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Twice-Exceptional Childhood Experiences Contributing to Imposter Syndrome in Post-secondary Faculty

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Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral study by

Joy Gehringer Shytle

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2022

Abstract

Twice-Exceptional Childhood Experiences Contributing to Imposter Syndrome in Post-secondary Faculty

by

Joy Gehringer Shytle

MSW, University of Kentucky, 1999

BS, Centre College, 1997

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Social Work

Walden University

August 2022

Abstract

This qualitative study involved exploring the relationship between imposter syndrome in post-secondary faculty and their twice exceptional (2e) childhood experiences. 2e is defined as students who are identified as academically gifted but also have a disability. Lack of accurate identification and accommodations for 2e students can lead to long-lasting mental health struggles, underperformance in academic environments, and low self-esteem. As 2e individuals become professionals, identity developed in grade school may contribute to feelings of imposter syndrome, causing significant performance and mental health struggles. Erikson's psychosocial identity theory was used as a theoretical framework to understand how these experiences impact identity development in stages four, five, and seven of psychosocial development. This study involved interviewing six faculty from a large state university in the Midwest who self-identified as 2e and had experienced imposter syndrome. Using semi-structured interview questions, participants were asked about their 2e childhood classroom and imposter syndrome experiences and how those two variables may be connected. After transcribing and coding data using NVivo, five themes emerged: a) Because I was gifted…, b) external interactions which become inner monologues, c) accommodating for my environment, d) imposter syndrome overriding objective success and e) imposter syndrome beginning in grade school. Clinical social workers working with 2e students and professionals with imposter syndrome can use this information for positive social change by working to identify where change is needed involving policy and strategies to reduce negative 2e struggles and imposter syndrome among higher education professionals.

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Dedication

This research is dedicated to every twice-exceptional child struggling within an educational system designed for neurotypical kids and to every hard-working professional who feels like they do not belong in their high-achieving professional world. May this research help create positive change for us, our families, students, and friends.

I also dedicate this research to Ed Shytle, my father-in-law, who passed away before he could have seen me complete this program. His encouragement was the push I needed to start this journey.

Acknowledgments

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Also, thank you to my committee chair, Dr. Ken Larimore, for your guidance and support while navigated this project. I appreciate you patience, knowledge, and time. And thank you to Dr. Sean Hogan for your critical, detailed, and invaluable feedback. I am a better writer because of you.

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Section 1: Foundation of the Study and Literature Review

Introduction

While the concept of imposter syndrome has only recently begun to be identified and researched, not only in academia but in adult social and professional roles, connecting causes of this phenomenon to experiences has not been as well studied. Much of the existing research involves individual experience instead of how societal and contextual experiences may factor into its manifestation. Imposter syndrome is defined as high-achieving professionals attributing their success to outside influences and therefore are unable to internalize personal accomplishments (Clance & Imes, 1978). In this study, I explored how experiences of twice-exceptional (2e) students (students who are identified as gifted but also have a disability) contributed to imposter syndrome feelings, specifically among post-secondary faculty at a large state university in Ohio. Having been a 2e student in elementary school and faculty member with imposter syndrome, I recognize how these are linked in my academic and professional journey. While rarely discussed in academic circles, informal conversations with colleagues have confirmed many others are experiencing imposter syndrome in their own personal and professional lives. In order to understand this, a qualitative study using purposive sampling was conducted. Interviews were conducted to understand experiences of post-secondary faculty who have impostor syndrome feelings and were also considered 2e in elementary and secondary schools. By understanding the link or lack thereof between 2e experiences and imposter syndrome, informed interventions can be designed for social work practitioners, school counselors, and teachers. By intervening appropriately during the primary and secondary educational school years, imposter syndrome can be reduced or eliminated in some individuals.

In order to explore the possible connection between 2e experiences and imposter syndrome, this study begins with a discussion of the problem, research in this area, its theoretical framework, and importance to social work. A literature review is presented to understand the history of the concepts of 2e and imposter syndrome as well as examine struggles faced by those with these issues. A qualitative research design was used. Interview questions formulated to elicit participant narratives were shared, coded, and analyzed for themes involving the topic. Lastly, I share a discussion of results and potential implications for social change, social work practice, and further research.

Problem Statement

The specific social work practice-focused research problem being studied is the impact of 2e childhood experiences on the development of feelings leading to imposter syndrome among post-secondary faculty members at a large state university in Ohio. The initial rationale for me to study this issue was my own experiences being 2e and having imposter syndrome as I navigated my role as a full-time faculty member. Imposter syndrome is a problem that many face but have been unable or unwilling to discuss, leading to struggles in their personal and professional lives. Students in the K-12 system who identify as 2e often struggle in all classroom settings (Bechard, 2019). Parents, teachers, and practitioners can lack understanding of diverse needs of 2e students, and this misunderstanding can have long-term repercussions on the functioning of these individuals. Lack of support and understanding can lead to underachievement in the classroom as well as social, emotional, and psychological consequences continuing into adulthood, resulting in imposter syndrome involving professional roles such as teaching in higher education (Foley-Nicpon et al., 2013).

While research in the area of gifted education is abundant, to date, there has been no study linking 2e childhood experiences with imposter syndrome. Many 2e individuals often become high achievers but report feeling like imposters around other high achievers in their field. Imposter syndrome is often reported in conjunction with low self-esteem, poor job or academic performance, and mood disorders (Hutchins, 2015). Substantial research has not been reported regarding how academic professionals with imposter syndrome experience this phenomenon.

Scope and Evidence of the Problem

While statistics regarding imposter syndrome are limited, research has found that up to 82% of adults report having feelings of imposter syndrome, which is defined as high-achieving professionals who are unable to perceive themselves as successful despite prominent professional and personal achievements (Bravata et al., 2020). Gender, discipline, and academic role do not seem to have an impact on prevalence or incidence of imposter syndrome feelings (Parkman, 2016). Hutchins (2015) found higher education faculty reported having a moderate amount of imposter syndrome feelings; with untenured faculty reporting these feelings at the highest levels. Impacts of imposter syndrome feelings on faculty include higher levels of anxiety and stress (Parkman, 2016), ongoing fear of being found out as a fraud (Bothello & Roulet, 2016), lack of likelihood to volunteer or attempt tasks they view as challenging (Bravata et al., 2020), and lack of willingness to share their thoughts and opinions in order to conceal their perceived ineptness, which is more common in women (Edwards, 2019).

When seeking to understand the scope of 2e students, numbers may be deceptively low as students who have a diagnosed or undiagnosed disability may be overlooked during the identification process for gifted programming. Currently, it is difficult to get statistics for 2e students. It is estimated that at least 360,000 students nationally are 2e (Maddocks, 2018). This number is only estimated for students with a learning disability and not other types of disabilities such as physical or mental health issues. Of students who were identified as eligible for any special education services, 9.1% of these students have been overlooked as suitable for inclusion in gifted programming (Barnard-Brak et al., 2015).

Significance of the Problem

The significance of this problem is twofold. First, in academic circles, stigma is perceived when admitting perceived inadequacies or mental health issues, preventing those in higher education positions from seeking help. Destigmatization and normalization of these experiences can help those who are struggling to come forward and seek support services (Jaremka et al., 2020). Secondly, there is a lack of research connecting 2e childhood experiences with feelings of imposter syndrome in adulthood, specifically among those working as faculty in higher education institutions. Significant mental health and professional identity issues affect quality of life and work among those identifying with imposter syndrome (Hutchins, 2015). Many educators are familiar with the term 2e. However, except for gifted education teachers, most report they lack understanding of this concept, its nuances in terms of identification, or potential support strategies for these students (Foley-Nicpon et al., 2013). Social work practitioners, human resource administrators, and faculty mentors can be educated about identification and support strategies for those with imposter syndrome so that alleviation of symptoms can be achieved.

By identifying how 2e experiences may contribute to these feelings of inadequacy and imposterism later in life, intentional practices can be developed to ensure proper identification strategies of 2e students are followed, 2e students are accommodated appropriately, and education of school personnel, families, and administration can be developed. I believe social work practitioners can use this knowledge at all levels of human development in order to identify and support 2e students from elementary school to adulthood. This knowledge, when applied to those who are currently experiencing imposter syndrome, can help social workers and other mental health professionals intervene to understand causes of imposter syndrome, create best practices and interventions to address individual and systemic causes of this phenomenon, and be a catalyst for normalizing and destigmatizing imposter syndrome experiences.

Purpose Statement

The purpose of this qualitative study was to understand and explore how 2e childhood experiences contribute to feelings of imposter syndrome among post-secondary faculty. By identifying potential experiences in childhood and secondary education contributing to ongoing feelings of inadequacy, this study can help social workers, educators, and other practitioners identify, normalize, and destigmatize both 2e childhood experiences and imposter syndrome feelings, which may result from inadequate supports in the classroom. Supports from elementary to post-secondary settings can be designed to reduce potential for negative social, emotional, and cognitive functioning. Identification of community and institutional contributions which perpetuate imposter syndrome can be identified and addressed. Mental health professionals can use this study to design a supportive work environment, helping employees to identify and work through their imposter syndrome struggles.

Research Questions

I designed research questions in order to gain an understanding of 2e experiences and imposter syndrome feelings and experiences. I sought to understand how participants conceptualized connections between the two variables or if they do not believe they were linked. Research questions were designed to elicit narrative responses from participants.

RQ1: How do post-secondary faculty describe their 2e educational experiences prior to and during college?

RQ2: How do post-secondary faculty describe their experiences with imposter syndrome during their educational journey and in their professional lives?

RQ3: What are post-secondary faculty's perceptions on how their early 2e educational experiences contributed to their feelings of imposter syndrome?

Key Concepts

Childhood experiences: Academic experiences related to 2e identification during kindergarten through 12th grade or obtaining a General Equivalency Diploma (GED).

Imposter syndrome: Refers to high-achieving individuals attributing their success to outside forces in addition to feelings that they are frauds in their profession (Clance & Imes, 1978). Research has focused primarily on women and minorities as those who primarily manifest this syndrome (Feenestra et al., 2020). However, gender does not appear to play a role in this phenomenon (Parkman, 2016).

Post-secondary experiences: Academic experiences after graduation of high school or completion of a GED.

Twice-exceptional (2e): Individuals who are identified as gifted and talented and also have a disability (Foley-Nicpon et al., 2013). School districts are divided, however, in their definitions of 2e, identification strategies, and accommodations. Where some school districts may only define students with learning disabilities as 2e, other districts may include all students who are eligible for special education services (Pereira et al., 2015).

Why this Study is Needed

Research studies clearly define how both imposter syndrome and 2e experiences can be detrimental in the personal and professional lives of individuals. While there are many studies and research articles in relation to each of these experiences separately, to date, no study has connected imposter syndrome to 2e childhood experiences. Misidentification or lack of appropriate accommodations for 2e students can cause self-esteem issues, perpetuate social skill problems, and contribute to academic struggles (Bechard, 2019; Maddocks, 2018). Imposter syndrome feelings may lead to anxiety, depression, underperforming in both work and home, and in some cases, suicidal ideation (Parkman, 2016). It seems clear that exploring the connections between experiences on the interpersonal level as well as examining contextual contributions can help in terms of understanding struggles with imposter feelings as well as potential weaknesses and strengths of 2e programming and imposter syndrome support. This can allow for interventions and systematic change to occur.

Nature of the Doctoral Project

A basic qualitative research design was used to address the research questions. Purposive sampling was used to study experiences of participants who self-identify as 2e and experiencing imposter syndrome. As the intent of this study was to learn from perceptions and lived experiences of participants involving this topic, this design was used to elicit narrative responses through in-depth one-on-one interviews. This design allowed participants to share their lived experiences, perceptions, and challenges of living with imposter syndrome and how it connected with their 2e childhood experiences.

Participants were selected from a large state university in Ohio. After receiving Institutional Review Board (IRB) approval from both Walden University and the university involved in this study, a search for research participants began. Through university-wide emails, social media, and other communication platforms, individuals who identified as being 2e and experiencing imposter syndrome were solicited, and those self-referring participants were selected for participation using purposive sampling. Six participants were interviewed using semi-structured interview questions and lasted for approximately one hour. Due to university COVID restrictions, interviews were conducted virtually using Microsoft Teams, a program that was accessible to all university employees. Data was collected by both me taking notes and audio recordings of interview sessions. Confidentiality was protected by assigning each participant a number and gender identification (e.g., Female 1). Interviews continued until data saturation was achieved.

Methodology

Completed interviews were transcribed into a Microsoft Word document, and line numbering was applied. Data were stored on a password-protected computer and organized by participant number. Transcripts were uploaded into NVivo, a coding and online transcription program. In vivo coding was used to capture meanings of participant responses to interview questions as closely as possible. Using an inductive process of data analysis, themes were developed by grouping and combining emerging codes from the data set. Upon completing coding of all interview transcripts, theme analysis was conducted.

Significance of the Study

This study is significant in that understanding how post-secondary faculty who struggled with being 2e as youth perceive those experiences as a precursor to feelings of imposter syndrome. Currently, mental health practitioners lack an understanding of how imposter syndrome is developed. High-achieving post-secondary faculty often struggle with anxiety, self-doubt, and other mental health issues, leading to problems in their professional performance (Hutchins, 2015). By connecting 2e experiences to feelings of imposter syndrome, this development can be explored, and interventions can be identified in order to increase educator and mental health practitioner awareness of the impact of negative 2e experiences. Coping techniques, therapeutic interventions, and overall awareness of the impact of imposter syndrome struggles can also be identified for post-secondary faculty who struggle with feelings of imposter syndrome. This study has the potential to create positive advances in terms of 2e educational practices, classroom interventions, and supports, as well as policy changes at all levels of academia and best practice identification involving one-on-one supports for children and adults.

Implications for Social Work Practice

While the concept of imposter syndrome was first identified in 1978, the progression of imposter syndrome feelings has not been well researched or understood. By understanding the progression of imposter syndrome, what immediate and long-term protective or risk factors of 2e experiences may be, and the potential impact of these environmental experiences may have on identity formation and imposter syndrome developments, informed interventions can be developed at all levels of practice. Examples of these interventions may be policy development, identification strategies, and support resources available during one's academic career. This research will benefit not only social work practitioners but also educational staff, administrators, clinicians, and human resources employees.

Social Change Implications

Positive social change can only occur through understanding how contextual mores, experiences, and societal views affect individuals, communities, and societies in both positive and negative ways (Mcleod & Thompson, 2009). By eliciting narrative stories of participants who have experienced 2e educational systems or participated in these experiences but were not accurately identified as 2e, how these experiences impacted identity development can be understood. These participants can share their understanding of how or if these experiences impacted their present feelings of imposter syndrome. Only by understanding this potential connection via those who have experienced these experiences, thoughts, and feelings can the need for systemic social change in this area be defined and become actionable. Potential social change includes destigmatizing imposter syndrome feelings and normalizing asking for help, improving identification of 2e students and their needed supports, and recognizing the importance of adequate services to address both 2e concerns and imposter syndrome at all levels of intervention.

Theoretical/Conceptual Framework

The theoretical framework that grounded this study was Erikson’s psychosocial identity development theory. Erikson’s theory was used to understand identity development during critical periods of social and emotional growth throughout the lifespan. By understanding how 2e experiences contributed to negative or positive identity development within the framework of Erikson’s psychosocial stage milestones, the progression and development of feelings of imposter syndrome in participants’ professional lives, specifically among post-secondary faculty, may be connected to both personal and contextual childhood incidents.

This study involved Erikson’s fourth, fifth, and seventh psychosocial stages. Stage four (industry versus inferiority) takes place during early and middle school years and involves the goal of developing a feeling of competence in their ability to be successful. As the primary setting for this is the elementary classroom, it is intricately linked to our participants’ experiences with twice-exceptional programming. Erikson aptly put this stage of development as “I am what I learn” (Erikson, 1994, p. 87). Since 2e students can present with all types or different combinations of disabilities, the manifestation of each student’s struggles can present in a myriad of ways (Barnard-Brak et al., 2015). Lack of appropriate identification and accommodation for each student can disrupt positive identity development, contributing to immediate self-esteem issues, perception of incompetency, and imposter syndrome feelings (Erikson, 1994).

Stage five (identity versus identity diffusion), which takes place between the later high school years and early adulthood, involves the goal of fidelity, or the ability to maintain emerging loyalties and beliefs despite outside influences which deviate from those loyalties (Brittian & Lerner, 2013). During this period, adolescents are developing their identity via many different roles. When this stage is successfully navigated, adolescents are more likely to become socially conscious and active participants in their communities and professional careers. If this stage is not successfully reached, this can lead to stagnation of personal identity growth and prevention of one fulfilling their high-achieving potential, or as in the case of imposter syndrome, attributing successes to outside forces (Brittian & Lerner, 2013).

Stage seven (generativity versus stagnation), which takes place during middle adulthood, mainly in the workplace and at home, involves the goal of providing care. This stage of development involves how one can leave a legacy for future generations (Erikson, 1994). Stagnation, the opposite of generativity, can result in social and emotional problems. A potential character trait associated with unsuccessful resolution of this crisis stage may be lack of effort to improve or advance their career (Newton et al., 2020). Just as unsuccessful resolution of earlier stage crises can negatively impact upcoming psychosocial stages, it can be inferred that adverse experiences during these same stages (four and five) can impact feelings involving positive professional identity, potentially resulting in the development or perpetuation of imposter syndrome.

By tracing identity development using Erikson’s psychosocial identity development, strengths and concerns can be identified and analyzed as one progresses through their academic and professional experiences. The psychological consequences of imposter syndrome, such as poor work performance, anxiety, and depression, can be analyzed as consequences of negative experiences due to 2e programming and misidentification. If a better understanding of how 2e identity is formed through positive or negative experiences and how this may lead to feelings of inadequacy or marginalization as adults, more research can be conducted to identify best practices for 2e children to enhance their experiences.

Values and Ethics

The National Association of Social Work (NASW) holds social workers to a high standard of ethical and professional behavior. By defining six core values of integrity, service, competence, social justice, dignity and worth of the person, and importance of human relationships, the NASW clearly states its practice expectations for trained social workers. For this study, the core values of social justice and dignity and worth of the person are at the forefront of this research. Ethical standards are defined to ensure consistent understanding and implementation of social work practice interventions. Social workers are called to see gaps in service, understand the need for change, and correct social injustices (National Association of Social Workers [NASW], 2021). This study has the potential to address how imposter syndrome becomes part of one's identity through examining experiences of 2e students during their academic careers. Social work values and ethics are implemented at each stage of this study to ensure a reputable, actionable, and useful study was conducted, and social change will result from reducing negative practices and supporting those with imposter syndrome feelings.

While all of the NASW core values are integral to the conceptualization of this study, the core values of social justice and dignity and worth of the person emerged as the focus of this research. The value of social justice involves challenging social injustices and oppressive practices for all individuals as well as ensuring equal opportunities in terms of access to resources and services (NASW, 2013). Social justice is compromised when individuals are not receiving services or do not have access to resources. At the primary and secondary school levels, there is a lack of consistent programming (Maddocks, 2018), identification standards (Barnard-Brak et al., 2015), and accommodation services for 2e students (Bechard, 2019). Those struggling with imposter syndrome often lack access to proper support services due to an unwillingness to ask for help for many reasons. Academic and professional institutions lack understanding of the potential impact of imposter syndrome on their employees and the need for services to address imposter syndrome. Equity and excellence in practice standards during interventions are imperative in terms of upholding NASW standards of social justice.

All individuals are worthy of respect, caring, and professional best practices from social workers. In addition, clients' right to self-determination must be upheld and resolution of societal or contextual oppressions should be addressed (NASW, 2013). The marginalization of 2e students is in direct conflict with these values. Lack of recognition and supports for imposter syndrome in professional settings leads to failing to uphold the standard of maintaining every person's dignity and worth. This study can help identify and address practices that can be improved, creating supportive learning and work spaces across academia or other professional settings where employees may experience imposter syndrome.

As the NASW Code of Ethics provides both a core set of values and ethical standards for social work practice, clinicians are bound to adhere to national standards as well as each state's board of social work. The mission and value statement of the university where participants worked articulates clear professional standards regarding improvement of services, commitment to diversity, and equality of services. These standards exist to protect students, faculty, staff, clients, and practitioners, as well as ensure all educational and social work interventions are provided with the utmost care and integrity. In this study, social, psychological, and environmental problems have been identified for 2e students and high-achieving professionals struggling with feelings of imposter syndrome. Gaps in interventions and the lack of knowledge regarding this topic has been discussed and a need for research has been defined. Guided by ethics, values, and standards of the NASW, this study can provide valuable insights to generalist social workers, clinical social work practitioners, and any individual working with 2e students and those suffering from imposter syndrome.

Review of the Professional and Academic Literature

This literature review includes evidence regarding development and impact of imposter syndrome on higher education faculty, as well as how 2e childhood experiences may contribute to this phenomenon. A discussion of current research pertaining to imposter syndrome will contribute to an understanding of the progression of imposter syndrome, its short- and long-term causes and effects, as well as providing needed information to design effective interventions. While there is substantial research on 2e individuals and an emerging body of work on imposter syndrome, to date, no study has been conducted linking them.

The primary problem addressed in this study is how 2e student experiences in the primary and secondary school system may contribute to feelings of imposter syndrome as adults, specifically among higher education faculty. Using a basic qualitative study design, interviews were conducted with faculty members who self-identified as 2e and having feelings of imposter syndrome. The literature review showed that 2e individuals are often underserved due to misidentification or lack of appropriate services, and these experiences may have potential negative impacts on short and long-term functioning. Studies were reviewed to define significant issues faced by faculty members with imposter syndrome in both their professional and personal lives.

This study was grounded in Erik Erikson’s psychosocial development theory, specifically levels four, five, and seven. By examining significant childhood and adult 2e experiences during each of these stages in relation to concepts being studied, this research helps determine the progression of imposter syndrome.

Keywords searched were: *imposter syndrome*, *imposter phenomenon*, *gifted students*, *twice-exceptional students*, *2e students*, *special education*, *gifted education*, *gifted and talented education*, *learning disabilities*, *Erikson*, *identity development*, *psychosocial development theory*, *educational justice*, and *social justice*. Databases were EBSCOHost, PsycINFO, Social Work Abstracts, and Google Scholar. Most of the literature was published between 2018 and 2022. Seminal works involving both the concepts of 2e and imposter syndrome were addressed dating back to the 1920s. Online databases provided most literature content via a digital format. Academic textbooks involving qualitative and social research were consulted. Some recently published books were also used for literature review content.

This literature review was structured to include a thorough history of twice-exceptionality, its identification in schools, implementation of services, and problems involving these issues. A discussion of Erikson's psychosocial developmental levels four, five, and seven includes how unresolved crises during each of these levels can impact adult functioning. Existing literature was reviewed, and supporting and opposing research was introduced. History of the conceptualization of imposter syndrome, its causes, problems associated with its diagnosis, treatment and intervention theories, and literature specific to the manifestation of imposter syndrome in higher education faculty was also addressed. Social justice issues resulting from social, institutional, and relational constructs were connected to 2e education and perpetuation of imposter syndrome, such as oppression, stereotypes, and stigmas involving gender, disability, and marginalized populations. Lastly, evidence for a need to study the connection between 2e experiences and imposter syndrome among higher education faculty was presented using existing literature.

2e Students: History and Problems

While not explicitly defined, the first documentation of twice-exceptionality can be found nearly 100 years ago. Hollingworth (1923) originated the term gifted in relation to exceptionally talented or intelligent students after several years of researching elementary school children. It was in this research that Hollingsworth found that said students can be gifted and have a co-occurring disability. Asperger's syndrome, introduced in 1944, noted that individuals with this diagnosis were highly intelligent but struggled with significant social issues, potentially making it difficult for them to reach their highest academic potential (Asperger, 1991). Research began to emerge on both learning difficulties and gifted students, albeit as individual concepts, not as coexisting in individuals. In 1973, Elkind published the first study on students having both giftedness and disabilities, laying the groundwork for future 2e research (Elkind, 1973).

Between the 1970s and 1990s, federal legislation, research, publications, and funding for gifted and special education grew in depth and scope. The Gifted and Talented Children Educational Assistance Act was passed in 1969. However, provisions for students with disabilities exhibiting giftedness were not made, nor were any guidelines given for identifying gifted and talented students (Lee & Ritchotte, 2018). Twice-exceptionality began to emerge as a concern that needed to be addressed in schools (Baldwin et al., 2015). The Jacob K. Javits Gifted and Talented Students Education Act, passed in 1988, focused on identifying gifted students who may have been missed during the traditional gifted and talented identification process. These students include those who are minorities, low-income, English as a second language (ESL), and students with a disability. Originally enacted in 1975 as the Education for All Handicapped Children Act, the Individuals with Disabilities Education Act (IDEA) was renamed in 1990. In 2004, the IDEA was reauthorized, making specific reference to gifted individuals with disabilities (Bell, 2020). However, even with the teaching community having an increased awareness of 2e students and their issues, federal and state legislation has still failed to create a universal definition of twice-exceptionality (Peters et al., 2019). This lack of a clear definition of twice-exceptionality has led to unequal identification of 2e students throughout the United States, leaving an estimated 3 million 2e students unaccommodated academically (Lee & Ritchotte, 2018).

Problems in Current 2e Educational Settings

Definition of the Problem

As discussed previously, there are no federally mandated guidelines for the definition of twice-exceptionality. Policy regarding 2e identification differs between school districts and states, often resulting in significantly conflicting definitions of what qualifies. Even gifted and talented student identification policies and standards vary between school districts (Reis et al., 2014). Some districts require a student to be eligible for special education services in order to be considered 2e, while others may have a broader inclusion process (Lee & Ritchotte, 2018). There are also districts that fail to provide comprehensive testing to all students in the district, leaving many unidentified as gifted, disabled, or both (Barnard-Brak & Johnsen, 2015). Some states have a mandate to test some or all students for gifted education programs, while others have no such policy. Lack of universal testing can result in reduced access to appropriate academic programming for gifted and 2e students (Hodges, 2020). Under the federal policy, Individuals with Disabilities Education Improvement Act (IDEIA) of 2004, students who fall into one of the 13 recognized disability categories are eligible for special education services according to definitions of free and appropriate education. The IDEIA stated the following as a definition for a recognized disability: The term child with a disability means: a child— (i)with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this chapter as "emotional disturbance"), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and (ii) who, by reason thereof, needs special education and related services. (*20 U.S. Code § 1401 - Definitions*, 2004)

Accommodations for 2e individuals, despite recognition of giftedness and a disability, are not guaranteed (Bell, 2020).

Identification Standards

Identification of both gifted and talented students, students with disabilities, and 2e students vary between states and individual school districts (Peters et al., 2019). In 1971, the Marland report presented the first federal definition of gifted and talented; however, states and school districts continue to interpret this definition differently. Some school districts define gifted and talented narrowly, focusing strictly on academic scores, while others include a wide range of abilities, including leadership, creativity, performance skills, and psychomotor activities (Lee & Ritchotte, 2018). When the concept of 2e was introduced, many school districts failed to define and identify potentially gifted students because of their disability. Students may not be tested if they are already identified as being eligible for special education services. Other students may be tested and positively identified as 2e, but not accommodated appropriately due to lack of holistic programming or understanding of these unique student needs. Lack of appropriate accommodations can be attributed to a paucity of training for teachers and school systems, resulting in a lack of understanding in terms of how to work with both gifted students, while accommodating the many learning challenges that may be presented with individual disabilities (Gierczyk & Hornby, 2021). As a result, these students may either be placed in a special education classroom where their gifted and talented attributes are not challenged or their disability is not addressed or remain in a regular mainstream classroom, where neither their disability nor giftedness is accommodated (Bechard, 2019). Teachers often were more focused on weaknesses of their students rather than their gifted and talented strengths (Gierczyk & Hornby, 2021). Potential consequences for 2e students who are underidentified, misidentified, or not accommodated can include low self-esteem, behavioral issues, and underperformance in the classroom (Jacobs, 2020). For students who are told they are gifted yet are underperforming, this can lead to long-term social and emotional consequences (Gierczyk & Hornby, 2021). Not included in most studies are students who are labeled gifted but have an unidentified disability, such as attention deficit hyperactivity disorder or dyslexia. These students are at high risk of being overlooked for disability accommodations. Also, these students' academic performance may be considered deficient for a gifted student, as their disability may hinder their ability to reach their expected academic, social, or emotional benchmarks, leading to a concept which is termed gifted underachievement (McCoach et al., 2020).

Issues in 2e Educational Settings

Lack of adequate school classroom and social supports are another mitigating factor in 2e education. Just as identification of gifted and special education students varies by state and school district, so do accommodations and school supports (Lee & Ritchotte, 2018). Often, a student identified as 2e is forced into either gifted or special education programming exclusively, ensuring that one of their exceptionalities is not accommodated (Jacobs, 2020). Ideally, a 2e student would be placed in a challenging academic environment with proper supports to accommodate their disability. Due to a lack of formal training in teacher education programs, many educators are unaware of the complex and diverse needs of 2e learners (Lee & Ritchotte, 2018). Lack of recognition can often lead to assumptions about student performance. For example, a student who is termed gifted but is underperforming may be called lazy, or students in mainstream classrooms who are unidentified as being gifted and/or special needs may be considered unmotivated (Jacobs, 2020).

Consequences of misidentification and underaccommodation for 2e students are both immediate and long-lasting. As manifestations of 2e characteristics are as unique as each student, so too are their school experiences. Environmental influences, social and cognitive skills, special education status, gifted identification, interactions with school faculty and staff, and family support can all play roles in terms of how students navigate their academic environment (Lim, 2021). Socially savvy 2e students may fare better than those who struggle with social skills. Bullying from other students as well as teachers and staff can result for many 2e students (Ronksley-Pavia et al., 2018). Bullying by students may be physical, verbal, or emotional. Teacher bullying is often found to be verbal and emotional, taking the form of impatience, stereotyping students as lazy and unmotivated, and singling out students in front of peers (Ronksley-Pavia et al., 2018). Students report feeling inadequate, embarrassed, humiliated, and given punishments for their struggles. Students also report increased bullying by peers after teachers negatively focus on 2e student issues, especially when teachers appear to ignore bullying (Ronksley-Pavia et al., 2018). These bullying experiences contribute to low self-esteem, social anxiety, depression, doubt in their academic abilities, and in the extreme, may lead to suicidal thoughts (Ronksley-Pavia & Townend, 2017).

As discussed previously, students are often forced into inadequate programming due to a lack of identification or availability of comprehensive supports in their school district (Jacobs, 2020). Students with more common special education needs may be recognized quickly and supported appropriately. Conversely, students who struggle with less recognizable or uncommon special needs are usually those who need more attention, are misdiagnosed, or remain unidentified. For example, students with an emotional or behavioral disorder are often relegated to special education services and are less likely to be referred for gifted testing, despite clear signs of gifted or talented abilities (Missett et al., 2016). Teachers report lowering their expectations for more difficult students, despite being identified or suspected as gifted (Ronksley-Pavia et al., 2019). Teachers often choose curricula tailored to support students' weaknesses rather than enhance their strengths (Missett et al., 2016). Students in this type of environment who are told they are gifted but stagnate in special-education services may underperform, as they receive the message that expectations for their success in gifted programming are low (Ronksley-Pavia et al., 2019). Conversely, 2e students placed in gifted programming but not given supports for their special education needs may struggle academically and socially. Students report feeling they do not belong in gifted classes, which is a sentiment that is overtly and subtly reinforced by their peers and teachers (Ronksley-Pavia et al., 2018).

Erik Erikson's Psychosocial Development Theory

The theoretical framework grounding this study is Erik Erikson's psychosocial development theory. Erikson developed an eight-stage model to identify key developmental milestones, each at a critical stage of psychosocial growth. Each stage represents a crisis for the individual to resolve (Erikson, 1968). Unsuccessful or maladaptive resolution of a crisis may lead to hindrance of successful development in later stages (Darling-Fisher, 2019). In this study, developmental stages four, five, and seven were examined and their theoretical concepts applied to critical incidents in childhood, specifically those related to 2e experiences, and their potential as catalysts for the development of imposter syndrome in adulthood. Psychosocial wellness in college students and adults can be connected to successful resolution of the first four developmental stages (Robino & Foster, 2018). Mental health struggles, problems in professional work environments, and low-self esteem can be connected to the development of a negative identity as a child and adolescent (Darling-Fisher, 2019). This study posits that a lack of successful resolution of these key stages can also lead to imposter syndrome feelings in later life.

Stage 4: Industry vs. Inferiority

In stage 4 of psychosocial development, Erikson expands on a person's ability to be perceived as competent. Taking place primarily in the school setting, or a culturally specific equivalent, individuals in stage four are to learn how to be successful in developing work ethic, achieving academic success, social graces, and cognitive development (Erikson, 1993). Successful resolution of this stage should result in a child's sense of confidence in their abilities to work independently and function well in their environments, in effect, becoming industrious (Green et al., 2016). To support this psychosocial development, teachers and staff should be encouraging and reinforce students' positive attributes (Sun & Sun, 2021). Students who do not successfully resolve this stage may doubt their ability to complete tasks, academic, social, etc., on their own (Green et al., 2016). Psychological distress, manifested in a myriad of ways, is a common outcome of the unsuccessful early-stage resolution. This study will attempt to connect feelings of imposter syndrome to negative experiences of 2e students beginning at stage 4 of psychosocial development.

Research is clear in its connection of mental health struggles to negative 2e experiences (Amran & Majid, 2019; Gierczyk & Hornby, 2021). Jacobs (2020) delineated 2e students into several categories:

- 2e and both giftedness and disability accommodations are met
- 2e and placed in special education classes
- 2e and placed in gifted programming
- 2e and placed in a mainstream classroom
- unidentified as either gifted and talented or as having a disability
- gifted but not as having a disability (identified gifted underachiever)
- having a disability but not as gifted

In these categories, only one student group is properly accommodated in both their special needs accommodations and in gifted program challenging their academic skills. As demonstrated previously, most 2e students are not accommodated properly (Park et al., 2018). When 2e learners struggle in the classroom, they are more likely to self-isolate (Jacobs, 2020), have lower self-esteem, struggle socially (Foley-Nicpon et al., 2013), and feel stigmatized (Ronksley-Pavia & Townend, 2017). If a student does not have appropriate support in this stage of development, as it has been demonstrated that most 2e students do not, they are at risk of doubting their ability to complete tasks well, have lower self-esteem, and do not develop a sense of industry. Despite their success, these students feel inadequate instead of competent (Erikson, 1993), setting the stage for imposter syndrome.

Stage 5: Identity vs. Identity Confusion

As individuals leave the grade school classroom, heading into middle and high school, their psychosocial development task moves from industry and competence to identity formation (Erikson, 1968). During this stage, individuals become more independent, expanding their social circles, and examine their beliefs, with the end goal of obtaining fidelity, or a commitment to their emerging beliefs about themselves and their world (Brittian & Lerner, 2013). A key component of Erikson’s psychosocial development is the impact one stage has on another. Brittian and Lerner (2013) argue that if subsequent psychosocial stages do not have adequate resolutions of the crisis, future stages are affected. If competence is not adequately achieved in stage four, one’s identity may be negatively impacted in stage five (Brittian & Lerner, 2013). In fact, more recent research has begun to focus on the concept of negative identity development as an outcome of this stage instead of limiting the less optimal outcomes to identity diffusion or rumination (Schacter & Galliher, 2018).

For the 2e student already struggling with development issues related to competence and inferiority as a result of their grade school 2e experiences, the risk for negative identity formation is high. While research on the concept of negative identity is relatively new, theorists believe that in extreme cases of negative identity formation youth may become distrustful of society as a whole and begin exhibiting socially unacceptable behaviors (Hihara et al., 2019). However, it is more likely that individuals who have negative identity development are pre-disposed to develop low self-esteem and have mental health issues more significant than those with positive identity development, leading to struggles that follow through to adulthood (Mitchell et al., 2021). For 2e students whose identity development includes the feeling of incompetence, low self-esteem, and mental health issues, it is conceivable that one would feel like a fraud when academic or social success occurs (Hutchins & Rainbolt, 2017), setting the stage for imposter syndrome thoughts.

Stage 7: Generativity vs. Stagnation

Erikson posits that much of early and middle adulthood is spent in stage 7, generativity vs. stagnation. During this stage, individuals are working, raising families, possibly caring for their parents, and assuming pro-social roles in their communities (Erikson, 1994). Generativity, the goal for this stage, means individuals are being productive, creative, and procreating, with the virtue of care, or giving to others as the positive resolution to be achieved (Erikson, 1997). This behavior manifests itself by actively working to make positive contributions to their world, both by nurturing family relationships and positively impacting their professional realms (Mitchell et al., 2021). As discussed previously, positive stage resolutions at earlier development levels are closely connected to how one manages their current developmental crisis (Kroger, 2018). In this respect, less than optimal outcomes in the identity vs. identity confusion stage will likely lead to suboptimal outcomes in the generativity vs. stagnation stage (Kroger, 2018). A negative identity formation, including internalizing feelings of incompetence, during adolescence can carry over to adulthood (Hihara et al., 2019), perhaps feeding the imposter syndrome fraud feeling. A suboptimal outcome in stage seven would be the stagnation of the individual. Characteristics of stagnation can include rejection of cultivating relationships, lack of engagement in community or professional activities, or not actively working to leave a personal or professional legacy (Newton et al., 2020). The behavior of stagnation has recently been found to be transmissible to one’s children. One study has found that intergenerational stagnation transmission may pass on a parent's negative behaviors in adulthood, particularly in mothers and their children (Millova et al., 2021), potentially setting the stage for intergenerational transmission of imposter syndrome feelings.

When connecting stagnation behaviors in adulthood to imposter syndrome, research shows that adults who struggle with imposter syndrome are more likely to have low self-esteem, suffer from mood disorders, and have poor academic or job performance (Hutchins, 2015). While these individuals are still considered high achieving, their fraudulent feelings may keep them from striving for higher levels of achievement academically, socially, and professionally (Hutchins & Rainbolt, 2017). These are the same behaviors that are characteristic of those in the stagnation stage of Erikson's psychosocial stages (Newton et al., 2020).

Imposter Syndrome

The term "imposter syndrome" was coined in 1978 by Pauline Clance and Susan Imes. Working as psychotherapists, Clance and Imes found a common theme among women in higher education. High achieving professional women reported feeling like frauds in their academic environments (Clance & Imes, 1978). Having termed this feeling "the imposter phenomenon," the researchers compiled data on over 150 women who were, by societal standards, outstanding in their fields. These women were earning PhD's, were very successful at work, and were excelling in scholastic works and honors (Clance & Imes, 1978). Despite having great success in their professional fields, these women attributed their success to outside forces rather than their own hard work (Clance

& Imes, 1978). While originally thought to be an issue impacting mostly women, more recent research has shown that men and women both struggle with this concept in their professional and personal lives (Orbe-Austin & Orbe-Austin, 2020). High achieving individuals, both men and women, who are members of minority groups are also found to have high levels of reported imposter syndrome feelings (Feenstra et al., 2020). Research on imposter syndrome is emerging. However, in the last 10 years, more studies have been conducted to understand the impact of imposter syndrome in the professional lives of high-achieving individuals (Bravata et al., 2020).

Characteristics of Imposter Syndrome

Imposter syndrome or imposter phenomenon is defined as a high-achieving individual attributing their success to outside influences such as luck, help from others, timing, low standards for success, or their ability to charm and “pull the wool over the eyes” of their colleagues (Bravata et al., 2020; Holden et al., 2021). The lack of ability to internalize their success leads to feelings of being a fraud, with an underlying fear that their colleagues will find out they are “imposters” and are not independently successful (Bravata et al., 2020). This phenomenon has been researched across many fields requiring high test scores, excellent academic achievement, and elevated standards of success, including academia, medicine, library science, and those seeking advanced or multiple degrees (Bravata et al., 2020; Holden et al., 2021; Orbe-Austin & Orbe-Austin, 2020). While imposter syndrome is not recognized as a psychiatric disorder, it is becoming more widely discussed and researched as the impact of these feelings is becoming a concern for individuals in both their professional and personal lives (Bravata et al., 2020).

Self-Doubt

Across professions, individuals experience similar feelings when identifying with imposter syndrome. Research has consistently shown that self-doubt is reported by most individuals who identify with imposter syndrome (Cader et al., 2021; Holden et al., 2021; LaDonna et al., 2018). Self-doubt is often the root of imposter syndrome feelings as individuals question that their success is due to their own efforts (Bravata, et al., 2020). Self-doubt regarding the quality of one's work is often internalized as a deficit in one's intelligence or ability to be successful (Hutchins & Rainbolt, 2017). Feelings of self-doubt have been found in studies across a spectrum of ages, professions, and across all stages of academic and professional careers (Bravata, et al., 2020; Hutchins & Rainbolt, 2017). Self-doubt and imposter syndrome feelings have even been found in doctorate level students, often resulting in a lack of dissertation completion (Marshall et al., 2017).

Anxiety

Individuals who struggle with imposter syndrome often report heightened levels of anxiety in comparison to those who do not identify with this phenomenon (Cader et al., 2021). Qualitative studies have elaborated on how those with imposter syndrome manifest anxiety. Some professionals report working well over normal workweek hours as they worry they have not done a competent job (Jaremka et al., 2020). Others report a heightened state of stress while they wait for their colleagues to discover they are "frauds" (Ramsey & Brown, 2018). Comparison of self to colleagues' perceived workload and success is another behavior often reported to cause and be fueled by anxiety (Bothello & Roulet, 2016).

Intellectual Inauthenticity

Intellectual inauthenticity involves not sharing one's true thoughts, contributions, or beliefs and instead only voicing ideas believed to be congruent with others in their profession (Edwards, 2019). This inauthentic behavior is linked to a lack of confidence that their knowledge, ideas, expertise, or opinions will be received with the same respect as others (Edwards, 2019). While little research has been done on this manifestation of imposter syndrome specifically, it has been well documented that those with these feelings, particularly women or minorities, often consciously do not ask questions or share competing views with colleagues (Hutchins, 2015).

Perfectionism

Many studies cite perfectionism as a common manifestation of imposter syndrome in students and professionals alike (Wang et al., 2019). The drive to be perfect has been linked to one's perceived inadequacy in their work, creating a negative feedback loop of self-criticism and anxiety (Wang et al., 2019). This, in turn, often leads to lack of self-promotion, overcompensation for one's doubts in their ability, and has been linked to negative mental health (Hutchins & Rainbolt, 2017).

Charm

Diligence in being well-liked is another characteristic of those with imposter syndrome (Edwards, 2019). In order to avoid being discovered as a "fraud," charm and a positive attitude are employed to gain the favor of colleagues and supervisors (Clance &

Imes, 1978). This attribute, first identified in the original research, has been recounted in narrative accounts of those with imposter syndrome (Gadsby, 2021). In fact, while those with imposter syndrome feel deficient in their areas of professional expertise, they often rate themselves positively in their ability to develop rapport and interact well with others (Gadsby, 2021). Imposters report consciously employing charm as a defensive mechanism against their perceived professional struggles (Clance & Imes, 1978). Individuals with imposter syndrome use charm and other interpersonal skills to appear confident in their intelligence and ability, thus preventing others from discovering their perceived incompetence (Hutchins & Rainbolt, 2017).

Problems Caused by Imposter Syndrome

While everyone will experience the impact of imposter syndrome in their own way, there are many common problems faced by those who fall into this category. Mental health issues, professional identity development (Hutchins & Rainbolt, 2017), work productivity, and career advancement struggles are common among higher educational professionals, students, and other high achieving professions (Bravata et al., 2020). The intensity of these issues may be compounded by gender stereotypes (Ling et al., 2020) or minority status (Le, 2019). The need to openly discuss the problems faced by those with imposter syndrome is integral to understanding how this phenomenon impacts both the professional and the workplace.

Mental Health Struggles

As anxiety and depression are common characteristics of imposter syndrome, significant mental health struggles are often reported by its sufferers (Cader et al., 2021;

Holden et al., 2021; Hutchins & Rainbolt, 2017). Some studies have found imposter syndrome to be a significant indicator of poor mental health, particularly anxiety, depression, and reports of psychological distress (Parkman, 2016). Reports of suicidal ideation have been reported as a concern for students with imposter syndrome (Parkman, 2016). High expectations of professional outcomes, such as publishing, tenure advancement (Bothello & Roulet, 2016), and other types of professional recognition, have also been linked with stress and anxiety in those with imposter syndrome (Jaremka et al., 2020). The long-term impact of mental health struggles can lead to burnout, decreased self-esteem, stress-related illness, and an overall decreased quality of life (Bravata et al., 2020).

Career Advancement Issues

Much of the recent research has documented the incidence of career advancement struggles for those who identify with imposter syndrome (Feenstra et al., 2020). In higher education there are well-defined indicators of success that are closely watched by the administration, other faculty, and staff (Edwards, 2019). Publishing, tenure-track advancement, and leadership positions are expected and earned through hard work and persistence (Hutchins & Rainbolt, 2017). While intelligence and ability are essential characteristics needed to achieve success in higher education, these are the same strengths those with imposter syndrome doubt they possess (Clance & Imes, 1978; Hutchins & Rainbolt, 2017). Believing their current success is not of their own ability, new opportunities are often overlooked. (Gadsby, 2021). Narrative and quantitative studies have both revealed data supporting those with imposter syndrome identities are less likely to take on leadership roles (Cader, et al., 2021), speak their true opinions in group situations (Hutchins, 2015), and hesitate to take on more responsibility (grants, research, overloads, etc.) (Jaremka et al., 2020). This perceived lack of initiative is often born from an intense fear of failure (Cader et al., 2021), making it more difficult for one to be noticed by those determining advancement and may reduce the likelihood of achieving tenure (Hutchins & Rainbolt, 2017).

A recent social work research article posits that the lack of an individual’s ability to be authentic, particularly for women and minorities, also contributes to one’s feelings of imposter syndrome (Fields & Cunningham-Williams, 2021). The perception that one has to either hide their true personality, intelligence, ideas, and feelings or risk stigma, backlash, and being stereotyped by being authentic in the workplace creates both internal and external stress, potentially reducing advancement opportunities for that individual (Fields & Cunningham-Williams, 2021). Feeling of exhaustion due to the constant vigilance of maintaining their “cover” as a competent professional (Fields & Cunningham-Williams, 2021), can result in one not entering their chosen profession at a higher level, such as teaching in a university (Hutchins, 2015).

Work Productivity

Research has shown that despite the perfectionist tendencies and diligence in work ethic, work productivity may suffer for those with imposter syndrome (Hutchins, 2015). Procrastination in starting a project, inability to make decisions, micromanaging themselves and others, and insisting tasks be performed perfectly are all documented work productivity struggles faced by those with imposter syndrome (Robertson, 2018).

Student evaluations of teaching are often lower for those who experience this phenomenon (Hutchins & Rainbolt, 2017). Research studies have found that these productivity issues may lead faculty to abandon their academic careers, or at the very least, strengthen their imposter syndrome perceptions that they do not belong in a high-achieving environment (Robertson, 2018). On the extreme ends of work productivity issues, you may find situations where complete stagnation occurs while others may exhibit unhealthy over-productive behavior (Fields & Cunningham-Williams, 2021).

Causes of Imposter Syndrome

To date, no specific cause has been linked to imposter syndrome, however, recently more research has focused on environmental, institutional, and relational factors as potential contributors (Feenstra et al., 2020). Instead of focusing on the individual and their personality traits as the cause of self-doubt and imposter syndrome feelings, social and contextual examinations are gaining credibility as the impetus for this phenomenon (Feenstra et al., 2020).

Individual Personality Traits

Initially framed as a detrimental personality trait, feelings of self-doubt, inadequacy, and anxiety (Clance & Imes, 1978), much of the early research on imposter syndrome focused on the personal behavior traits and temperaments contributing to these feelings (Feenstra et al., 2020). Several studies have explored personality traits acting as protective or risk factors in imposter syndrome (Bravata et al., 2020). For example, playfulness was found to contribute to resilience in those with anxiety and self-doubt, acting as a protective factor against imposter syndrome (Brauer & Proyer, 2017).

Conversely, gender (Edwards, 2019), pre-existing mental health struggles, (Bravata et al., 2020), ethnicity (Fields & Cunningham-Williams, 2021), and perfectionist tendencies (Holden et al., 2021) are all correlated with higher incidences of imposter syndrome feelings.

Relational/Interpersonal Contributions

As children, we learn to interpret relational cues from interactions with others. When interacting with those whom we respect, these interpretations can build self-esteem and encourage feelings of value, or convey disapproval, reinforce feelings of inadequacy (Feenstra et al., 2020), and support one's negative self-image (Edwards, 2019). Basically, we see ourselves as we perceive others see us (Feenstra et al., 2020). Stereotypes surrounding marginalized individuals, for example, women in the workplace or racial minorities, may be subtly reinforced by the interactions between colleagues (Acholonu & Oyeku, 2020). When these subtle microaggressions occur over a period of time that person is likely to internalize these stereotypes as true and begin to hide their authentic selves (Acholonu & Oyeku, 2020). Those in white, heterosexual, male dominated professions, report instances of repeated microaggression interactions, strengthening one's perception that their authentic self is not good enough to have been successful, therefore feeding imposter syndrome feelings (Acholonu & Oyeku, 2020). In high-achieving professions, such as medicine or academia, microaggressions can take the form of not being asked for advice, being excluded from important workplace discussions (Feenstra et al., 2020), or missing out on professional opportunities due to a lack of equal, effective communication (Acholonu & Oyeku, 2020).

Social/Societal Contributions

Research suggests that one’s position in the social structure can impact the likelihood of them experiencing the imposter syndrome phenomenon (Feenstra et al., 2020). Social stereotypes may contribute to the lack of recognition of talent, skill, and contributions in those who are high-achieving (Feenstra et al., 2020). Women may be characterized as lacking leadership potential or labeled as aggressive for behavior that would be considered assertive in a male colleague (Cokley et al., 2015). These social mores may bias co-workers or administrators against another colleague, thus impacting their relational interactions (Acholonu & Oyeku, 2020), as discussed previously. These social structures may be partially responsible for women and minorities not matriculating in traditionally male professions (science, math, engineering, and technology) or contributing to the drop-out rate once in the academic program or employed in their profession (Chrousos & Mentis, 2020). Internalizing gender or racial stereotypes can increase the likelihood of one feeling as though their success is not a personal achievement, reinforcing imposter syndrome thoughts (Cokley et al., 2015).

Institutional Contributions

The organizational structure where one works can have a profound impact on the culture of that workplace (Feenstra et al., 2020). Depending on the profession, women and racial minorities may be clustered in specific roles while other, not marginalized workers may be more likely to hold higher-level positions (Feenstra et al., 2020). Institutionalized gender and racial discrimination can be difficult to define clearly, and this lack of concreteness perpetuates the discriminatory behavior of the organization

(Wells et al., 2021). Wage gaps still exist, even when accounting for circumstantial differences such as educational levels or time at an organization (Meara et al., 2020). Chief executives of Fortune 500 companies are predominantly white males, making up almost 86% of the current CEO’s. Women and minorities encompass the rest of the positions, with only 1% of that total being minorities of both genders (Zweigenhaft, 2021). Organizational structure can make it hard for these marginalized individuals to progress in their chosen profession despite equal talent, credentials, and skill (Cokley et al., 2015), potentially strengthening and perpetuating the feelings of imposter syndrome.

Current Treatments and Interventions

In the last 10 years, several books and a significant amount of research articles have made suggestions on how to treat imposter syndrome feelings (Bravata et al., 2020). Acknowledging that imposter syndrome is created at multiple levels of intervention, no one strategy will work for all (Feenstra et al., 2020). Just as with all mental health issues, the manifestation of imposter syndrome is unique to everyone, based on their lived experiences as well as other environmental factors (Bravata et al.,2020). Change at the institutional and societal level can help change a culture that perpetuates imposter syndrome (Wells et al., 2021). Relational and individual interventions can help address the stress and negative impact on professional and personal lives (Hutchins & Rainbolt, 2017).

Institutional and Social Interventions

From a top-down perspective, societal and institutional oppression and power imbalances should be addressed at all levels of education and in the workplace (Andrews, 2020). This concept employs organizational change as not only a treatment but as a prevention for imposter syndrome (Feenstra et al., 2020). Recognizing that personal attributes are not at the core of this phenomenon, addressing systemic inequities can call attention to how imposter syndrome is created in individuals from as early as childhood educational experiences (Andrews, 2020). Gender and minority stereotypes need to be assessed and confronted as a real and ongoing contributor to discrimination, marginalization, and oppression, reinforcing, among other things, imposter syndrome (Wells et al., 2021). While some research has suggested that calling attention to discrimination can inadvertently make it worse (Cokley et al., 2015), only by intentionally defining and changing oppressive institutional atmospheres can workplace and systemic change occur. Leadership within organizations should be held accountable for acknowledging environments promoting stress, anxiety, and imposter syndrome and seek to affect policy change that support a healthy working environment, including pay equity, leadership training, unbiased evaluation procedures (Mullangi & Jagsi, 2019), and gender-neutral language (Wells et al., 2021).

Relational Interventions

Many research studies advocate for positive peer interactions as a mechanism for dealing with imposter syndrome (Parkman, 2016). Support from supervisors and colleagues have been found to have a negative correlation with imposter syndrome feelings as well as anxiety and depression (Pervez et al., 2021). When organizations normalize seeking support or have intact support programs for their employees, research shows that positive coping mechanisms can be learned, job satisfaction may increase, and mental and physical health can be improved (Pervez et al., 2021). These strategies are recommended for both professional as well as academic settings as imposter syndrome is well documented among college students (Ramsey & Brown, 2018). Experienced and empathetic peer mentors can model resilience (Ramsey & Brown, 2018), normalize fraudulent feelings (Pervez et al., 2021), and support positive professional identity development (Hutchins & Rainbolt, 2017). Some research suggests that mentor relationships can have an adverse impact on imposter syndrome, with participants reporting that their mentors highlight the imposter's already negative perception of themselves (Hutchins, 2015). Care should be taken by both the mentor and organization to be responsive to the needs of the individual being mentored.

Interpersonal Interventions

Treatment for imposter syndrome at a personal level often includes coping mechanisms such as generic prescription of self-care, meditation, or therapy (Andrews, 2020). While these are often short-term helps, it does not address the root cause or ongoing professional and personal struggles resulting from imposter syndrome. As many imposter syndrome sufferers do not share their fraudulent feelings with others, both adaptive and maladaptive coping skills are often developed in a vacuum over time (Hutchins, 2015). Interventions at the individual level should focus on the dominating issues of the sufferer (emotional exhaustion, anxiety, depression, and high-stress levels) (Bravata et al., 2020).

Some research has indicated that treating those with imposter syndrome using trauma-informed care techniques may be effective in diminishing its negative effects

(Andrews, 2020). Those with imposter syndrome may exhibit the same type of behaviors as those with traumatic responses to stimuli (Andrews, 2020). People-pleasing, overworking, inability to set boundaries and say no, and social isolation are all behavioral responses to trauma that are also seen in those with imposter syndrome (Andrews, 2020). By uncovering the underlying mechanisms behind these behaviors, those in therapy can be encouraged to be self-reflective and reframe their mindset regarding their ability to excel in a high-achieving work environment (Cader et al., 2021).

Social Work Practice Implications and Social Justice Issues

Social workers and other professionals must play a part in the recognition of the needs of 2e students, the deficits in the macro, mezzo, and micro-systems, and help support the teachers, parents, and students. Social work education is unique in its focus on the person in the environment. Social workers are trained to look at all the systems connected to an issue and how change affects those systems and their clients (Forenza & Eckert, 2018) By addressing systemic inequities for 2e students, recognition of needs on all levels of interventions can be analyzed for change (Hart, 2019). This change not only will help to create and ensure appropriate environments for 2e students, but will aim to decrease long-term struggles, such as imposter syndrome or under-performance in adulthood (Ronksley-Pavia et al., 2019). On a macro level, policy development acknowledging the inequities in opportunity for appropriate education must be addressed. While policy change is complicated, slow, and often stagnated by bureaucracy (Viennet & Pont, 2017), social workers are called on to address social injustice in all areas of practice (NASW, 2013). Policy change at all levels should be a multi-directional process, based on the school and student needs, current research, and analysis of existing policy (Viennet & Pont, 2017). Failure of policy- makers to fully understand the issues at hand may result in ineffective policy change (Viennet & Pont, 2017)

Macro-change at the higher education level is at the very core of the NASW Code of Ethics value of social justice (Fields & Cunningham-Williams, 2021). A need to challenge and change the oppressive internal structures of higher education can help alleviate systemic discrimination. As discussed previously, women and marginalized populations are still at risk of being overlooked for raises, promotions, awards, and opportunities that may be available or easily attainable to others (Cokley et al., 2015). Only by understanding how the culture of oppression has impacted the functioning of an organization, in this case, higher education institutions, can real changes be identified, policies made, and change implemented (Fields & Cunningham-Williams, 2021). Research studies, such as this one, can provide information regarding lived experiences of individuals, outlining the struggles they have faced due to imposter syndrome feelings as well as the institutional culture that supports the perpetuation of that imposter syndrome feeling (Kirk & Reid, 2002).

At the mezzo level, community analysis, support, and interventions can be planned with intentional change on both the elementary, secondary, and higher education level (Harmon et al., 2021). Properly accommodating those with disabilities at all levels of education as well in the professional realm is necessary to support success, mental health, and healthy self-esteem (Bechard, 2019; Cokley et al., 2015). Acknowledging the increased pressure and oppressive circumstances that may be present due to the addition of being a woman or part of a marginalized population must occur not only on the societal and institutional levels, but at the community level as well (Fields & Cunningham-Williams, 2021). Social workers can help identify gaps in service, needs of each community, oppressive behaviors, and create supports for educational institutions at all levels. By creating and researching best practices, social workers can create change in both community and professional institutions for identifying environments that perpetuate social problems, in this case, imposter syndrome in higher education faculty (Kirk & Reid, 2002).

Micro-level practitioners, particularly at the clinical level for social workers, face social justice issues with most every client interaction. By helping clients find the language to voice their feelings perpetuated by oppressive policies and environments, social workers can empower each individual to reframe their experiences. Understanding how systemic oppression and discrimination has contributed to their struggles as a 2e student as well as how their educational experiences contributed to their perception that they are not as good as their peers (Feenstra et al., 2020), researchers and practitioners can design a starting point for positive change to occur in the therapeutic setting. Social justice change is a layered process (Viennet & Pont, 2017). At the micro practice level, social workers can help struggling clients, provide education, and advocate at each level of intervention for improvements in the short-term to affect long-lasting change (Kirk & Reid, 2002).

Summary

This chapter contains a thorough review of the literature for both twice-exceptional students and those who identify with imposter syndrome, though neither variable has been connected. Research is clear that 2e students have been historically underserved, either by identification (Barnard-Brak & Johnsen, 2015), accommodations (Gierczyk & Hornby, 2021), systematic struggles (Bell, 2020), or lack of understanding by the teachers, staff, community, and educational institutions (Bechard, 2019). Failure to appropriately accommodate those with special needs and gifted abilities can result in negative self-concept, anxiety, depression, and under-performance (Foley-Nicpon et al., 2015; Lee & Ritchotte, 2018). While not all 2e students struggle throughout their academic careers or in their professional lives, many studies report the long-term consequences of inadequacies in 2e education (Gierczyk & Hornby, 2021). As identification standards are inconsistent across states and school districts, an accurate number of students eligible for these services is unknown, potentially leaving many students without necessary school, social, environmental, and structural supports needed to be successful (Lee & Ritchotte, 2018).

Imposter syndrome, or imposter phenomenon, while conceptualized almost 50 years ago (Clance & Imes, 1978), is still not a recognized category of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013), despite many researchers’ push to include it as a mental health disorder (Bravata et al., 2020). Imposter syndrome is defined as high achieving professionals attributing their success to outside forces, feel like a fraud in their professional, and sometimes personal lives

(Clance & Imes, 1978). Thought initially to affect mainly women, research has been mixed as to the incidence of imposter syndrome in men (Bravata et al., 2020). This could be in part due to the stigma of one revealing self-doubt or fraudulent feelings in the workplace, resulting in inaccurate numbers of those who struggle with these feelings (Cader et al., 2021). For those who struggle with imposter syndrome, high stress, low self-esteem, mental health struggles, and workplace performance issues are all potential outcomes (Bravata et al., 2020; Gadsby, 2021; Hutchins & Rainbolt, 2017). To date, no clear cause of imposter syndrome has been identified, however, research over the last five years has begun to examine environmental factors as a potential cause as well as interpersonal experiences (Feenstra et al., 2020).

A better understanding of how interpersonal, community, and societal experiences can impact and perpetuate imposter syndrome can help human service professionals create effective interventions at every level of client system interaction (Kirk & Reid, 2002). Applying Erikson's psychosocial identity development theory as a framework for understanding how an individual's psychosocial development milestones are resolved, the impact of both positive and negative 2e experiences, as well as risk and protective factors in childhood (Erikson, 1997), researchers can begin to fill in the gaps in understanding of how imposter syndrome may develop. This advancement of knowledge will allow for applied, informed, and appropriate changes to be identified and implemented (Babbie, 2017) in both 2e education and identification and treatment of imposter syndrome.

Section 2 includes the research design and data collection methods for this study. As demonstrated in the literature review, a gap in research exists involving connecting 2e experiences with imposter syndrome feelings. A discussion of research questions, research design, data collection, and ethical considerations will be used to outline and justify chosen methods for this qualitative research study.

Section 2: Research Design and Data Collection

Introduction

The purpose of this qualitative study is to gain an understanding of how 2e childhood experiences may contribute to feelings of imposter syndrome, particularly among higher education faculty. As demonstrated in Section 1, imposter syndrome is a prevalent and persistent problem among many high achieving professions. While research has recently begun to explore the symptoms and interventions for imposter syndrome, little research has been conducted to understand the formation of imposter identity. Much research has been conducted on experiences of 2e students in the classroom, ranging from early childhood experiences to college classroom struggles. Lack of accurate identification and accommodations for these students include low self-esteem, mental health struggles, and underperforming in the classroom (Gierczyk & Hornby, 2021). By applying Erikson's psychosocial identity development theory to significant incidents involving childhood 2e classroom experiences, I attempted to explore connections between feelings of imposter syndrome and the educational system's impact on 2e students.

This chapter contains the research design and rationale for its implementation. A discussion of research questions, methodology, and data analysis is followed by an examination of issues involving trustworthiness in this research study. Ethical considerations for participants and data collection and storage are identified and addressed.

Research Design and Rationale

The purpose of this basic qualitative study was to understand and explore how 2e childhood experiences contribute to feelings of imposter syndrome among post-secondary faculty. By conducting semi-structured interviews with participants, this study was used to identify potential experiences in childhood and secondary education that may contribute to ongoing feelings of inadequacy. This study can help social workers, educators, and other mental health practitioners identify, normalize, and destigmatize both 2e childhood experiences and imposter syndrome feelings, which may result from inadequate supports in the classroom. Supports from elementary school to post-secondary settings can be designed to reduce potential for negative social, emotional, and cognitive functioning. Identification of community and institutional contributions which perpetuate imposter syndrome can be identified and addressed. This study can be used to design supportive work environments to help individuals identify and work through their imposter syndrome struggles.

For this study, research questions were designed to identify key milestones in participants' childhood and adult professional experiences relating their status as 2e and having imposter syndrome.

The research questions for this study were as follows:

RQ1: How do post-secondary faculty describe their 2e educational experiences prior to and during college?

RQ2: How do post-secondary faculty describe their experiences with imposter syndrome during their educational journey and in their professional lives?

RQ3: What are post-secondary faculty's perceptions regarding how their early 2e educational experiences contributed to their feelings of imposter syndrome?

How participants perceived the significance and impact of those experiences on their identity development and self-concept was viewed using Erikson's psychosocial identity theory. Ultimately, the goal of this study was to fill a gap in research connecting 2e experiences and feelings of imposter syndrome.

For the purposes of this study, key variables were defined as follows:

Imposter syndrome: Attributing success to outside forces or hiding feelings about being fraudulent in professions (Clance & Imes, 1978).

Twice-exceptional (2e): Individuals who are identified as gifted and talented and also have a disability (Foley-Nicpon et al., 2013).

Childhood experiences: Academic experiences related to 2e identification during kindergarten through 12th grade or prior to obtaining a GED.

Post-secondary experiences: Academic experiences after graduation of high school or completion of a GED.

Methodology

Semi-structured interviews were conducted with participants from a large Midwestern university who self-identified as 2e and having imposter syndrome. After receiving IRB approval from both Walden University (approval #: 04-13-22-0988929**)** and the university involved in this study, a search for research participants began. Using open-ended and semi-structured interview questions, I met with participants for approximately 1 hour. Responsive interview techniques were used to allow for a relational and reflexive interview process.

Participants

Participants for this study were post-secondary faculty members who self-identifed as being 2e and experiencing imposter syndrome. Approximately 8-12 participants were anticipated to be interviewed. Interviews continued until data saturation was achieved. A total of six participants were interviewed. As compensation for participants' time, $10 gift cards to Amazon were offered.

Sampling

Self-referring participants were selected for inclusion in the study using purposive sampling. As qualitative studies generally have a smaller sample size, purposive sampling allows the researcher to identify those who have unique experiences that are being researched (Ravitch & Carl, 2016). Purposive sampling allowed the researcher to identify participants with characteristics identified in research questions, and also are willing to share their experiences during interviews (Ravitch & Carl, 2016). The university from which the participant pool was sampled has six campus sites. The search for study participants included solicitation specifically to faculty members on all campus sites via university-wide emails. Faculty members could be adjunct, part-, or full time. Individuals who were not identified as gifted or have not been diagnosed with a disability at any point in their lives were excluded. Individuals with whom I had a professional relationship were only considered if more participants were needed to achieve data saturation.

Instrumentation

Semi-structured interview questions were designed to elicit narrative responses for each of the three main research questions.RQ1, RQ2, and RQ3 were intended to elicit first participants’ 2e experiences. Questions regarding participants’ experience involving imposter syndrome in their professional environment were explored. Finally, questions were asked to explore the connection, if any, between their 2e experiences and current feelings of imposter syndrome. Follow-up questions and prompts were used as necessary during the interview process.

Prior to interviewing participants, a simple questionnaire was sent via email to obtain demographic information. Data regarding age, race, sex, marital/relationship status, educational information, and employment background were collected via email and during interviews.

Data Analysis

Due to university COVID restrictions, interviews were conducted virtually using Microsoft Teams, a program accessible to all university employees. Data was collected by both myself taking notes and audio taping of the interview session. Confidentiality was protected by assigning each participant a number and gender identification (e.g., Female 1).

Upon each interview completion, I transcribed the interview content. Once all interviews were completed, the transcripts were read to analyze for themes. Transcripts were then coded using NVivo, a computerized transcription program, creating one file for each participant. In vivo coding was used to capture the meaning of the participants’ interviews as closely as possible. Using an inductive process of data analysis, themes were developed by grouping/combining codes emerging from the data set. Upon completing the coding of all interview transcripts, theme analysis was conducted (Saldana, 2016).

Addressing Research Trustworthiness

Credibility

Credibility was established by member checking with the participants, using thick descriptions, and using a peer as an external auditor. When coding, a thick description to ensure a detailed account of the participant's perspective was ensured by using narrative impressions of the interview experience to provide context to the researcher and the readers (Ravitch & Carl, 2016). Member checking, with those participants who are willing, was conducted as themes emerged from the data to ensure researcher interpretation was accurate (Motulsky, 2021). Using a peer as an external auditor as data was interpreted helped control for potential researcher bias, particularly as this research topic was connected to the researchers' personal experiences (Ravitch & Carl, 2016).

Transferability

By careful data analysis, including thick descriptions for context, this research can be transferrable to others in similar environments. Details in transcribing and coding ensured fidelity of the interpretation of that participants' experiences, allowing for applications of this research's outcomes to be relatable to other audiences (Ravitch & Carl, 2016).

Dependability

The research method being used for this study, semi-structured interviews, was chosen due to its versatility in gathering participant information. Open-ended questions were designed to elicit narrative experiences, perceptions, feelings, and connections related to the research variables (Rubin & Rubin, 2012). Data triangulation was used when selecting participants by seeking diversity in disability, age, and 2e accommodations. By seeking a diverse participant pool, dependability was strengthened by comparing data from varied participant perceptions of their experiences. Age, location of 2e school (state or district), and disability type was used as comparison points for participants' perceptions of their experiences. By using purposive sampling and conducting interviews until data saturation occured, different perspectives of diverse participants were examined for theme analysis (Ravitch & Carl, 2016).

Confirmability

The neutrality of the researcher is essential to achieving confirmability in this study. External audits and research reflexive exercises were conducted to assess for potential bias in data interpretation (Ravitch & Carl, 2016).

Ethical Procedures

Once this research proposal was approved, an IRB application was submitted to both Walden University and the university from where the participants were sampled. The IRB process identified any ethical issues and ensured controls were made to protect the participants from harm and minimize any risk. Prior to the interview process, participants were presented electronically with the informed consent document which outlined the research study questions, how participant information will be collected, protected, and verified through member checking, and any potential risks or benefits of this process. A potential risk for participants was anxiety or stress arising from recalling traumatic childhood events. A document containing community resources for counseling was distributed after the interview process should a participant wish to receive this information and want to follow up on any issues or discomfort that may have arisen during the interview process.

Participant Confidentiality

Identification of the participants will remain confidential. Each participant was assigned an identifier including their gender and a number corresponding to the order in which their interview occurred, for example, Female 3.

Data Protection

Participant interviews were conducted via Microsoft Teams, a program accessible to all university employees. These recorded interviews, transcribed data, coding memos, and any data analysis were saved to a password protected computer hard drive accessible only to the researcher. Any hard copies of data were kept in a locked filing cabinet accessible only to this researcher. Research records will be maintained for five years from the date of research completion and confirmation of IRB project closure. Hard copies will be destroyed via shredder and electronic copies will be deleted and files overwritten.

Other Ethical Considerations

As I am a faculty member on one of the six campus sites for the university identified in this study, there may have been a faculty member with whom I was acquainted apply to be a part of this study. Participants with whom only a professional relationship exists were considered for inclusion in this study.

Participants were presented with a $10 Amazon gift card via email to thank them for their time and participation. This token of appreciation was not intended to be an incentive for participation.

Summary

This section included an outline of the rationale for this research project, research questions, and theoretical context. Relevant key terms were defined as they applied to this study. Research design, participant sampling, data analysis, and research trustworthiness were identified and justified. Data collection methods and practices to ensure credibility, transferability, dependability, and confirmability were discussed. Ethical considerations were identified and addressed, and proactive measures were delineated. Section 3 includes an outline of findings for this research project.

Section 3: Presentation of the Findings

Introduction

The purpose of this qualitative study was to determine if 2e childhood experiences contributed to feelings of imposter syndrome among post-secondary faculty. Semi-structured interviews were conducted to elicit detailed narrative responses. All interviews were conducted virtually via Microsoft Teams with a total of six participants.

The research questions were as follows:

RQ1: How do post-secondary faculty describe their 2e educational experiences prior to and during college?

RQ2: How do post-secondary faculty describe their experiences with imposter syndrome during their educational journey and in their professional lives?

RQ3: What are post-secondary faculty's perceptions regarding how their early 2e educational experiences contributed to their feelings of imposter syndrome?

In Section 3, I review participant recruitment techniques and demographics, interview format, and data collection and analysis. Research trustworthiness and potential limitations are examined. Research findings are discussed by identifying and providing evidence for themes that emerged for each of the three research questions. Finally, this section includes advice participants shared they would give to their childhood self to prevent imposter syndrome.

Data Analysis Techniques

Participant Recruitment

In May of 2022, I received IRB approval from Walden University (#04-13-22-0988929) and the large Midwestern state university used for participant recruitment. For recruitment of participants, I submitted a request to the marketing and communications department of the research site university requesting approved flyer/recruiting information be disseminated to all faculty at the institution. The marketing and communications department formatted and disseminated a call for participants with email addresses containing information regarding the purpose of the study, participant requirements, time expectations, study format, compensation, IRB approval number, and information on how to contact me via phone and email. This email was initially delivered to all faculty on all university campuses affiliated with the large Midwestern state university. A second email was sent approximately 2 weeks later after it was made known that the original email list did not include those with primary staff or administration designations but also serve as faculty at the university. The first email release yielded four appropriate participants. The second email release yielded two more appropriate participants for a total of six participants. Once participants signed the informed consent form, virtual interviews were scheduled at their convenience. All participants who inquired about the research project were appropriate for study inclusion. Semi-structured interviews via Microsoft Teams were conducted over a period of 22 days. All participant interviews followed the same question delivery and format (see Appendix A). Interview lengths ranged from 45 minutes to 2 hours. At the conclusion of each interview, participants were informed that a list of mental health providers in their geographical area was available should any feelings of distress arise during or after the interview process.

Demographics

Participants for this study were all faculty members at a large state university in Ohio. Demographic information for all participants was analyzed (see Table 1) and, while the sample size was small, diversity was found. While little racial diversity was found, participants' faculty status was varied and accomplished, with two tenure-track faculty, one instructional faculty, one adjunct, and one visiting faculty, as well as one administrator with teaching responsibilities. While participants were mainly housed on the main university campus, regional campus faculty were also represented. Participants' ages ranged from 38 to 54. Age categorization was as follows: three participants were 31 to 40, two participants were 41 to 50, and one participant was between 51 and 60. Five participants had completed master's degrees. Four faculty members had completed their Ph.D.s, and two participants had completed several years of postdoctorate coursework and research. Two participants were male and four were female. Four participants were born in the United States while the remaining two participants were born in South America and Europe. One of these international participants had moved to the U.S. as a younger school-aged child and one participant moved to the U.S. after completing secondary educational requirements.

While each participant reported varied gifted education experiences, all but one was formally identified as gifted in early elementary school. The formally unidentified gifted participant was raised in a country where formal gifted education did not exist but reported being labeled as very bright and was given advanced learning opportunities similar to gifted programming in the U.S. One participant reported attending a school where gifted class opportunities did not exist, despite offering testing for gifted identification. The remaining participants reported attending gifted and talented classes and being tracked into advanced educational classes when attending middle and high school.

Disability status of participants included both physical and mental health diagnoses. Two participants reported physical disabilities, while four participants reported mental health diagnoses, including anxiety, depression, and ADHD or attention deficit disorder (ADD). One participant reported being misdiagnosed as bipolar but was eventually diagnosed with anxiety and ADHD. Both participants with physical disabilities reported being diagnosed at birth or during very early childhood. Participants with mental health diagnoses all reported not being diagnosed until after completing high school. Ages of initial mental health diagnoses were as follows: one was diagnosed at 19, one at 20, one at 23, and one at 27. One participant who initially presented to the study with only a physical disability reported feeling that mental health struggles were part of their pre- and post-secondary educational experiences but was never formally diagnosed with a mental health disorder.

Table 1

Demographic Information of Participants

Demographic Characteristics	***N***	**Demographic Characteristics**	***N***

Age Grouping		**Disability**	
31-40	3	Physical	3
41-50	2	Depression	2
51-60	1	Anxiety	4
Gender		Attention-Deficit/Hyperactivity Disorder	3
Male	2	**Age of Disability Diagnosis**	
Female	4	Elementary/Secondary School: 0-18	2
Racial Identification		Post-Secondary School: 18-30	4
Caucasian/White	5	**Faculty Status**	
Latino	1	Tenured or Tenure-Track	2
Educational Attainment		Instructional Faculty	1
Masters	2	Adjunct Faculty	1
Doctorate	4	Visiting Faculty	1
		Administrator with Teaching Responsibilities	1

Data Collection

Participants were interviewed virtually via Microsoft Teams using a set list of semi-structured interview questions. Upon starting the interview, I asked if the participant had any questions they would like to discuss prior to starting the interview. A general outline of the structure of the interview questions was reviewed with the participants, and information about the recording and transcription of the interviews was given (Rubin &

Rubin, 2012). Once the participant was comfortable, the Microsoft Teams video was stopped, and the audio recording and transcription features were enabled. An audio recording using a mobile phone was also used as a backup recording for the Microsoft Teams recording. During the interview process, notes were kept on a hard copy of each set of interview questions labeled with the participant identifier (e.g., Male 1). These notes included follow-up questions as well as my thoughts and feelings regarding the interview as it progressed.

The interview questions began with basic demographic and educational information. The primary research questions for the interview were structured in three parts. The first section was designed to elicit the participant's 2e experiences, including their gifted identification, their disability diagnosis, and how each identification (or lack of diagnosis) manifested in their educational journey, as well as the struggles and supports encountered in that journey. The second question section focused on the participant's perception of their imposter syndrome, including when they first became aware of feelings of imposter syndrome, how it manifests in their work life, how these feelings are processed internally and externally, and how each participant accommodates for these feelings. In the third question section, participants were asked to connect their 2e experiences to their imposter syndrome feelings. These questions included asking about similar emotional and social responses experienced in both 2e settings and work settings, processing their professional identity in regard to imposter syndrome, and any clear connections or contributions their 2e experiences had on their imposter syndrome development. Finally, each participant was asked what advice they would give their grade-school self to help prevent feelings of imposter syndrome in their adult lives.

Once the interview was concluded, the recording was stopped, and the video feature was enabled if the participant consented. Each participant was asked if they had any questions or concerns. Information was provided to each participant regarding updates on the data analysis and final project. Each participant was also asked to participate in member checking if needed. All six participants agreed to be contacted if additional information or clarification was needed during the analysis process. A $10 Amazon gift card was emailed to each participant after the conclusion of the interview to thank them for their time.

Data Analysis

Upon conclusion of each interview, the Microsoft Teams transcript was saved and downloaded to my computer in a file labeled with the identifier of each participant. The same was done with each downloaded audio recording. Data analysis was conducted by me only to ensure confidentiality and protect client data. Transcription was completed by listening to the audio recording and reviewing the downloaded transcript to ensure a verbatim translation, proper formatting, correcting for mistakes, and removing the time stamps. Member checking was used for three interview transcriptions to ensure accuracy in translation and meaning of interview content (Ravitch & Carl, 2016). Once each transcript was complete, the audio recording and corrected transcript file for each participant was uploaded into NVivo, the qualitative analysis program being used for this project.

Coding was completed using the qualitative analysis program, NVivo. Each transcript was analyzed by reading the interview content and coding occurred for each transcript separately. In-vivo coding was used to identify 1060 initial codes. Pattern coding was then used to group those initial codes into 21 separate coding categories (Saldana, 2016). From these categories, five overall themes emerged and were connected to each of the three research questions.

Evidence of Trustworthiness

Credibility

Credibility was ensured by using NVivo software to code each transcript manually and develop overall themes. While all six participants agreed to member-checking should it be needed, only three participants needed to be contacted after the initial interview to clarify meaning or intent. My dissertation chair assisted as a peer-reviewer at different intervals during the research collection, data analysis, and the writing process to ensure accuracy, maintain fidelity to the research questions, and safeguard credibility. To ensure any potential researcher bias was identified and corrected if needed, the program chair of my academic department was used as an external peer reviewer. Potential bias was also discussed with my dissertation chair (Ravitch & Carl, 2016).

Transferability

During the transcription process, I ensured accuracy in data collection by listening to each audio recording while correcting the pre-formatted Microsoft Teams transcript for a verbatim script. By asking the initial research questions and follow-up questions as needed, each participant shared details of both 2e and imposter syndrome feelings as they experienced these variables in both academic and professional settings. These questions were used to gather thick descriptions of their perceptions and experiences within their own context but will allow the reader to apply the findings to their own contextual experiences. Member checking was used in three interview transcriptions and coding of those interviews, to ensure accurate interpretation of their shared content (Ravitch & Carl, 2016).

Dependability

During the interview process, a research question script containing open-ended questions was used to ensure each question was asked of each participant. The questions were designed to elicit in-depth responses to understand the reality of each participant's personal experience (Rubin & Rubin, 2012). Follow-up questions were asked as needed, but the format and question set remained consistent for each participant. As participant demographics were fairly diverse, dependability was strengthened by comparing the diversity in both demographics and experiences to each research question (Ravitch & Carl, 2016).

Confirmability

To ensure the confirmability of this study, researcher neutrality was examined by conducting an external peer review and discussions with my dissertation chair. Reflexive journaling was used while listening to each interview as well as during the transcription process. (Ravitch & Carl, 2016).

Limitations

Potential limitations of this study included the small sample size and the necessity of using virtual interviews rather than face-to-face interview settings. As purposive sampling was used and participants self-selected into the study, a small sample size was expected (Ravitch & Carl, 2016). The timing of the call for participants also proved to be problematic, as the dissemination of the first” call for participants” email occurred after most faculty had left campus for the summer. Also, in inadvertently leaving out staff and administrators who teach out of the initial email call, many potential participants may have been missed. A larger sample size may have yielded more data; however, data saturation was reached in several codes and themes connected to each research question (Ravitch & Carl, 2016).

Due to initial COVID restrictions and the large geographic area from which participants were located, virtual interviewing over Microsoft Teams was used. While face-to-face interviews would have been preferred by me, accommodations were made in order to ensure participant confidentiality and comfort during the interview process (Rubin & Rubin, 2012).

Findings

For this research study, connections between 2e childhood experiences and feelings of imposter syndrome were examined. A total of six participants (see Table 1) were interviewed. Three research questions were explored, and five themes emerged from the data.

For RQ1, two themes were identified: Theme one was because I was gifted….. Theme two was external interactions become inner monologues.

For RQ2, two themes were also identified. Theme one was accommodating for my environment. Theme two was imposter syndrome thoughts overriding objective success.

One overarching theme for RQ3 was identified: Imposter syndrome identity begins in grade school.

RQ1 Theme 1

Common to all participants who were diagnosed with a mental health disorder was the feeling that because each had been identified as gifted, their mental health struggles were attributed to other things and, therefore, went unnoticed, untreated, and unaccommodated. While each participant's gifted educational program was different, all but one of the six participants reported struggles with behavior issues, motivation, worry/anxiety, social skill struggles, and at times, low grades.

Female 2 shares several instances where she felt her mental health struggles were overlooked:

> This was, you know, having the symptoms there and because I was so bright, they were ignored. I was the kid who would get a 100% on the test and like this is the greatest project I've ever seen in my life on big projects, especially if they were creative. But would not turn in a homework assignment ever.

> It was in the anxiety piece was very much there, but it was explained to . . . I mean it was the 80s and it was explained away as she worries because she's so smart.

Female 2 details how this pattern of not turning in homework continued through to high school resulting in lower grades. Female 2 recalls being told she was “not reaching her potential” because she was not doing her homework. Despite a pattern of this repeated behavior, the school did not suspect a mental health struggle. As heard throughout this study, her struggles were attributed to giftedness instead of a potential disability. As Female 2 progressed through her educational experience, severe depressive episodes in high school contributed to significant academic struggles. Female 2 reports these depressive episodes negatively impacted her perception of herself as truly being “one of the smart kids.”

Participant Female 3 shares that she had a consistent pattern of dysfunctional behavior through the years of her elementary school experience and into secondary school that was also attributed to her giftedness. Also common to many participants, Female 3 shares her “aha” moment that followed her mental health diagnoses.

> When I got the ADHD diagnosed, it just explained so much for me about my whole educational experience. I was basically just blamed for being a chatterbox and thought to be social as opposed to somebody who has a legitimate attention deficit, probably derived from trauma, which is another conversation, but these things all overlapping and so when I got the diagnosis, it was a light going off. . . . And there was other stuff going on at home and in my personal life, and maybe if

> we knew that the words like “social butterfly” problem and “has trouble staying on task,” maybe if somebody had raised the red flag.

Female 3 shares how she struggled socially. She attributes these struggles to a combination of being from a lower-socioeconomic background, teacher perceptions of her “talking too much and losing focus,” and one particularly negative interaction with a math teacher. Female 3 recalls this memorable conversation with her math instructor as resulting in her feeling bullied, developing an intense fear of math, and negative self-image development. Female 3 articulates her frustration of being passed along in each grade with the same “social butterfly” and “lacks focus” notes in her academic record, yet never being identified as struggling because she was gifted.

Participant Male 4 shares his experience with undiagnosed ADHD and how it manifested in the classroom. Believing his gifted label prevented recognition of any mental health struggles, Male 4 details how his neurodivergent behavior eventually led to long-term academic and social struggles, even into his college experience.

> I think that's the challenge of the gifted label because then it's like you're one of the good kids. There's nothing to worry about here.
>
> Maybe the spirits of the ADHD component came in. I would not have a filter and would say or do things that sometimes was upsetting to the teacher, and didn't I think fit the model for like how gifted kids should act? Gifted kids should be well-behaved . . . that was the kind of stuff that I think where my disabilities or diagnosis affected it most.

Participant Female 6 remembers her educational experiences as being impacted by her undiagnosed ADHD as well as the perceptions of how girls should behave. The gifted label and lack of recognition of the prevalence of certain disorders in female students compounded the internal and external struggles in her classroom environment.

> So, it was always the like being the one with a hand up first or talking out of turn or talking too much or those sorts of things. And those aren't really identified in a girl in particular. Those aren't really identified as, at least they weren't when I was a kid as ADHD, right?

Finally, Female 6 shared how her lack of hyperactivity and ability to complete her work in “bursts of hyperfocus” may have masked any recognition of ADD traits, contributing to the long-term struggles that come with ADD and anxiety.

Participant Female 5 presented to this study with a physical disability but stated she suspects she may have mental health struggles that have remained undiagnosed to this day. Stress in her home life and frustration with her school environment led to what she describes as “serious episodes of acting out,” both academically and behaviorally.

> I mean, I was just a horrible, horrible student and it's so funny because it doesn't at all fit who I am now. But there you go. Maybe that was my disability.
>
> The more we talk about this, I feel like . . . my 2e thing is not my heart, I think it’s mental health stuff.

Despite behavior and academic struggles, participant Female 5 excelled in a school where there was no formal gifted program. Her ability to succeed, her gifted label, and developing accommodation strategies for herself, allowed Female 5 to navigate a successful professional life without exploring a mental health diagnosis. Yet, as an adult reflecting on her past, she suspects mental health struggles may have been or are a part of her story.

All five of these participants report their behavior, academic struggles, or mental health was overlooked or attributed to their gifted identification. Only after high school ended did any mental health diagnosis become formally identified and accommodated. Each participant in this section shared thoughts of wondering how their educational experiences would have been different if their mental health struggles had been identified and accommodated in elementary school.

RQ1 Theme 2

All six participants can remember individuals or situations in their educational journey where negative or positive interactions contributed to their identity development. Whether it be one teacher with a negative comment, a series of micro-interactions leading to an internalized message of their worth, or even an astute counselor who had a positive impact, each participant can recall, usually in great detail, how these events contributed to how they perceive themselves professionally, academically, and personally.

Participant Male 1 shared how his family's success was a catalyst for both his success and his identity development.

> So, I was always like, you should be fantastic. Look what your grandfather did . . . look what your father did. Look at what you've done and after a while you are not winning anything else. Sometimes I think I am not putting in enough effort.

Participant Female 2 recalled instances in elementary school and more recently where interactions either contributed to a negative inner monologue or reinforced what she was thinking about her success or struggles. As mentioned previously, Female 2 recounted many instances where she was told she was “not living up to her potential,” or” if you would just do your homework, you would have all A’s.” The consistency of comments of this type eventually led to Female 2 feeling as she “wasn’t really a strong student”, or ”never really self-identifying as “one of the smart kids.” These feelings were often reinforced by family members and other professional interactions. When sharing her feelings about both her mental health struggles, Female 2 recounted instances where others invalidated her experience:

> She looked right at me and said, you don't have a disability.
>
> And then in talking to my “family” and like having it immediately invalidated, I was like, well, that explains an awful lot too.

Participant Female 3 recalled one significant event with a math teacher that she believes was at the root of her view that she would never be good in math. Despite being in a math-driven academic field, Female 3 struggled and ultimately succeeded in accommodating for her constant inner monologue that she will never be good at math.

> Probably middle school, my algebra teacher told me I was a B student trying to be an A student. And that was probably the first moment that I remember. And he’s like, you'll never be a 4.0 student.

Female 3 also shared how she eventually accepted another teacher’s perception of her behaviors being social instead of having undiagnosed ADD. By learning to use this to her advantage, she feels she was able to mask much of her anxiety and self-doubt. Using this charming persona, even in her current professional setting, Female 3 stated it helps her hide her continued feelings of anxiety and self-doubt.

> And so, I quickly learned that if my teachers saw me as a social person and that was the role that I would play, then that's the role that I would play in the classroom forever. So, I was I was a teacher's pet in the sense that I would instead try and build relationships with my teachers and build relationships with my classmates and those kinds of things, and extracurricular activities were really important to me by the end.

Female 5 recalls how her family dynamics strengthened her gifted identity in a way that eventually caused problems in the classroom and her academic performance.

> I was really raised in a family that saw that saw itself as smart. And you know, my parents probably didn't take the best approach and basically said, you know, you're smarter than your teachers and didn't really raise me to have much respect for them.
>
> They (family) didn't blame me for not wanting to do the math sheets because they thought they looked boring too.

Female 5 also shared how both family and school interactions led to a negative inner monologue for both self-esteem and academic ability and validated her identity as a trouble-maker. After being accepted into a competitive summer academic program:

> My principal of my high school wrote to the gifted program and asked them to retract my acceptance because he felt it sent a bad message that a student with

> such poor grades would be accepted into such a program, and that I should at least have to improve my performance.

Even into her college years, Female 5 experienced interactions that reinforced her thoughts that she was missing something that would make her extraordinary, leading to feelings of inadequacy.

> I was taken aside by a philosophy professor who I was not that close to and told in no uncertain terms that he thought I wasn't capable of succeeding in Graduate School because I didn't eat, breathe, and sleep philosophy, which is true, I didn't. I think I got a lot of messages that at various points in my life that just said, you know, you're smart but you're not all that you know you're lacking something else. I guess that's what I would say. I never worried that I wasn't smart. I worried that I was lacking something else.

Male 4 recounted his memories of being called “lazy” and “stupid” regarding his academic performance, struggles, and work ethic. These consistent messages formed an internal sense of unworthiness and frustration that has carried into his academic and professional career. In hindsight, a connection between his inner monologue and imposter syndrome identity can be attributed directly to some of the things he heard as an undiagnosed 2e child.

> It was all the things probably you’ve heard already from others like lazy, stupid. You don't belong here. Not good enough. Especially the lazy one when you have no other thing to attribute it to, that makes sense.

> That's it’s easy go to be like, well, you're just not trying enough. You're lazy and like . . . I know how much I was struggling and that wasn't laziness all along.
>
> I just know there was that sense that something is just wrong with you and it’s something very core to who you are, where you're just not cut out for what smart people do.

Each of these participants can clearly recall the moment or moments when they received the message that they were not “good enough.” Even though several of these participants were doing very well in the classroom environment, internalization of implied or overt negative messages have become the base of their internal monologue regarding their ability to succeed.

RQ2 Theme 1

Participants all recount finding ways to navigate their environment both personally and professionally. Intentional accommodations for their personal struggles with their disabilities and imposter syndrome feelings included behaviors such as attending therapy, engaging in self-care activities like exercise or family time, and seeking out resources to help understand and cope with imposter syndrome feelings.

Male 1 makes intentional time for family and actively practices anxiety reducing techniques to manage his imposter syndrome feelings.

> I’ve started meditation and meditate, not as often as I should, but maybe once a day or once every other day. And there's a book . . . which is from a renowned psychologist, which gives you tricks to deal with an approach called ACT, which stands for acceptance and commitment therapy . . . the book is excellent, and he

> mentions lots of studies and techniques and exercises. So, I use those quite a bit actually to try to control anxiety with the with ACT.
>
> Sometimes I think maybe I am not putting in enough effort. Then I think about this. Yea, that might be true but at the same you are spending a lot of time with your two kids, and you are spending time at home. And you're not writing that grant and you are not writing the best conference paper, but you're still publishing. But wow, you've gone to so many soccer matches, and gymnastics meets, and watching movies with my daughter and going to movies, and training soccer with my son from when he was 5 to 16. Maybe it's ok. Maybe it's not that I am not good, but maybe that it's I decided to dedicate time to other things, like at home with my wife. I don't know. Maybe that's it.

At the same time Male 1 is working to reframe his imposter syndrome thoughts; he recounted other experiences where he finds himself masking his imposter syndrome and feelings of inadequacy by hiding his internal struggles.

> He (colleague) will find holes in my in my reasoning. He was extremely good, and I will have to pretend it doesn't matter and that's not that important. . . . So, I also had that experience there in industry like pretending to be somebody else that I obviously wasn't.

Many of the participants shared how navigating their imposter syndrome has impacted interactions with peers. Many participants report unconscious behavior changes, only recognized in hindsight that now can be attributed to their imposter syndrome fears.

Female 2 shared how both her gender and disability can cause her to augment her interactions in the professional workplace.

> Being the only female and then knowing that I wasn't gonna be able to speak without crying. And it not a healthy environment that I find it was like I just, I'm just not gonna say anything because I'm not gonna be able to, I won't be taken seriously.
>
> It's a lot of (feeling) like . . . I don't actually know what I'm doing here. Everyone else knows what they're doing and I don't have any idea. You know, sitting (meetings) right now, tons of time when we're all sitting in the same room. But when we are and being the only woman. So, in our meetings I didn't make a single comment that wasn't questioned, clarified, contradicted. I eventually gave up.

Female 6, despite being in a position of power in her department, detailed how she sets up her statements to shield herself from potential criticism. When asking questions or sharing new ideas in a meeting, Female 6 stated:

> I know that sometimes this . . . is attributed to like that's just like something that women do a lot is never sounding confident in my own voice. So, I say, like, I just want to throw it out there or I don't know what you think about this, or you know, I was just thinking of this. Oh, maybe it's not, like second guessing myself or downplaying my input to a situation or whatever. And rather than being confident in the suggestion or whatever. You know, always kind of putting that, I don't know, like limiter on it or descriptor on it, like, maybe this isn't a good idea, or

> you know, maybe, I don't know what you think or always looking for that external validation or putting something on there or I'm just throwing this out there. So, if you don't think this is a good idea it's not that big a deal to me . . . but that idea of like always putting that piece in when you bring the suggestion or you bring something to the table and it's definitely it's definitely something I have noticed that I do more with some people than others. And always looking to other people for their reaction to my suggestions or my ideas? But that’s hard because like that buzzing excitement thing. I am an ideas person. I recognize that about myself, but then I always second guessing like, ohh, is this actually a good idea?

Other participants shared that once diagnosed with a disability that would allow them to have academic accommodations, stigma often kept them from asking for help. Female 3 shared:

> My psychiatrist, I asked her for a letter for accommodations for my community college, and she said, well, what do you need it for? You would only get extra time essentially because I think she saw the ADHD is a symptom of depression and not vice versa. I still don't understand her rationale. And so, I never pushed for accommodations, which is extra exam time. Right. And I regret that in hindsight. I think that is a silly, silly thing to do. I never alerted my teachers. I never did anything like that. I think at that point you're in college and you're kind of more autonomous and responsible for your own education. And I just wasn't willing to take that extra step and try and get the accommodations that enhance that. I think I probably should have.

Male 4 shared how his internal and external stigmas prevented him from asking for accommodations at the college level.

> There was that sense that something is just wrong with you and it's you know, something very core to who you are, where you're just not cut out for what smart people do. But unofficially for sure, if I would go to a professor and disclose something, I think I ended up from some people some lenience, but never an official accommodation. That's so hard . . . I'm like, ooh, I can feel my own stigma my coming up because I'm like, no, no, I wouldn't wanna give myself the excuse to not do my work on it, you know, I know that that's all stigma. I would like to think that I would (get accommodations), I think it would have been beneficial to at least have a paper trail and something to fall back on and something in writing, things that I knew could help. So yeah, I would like to think if I could set stigma aside, I would (ask for accommodations).

Male 4, as well as all the other participants, has also developed strategies to deal with his feelings of inadequacy and imposter syndrome.

> That can be, one, like overcompensation is for sure through reading. That I have convinced myself at some point that if I read every single thing that I can find about something, then I won't feel this way. . . . I would like to think some of the motivation is also curiosity about the subject that I know some of it is just like you're not an expert. You don't know these things. You have to learn them and hear it said you need to sit down and read and read and read and immerse yourself in it.

In similar behavioral patterns, Female 3 reported excessive preparation for classes in which she feels anxiety and Female 5 reported favoring online or virtual classes over in-person settings. Female 6 reported she often asks qualifying statements that seek external validation. Knowing she struggles with imposter syndrome, Female 6 reported actively trying to change her thinking by "dealing with it by objectively looking at my success and reminding myself of my worth."

Participants also recount strategies to complete their work while calling little attention to themselves for fear of others discovering they are "imposters." Female 5 shared how, despite obvious success in many of her academic and professional pursuits, she feared that she was not good enough to get published. Instead, she co-wrote a book with a colleague whom she felt had much better chances at getting recognized and accepted by a publisher.

> I wanted to write a book . . ., so I did that. She (colleague) sold it to her publisher as something that she would write, and then when she got it, OK, she took me on as a sub author. And so, I went down to 10 hours a week at my job for a couple years and wrote a book. . . . I mean, there's no way that I would have gotten the OK to write such a thing. I guess that's the way I often accommodate it. . . . I work with people like my Dean who are in positions of power or have some degree of authority, and I use their authority to do my work. I think it's safe for me. It allows me to do the work and make a difference and have influence. Well, at some point not being entirely responsible for the outcome, someone else is responsible.

Finally, common among all participants is their desire to shield others from their same struggles. Manifestation of this concern takes many forms, but consistently occurs in each faculty member's classroom.

Male 4 shared how he tries to encourage students to talk with him instead of engaging in some of the avoidance behaviors he practiced as a college student.

> It's part of my spiel I give the first day of class. And I talk about basically, if you communicate with me, there is no punishment if something is late, but you are communicating. That doesn't mean you have to give me the story of what's happening. I just need you to tell me this is late. Here is why, broadly speaking, here is when it will be done, or here's where I anticipate I have it having it done. Here's my plan. Is that OK? And if you do that, that's all I'm asking. You won't lose points if you follow the plan or continue communicating all will be well. And so, I try to set that, you know, I try to force them into learning what I learned of through hard situations. I tried to force it more easily for them.

Female 6 shared how she is very candid with her students, many who are females going into a STEM field. Talking about her personal journey with imposter syndrome despite obvious success is one way she hopes to impact her students' thinking about their academic and professional journey.

> I share probably with my students because they face it. I feel like something imposter syndrome is something that are, that my current students are much more aware of. And I also think that there's like a generational shift in talking about mental health. And my current grad students and my grad students that I've had

> over the last few years . . . I've had some really amazing, strong, incredible, smart women who voice their feelings of imposter syndrome. And I think that that's given me place to be a mentor for sure, but also, and share that like firstly that they're amazing, but also that like this isn't something that necessarily goes away because you're a full professor or because you know, you get a lot of grants or whatever. I'm still like, OK, you know, in the last few years, I've had a baby, and there's been a pandemic and blah, blah, blah. And I've gotten a bunch of grants, but I haven't published very much. Or like I haven't published in academic article in a couple of years. I've published three book chapters since the pandemic hit, but maybe only one article and that like that makes me that makes me feel like a failure. When ultimately, like we, you know, we just did like our merit evaluation . . . redid our merit evaluation process for our school and just went through that process. You know, I found myself surprised that I was ranked one of the highest, because I saw these things as failures or shortcomings or places where I wasn't good enough.

Female 2’s experience with imposter syndrome has also compelled her to help others whom she sees may potentially struggle with the same imposter syndrome feelings. By actively creating awareness opportunities and structured support for 2e students and her own students at the university, her goal is to “fight for change” to prevent others from sharing the imposter syndrome experience.

> I spent half of the semester doing . . . I wouldn’t even use the word research. We just kind of called it a project but working with our students on performance anxiety.
>
> I advocate for kids. Sorry, this actually is relevant. These are not just silly tears. I advocate for kids with disabilities.

RQ2 Theme 2

All participants shared experiences where, despite objective successes, imposter syndrome prevented them from internalizing or accepting their successes. While participants were all able to list their professional and academic successes, feelings of inadequacy related to current professional functioning overwhelmed their rational view of their success.

Male 1 shared how his awards and accolades have been a part of his identity since elementary school. While working in his chosen professional field prior to teaching, Male 1 shares how he received many high-level accomplishments and recognitions. Academically, Male 1 has received awards and has published a significant number of research papers. As his professional career has advanced Male 1’s focus has been on his current job duties and family involvement. This conscious choice has prevented him from performing at a level that brings the number of awards and recognitions he experienced as a younger academic. While he can verbalize that this is a conscious choice, the lack of overt recognition plays into his imposter syndrome feelings.

> And that’s why you feel like an imposter as well. You may have this superstar next to you, and you’re like, I am not as good as you. That’s when you say maybe

> I am lazy. But yea, I was tired last night, and I should have been writing a paper, but I was tired because I was playing soccer with my son.

Female 2 shared multiple instances of objective success starting in grade school. Recognitions for her excellence in her field, being selected to be a student voice in admission decisions, having her students achieve at the highest level of their field, and accolades from high-ranking peers are consistent hallmarks of her professional journey. Despite this, Female 2 states she cannot accept or understand others' view of her success.

> And then things like reunions and people remembering me as the smart one and me not understanding that at all.
>
> Yeah, I did not perceive myself as a strong student. Which looking back seems bonkers and the people that I talked to are like, how is that possible?
>
> He was telling me about how his wife had then felt very badly that night because she was comparing herself to my career. And I was like. All right. Well, she could have just come and knock on the door because I was hysterically crying in the bedroom over my career, so like obviously we're all struggling here. No, and that did, like, put things in perspective for me some.

Female 3 completed a Ph.D. and post-doctorate work in a STEM field, yet still feels like an imposter and experiences excessive anxiety when teaching any math-related classes or answering questions related to math.

> I try and prepare really well in advance, especially with the computation part, because I know I have to overcome this massive math anxiety. I just sweat profusely if a student asked me a question in a way that I haven't prepared for, I

> just panic, you know, my heart starts racing and I'm sweating more, and I just can't. And then later, you know, I'll unravel the question and it'll be I'll be able to answer it, but there's just a huge layer of panic and trauma around math that even if I'm teaching it, I can't get over. It's stupid.
>
> I have basically self-taught myself everything that I can, but this is part of the reason that I'm prescribed anti sweating medication and low blood pressure medication because when I am teaching, the way that I teach is, we go through math problems and I teach them the solutions. And I don't know why I made it that way. I made it as hard for myself as humanly possible, partially because that's the way that I learned. And so, I wanted to make sure I was on top of everything, but they asked me questions, and you can probably see the panic on my face. I bet the blood just rushes from my face when they ask questions that I'm not 100% prepared for. It's sad. It's devastating. So, my most anxious times are when I'm in front of a classroom and I'm working through and trying to teach how to solve a problem. My biggest fear in my job is when a hand is raised and I'm like, oh my God, I hope I can answer this question.

Male 4 reported he often feels less accomplished when working with some faculty members whose educational attainments may be higher or others' school pedigree may be considered more prestigious. Very successful in his chosen field, in both practice and professionally, Male 4 struggles with equating his experience with others with a more traditional or prestigious path.

> That’s a big one like that fear of evaluation, fear of negative evaluation. Knowing that I didn't go to prestigious schools . . . there’s self-doubt that comes from that that. Like I went to public schools to state schools and, yeah, it maybe didn't try as hard. There's probably so much more I should know. And certainly, there’s that pressure, especially as faculty. I think that we should know everything that we should be experts in everything. And so, if this student asks the question, I don't know the answer to it takes me a moment to be able to just say, like, let's figure that out instead of like, oh, God, I'm dumb. I don't know. I am supposed to be the expert. So, it (imposter syndrome) shows up in that way.
>
> (In academics) I think is a piece of that of gotta prove myself and layered onto not being a doctoral person in academia, I think there's that (feeling) like then you've gotta earn your keep. You've gotta prove your worth. These people are smarter than you. They know more so you better work hard. . . . It also shows up, I think, in some defensiveness there a little bit of a chip on my shoulder sometimes where in, in meetings or things like that, if everyone doesn't agree with me or something, you know it must be because, you know well, they must think I'm stupid. . . .You know, it's hard not to personalize that and to have all those self-critical thoughts just come raging back and close you off from the conversation off or you close yourself off from the conversation.

Despite receiving teaching evaluations that are overwhelmingly positive, Male 4 reported extreme anxiety when teaching evaluations are disseminated.

> The absolute dread when course evaluations come out despite, so far, having what I consider very balanced and fair course evaluations, if not like maybe a little bit too positive. It's like I need someone to say something bad. . . . So, like, even though that is the case and has consistently been the case, the dread that fills me when they come that this will be the time that they have figured out that I am a dummy and that I did not teach them anything, and that they all hated me so much and dreaded the class. I just wait to read that. And then it's a vicious cycle cause when it doesn't happen. I'm so relieved.

Female 5, having a high-level administrative position in addition to her teaching duties, reported feeling like she will never fit in with those she works with professionally. Being a published author, obtaining a high level of educational success, and performing exceptionally well in her positions, Female 5 reported still feeling an intense fear of failure.

> Even though I've been actually very successful in my career, I am always fearful that I'm going to fail and so there are things that I don't take on because I'm afraid that they will fail, even though all of my experiences that that's not what would happen. . . . I just think it's in a kind of an amorphous fear of failure, a just an entirely irrational conviction in fact. I was really anxious about taking on a new role, even though I knew that I wasn't really gonna be doing anything that I hadn't already done. I just this looming feeling of catastrophe that everything was gonna fly apart.

Female 5 shared how this fear of failure has kept her in the background instead of in a higher, move visible position of leadership.

> I think it's safe for me. It allows me to do the work and make a difference and have influence. Well, at some point not being entirely responsible for the outcome, someone else is responsible.

Finally, Female 6 shared how despite being sought out for her expertise and has demonstrated obvious success both academically and professionally, she has trouble attributing this success to her own hard work and initiative.

> I think that I see that even now, as a professional, objectively, I'm like kind of at the top of my field. I've have written multiple book chapters on what I do, and people come to me with questions, and you know, I did an interview for “a prestigious newspaper” earlier today and I'm the editor in chief of the journal for my professional society. And I've won one of their bigger awards as a researcher of the year. Like, I have these things that should give me confidence in myself. I think that it's hard. You always think like, ohh, that was just a fluke.

Each participant was able to voice their academic and professional success, yet each participant shared the feelings of not being “good enough.” Attributing their success to luck, the intervention of outside social or environmental forces, and comparison of themselves to others in their field perpetuated the feeling being an “imposter” in their professions.

RQ3 Theme 1

The research question for this study looked for a connection between imposter syndrome and 2e childhood experiences. All participants in this study felt they could connect experiences and feelings, beginning in grade school, to their feelings of imposter syndrome in their professional lives today. The following responses from the participants detail their perceptions and examples of how they connect their current imposter syndrome struggles to their earlier academic 2e experiences.

Male 1 remembered how his excellence in his earlier years, driven by both an innate intelligence and pressure from outside forces, formed the foundation for his imposter syndrome feelings in his professional life today.

> Back when I was in middle school, high school, and the first few years of university, I was extremely good at the at all of these subjects in college, in engineering or in in high school. So, I win prizes, right? I'll be winning like this prize or national prize here and over there, even after college. After the first 4 years of college and then graduate school and so on, I was good. But I don't go in now and win anymore. I've never won a best conference paper, ever. I'm like. I'm really not as good as I used to be. I used to win and now I don't win anymore. So that puzzles me a little bit. And that is for sure, imposter syndrome, like, what's going on? Why is that? I don't win that, like, not even one? So that that is for sure something that has been in my mind of more than a few times.
>
> The fact that I was really good and then I'm not as brilliant as all...not to be getting more grants and more awards and more prizes. So**,** comparison of the past

> to the results today. So that's probably what contributes to like feeling like an imposter right because like you were supposed to be really good and where are your prizes are you're not winning any anything anymore.

Female 2, cited her 2e experience, specifically lack of recognition of her mental health struggles, as a catalyst for her intense feelings of anxiety related to imposter syndrome.

> I did not consider myself to be a great student. I looked at the smart kids as being the other people. I did not put myself in that category. . . . I'm trying to think of how to elaborate. It's really strange to look at in retrospect because as I look back, I was like given leadership awards and given leadership opportunities and you know, looking back, it's confusing to me now how I didn't feel confident, but I know that absolutely I didn't. I thought of myself as kind of a screw up and that I just couldn't get it together, constantly procrastinating and avoiding work and forgetting to do things or thinking that I forgot to do things…because I didn't have the study skills built up when I was young. . . . Then I just was like, what is doing my homework even mean? And so, I just didn't do any of those things because I didn't do like homework assignments. It was seriously just homework assignments. Now that I look at it and it was like the daily homework, and I just didn't do it and I would go into school panicked every single day. And so, I thought of myself as the person who never did her homework. But I would still make honor roll a lot of times, but also went to a school where we would have people who have would have over a 4.0 but still only be 25th in the class. So, I think some of my disconnect is that now because it's my field I know how to

> recognize actual intelligence and leadership skills and achievements from the things that were recognized largely in the 80s and 90s, but not today as much achievement. And there's a difference between playing the school game and actually being intelligent. I never could have understood that you know at 18, let alone at age five what or whatever. So, I was not great at playing the school game. But then once I got to college, I got good at playing the school game. And now when it comes to those things that would be recognized, like making sure these tasks get done and making sure they get done on time, whether you think that they are worthy tasks or not, that is something that I have since figured out as an adult, but there is definitely a huge disconnect between my actual abilities and the way I thought of my abilities.

Female 3 reports ongoing frustration with herself for her 2e struggles. Rationally, she is able to articulate why she struggled academically and behaviorally during her educational experience. Emotionally, Female 3 stated still feels as though she should have been able to overcome her academic struggles, despite clear evidence of her neurodivergence.

> I think that I get still very upset with myself if I make a mistake in math. . . . Literally, as a teacher this year I was facing this all the time because I had to go back to college level algebra and figure out how to do it again and it was just a constant reminder. If I made a mistake I would get very, very upset with myself. So, I actually recruited a couple of TA's and I had them check my work constantly because I don't trust myself to not make some mistakes during math and teaching

> math. So, you know that math class. I finally excelled at? I finally started using grid paper and I don't know why I'm still not using grid paper, but that has always been a huge compensatory help for me and I just don't trust myself to be confident in math, so I have TA's check my work, so that's probably the most glaring example of what I had to do this year and what I dealt with this year and again having challenging students ask me crazy questions in class, brings back the whole competence issue and being frustrated with myself. Also, I feel like I slacked a lot, and I definitely went to grad school to kind of not make up for, but I guess kind of make up for the amount that I slacked in the high school and in early college. I just didn't care enough. And so, I feel like I was making up for that a lot. And I was. I've always been kind of frustrated with myself in hindsight, for not trying harder and getting some of those basic classes, like, I just wasn't willing to take physics. I just didn't want to. I just didn't care enough. There's some hindsight frustration for sure.

In addition to frustration at not being able to free herself from struggles learned in grade school, Female 3 shared her belief that if she had been diagnosed and accommodated, behaviorally and/or medically, her imposter syndrome feelings may not be an issue today in her professional life.

> There was other stuff going on at home and in my personal life, and maybe if we knew that the words like “social butterfly” problem and “has trouble staying on task”, maybe if somebody had raised the red flag then I would have just kept going. I probably would have. I mean, I know that it's in there deep down, but

> there was a hard right turn in there somehow and it was puberty. And we all know what happens with puberty is when a lot of these mental health issues and imbalances emerge. And now that we know what we know, maybe it's maybe that is feasible, maybe that is 100% possible that given the right treatment and treatment plan maybe not even medical intervention, but maybe a behavioral intervention would have been enough to keep those skills up. And then I wouldn't feel so behind even today.

Male 4 also shared his frustration with his belief that his struggles may have not been as severe had he been diagnosed in grade school. Acknowledging the intersection between disability, giftedness, and low-socioeconomic status, Male 4 shared his understanding of the complicated nature of imposter syndrome feeling development.

> Self-esteem. That that sense of not feeling that you're good enough. I think it was pretty persistent for a very long time. And again, I think there are class reasons to see. OK, so see what economic reasons that also like contributed. From "being in" the remedial reading and being like obviously I'm not as smart as the kids and the other reading class to then, I can't be as smart as the gifted kids. Why am I here? Also, this is a quick aside, but, "my school" went through this whole thing with school funding in the 90s, and so we would have like these pep rallies where to encourage people to support the equitable school funding across the state because our schools were physically falling apart and that was something that also stuck with me, even though that was later in high school to know that, like people are here and we're having this rally to ask people to make our schools better because

> our schools are not as good as the schools “around me.” So, knowing that not only are you an impostor here, but like your school isn't even that good compared to the others. I think added a layer of complexity to that. But there's so many elements that feed in on all of that right that where we've talked about, if you've struggled, maybe you also didn't have some of the same opportunities to go to certain schools or whatever. And so that feeds back again on you're not as good as this person. And so, it becomes the self-reinforcing cycle. And I can see that and that's me. I realized that sounds like a little bit whiny, because I've obviously had good opportunities in my life. But of you know, to go like to think about what could have been had these things not been there, almost feeds back on the impostor stuff, because that wasn't your life. Your life is what it was like. What could I have achieved if?

Male 4 reported that he is aware of his potential bias against those who were perceived to struggle less than himself. Recognition that this potential bias may arise in the classroom, he reported being intentionally mindful in his interactions with others. In a previous section, Male 4 shared that at times his imposter syndrome can manifest as “having a chip on my shoulder” regarding those who may be perceived as more privileged or having fewer struggles or risk factors in their academic journey. When discussing moving from a regional campus position to a position on the main university campus:

> I mean, it was one of the things that excited me about going to the regional campus was some, some of that separation from the “main” campus and working with students who I know, not always, but I think a more so as a whole reflected

> my experience too. I knew I would be working more with students who were struggling in the same way as I struggled than on the" main" campus where there is a lot more privilege and all of that. . . . So now, if I'm teaching undergrad on the "main" campus, I can see having to check myself a little bit with maybe students who I perceive as being privileged, who are struggling at the same things that students I perceived as less privileged, like treating that equitably and not sort of punishing students for their privilege. I think I have to be aware that I can't treat them differently. I think some of that also, though being conscious of where you know it was more comfortable for me to work with a certain type of student or a student I perceive as being a certain type of student because they're more like me and maybe they won't see me as the dummy. And so, I think I'll need to be conscious of if I feel that same confidence when I'm with students who come from different backgrounds who maybe went to the nicer schools and all of that.

Female 5 remembered feeling like an alien in her world. Being exceptionally smart, struggling with outside issues, and having to advocate for her own academic opportunities has contributed to her imposter syndrome manifesting as being intensely self-conscious in her professional life.

> I think that I definitely felt insecure as a child and uncertain about my likability and my ability to fit in, so again, it wasn't that I feared that I wasn't capable exactly in the intelligence realm, it just was more that. I felt well, I felt literally alien. I have a very strong memory of being in about 4th grade and being completely convinced that I was actually an alien, and my parents were not really

> my parents and that someday the aliens would come and get me and I would fit into their world.

Female 5 shared these same feelings of being the outsider manifest in her professional role.

> I recently went to a conference and my “supervisor” was supposed to go and he wasn't able to make it, so he asked me to sit in on the “supervisors” meeting at this conference for him and that's completely appropriate as his number 2. I went and I really tried, and I wasn't the only non- “supervisor” there. There were a couple of other people that were either new or were sitting in for someone and everyone else at the lunch found someone to chat with and were talking away and I just kept trying and I could not get anyone to talk to me. And so, I ate my lunch alone and it really did feel exactly the same as being that kid.

In addition to feeling socially awkward, Female 5, diagnosed with a physical disability at birth, shared how her body image has also contributed to feeling out of place, both in grade school and in her work.

> I don't know if it's because I am still pretty physically awkward in my body, and I don't wear a lot of makeup or do a lot of things to, you know to have the shiny look of professional women. But I really struggle like I really have to prove to people that I'm good at what I do. It always takes a while for people to realize that I'm good at what I do because I just get written off, I think. Part of that is I am now middle aged and middle-aged women are invisible. I just have never been

> someone that people look at and go wow. There's like the person I want to hire, but when people hire me, they're super happy about it about 6 months in.

Female 6 remembers struggling both socially and emotionally as an undiagnosed 2e student and shared how her imposter syndrome can manifest as these same feelings in her work and personal relationships.

> I think that ADHD and anxiety together don't make you a popular kid and being smart doesn't make you a popular kid. At least it didn't in the 90s. And so, I think that that always puts a certain flavor on your relationships, and I mean, even if I just reflect now on like this concept of like RSD [rejection sensitive dysphoria]. Like that idea of just taking something so sensitively or so to heart or like taking something that probably was thoughtless, right? Or maybe somebody had their own reasons for it or whatever, and you just take it so sensitively or so you know so personally that it really dings your relationships or dings how you feel about yourself in relationships. And I still experience that. And I recognize that that probably partly I can feel hurt by it. But partly it's our RSD taking it super personally, right? Like I can hurt by it, but it probably wasn't a personal slight, but it's really like I have to do serious, serious work with myself to not take it as a personal slight…to not take it as you just don't like me.

When experiencing these feelings, Female 6 shared how it can impact her professional and interpersonal interactions. Intentional awareness of how her lifelong hypersensitivity connects to her imposter syndrome has allowed Female 6 to practice being mindful when her thoughts become overwhelming.

> You know, do I say something that about it hurting me, or do I just suck it up? Because is this just in my head? And do you say something about that and advocate for yourself or do you just let it go and try to protect that friendship while feeling shitty? So, like I'm trying too just like, hold on and try to remind myself and you know, a lot of this is like, you know, doing that work, work with yourself. Like, some of this is real and some of these feelings are real and valid, and some of this is just where you are right now. And so, can I hold on to saying something until I'm feeling less stressed and anxious and overwhelmed, and can I avoid hurting a friendship by saying something that's too dramatic or too sensitive or whatever, or takes it too personally, right? So that's kind of what I'm doing, right. But then at the same time, does that mean that I don't advocate for myself and for my family and our needs.

Lastly, Female 6 shares how her pattern of people-pleasing has both been beneficial and been detrimental to her since her childhood 2e experiences.

> I think that I've always been capable. And so, I'm generally somebody who can get things done. But I think that partly the some of the hypersensitive or like the sort of, for want of a better term, sort of the people pleasing side of ADHD and anxiety and imposter syndrome of trying to prove your worth through external validation. I'm really awful at saying no. And so, I do a lot of things and I do most of them well, but I don't protect my own time and I don't protect my own mental health in doing that. And so, I think I do lots of things and I do them well, but I am frequently overwhelmed by that, and feel like I'm not doing good enough job

> or like I'm not doing enough. Or that I'm not doing what needs to be done. And I'm not very good at, I don't wanna say I'm not very good at prioritizing, but I'm not very good at like saying something is less important than something else. And I am easily excited by new things. I thank you ADHD. And so, I really struggle with saying, well, what could I say no to or what should I say no to. What things are appropriate for me to say no to and how will how will it be seen if I say no? And so, I think that like it's inherently built into our jobs to have this feeling of like needing to say, yeah, it's needing to do more. And I think that's exacerbated by a lot of the things that come in here with ADHD and anxiety.

Advice to Grade School Selves

At the conclusion of each interview, I asked the participant what advice they would give their 2e grade school self to prevent feelings of imposter syndrome in their professional lives today. Each participant, having just recounted their journey with giftedness, disabilities, and imposter syndrome, was able to thoughtfully share what they had wished they had been told or internalized as a 2e student.

Male 1 Advice

> I would say realize that you're going to run into people that are extremely good at some things and you're never gonna be able to be as good as them, but you're still good at some things. But there's gonna be people that are, like, brilliant. And that you won't be able to be as good as them for sure. And that has been an experience. So, take it easy, right. It's fine. It's excellent that you're good at this. Now, just

remember that there's gonna be people that are gonna be like, brilliant and other things. That and you won't be able to be as good as them.

Female 2 Advice

We do the best we can with what we have. But it probably would have been advice to my mom. Like, please, get this girl treated. Because it was like it was entirely that. Yeah, it was entirely depression that had nothing to do with abilities. Obviously, we're speaking in the totally fantasy world anyway, but (to be told) that no, you're not crazy. These feelings are real, but they also can be helped. And they're not your fault. And you know you if you go and you get some help, you're gonna be able to have your performance match how smart everyone else seems to know you are. Or I would have also explained to her that everyone else around you thinks that you are super smart. Because I didn’t see that then I didn't know that then.

Female 3 Advice

You have anxiety, not testing anxiety. I think that would be huge. That would be so nice to know because I think the root of people that have test anxiety is just the way that it expresses when you're young, right? But you think that you don’t know the answers when you have test anxiety and that you're stupid and so it's a negative feedback loop that, oh well, I must not be prepared for this exam. That's why I got an 85 and you know there's sweat dripping on the page. I'm stupid and that that negative feedback loop really is I think detrimental. And if I had known I think maybe we could have stopped the negative feedback loop. The way it

> manifested at the time was in math . . . so I just wish that I had told myself that and maybe I wouldn't have given up, or if I could be a motivational speaker to myself, but a teenage me had other things in mind.

Male 4 Advice

> This sounds so like . . . not cynical, but pessimistic, I guess. Part of it is that none of this matters in some state. That this will not be the thing that you define yourself by. . . . It's still kind of is what I tell myself. The biggest thing that comes to mind, I guess, is that this is not the center of who you are. This stuff does not matter in 20 years. That it will not matter that you were in the remedial class and frankly, it won't matter that you were in the gifted class either. Like none of it is core to the life that you live.

Female 5 Advice

> Learn to fail. I never had the experience of failure. Because things came really easily to me, and I wasn't involved in sports, and I think it developed this fear of failure that is unreasonable. I think that if I had had more experience failing. I think there's a chance that I wouldn't have been so afraid of it.

Female 6 Advice

> I think that two things. So, one is actually voicing to other people, to my parents or to my teachers the things that were hard. Because I think that people didn't see the things that were difficult, which means meant that you don't then get identified with ADHD or with anxiety or whatever. You just do the hard things. Which I mean like I know there's some value in just doing the hard things, but

> equally, you shouldn't be a 7-year-old just pretending like things are all OK. So, I think that that, that, that would be part of it is, you know, voice your struggles. And then I don't even know like how you would form this in terms of advice but having internal validation for being good enough. You know that it's not that you don't have to rely always on somebody else or on what you think somebody else says to feel good enough. That when somebody gives you a compliment to figure out how to actually take it. Because those times when you feel like you haven't done well enough, or you haven't been good enough are always going to stay in your brain so much stronger than those times when somebody is giving you validation. When somebody said they're proud of you or that you did a good job. Like you hear, you did good. You did a good job, and you think about how you could have done a better job instead of just, you know, internalizing like I did a good job.

Summary

Post-secondary faculty described their 2e experiences in both similar and vastly different ways. Being identified as gifted served as both a protective factor for some and as a mask for those struggling with undiagnosed mental health issues. The participants' attitude towards structured or unstructured gifted programming/accommodations, was overwhelmingly positive, however; lack of recognition or accommodations for the part of them that made them 2e (disability) was found to be a catalyst for frustration, behavioral issues, low self-esteem and self-doubt, and for some, a form of learned helplessness.

These experiences, combined with other external forces, formed the basis for negative identity development.

Imposter syndrome for post-secondary faculty in this study seemed to manifest in many ways. Constant internal narratives of self-doubt, physical reactions to professional or personal anxiety or self-doubt, and manipulating their environment or professional situations to protect themselves from failure or embarrassment were manifestations of imposter syndrome shared by all six participants. Also common to all participants was their desire to share their experiences and advice, mostly with their own students. A sincere desire to prevent students from developing the same imposter syndrome feeling and struggles was expressed by all. The wish to normalize these imposter syndrome feelings and de-stigmatize the environment that prevents conversations about mental health struggles was voiced by most participants.

All six participants could clearly connect the development of their imposter syndrome feelings in their professional environment to their 2e experiences in grade school and their subsequent academic experiences.

In Section 4, I address connections between 2e childhood experiences and imposter syndrome among post-secondary faculty from a large university in Ohio. Through a discussion of my research findings, I apply the theoretical framework and analyze findings within the context of the literature review. I also apply these findings to social work practice recommendations and NASW social work ethical principles. Finally, research study findings and their potential to create positive social change is discussed.

Section 4: Application to Professional Practice and Implications for Social Change

The purpose of this qualitative research study was to explore connections between 2e childhood experiences and development of imposter syndrome among post-secondary faculty from a large university in Ohio. By identifying potential experiences in childhood and secondary education that may contribute to ongoing feelings of inadequacy, this study can help social workers, educators, and other mental health practitioners identify, normalize, and destigmatize both 2e childhood experiences and imposter syndrome feelings, which may result due to inadequate supports in the classroom.

Key Findings

The research questions for this study were:

RQ1: How do post-secondary faculty describe their 2e educational experiences prior to and during college?

RQ2: How do post-secondary faculty describe their experiences with imposter syndrome during their educational journey and in their professional lives?

RQ3: What are post-secondary faculty's perceptions regarding how their early 2e educational experiences contributed to their feelings of imposter syndrome?

After coding and analyzing data, five themes emerged. For RQ1, themes identified were: a) because I was gifted…. and b) external interactions which become inner monologues. RQ2 themes were: a) accommodating for my environment, and b) imposter syndrome overriding objective success. Finally, RQ3 had one overarching theme: imposter syndrome which begins in grade school.

This study provided insight into the development of imposter syndrome feelings among post-secondary faculty as they related to their 2e childhood experiences. Few 2e students are accommodated effectively (Lee & Richotte, 2018). Many students who are identified as gifted have overlooked mental health issues (Jacobs, 2020). Participants in this study shared the sentiment that their giftedness masked their internal struggles resulting in lack of accommodations, academic issues, and/or being labeled as a behavior problem. Male 4 said, “I think that's the challenge of the gifted label because then it's like you’re one of the good kids. There's nothing to worry about here.” These participants reported finding ways to succeed despite their challenges, developing both positive and negative coping skills. While some participants navigated their environment with charm and savvy social skills, others were told they were acting out, lazy, or unmotivated. These coping skills often led to negative identity development through repeated microaggressive interactions.

All participants reported that their imposter syndrome thoughts prevented them from internalizing their success. Participants consistently attributed their success to the intervention of others, luck, charm, external forces, and a constant feeling that they should be doing more. When comparing their own successes against their peers, participants believed they were lacking the same achievements, drive, or knowledge. Objectively, participants were capable of listing their successes, achievements, and accolades, but imposter syndrome thoughts prevented them from internalizing those successes as being enough or as a result of their own hard work. These imposter syndrome thoughts can lead to mental health struggles (Cader et al., 2021; Holden et al., 2021; Hutchins & Rainbolt, 2017), unhealthy needs for perfectionism (Wang, et al., 2019), feelings involving intellectual inauthenticity (Edwards, 2019), hindered career advancement (Feenstra et al., 2020), and negative impacts on work productivity (Hutchins, 2015). All participants reported a combination of these struggles as a result of their imposter syndrome.

In order to mask imposter syndrome feelings, participants reported developing coping skills, many beginning in their grade school years, to successfully navigate their professional and academic environment. Many participants shared they learned to adapt both in their academic and professional worlds. Using social skills to mask feelings of inadequacy, remaining in positions with lower levels of responsibility or visibility, employing mindfulness practices, overcompensating in terms of preparation for classes or meetings, and pretending to be knowledgeable in situations where one lacks expertise are all behaviors reported by participants in this study. All participants shared a desire to reduce imposter syndrome feelings in their students by sharing their stories. While there are many techniques recommended for the treatment of imposter syndrome, most participants report that stigma keeps them from seeking accommodations or sharing their imposter syndrome feelings in academic, professional, social, or even therapeutic interactions.

RQ3 was about connections between 2e experiences and feelings of imposter syndrome. Each participant was able to give several examples of feelings and behaviors learned in grade school which led to their current imposter syndrome feelings. While there is no identified research on connections between imposter syndrome and 2e experiences, there are some emerging theories involving what causes imposter syndrome. Interpersonal/relational interactions, social and institutional contributors, and innate personality traits make it more likely to experience imposter syndrome feelings (Bravata et al., 2020; Feenstra et al., 2020). Participants in this study clearly connected their imposter syndrome feelings to their educational experiences. This knowledge, combined with existing research, can be used to inform social workers, teachers, and other mental health practitioners about the consequences of misidentification or inadequate accommodations for 2e students. Policy changes, identification of best practices involving testing for both giftedness and disabilities, and curriculum changes for both mental health practitioners and teacher education can be informed by this research, resulting in positive experiences for 2e students.

Theoretical Framework

2e experiences shared by the participants provided insight into how their imposter syndrome feelings began. Individuals in psychosocial development stage four are learning how to be successful in terms of developing a work ethic, achieving academic success, social skills, and cognitive development (Erikson, 1993). Successful resolution of this stage should result in a sense of confidence in abilities to work independently and function well in environments and becoming industrious (Green et al., 2016). Students who do not successfully resolve this stage may doubt their ability to complete academic and social tasks on their own (Green et al., 2016). As demonstrated by participants in this study, beliefs that they were lacking academic competence or not possessing a good work ethic were formed during their childhood and adolescent 2e experiences. Participants reported feelings of frustration, inadequacy, lower self-esteem, which are similar feelings that contribute to feelings of imposter syndrome in their current professional roles.

For 2e students already struggling with identity development issues related to competence and inferiority as a result of their grade school 2e experiences, the risk for negative identity formation in stage five is high (Hihara et al., 2019). As found in this study, participants shared that they internalized the perception of teachers, parents, caregivers, and other important figures in their childhood that they were lacking in some indefinable way, solidifying their identity as lacking work ethic, academic ability, or social skills. While each of these participants are objectively very successful in their field and academic careers, in effect, they appear to be industrious and have a positive professional identity, feelings of inferiority and negative identity indicate unsuccessful psychosocial development in stages four and five. Fully successful psychosocial development was compromised by their negative 2e experiences.

Stage seven of Erikson's psychosocial identity development theory is generativity vs. stagnation. All participants in this study are currently within the age parameters of this stage of psychosocial development. Participants reported that their internal perceptions of generativity are hindered by their impostor syndrome feelings. Feelings of generativity manifest by perceiving oneself as actively working to make positive contributions to their world by nurturing family relationships and positively impacting their professional realms (Mitchell et al., 2021). Participants report that despite positive home and work lives, they do not feel as though they are doing enough to reach their internal generative goals. Participants report feeling as though they are somewhat stagnated in their professional goals as a result of their imposter syndrome. When connecting stagnation behaviors in adulthood to imposter syndrome, research shows that adults who struggle with imposter syndrome are more likely to have low self-esteem, suffer from mood disorders, and have poor academic or job performance (Hutchins, 2015). While these individuals are still considered high achieving, their fraudulent feelings may keep them from striving for higher levels of achievement academically, socially, and professionally (Hutchins & Rainbolt, 2017). Each participant in this study reported some form or combination of the stagnated behaviors listed.

Application to Professional Ethics in Social Work Practice

Social Justice

The social work value of social justice implores social workers to challenge social injustices responsible for oppressive practices for all individuals as well as ensure all individuals are ensured equal opportunities for access to resources and services (NASW, 2013). For participants in this study, lack of recognition and adequate accommodations resulted in educational and social injustice. These participants who reported an ongoing struggle with imposter syndrome often lacked access to proper support services, both in their educational journey and in their professional environment. Misdiagnosis or under-diagnosis, stigma, learned coping skills, and an unwillingness to ask for help contributed to the perpetuation of these social injustices. Academic and professional institutions lack understanding of the potential impact of negative 2e struggles or imposter syndrome on their students and employees. A need exists for services to address imposter syndrome and 2e accommodation inadequacies. Equity and excellence in practice standards at all levels of intervention are imperative in upholding the NASW standard of social justice.

Dignity and Worth of the Person

The social work value of dignity and worth of the person states that all individuals are worthy of respect, care, and a social worker's professional best. In addition to this overarching concept of each client's worth, one's right to self-determination is upheld and resolution of societal or contextual oppressions are addressed (NASW, 2013). The marginalization of 2e students is in direct conflict with this value. Lack of recognition of and supports for imposter syndrome in the professional setting is also failing to uphold interpersonal and contextual value of a person's dignity and worth. As this value specifically identifies the need for analysis of micro, mezzo, and macro environments which may intentionally or unintentionally neglect to address these inadequacies, this study has shown that in both academic and professional settings, concrete needs exist to identify inadequate practices and create safe, supportive, and equitable learning and work environments to prevent experiences leading to imposter syndrome struggles.

As the NASW Code of Ethics provides both a core set of values and ethical standards for social work practice, clinicians are bound to adhere to its national standards as well as each state's Board of Social Work ethics. The mission and value statement of the university from which the participants were sampled articulates detailed standards regarding improvement of services, commitment to diversity, and equality of services. These standards exist to protect students, faculty, staff, clients, and practitioners, as well as to ensure all educational and social work interventions are provided with the utmost care and integrity for all. Macro and mezzo interventions are also inherent to the social work practice model of person-in-environment (Kentucky Board of Social Work, 2020). In this study, problems were identified for 2e students and professionals struggling with feelings of imposter syndrome. Using the information gathered in this study, in conjunction with existing research on both 2e struggles and imposter syndrome consequences, mental health practitioners can work at all levels of intervention to create awareness, change policy, reduce stigma, and identify gaps in intervention. The results of this study can be used to secure funding, create and disseminate new training, and inform policy related to both 2e and imposter syndrome struggles.

Guided by the ethics, values, and inherent standards of the NASW, this study can provide valuable insight to generalist social workers, clinical social work practitioners, as well as any profession working with these populations. Adding to the general research knowledge regarding the 2e identification standards and the consequences of misidentification, the results of this study can be used to identify the source of academic and behavioral struggles of gifted (or any student) in their academic journey. Understanding how 2e students' struggles can develop will inform clinical and generalist practice interventions and promote the need to solidify identification standards for giftedness, mental health struggles, and potential learning disabilities. For mental health practitioners working with those with imposter syndrome, unpacking the stigma, self-doubt, and negative identity development that started in grade school can be used to create and implement effective therapeutic interventions, develop social and institutional supports for those with mental health struggles, and normalize both imposter syndrome and mental health issues on a societal level.

Recommendations for Social Work Practice

Policy Change Involving Universal Testing and Identification Standards

As noted in the literature review, there are very few federal standards for gifted identification (Peters et al., 2019). There are no federal guidelines regarding the identification of twice-exceptionality (Reis et al., 2014). Not until a parent or teacher recognizes a need for testing for a disability, does testing or an identification process occur (Gierczyk & Hornby, 2021). As stated by most of the study participants, their identification as gifted masked any mental health or learning struggles that should have been recognized and accommodated. Knowing that long-term academic, mental-health, and professional struggles occur as a result of a lack of appropriate testing and identification for both giftedness and disabilities (Gierczyk & Hornby, 2021), a policy creating mandated gifted and disability testing for all students should be considered. Social workers at the macro level, in conjunction with micro and mezzo level mental health practitioners, can work to gather data and evaluate existing local, state, and federal policies regarding testing and identification. Using this existing information on testing for giftedness or recognizing disabilities, and knowledge regarding appropriate accommodations along with the new and existing data detailing consequences of inadequate identification, clinical and generalist interventions, and accommodations, new policy can be created to ensure all students' unique needs are identified and addressed.

Expanded Training of Social Work Practitioners

For clinical social workers, continuing education is mandated by state social work boards (Kentucky Board of Social Work, 2020) and the National Association of Social Workers (2013). While social workers practicing in the school setting may be aware of the 2e issues presented in the study, information regarding the understanding of 2e struggles, identification inadequacies, and the connection to imposter syndrome formation and consequences should be disseminated to all social work practitioners. Clinical social workers can create content and provide training opportunities for social workers at all levels of practice and interventions. By expanding the depth of general knowledge regarding 2e issues to all mental health practitioners, students can be identified and accommodated more quickly, policy change can occur, and informed interventions at all generalist and clinical social work intervention levels can occur.

Implications and Social Work Practice

As an instructor of social work for generalist and clinical level social work students, this data will provide context to the information provided to students working in their field placements as well as those taking core social work classes. The 2e findings, imposter syndrome experiences, and the connection found between the two variables can be useful in helping students understand psychosocial struggles faced by children and adults alike. Teaching the application of these findings in helping students understand theoretical concepts such as Erikson's psychosocial identity development theory will assist students in honing their practice and intervention skills when in the field. Also, as the impetus of this study was based on personal experiences, sharing with students my journey and the study results regarding imposter syndrome can help de-stigmatize feelings of imposter syndrome with the hope that asking for help can be normalized for all students and social workers.

Transferability

The results of this study may be transferrable to similar academic and professional settings. This study's participant experiences represented a diversity of gifted programming, school settings, demographic backgrounds, professional fields, and academic journeys to higher education. Despite the differences in their backgrounds, all report similar struggles and manifestations of their twice-exceptionalism and imposter syndrome. Clinical social work practice can use the findings from this study to inform interventions at the micro, mezzo, and macro levels of practice intervention in a wide range of academic, professional, and therapeutic settings. As social workers work to create positive social change by identifying, researching, and implementing informed programming (NASW, 2013), the findings of this study can be used as a catalyst for policy and intervention change in diverse settings.

As social workers practice in a wide range of settings, all levels of social work intervention can be positively impacted by the findings of this study. As noted in both the literature review and the participant interviews, interpersonal experiences, community, school, and department struggles, and inadequate policies prevented optimal academic experiences. As social workers find themselves practicing either clinically or otherwise in any of these settings, they can draw on the results of this study to understand the etiology of the academic, behavioral, mental health, and imposter syndrome struggles at all levels of development. While the application of this knowledge will look different if one is working with a gifted student struggling with behavior issues or analyzing policy to support stigma reduction in the workplace, the root of the development of each issue can be understood in part by these findings.

Limitations

Credibility

Minor changes were made from the original study proposal. Coding using an Excel spreadsheet was originally planned, however, NVivo, a computerized coding program was used to facilitate the coding process and theme analysis. Also, the study originally estimated that 8-12 participants would be sought for interviews, but data saturation began to occur after six interviews. Despite any changes, thick descriptions were obtained and utilized, member checking was utilized (Rubin & Rubin, 2012), and in-vivo coding was used to analyze verbatim transcriptions (Saldana, 2016), ensuring fidelity to the research questions and participant experiences (Ravitch & Carl, 2016).

Transferability

Though having a small number of participants, this study should be transferable to 2e post-secondary faculty in similar institutions well as other high-achieving professionals having similar experiences. The interview questions were designed to elicit thick descriptions allowing for both depth and breadth of understanding of each participants' experience. Member-checking was used and data collection continued until saturation was reached to ensure the transferability of this study to other similar academic or professional experiences (Ravitch & Carl, 2016).

Dependability

By using an interview script, all participants followed the same questions and format strengthening the dependability of this study (Ravitch & Carl, 2016). The interview questions were structured in three sections, seeking in-depth responses for each of the three research questions. Follow-up questions were used as needed to gain clarification of a concept or to explore an experience more fully (Saldana, 2016).

Confirmability

Journaling and reflexive exercises were conducted to identify and correct for any potential research bias. Feedback was sought from my dissertation chair and a faculty peer-reviewer during the writing process to ensure any personal bias was addressed.

Recommendations

Recommendations for this study are two-fold. First, expand the participant pool to other universities. By limiting the participant pool to faculty at one university, the number of participants and the geographic scope was limited. By expanding the universities included in this study, a deeper understanding of the impact of 2e experiences in the development of imposter syndrome in post-secondary can be reached. Also, by expanding the study outside of the university setting to include other high-achieving professions, a deeper understanding of the scope and impact of the variables studied can be obtained.

Secondly, this study focused on a broad range of 2e identifications. By breaking down 2e subsets into those with physical disabilities, students with undiagnosed mental health and learning disabilities in grade school, and students diagnosed with mental health and learning disabilities while in grade school, their experiences can be studied separately, yielding more in-depth or even different data for each subset.

In order to share the information found in this study, social work conference presentations and the submission of this study in a journal article format will be pursued. Since the findings of this study are also applicable to other mental health and teaching professionals, inquiries will be made as how to disseminate this information to other counseling professionals, teachers, and university faculty.

Implications for Social Change

Social workers and other mental health professionals are called to recognize gaps in client service. By using the information in this study regarding the needs of 2e students, the struggles of those with imposter syndrome, and the deficits in the macro, mezzo, and micro-systems of both academic and professional institutions, long-lasting social change can be created and maintained. Social work education is unique in its focus on the person in the environment. Social workers are trained to analyze all systems connected to an issue and consider how each change affects those systems and their clients (Forenza & Eckert, 2018). By addressing systemic inequities for 2e students, recognition of needs on all levels of interventions can be analyzed for change (Hart, 2019). This change will not only help to create and ensure appropriate environments for 2e students but will aim to decrease long-term struggles, such as imposter syndrome or under-performance in adulthood (Ronksley-Pavia et al., 2019). On a macro level, policy development acknowledging the inequities in opportunity for appropriate education must be addressed. While policy change is complicated, slow, and often stagnated by bureaucracy (Viennet & Pont, 2017), social workers are called on to address social injustice in all areas of practice (NASW, 2013). Policy change at all levels should be a multi-directional process based on the school and student needs, current 2e and imposter syndrome research, and analysis of existing policy (Viennet & Pont, 2017). Failure of policy makers to fully understand the issues at hand may result in ineffective policy change (Viennet & Pont, 2017). As shared by our participants, ineffective policy leads to inadequate programming. Inadequate programming leads to struggles in functioning in one's social, biological, and psychological dimensions. As recognition of 2e and imposter syndrome struggles continue to develop, interpersonal interventions can be honed, community needs and programs can be appropriately assessed, and policy creating an umbrella to support these social changes can be implemented.

Summary

This study provided an opportunity to explore a connection between 2e childhood experiences and imposter syndrome feelings in post-secondary faculty from a large university in Ohio. A positive correlation was reported by study participants between 2e struggles and the formation of an imposter syndrome identity. The information found in this study should be disseminated to school administrators, special education and gifted teachers, post-secondary faculty, social work professionals and other mental health providers. By creating a community of those who share these experiences, normalizing the feelings created by imposter syndrome, and encouraging new policies to support 2e and mental health change, this study can be used to start a long-term social change movement supporting social and educational justice, accessible and appropriate mental health services, and the unmasking of those of us with imposter syndrome.

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Appendix: Interview Research Questions

Interview questions for 2e/Imposter Syndrome Research Study

RQ1: How do post-secondary faculty describe their twice-exceptional educational experiences.

- Please share your 2e definitions for yourself? Giftedness and disability?
- Do you remember when *what age* you were identified as gifted? What was your experience with gifted education at your school?
- What is your disability and how did it manifest for you?
- At what age were you diagnosed with a disability?
- How did your disability impact your work?
- How did your disability impact your perception of your academic competence?
- If you were diagnosed with your disability in elementary or secondary school, how was your disability accommodated in the classroom?
- As you progressed beyond your elementary school years, how were you accommodated for your twice-exceptionalness?
- Is there anything else you want to share about your 2e educational experience?

RQ2: How do post-secondary faculty describe their experiences with imposter syndrome during their educational journey and in their professional lives?

- How would you describe your job at the university?

- What is your definition of imposter syndrome as you perceive and experience it?
- How does it manifest in your professional work?
- When do you first remember feeling this way?
- Have you discussed these feelings with any other faculty?
- In what ways have you tried to accommodate your imposter syndrome feelings?

RQ3: What are post-secondary faculty's perceptions on how their early twice-exceptional educational experiences contributed to their feelings of imposter syndrome?

- Looking back on your 2e childhood experiences, did you experience any feelings that you share with your imposter syndrome today? Competence, self-esteem, frustration,
- How to you feel like your professional identity development, including the development of imposter syndrome feelings, may have been impacted by your 2e experiences?
- In your opinion, did your experiences as a twice-exceptional student contribute to your imposter syndrome feelings in your professional identity? How so?
- What advice would you give to your elementary school, 2e self to prevent your feelings of imposter syndrome today?
- Is there anything else you would like to share about our topics today?