of delivery. During focus groups, if the IRB process was mentioned ,immediate empathy and sharing of stories erupted. Also, the structure of having a faculty member supervising their research and discussion boards were common experiences. However, the level of how these experiences brought about impostor phenomenon or belonging feelings differed as the participants shared their experiences.

Faculty Interaction

Every participant mentioned faculty interaction when asked to describe their academic program. It was clear that all students felt that faculty had an influence on their doctoral experience. Seven of the ten participants mentioned that they felt connected to faculty throughout

their journey. Ray, Jack, Amanda, and Kate were in programs that were separated into cohorts. While they all may have completed their dissertation during different times than their cohort, they felt they knew and had relationships with faculty each term. These four participants all had a component that was in person, whether it was fully an in-person program or in-person residencies. They each recalled how the in-person interactions led to approachable, academic relationships with their faculty.

Lydia, Leah, Betty, Jessica, and Sally all had completely online experiences. They mentioned being able to reach out to their faculty via message or email but not feeling any relationship development until they began the dissertation process. However, when asked about faculty relationships they each discussed individual efforts by professors to have virtual check-ins and meetings although they were in the minority of their coursework. Jessica recalled during a focus group that she had a professor reach out directly to her to check in when an assignment was late. She described that at first:

I was like, oh I did something wrong. I kept apologizing but when I explained why it was late my professor was kind and told me to reach out when things were challenging and they would try to help with extensions when they could. They did not have to contact me, they could have just taken the points away and moved on.

However, interactions like the above were not the normal pattern for online students until they got to the dissertation portion of their education. The relationship with the dissertation chair was the one cited first for online doctoral students when asked about faculty interactions. In focus groups with a mix of online and in-person modalities the online students mentioned that faculty interaction within the coursework portion of their program was an extra effort. Leah

mentioned that one of her professors had a weekly virtual meeting and sent the recording out to the whole class. Leah said "She didn't have to make that effort, and most of the others did not."

Clara has been in two programs, one in-person residential and one completely online. She had a unique perspective since she was able to relate in discussion groups with those who were in-person and fully online programs. She was assigned a faculty advisor early on in her in-person program which she thought was helpful to develop research ideas earlier in her program than in her online experience.

All participants mentioned the influence that faculty had on their feelings of belonging. Positive interactions included an example from Leah, she "always felt the faculty were there to help her and answer her questions". Sally mentioned that she was in a newly formed program and her interaction with faculty during research was instrumental in fighting feelings of doubt. She mentioned that a faculty member once told her that:

> The percentage of people that have their doctorates is so small, that she should feel different. My faculty member reminded me that the program had requirements for entry and for continuing in the program and I met those, so of course, I should be there.

Encouraging feedback from faculty helped many participants fight back against the negative self-talk and motivated them to persist.

Interactions that participants felt were negative sometimes confirmed their feelings of self-doubt. Ray mentioned that he often felt that he was not understood by some faculty members which contributed to him struggling through a "rough patch" within the program. He stated that many faculty didn't "meet him where he was" or listen to him completely. He said when he had these types of interactions, he felt more like he did not fit the mold of the program. Betty also

mentioned a point in the program when she was not hearing back from her faculty mentor and how that timeframe made her feel that she had made the wrong decision about pursuing her degree. Overall, participants linked faculty interaction as an experience that defined what their experience was within their academic program. Rarely were other academic relationships within the university discussed when it came to belonging feelings within the program.

Program Structure

Differences in program structure led to differences with challenges expressed by participants. Every participant from online programs mentioned feeling alone at least once during their academic journey. Four out of the six participants with online experiences discussed not having much interaction beyond discussion boards with their peers. Three students mentioned not realizing who to contact when they needed help in classes. The loneliness from those in the fully online programs was amplified by not having many peers in "real" life that had experience with doctoral education. Betty mentioned seeking relationship through social media with groups of doctoral students from her online University to seek help from peers.

> When I had trouble with my chair and I did not know what I should do, I turned to my Facebook group. I had people privately messaging me saying they had the same issues. It gave me the confidence to email them{to resolve the situation.}.

The cohort method was a structure that was highly applauded by several members of the study. Amanda mentioned the relationships and peer resources of her cohort helped her even when she was the only female in the cohort and could have felt differently. Jack mentioned that his cohort was divided into teams and those teams shifted each term so that they worked with most people in the cohort at least once. Kate mentioned that her cohort was affected by the

pandemic and were not able to participate in the international travel event, but she helped lead a virtual meeting/study group to establish relationships. Among the five participants that were in cohort programs, they each spoke of professors by name that influenced them and were consistent throughout their journey. These faculty members were not just their research mentors or on their dissertation committee. These faculty relationships were earlier in their program experiences than those in online programs who mostly cited faculty relationships related to their dissertation process.

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Research Question Responses

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The purpose of this transcendental phenomenological study was to understand the experiences of first-generation doctoral students within educational leadership or leadership programs as it relates to their feelings of belonging, impostorism, and otherness. The study used one central research question and three sub questions to explore the experiences of the participants. This section discusses the responses to the questions based on the research findings.

Central Research Question

What are the experiences of first-generation doctoral students related to impostor phenomenon and sense of belonging? Participants reflected on their educational experiences and described feelings of impostorism and questions regarding their abilities and preparation for the doctoral journey. They often expressed feelings that they did not feel like they belonged within their program during certain timeframes. All participants identified barriers that they were challenged by in pursuit of their degree. At least at one point in each of their doctoral experiences, all participants indicated they had feelings that they should quit or that they should not be pursuing a doctorate. Jessica mentioned that she thought "that nobody really understands

what I've gone through to get here." That sentiment which demonstrated feelings of not belonging was expressed in various ways by the other participants of the study.

Sub-Question One

How does social categorization of first-generation students influence sense of belonging feelings for first-generation doctoral students? The results of the study show that being categorized as a first-generation student led the participants to feel they were under-prepared to pursue a doctoral degree. Eight out of the ten participants mentioned not knowing what they were doing and not having a point of reference to know if they were "doing it correctly." Lydia verbalized this feeling by discussing not having someone in your family or direct circle with doctoral experience was challenging and led to having to find other sources for information. Jack mentioned that he got hung up more on the processes of the program than on the content of the courses. He mentioned that once he felt comfortable with the processes, he felt that he was becoming part of the program. Ray and Clara cited that as a first-generation student many within their friend and family group did not understand their pursuit of an advanced degree. This feeling of mixed belonging within the academic environment but also within their non-academic environment was expressed by five out of the ten participants. Clara described her belongingness feelings within her small hometown and church community. She mentioned that her place of work is really the only place that she interacts with others who have or are pursuing a doctoral degree. Jessica expressed that her pursuit of a doctoral degree has created a relational barrier with her parents. When she talks to her mom about her pursuit, she is often asked "You think you are better than us?."

Sub-Question Two

How does social categorization of first-generation students influence impostorism for first-generation doctoral students? All the participants of this study indicated that they had experiences with impostor feelings. Eight of the ten participants indicated that they felt their lack of resources and experiences since they were first generation students influenced those initial impostor feelings. However, not all their experiences with impostorism were due to their first-generation status. Impostor feelings "came in waves" or were a pattern of thought that were hard to break. Participants expressed experiences with self-doubt, limited resources, and limited experiences as areas when impostorism was triggered. Ray mentioned that impostorism is like " a box around your head and you have to determine what to do with it, work through it." He mentioned that a professor advised him to look at his successes and see where he is now. He advised others to admit they are struggling with impostorism, name it and then be able to deal with it. Lydia mentioned that impostorism is mental and emotional. She said "we are our own worst enemy. It's a cycle." Sally mentioned that as she progressed in her program and her profession "the more conversations that I have with people at the doctoral level, the more she felt that (impostorism) was all-consuming."

Sub-Question Three

How do feelings of belonging impact impostor phenomenon behaviors in first-generation doctoral students? The ten participants interchanged their sense of belonging and impostorism thoughts when they were interviewed, and talked with each other in focus groups and even in their reflective writing. The data reflected that impostor doubts and self-talk were indications of a lack of belonging among the participants. Jessica stated well how the spillover from impostorism, and sense of belonging played out in her story by saying "that feeling like you don't belong like feeling that I'm a fraud. I feel like a fake. Someone's going to find out. How can I get

here like that? That constant nagging feeling that I'm just not good enough." Clara mentioned that her perceptions of many in her doctoral program were that they came from families that had more experience. Clara verbalized that:

> I think some people who grew up in a home where you know your parents were college graduates and your grandparents were college graduates, and they had PhDs or other, you know, advanced degrees. I think that they feel more. My impression is that they feel more of a sense of entitlement. And I think they feel as if that's where they're meant to be, because that's the norm for their family rather than the exception.

Clara's comparison of continuing generation students showed that she felt that she was an exception and an outsider while the others belonged. Comparison was one area in all participant experiences that led to participants measuring their feelings of impostorism and their feelings of belonging.

Another area of similarity among all participants was the influence that feedback from assignments and from interactions with peers had on their belonging and impostorism. Poor feedback on an assignment was one of the first triggers for most of the participants. How participants learned to deal with, and approach academic feedback indicated how they eventually felt about their success and belonging in the program. Accepting feedback as a positive experience seemed to be a turning point in many of the participants' journeys as it related to belonging. This study showed that while feedback could be a trigger for impostorism, as expressed by Jay when he got his first paper back and said "Wow, I must be terrible and this is the proof why I should not be here", feedback was also the way to success because participants mentioned that when they looked back through those challenging times, it led them to see that

feedback was a tool for improvement. Most participants mentioned in both the focus groups and the reflective writing that they felt that the feedback they received, while challenging, was an instrumental piece in their success in a doctoral degree.

Summary

This chapter reflected the rich descriptions of the experiences that first-generation doctoral students had as they related to impostorism and a sense of belonging. Themes identified as common influences among the participants included family, resource availability, self-efficacy, and program characteristics. Relationships with others and communication about their internal thoughts helped participants work through their feelings of impostorism and belonging. Additionally, participants mentioned having to work harder or put in more effort to be successful than others. The development of positive relationships with faculty members and learning how to use feedback to improve their skills were mentioned by participants as positive experiences to counteract impostor feelings. The results of the study show that first-generation students are tentative about their inherent skills and experience, but they are confident in their ability to work hard to learn and grow. Clara summed up the first-generation doctoral experience well when she said " just persisting through and not being able to admit defeat and realizing…I may be starting at a deficit, but I feel that I'm capable of rising to this.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this study was to explore the experiences of first-generation doctoral students as they relate to their feelings of belonging, impostorism, and otherness. The results of the study give insight into how impostor and belonging feelings influence the thoughts, feelings and behaviors of first-generation doctoral students. This chapter presents a summary of the interpretations and ideas found in the research data. Five subsections are discussed including (a) interpretation of findings, (b) implications for policy and practice, (c) theoretical and methodological implications, (d) limitations and delimitations, and (e) recommendations for future research.

Discussion

First-generation doctoral students experience feelings of impostorism and otherness as they navigate through their doctoral programs (Chakraverty, 2020; R. G. Gardner et al., 2019; S. K. Gardner, 2013; Howard, 2017). Many of the challenges facing first-generation students follow students through to their doctoral experience and can contribute to experiences of impostorism or a sense of belonging (Handforth, 2022; Mack, 2019; Mitic, 2022). The results of this study show there are consistencies across the first-generation doctoral experience concerning impostor thoughts and belonging feelings. The findings suggested that family, availability of resources, self-efficacy, and program characteristics shaped the first-generation doctoral student experience. The participants clearly showed that while they faced challenges in these areas, they were able to persist. As Jessica indicated "This is going to be hard, but things that are harder are worth your time. If this was easy, everyone would have a doctorate".

Interpretation of Findings

First-generation doctoral students are experienced with overcoming obstacles during their academic journey. Participants discussed being faced with impostor syndrome and feeling like they did not belong even after being successful in their previous degree levels. The study found that while challenges continue, participants shared strategies that shed light on how they were able to persevere.

Who Do You Think You Are?

The experiences expressed by the participants mirror what was discussed in the literature review. The literature and the experiences of the participants indicate that the backgrounds of first-generation students have common characteristics such as lower socio-economic environments and fewer educational opportunity than continuing-generation students (Luzeckyj et al., 2017; Phillips et al., 2020; L. R. Sims & Ferrare, 2021). Lack of understanding of role models within their family of origin was discussed by the majority of participants. Participants verbalized feeling they lacked many of the foundational capital of others within their program. Pointing back to their family background or limited K-12 experience was common when participants began to discuss the self-talk or impostor thoughts they continued to have during their doctoral experience. A common question emerged as participants discussed the internal dialogue when questioning their pursuit of a doctoral degree. While the exact words varied slightly, the majority of participants voiced asking themselves "Who do you think you are?" while trying to achieve their terminal degree.

Family background was one area that emerged as a reason to question their pursuit of a degree. Family of origin support varied among participants. Some participants had moral support and encouragement from their family of origin. Others felt that the pursuit of a doctoral degree was not understood by their family of origin and it brought tension or feelings of otherness for

participants within their family environments. This corresponds to the research as first-generation students have reported having to use different language or lower their vocabulary when interacting with their families (Covarrubias et al., 2019; Luzeckyj et al., 2017). Participants mirrored the literature as they shared stories of being teased when they used expanded vocabulary or even confronted for acting as though they were better than others in the family. These experiences led to participants downplaying their academic experiences to those in their families. The conflict that was felt among the individuals in the study led them to question where they belonged. They continued to not feel they had deficits while pursuing their degree but yet they have moved beyond where they were and it was a strain on those foundational relationships. Even those with supportive families of origin still mentioned that most of their families really did not understand the process, workload, or reasoning associated with doctoral education.

The participants of this study expressed that their background made them question their ability and sense of belonging within their programs. Participants cited their perceived weakness with their family background which included having young parents due to teen pregnancy, or the generational lack of education among parents and grandparents. Some cited educational backgrounds that included parents and grandparents who did not complete high school. The descriptions used by the participants confirmed that they felt that they were starting at a deficit and displayed behaviors of having a deficit mindset regarding education. It also made them feel different than members of their family or origin.

These descriptions of deficits can be interpreted to say that participants felt very much the exception within her family for pursuing a doctoral degree while also struggling with feelings that they did not belong within their academic environment. Clara remarked that

People who grew up in a home where…parents or grandparents were college graduates and maybe even had PhDs…my impression is that they feel more of a sense of entitlement. And I think they feel as if that is where they are meant to be because that is the norm for their family rather than the exception.

Clara's statement reveals that the comparison of family background impacted her perceptions when she compared herself to continuing generation peers. These findings mirror those of other first-generation students who have expressed feeling like an outsiders because they have a different background from other students (Chakraverty, 2020; Cohen & McConnell, 2019b).

First-generation students have been found to continue ties to the responsibilities of their families (Covarrubias et al., 2019; Patfield et al., 2021). However, family responsibilities for an adult student pursuing a doctoral degree shift from the family of origin to their current family responsibilities. Participants were quick to mention the role of the spouse in their coping with imposter thoughts and behaviors. One of the strategies utilized by most participants in confronting feelings of fraud or otherness was conversations with their spouses. The dialogue and communication within this trusted relationship were cited as a way to break the cycle of imposter thoughts.

The family was also cited as motivation to continue with their program even through the impostor thoughts. Jessica spoke about how her younger sibling and even some nieces and nephews attended college after her experience showed them it was a possibility. Leah listed leaving a legacy for children and grandchildren as a reason to encourage other first-generation doctoral students to pursue the degree. She stated, "this could be the thing that just changes your

whole family."   Lydia described being a first-generation doctoral student as being a trailblazer. While these were all positive motivating factors, the participants still cycled through the impostor thoughts. Lydia finished her thoughts about being a trailblazer by saying:

It's always that doubt that is lingering. Self-doubt no matter how much you've accomplished this far. There is that little voice in the head that says- What do you think you are doing? Who do you think you are? And you know, some days that voice is a heck of a lot stronger than other days.

Relationships Matter

Relationships with peers and faculty were another common theme that impacted participants and their experience with impostorism while pursuing their doctoral degrees. Program modality seemed to impact the number of interactions , but all participants cited interaction with faculty as a key to their sense of belonging. Faculty interactions were frequent and more accessible for the participants with experience with in-person or hybrid programs. The participants from programs that had an in-person component tended to be the first to mention specific faculty or assignments that helped them feel as though they belonged during focus group interactions. The students in fully online programs mostly centered their faculty relationships around the dissertation committee process. However, online students did mention that once they realized that faculty were there to help, they received the support and feedback they needed by asking and seeking the relationship. Leah noted " I learned way later than I wish I had that your professors, the vast majority, are there to help you. Ask them and ask beyond your assignment." Leah mentioned that learning how to ask and continue to seek feedback from faculty helped her get more eyes on her work. These interactions led her to feel more confident in her work and abilities. Leah continued by saying "Your professors want to be helpful, so let them. Ask them

and get to know them on a personal level if you can."

Approach to feedback during the doctoral level is one area of faculty interaction in that all participants shared an opinion. In particular, the majority of participants spoke about the evolution of the effect that feedback had on their impostor and belonging feelings. As participants walked through their doctoral journey many cited feedback as a trigger for impostor thoughts early on in their program. Triggers included a comparison of their work to their perceptions of their peers' work, faculty feedback via grading, and faculty edits to their writing. These forms of feedback led to self-doubt and impostor behaviors. However, as participants spoke about the dissertation process which occurred later in their doctoral journey they spoke about trusting their committee and chair and valuing their input for their study. Perhaps it was the relationship building that increased the confidence of the student in trusting that the feedback was helpful and not a reason for negative self-evaluation (Cohen & McConnell, 2019b). Participants shared that feedback was helpful to them as they conducted their research in partnership with their committee. The change in approach to feedback was twofold and was eloquently expressed by Clara as advice to those considering a doctoral degree. She said ' you must be open, reflective, and willing to receive feedback." The openness to feedback allows students to receive feedback in a way to improve their work and not as a reflection on the individual. Early on in their journey when feedback was received multiple participants cited phrases of self-talk that included describing themselves as "stupid", "dumb" or "out of their league". However, when the student/faculty relationship was more individualized to the student like as a committee member or chair, the focus of the feedback was no longer tied to them as an individual but to the work that they were doing with the faculty member. It was a shift that was seen by the participants as they took time to reflect on their overall journey.

Implications for Practice

The findings of the study reveal implications for leaders and faculty of doctoral programs as they relate to first-generation students, impostor syndrome, and sense of belonging. The implications do not lead to policy suggestions, but they do lead to practice implications discussed in the following section.

Implications for Doctoral Programs Administrators

All participants of this study indicated that at one point in their doctoral degree, they felt like they did not belong and should quit their program. The majority of participants indicated having these feelings multiple times during their pursuit of their doctoral degree. However, as the shared experiences of participants emerged it was evident that interaction with faculty both in and out of the classroom impacted the students' confidence and view of themselves and their abilities within the program. Students in online programs, in particular, did not understand the relationship between faculty and students in their doctoral programs during the coursework portion of their doctoral degree. Leah, Betty, and Jessica in particular mentioned that they learned "too late" that they could ask questions or seek help from faculty members teaching their classes. However, once they had a faculty member show availability or interest in them or their work outside the module requirements, they realized that they could reach out to faculty with questions or feedback. Building interactions that allow for student/faculty interactions on an individualized basis provides opportunities for students to build trust in their relationship with the faculty member which increases the likelihood of resource seeking behaviors (W. L. Sims & Cassidy, 2019).

When discussing faculty relationships in focus groups, the online students struggled to

cite meaningful interactions beyond discussion board postings until they were assigned faculty for the dissertation process. Participants in hybrid or in-person programs cited multiple faculty members by name and with specific courses. Online students struggled to name faculty that were not part of their dissertation process. A practice consideration for doctoral programs that are mostly online is to weave in faculty interactions or synchronous opportunities to build faculty/student relationships early in the program. The establishment of faculty relationships and trust impacted the participants' view of feedback as they continued through their doctoral journey. Establishing relationships with faculty earlier in the program and modeling positive and appropriate communication behaviors between faculty and students regardless of modality may help students shed those self-doubt and imposter feelings earlier in their doctoral pursuit.

Providing students with information related to non-academic relationships within their programs would be another area of practice that programs could glean from this study. First-generation students mentioned the loss of belonging within their old family structure as they persisted and grew in their academic environment. While the literature spoke to this occurring, the participants of this study cited very few experiences within their programs that supported them outside of the classroom as they pursued their doctoral degrees (Covarrubias et al., 2019; L. R. Sims & Ferrare, 2021). Two participants mentioned that having the opportunity to speak with doctoral students who were ahead of them in the program was beneficial for them in knowing what to expect as a doctoral student. A few other members found groups on social media that filled a relationship void for them to discuss the challenges that occurred both inside and outside of the classroom. These experiences reveal an opportunity for doctoral programs to build into their onboarding practices discussion around the non-academic challenges of balancing life and learning. Perhaps facilitated by peer mentors or curated by students from a diverse range of

experiences, these resources could help normalize strategies for the transition that will occur for doctoral student as they progress through the program.

Implications for Faculty

First-generation students value knowing the "correct way" to work through a process and are often less likely to seek resources when they feel that have a deficit of knowledge on how to proceed (Gibbons et al., 2019; Markle & Stelzriede, 2020; L. R. Sims & Ferrare, 2021). By integrating relationship-building experiences into the early stages of doctoral programs, institutions can help alleviate fear and otherness feelings by building confidence and expectations for students. The participants of the study all got to that level of confidence as they persisted through their programs. The realization of resources could have occurred much earlier for most students reducing their struggle. Only one participant in the study felt she had a solid framework for relationships early on within her program. She specifically cited the prioritization of relationships within her in-person program as the key factor in her confidence to persist and complete. Several others were in a cohort program that had in-person components, these students mentioned comparison with peers in the program occurred earlier than those sharing within their focus groups but they also mentioned building relationships with faculty that they saw in multiple classes. While prioritizing relationships regardless of modality would serve the first-generation doctoral student experience, all students could benefit from increased faculty interactions and academic citizenship modeling early in their programs. A practice consideration for faculty would be to build in required interactions early in their coursework. These interactions could be tied to a resource seeking activity which could include a required interaction with peers, a resource within the program or the faculty member. While discussion boards are widely used within online programs, varied activities would expose first-generation

students to more tools or resources that they would be more likely to seek once they see an appropriate use case.

Implications for First-Generation Doctoral Students

Impostorism is widely considered as an internal reaction to thoughts of fraudulence and fear of exposure (Clance & OToole, 1987), The internal thoughts and fears of first-generation doctoral students can be influenced by the external environment of their academic program or classroom, but the student can also impact the effect of the phenomenon by incorporating practices that break the impostorism cycle. According to participants, the realization that others experience doubt and fear during the doctoral journey helped to alleviate their self-talk cycle. When they realized that those that they perceived as more successful or more acclimated to the academic environment still struggled the cycle of self-doubt was broken. A practice that would accomplish this realization would be to seek a mentorship relationship. The relationship could be with a peer who is a bit further along in the program or with a faculty member within the program. The goal would be to be in a relationship with someone who has experienced the doctoral journey. First-generation students have cited not having mentors within their families. Seeking mentors within their programs would be a solution for this gap in support.

Additionally, the findings of this study showed that students who established relationships with faculty and approached feedback given by faculty with a growth mindset experienced more belonging feelings. Participants cited the evolution of their approach to feedback given on assignments and their work within the program. When the mindset on feedback was approached with trust that the feedback was intended for improvement instead of internalized as a judgment of their ability, participants began to feel they belonged. While faculty

delivery of feedback can influence this transition, attitude, and approach to feedback can also be altered by the student. A practice that can be utilized by first-generation students would be to use resources like writing centers or library tutorials to seek additional feedback on their work. If these resources are used early, they can begin to help students gain confidence in the feedback cycle without having the pressure of grades attached. Building confidence with these lower-stakes resources will allow students to feel confident in approaching faculty with questions or assistance. First-generation doctoral students should be aware of the responsibility of seeking relationships and help on the doctoral journey is often one that is self-initiated. Seeking relationships with peers and faculty within the program was a successful mechanism used by participants of the study to combat impostor feelings.

Empirical and Theoretical Implications

This section outlines the empirical and theoretical implications of this study. The findings of the study are compared and contrasted to the current literature and social identity theory as it relates to first-generation doctoral students and impostorism.

Empirical Implications

The research related to first-generation doctoral students reported a variety of challenges for students while pursuing their degree including academic, economic, and cultural challenges (Bahack & Addi-Raccah, 2022b; S. K. Gardner, 2013; Goldman et al., 2022). The findings of this study confirm that first-generation doctoral students face barriers as outlined in the literature. They find themselves struggling with finances, family responsibilities, and cultural challenges that they do not belong within their program or that they are an academic fraud. This study

confirmed that first-generation students experience a struggle with believing they have the school-related capital to succeed (Farkas, 2018; Handforth, 2022). Additionally, this study confirmed that the process of comparing their background with others within their program led first-generation students to question whether they belonged in the program or if they were in the program for false reasons (Cohen & McConnell, 2019b; Markle & Stelzriede, 2020). The imposter thoughts and otherness feelings led participants of the study to isolate themselves from others and limited their willingness to seek help which was also an outcome of previous research (Fassl et al., 2020; R. G. Gardner et al., 2019).

This study further brought to light the power of faculty relationships as a confidence-building mechanism to break impostor thoughts and increase belonging feelings. Previous literature highlighted that first-generation students are more likely than continuing-generation students to seek direct, skill-based guidance (Bahack & Addi-Raccah, 2022b; Markle & Stelzriede, 2020). This study also revealed the expectation that first-generation students put on the faculty members to communicate and facilitate not just course-related information but information related to the processes of the doctoral experience. When communication was not readily available to the students in the study, the cycle of negative self-talk, impostor feelings, and otherness became louder in their experience. A common example among the participants related to the IRB process. In one particular focus group, participants spoke about how they had overcome quite a bit of their imposter feelings as they progressed through coursework but the IRB process with its new terminology and mysterious timelines seemed to have them regressing in their thought pattern regarding becoming a scholar. In particular, one participant said that it seemed that not knowing the processes of things set him back more because he did not expect to know what was going on in the classroom or how to conduct academic research but he expressed

he should know how to do the processes required of him. Others agreed that IRB was almost paralyzing to them as they waited for feedback regarding their study.

The fear of feedback and internalization of feedback was prevalent in the experiences of participants especially when there were limitations to relationships with those giving the feedback. However, when relationships and trust were established between faculty and students or among peers, the negative self-talk and fear of feedback were quieter for the students. While the students may not have felt they could trust their knowledge in the situation, they felt they could trust the faculty member with whom they had an established relationship. Several of the online students who cited limited relationships early with faculty sought out relationships with peers who they thought were more knowledgeable or "belonged" in the program. One example that was mirrored among several participants, was relationships with peers who were "better" writers. The first-generation students gravitated to those whom they perceived as doing well in the course to ask for feedback or partnership when completing group work. At least half of the participants evaluated the work of others on discussion boards or during group work and established relationships with those they perceived were more successful. They would seek out feedback from these trusted individuals to help them feel more confident about their work. The feedback was perceived as helpful by the participants.

Theoretical Implications

Tajfel's (2010) social identity theory indicates three constructs that contribute to an individual's social identity: social categorization, social comparison, and social identification. The findings of this study confirm that each of these constructs contributed to how the participants saw themselves and resulted in behaviors and thoughts that aligned with

impostorism and otherness. Social categorization was expressed in this study with the deficit discussions where participants spoke about their family of origin, socio-economic status, and sometimes their rural location while growing up as factors that confirmed that they were out of place within the doctoral environment. This categorization contributed to their inner dialogue when they faced perceived barriers within their programs. Categorization led to the next construct during participant discussions, social comparison permeated from participants' descriptions of their experiences with others in their program. It was clear that during discussion posts, or in work groups, participants began to see others they perceived as being continuing-generation students as having more school capital than they possessed. The comparison was an area that was revealed in this study to be a critical point of impostor feelings. Comparison led to feelings that they were not like others in the program and it would soon become evident to others.

The final construct used by social identity theory relates to social identity development. The study touched the surface of how the social identity of participants became blurred during this time of becoming an academic scholar. As previous literature supports, first-generation students tend to be challenged with belonging feelings to the academic environment but once they overcome those challenges, belonging feelings within their home or community environments are impacted (Covarrubias et al., 2019; Luzeckyj et al., 2017). Participants echoed previous research findings that they felt that as their vocabulary and interests expanded while pursuing their degrees, they felt out of place or downplayed that growth around family or community members. In some instances, participants expressed feelings of otherness in both environments. They felt they were pretending in their academic journey but felt they had outgrown their previous environment. The majority of participants cited key relationships like

that of their spouse or a supportive co-worker as helpful to fight feelings of otherness. This feeling of 'in-between' appeared in earlier research with first-generation doctoral students and seemed to create a more internal dialogue that led to behaviors such as being uncomfortable with the title of Dr. or adjusting vocabulary depending on the environment. These behaviors were an attempt to match their social identity to that of others in the group that they were associating with and not break ties with either environment.

Limitations and Delimitations

The study did have some limitations related to the participant sample and participation levels. Delimitation also occurred as related to participant criteria and program characteristics. This section discusses the limitations and delimitations of the study.

Limitations

One limitation of the study was the varied levels of participation with focus groups and writing prompts. Since the participants were all working professionals and some were also still enrolled students, it was challenging to schedule focus groups with more than 2 or 3 participants. Smaller focus groups may have limited the discussion among diverse participants. An additional limitation was that not all of the participants completed and submitted their writing prompts. While most prompts were received, it was a challenge to get these done in a timely fashion. A suggestion for future research would be to tie the writing prompt to the end of the interview portion. Perhaps even make it a video recording to make it seem less time-consuming to the participant. Another limitation of the study was a lack of criteria related to the modality or program type. Participants in the study all turned out to be full-time working adults pursuing or recently completing their doctoral programs. However, there were no full-time students or fully

seated programs represented.

Another limitation of the study was the lack of ethnic and gender diversity among the participants. The study criteria focused on experience with impostorism, however the respondents to the call were white and largely female. A suggestion for future research would be to explore if race and gender impact the feelings of belonging or impostorism among first-generation doctoral students by conducting this study with subgroups such as males and varying ethnicities.

Delimitations

Delimitation occurred due to the criteria for the participant grouping. This study was limited to a sample size of 10 participants. Each participant self-identified as being a first-generation doctoral student who had experienced the impostor phenomenon. While no site or setting limited participation criteria, the group was limited to be related to doctoral programs around leadership. The programs included in the study were a mix of disciplines, but themes related to discipline were not able to be determined because of the smaller sample size and number representing that discipline

Recommendations for Future Research

Several recommendations for future research should be explored as a result of the findings of this study. First, a recommendation to explore the impostor phenomenon in both continuing-generation doctoral students in the same manner that first-generation doctoral students were explored. Expanding the student of impostor phenomenon among additional categories of doctoral students would open the possibility of tying impostorism to the doctoral process regardless of student background.

This study shed light on how the use and delivery of feedback affect student's perceptions of their abilities and belonging. Further research regarding feedback approaches and the impostor phenomenon may help educators and program directors in the course and program design. The data collected for this study showed that feedback could be internalized by individuals and color their sense of belonging within their program. It also highlighted the need for trust relationships to shift that feedback reaction into a growth pattern. Extending research on this phenomenon would contribute to approaches to increasing belonging feelings for students especially those who are struggling with belonging and impostor feelings.

Another area of research to be explored is the impact of belonging feelings for students in fully online doctoral programs and those in in-person or hybrid programs. This study did not delimit students based on program modality but experiences did seem to differ about their sense of belonging and relationship building within their program. Exploration of program modality for first-generation students would be an advancement to current literature. Program choice criteria for first-generation students exist in the literature about undergraduate experiences. Exploration of program choices for advanced degrees for these students may advance the understanding of first-generation doctoral students.

An additional area of research that could be expanded would be related to ethnicity and gender. Since first-generation students have backgrounds that are also important to their identity and experiences, delimiting the study by other demographics like race would add richness to the results of this study. Exploring the black student experience or Latino student experience through the lens of first-generation status would contribute to the field of literature exploring the doctoral student experience. The impact that additional social identity groups play into the first-generation experience would add to the limited research in this area.

Conclusion

This transcendental phenomenological study provided an opportunity to understand the experiences of first-generation doctoral students and how impostorism and sense of belonging impacted their academic journey. Their descriptions allowed readers to hear about their struggles, inner conversations, fears, and achievements. Their approach to impostor thoughts and deficit thinking provides insights into the inner struggles of impostorism in academic pursuits. Their shared experiences with barriers, relationship struggles, and coping skills provided a rich description of the phenomenon.

What emerged from this study is a view of how important relationships are in academic environments. The doctoral journey is designed to be a transformative and highly independent experience. The results of this study show how such a design can prove to be an environment that reaffirms deficit thinking and encourages impostor thoughts and behaviors. Practices to improve trust relationships with faculty members in conjunction with healthy feedback expectations are suggested to better incorporate doctoral students, in particular those with first-generation backgrounds, into their programs. Relationship-rich experiences early on in programs would encourage those with limited experience to approach others for help and guidance reducing the perception of isolation.

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Appendix A

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

July 31, 2023

Karen Pore
Sherrita Rogers

Re: IRB Exemption - IRB-FY23-24-81 FIRST-GENERATION DOCTORAL STUDENTS, IMPOSTORISM, AND BELONGING: A TRANSCENDENTAL PHENOMENOLOGICAL STUDY

Dear Karen Pore, Sherrita Rogers,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or

For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your information sheet and final versions of your study documents can also be found on the same page under the Attachments tab.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

Appendix B

CONSENT FORM

Title of Project: FIRST-GENERATION DOCTORAL STUDENTS, IMPOSTORISM AND BELONGING: A TRANSCENDENTAL PHENOLOGICAL STUDY

Principal Investigator: Karen Sullivan Pore, Doctoral Candidate, School of Education, Educational Leadership, Liberty University

You are invited to participate in a research study. To participate, you must self-identify as a first-generation doctoral student, be associated (enrolled, separated or completed) with a educational leadership or leadership doctoral program within the last 3 years and be over 18 years old. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding to take part in this research.

Purpose: The purpose of this study is to understand the experiences of first-generation doctoral students within educational leadership or leadership programs as it relates to their feelings of belonging, impostorism and otherness.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Allow the researcher to use information in your self-identifying email responses in her research.
2. Participate in an interview, lasting about an hour via video conference. The interviews will be recorded to allow for later transcription and analysis.
3. Participate in a focus group with a small number of other participants last about an hour. The focus groups will be via video conference and will be recorded to allow for later transcription and analysis.
4. Write a letter of advice to yourself that you wish you had received at the beginning of your doctoral journey. This activity will take around 30 minutes.
5. After interviews have been transcribed, you will be asked to read the interviews for accuracy. The review should take 30 minutes.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study. Benefits to society include a better understanding of the experiences of first-generation doctoral students. Also, first-generation doctoral students who have experienced otherness and impostorism may gain insights into the factors that contribute to those experiences.

Risks: The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Confidentiality: The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, an only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.

- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside the group.
- Data collected from you may be used in future research studies or shared with other researchers. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed.
- Data will be stored on a password-locked computer. After five years, all electronic records will be deleted.
- Recordings will be stored on a password-locked computer for five years and then deleted. The researcher and members of her doctoral committee/study team will have access to the recordings.

Compensation: Participants will not be compensated for participating in this study.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision on whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to withdraw from the study: if you choose to withdraw from the study, please contact the researcher[s] at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contribution to the focus group will not be included in the study if you choose to withdraw.

Contacts and Questions: The researcher conducting this study is Karen Sullivan Pore. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at ▮▮▮▮▮▮▮▮▮▮ You may also contact the researcher's faculty sponsor, Dr. Sherrita Rogers, ▮▮▮▮▮▮▮▮

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher[s], you are encouraged to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Statement of Consent: By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐　The researcher has my permission to record me as part of my participation in this study.

_____

Printed Subject Name

_____

Signature & Date

Appendix C

PARTICIPANT EMAIL

Hello:

Thank you for your interest in the study. In order to ensure that you qualify to participate, please answer the following questions. Once received and reviewed, you will be contacted via email about the next steps for the study.

1. Are you a first-generation student pursuing a doctoral degree? First-generation student is as a student whose parents did not attend or complete college (Baldwin et al., 2021; Means & Pyne, 2017; Toutkoushian et al., 2018). First-generation doctoral students are first-generation students pursuing a doctoral degree (Baldwin et al., 2021).

2. Have you ever faced any challenges that first-generation students are commonly found to experience? Check any that apply:
   o Financial need/pressure pursuing your degree,
   o Family pressures/responsibilities while pursuing your degree
   o Administrative hurdles while pursuing your degree
   o Academic hurdles while pursing your degree

3. Have you ever struggled with impostor syndrome while pursuing your degree? Please describe feelings you associate with impostor syndrome.

4. Have you struggled with feeling a part of your doctoral program?

Thank you for your time and interest.

Sincerely,

Karen S. Pore
Doctoral Candidate, Liberty University

Appendix D

SAMPLE PROCEDURAL LOG

7/31/23	Received IRB Approval
8/11/23	Emailed potential participants and did social media blast
8/14/23	Participant responded
8/15/23	Participant completed screening and demographic survey.
8/17/23	Contacted participant to schedule interview
8/19/23	Conducted interview
8/20/23	Contacted participant to schedule focus group
8/25/23	Scheduled focus group
8/25/23	Transcribed interviews
9/1/23	Sent transcripts to participants for member checking
9/5/23	Held focus groups
9/7/23	Transcribed focus groups
9/7/23	Sent letter writing prompt to participant
9/10/23	Received letter from participants
9/12/23	Began reading and coding of transcripts and letter and highlighting for significant statements

Sample Data Coding

P8	Horizonalizing statement	Does the expression contain something about the experience that is necessary and helps us to understand the experience?	Is it possible to label it or abstract it?	Label	Pagein transcript	Related interview question	Research question	Researchers notes related to statem…
P8	I grew up very poor. My mom and dad both self proclaimed that they barely graduated from high school.	y	y	family financial	1	2,5	1	
P8	My mom would just always say that she, just, you know, had regrets about not being able to go to school, because then she had to stay at home with the kids and that sort of thing and stuff. And so she just always kind of said that to us.	y	y	family	1	2,5	1	
P8	, I just remember I'm always just kept saying that to me, you know that like education can be your ticket out, like, you know, getting out of a small town, getting out of poverty like just always kind of had that like nagging like in the back of my mind, that like this could be my ticket out of small town, Indiana, you know.	y	y	barrier FG characteristic	1	2,5	1,2	
P8	But my parents had no clue. They didn't know how to fill out a FAFSA form. They didn't know, you know, how to go to college,			family		2,5		

Appendix E

FIELD NOTE EXAMPLE

Name of Participant: Number one	Field Notes
	Date: 08/28/23
BE SURE YOU ARE RECORDING THE ZOOM!!!!	Time: 1pm
	Time Ended:
1. Please describe your educational background and journey to pursuing a doctoral degree.	
Started as an adult learner in Information technology, Associate, why would you pick a subject that , bbq, done at that point. Leadership bug MSL South, 2014, 2019 University of Charleston WV Hit the wall, paralyzed in head- graduated a year behind his class	He was first to bring up impostorism.
2. Please describe your personal background and how your family or personal experiences contributed to your journey.	
Brain mapped, neuroscientist. Cognitive diversity underlying of 56. Paratrooper had bad accidents. TBI ADD, ADHD, sustained focus is an issue. Working memory. Always struggled with learning, - military, real estate test, test anxiety, learning/ Learned yourown self gamify the mental barriers.	He saw it all as one and did not separate out.
3. How did you arrive at your decision to pursue a doctoral degree and your choice of program and institution?	
Wanted to be competitive, Impact that you were having on the academic community as neuro-diverse. Apply the academic rigor, Hustle, grit, communications, GAP was education. You have to forgive Rick as an uneducated	
4. Describe your definition of a first-generation student.	
No means or desire to go- intrigued by possibilities. Taking the easy way out if he is not uncomfortable.	His comments about family were very succinct. He want to share more about who he is than where he came from
5. Describe your challenges as a first-generation college student throughout	He stated he has