Title

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"My Second Home": Perceptions of Belongingness for Students with Intellectual and

Developmental Disabilities in Inclusive Post-Secondary Education Programs

A dissertation submitted in partial satisfaction of the

requirements for the degree

Doctor of Philosophy in Special Education

by

Emily A. Frake

2024

ABSTRACT OF THE DISSERTATION

"My Second Home": Perceptions of Belongingness for Students with Intellectual and

Developmental Disabilities in Inclusive Post-Secondary Education Programs

by

Emily A. Frake

Doctor of Philosophy in Special Education

University of California, Los Angeles, 2024

Professor Sandra H. Graham, Chair

Belonging is an essential human need, regardless of whether or not one has a disability, and has

been found to positively impact one's physical and mental health. Feelings of belonging for

college students with intellectual and developmental disabilities (I/DD) have largely been

unexplored in research. Using the 10 Dimensions of Belonging framework (Carter & Biggs,

2021) as a foundation in this dissertation, 13 students with I/DD who attended inclusive post-

secondary education (IPSE) programs across the United States were individually interviewed to

better understand how they perceive their experiences of belonging (or not) on their college

campus. To complement the interviews, a subset of four students were observed during a typical

college day. Ultimately, interviews indicated that participants in this study experienced all 10

Dimensions of Belonging (i.e., present, invited, welcomed, known, accepted, involved,

supported, heard, befriended, and needed), as well as gaps in belonging (i.e., exclusion in places

and spaces, unheard, unknown, lack of invitation, extraneous, lack of support, "drama," and lack

of friendship with non-IPSE peers). Observational data largely corroborated these findings.

Analysis of this data led to a revised model of belonging specifically for IPSE students, as well

as recommendations for IPSE programs to increase feelings of belonging for IPSE students.

Future research should continue to explore feelings of belonging for IPSE students in other

contexts, such as community colleges or in other geographic regions around the world.

The dissertation of Emily A. Frake is approved.

Connie L. Kasari

Bryan Everett Thornton

Lois A. Weinberg

Jeffrey J. Wood

Sandra H. Graham, Committee Chair

University of California, Los Angeles

2024

DEDICATION

To all the disability rights advocates and disability justice activists of the past, present, and future. May you continue to fight the good fight.

"Silence is the last thing the world will ever hear from me." – Marlee Matlin

"I wanna see a feisty group of disabled people around the world…if you don't respect yourself and if you don't demand what you believe in for yourself, you're not gonna get it."

– Judith Heumann

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ACKNOWLEDGEMENTS

I must first acknowledge my participants, without whom this dissertation would not exist. Thank you for your interest in this research and for trusting me with your experiences. I appreciate your time, your kindness, and the opportunity to talk to you. Thank you!

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Thank you to my mom, who has shown me what disability advocacy looks like first-hand and who has been my biggest encourager throughout this PhD journey. I will miss our monthly lunch dates. Shout out to my dad, who holds me to the highest of expectations in everything that I do. I got it done! To my little sister, thank you for your support of me earning my PhD and particularly, of my move to Waco #SpreadsheetQueen Uncle Gregg, I have learned so much from you about the capabilities of people with I/DD to live rich and meaningful lives, as well as the injustices you face. Without you, I don't believe I'd have a career in special education. To my best friend, Shay, thank you for celebrating me at every major (and minor) milestone along the way. There will always be a (pull-out sofa) bed for you in Texas.

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Thornton who have been so supportive through the entire dissertation process. I'm grateful to know both of you and have your insight. Thank you both for the important work you do for students with disabilities.

To UCOD, DSU, and the larger disabled community at UCLA, thank you for the continuous work you do to make this university and the world a more accessible place for all. Joining these organizations and getting to know you all has made me a better person. Keep up the good work. I will be rooting for you, always. Nothing about us, without us!

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ACADEMIC PUBLICATION

Frake, E.; Dean, M.; Huynh, L.N.; Iadarola, S.; Kasari, C. (2023). Earning your way into general education: Perceptions about autism influence classroom placement. *Educational Sciences*, *13*(10), 1050.

SELECTED CONFERENCE PRESENTATIONS

Council for Exceptional Children – Teacher Education Division Conference October 2023
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Creating Connections Symposium
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PacWest LEND Trainee Conference March 2023
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Cal-TASH Conference
Co-Presenter on *"Social Media Access for All study"* March 2023
Co-Presenter on *"Inclusive Special Education"* March 2017, March 2018

General Introduction

College is a time of tremendous growth – both personally and academically (Mayhew et al., 2016). Beyond academic growth, college impacts one's moral development, attitudes and beliefs, and quality of life post-graduation (Mayhew et al., 2016). Yet, students with intellectual and developmental disabilities (I/DD) are often denied the opportunity to attend college and experience the growth that transition-aged youth (18-22 years old) without intellectual disabilities do. To address the lack of post-secondary education and support for transition-aged youth with I/DD, campuses spanning from UCLA to Syracuse have created Inclusive Post-Secondary Education (IPSE) programs. These programs provide critical vocational, academic, and independent living skills to transition-aged youth with I/DD, while providing them with the social opportunities available to non-disabled college students.

Students with I/DD who have earned a high school diploma or GED are welcome to enroll in community colleges or apply to four-year universities. However, many students with I/DD do not graduate high school with a diploma and instead receive a Certificate of Individualized Education Program (IEP) Completion, commonly referred to as a Certificate of Completion (CoC), or age out of the public education system on their 22nd birthday. In the 2019-2020 school year, 14,266 students with I/DD in the United States left high school with a CoC or aged out (U.S. Department of Education, 2022).

An option that many do not consider for a student with I/DD without a high school diploma is college. Yet, in the United States, and around the world, college programs for students with I/DD are successfully matriculating hundreds of students with I/DD every year in Inclusive Post-Secondary Education (IPSE) programs (ThinkCollege, 2023). IPSE programs provide the college experience to students with I/DD, particularly those who earned a CoC and

not a high school diploma. While IPSE program components, eligibility, and curriculum can vary

drastically from one program to another, the essential element of all IPSE programs is inclusion

with non-disabled students on the same college campus. For example, students enrolled in

ClemsonLIFE, an IPSE program on the Clemson University campus, have targeted classes on

finances, employment skills, and healthy relationships but also live on campus, attend football

games, and participate in Greek life, just as any other Clemson student would (ClemsonLIFE,

2023). According to ThinkCollege, a project developed and curated by University of

Massachusetts Boston, there are currently 338 postsecondary education options for students with

I/DD in the United States (2024).

IPSE Programs and Belonging

Research has previously demonstrated the adaptive behavior and self-determination

growth that students enrolled in IPSE programs make (Lee et al., 2021). In a country where only

17.9% of adults with disabilities are employed, IPSE programs have already proven their utility

(U.S. Bureau of Labor Statistics, 2021). However, what remains to be explored is the extent to

which these inclusive programs foster belonging. Belonging has been theorized as a universal

human need - regardless of disability - since Maslow (1943) first introduced it as the third tier in

his Hierarchy of Needs, after physiological and safety needs. A college student's sense of

belonging has been found to positively influence their success and well-being (National

Academies of Sciences, Engineering, and Medicine, 2017). Additionally, belonging predicts

stronger engagement, mental health, and persistence for college students at 4-year universities

(Gopalan & Brady, 2020).

School belonging has been comprehensively defined by Goodenow and Grady (1993):

Students' sense of being accepted, valued, included, and encouraged by others

(teacher and peers) in the academic classroom setting and of feeling oneself to be an

important part of the life and activity of the class. More than simple perceived liking or

warmth, it also involves support and respect for personal autonomy and for the student as

an individual.

School belonging more specifically focuses on attachment to one's teachers, staff, and

peers at school, in addition to the perception of being accepted and valued at school (Willms,

2000). Feeling that one belongs in their school environment is important, including at the

university level, as these feelings may lead to both positive physical and mental health outcomes,

as well as strong academic achievement outcomes (Slaten et al., 2016). Conversely, the lack of

social bonds can lead to both poor physical health and emotional distress for an individual

(Baumeister & Leary, 1995). This is especially important as adults with I/DD are at a higher risk

of suicidal ideation, suicide planning, and suicide attempts compared to adults with other

disabilities and non-disabled adults (Marlow et al., 2022).Therefore, it is important to explore

whether IPSE students believe their IPSE programs provide them with an environment of

belonging.

Capacity for Belonging for People with I/DD

In recent years, belonging researchers have repeatedly illustrated the ways in which

people with I/DD feel a sense of belonging or exclusion within various communities (e.g., Bigby

et al., 2018; Gur & Bina, 2023; Strnadová et al., 2018). After reviewing the research on

belonging, Allen and colleagues (2021) suggest an integrative framework of belonging in which

four components must be present for belonging to take place. The first component is

competency, or "having a set of (both subjective and objective) skills and abilities needed to connect and experience belonging" (Allen et al., 2021, p. 92). The authors suggest one needs competencies in social, emotional, and cultural realms to be able to belong. While people with I/DD may have deficits in social skills or emotional regulation, this is not to say that they are without *any* skills in these areas. The second component is opportunity for belonging, which, for this dissertation study, is the college campus setting and IPSE program. The third component is the motivation to belong or the extent to which people want or need to forge connections with others. While Allen and colleagues (2021) concede that motivation to belong may vary across people for a variety of reasons, they never discount the ability of one to feel the motivation to belong, even after experiencing severe trauma. The fourth and final component is perceptions, or how one feels about their experiences and whether or not they belong. Each of these four components must be necessary for belonging to be possible (Allen et al., 2021). The integrative framework developed by Allen and colleagues (2021) suggests that people with I/DD are able to feel belonging, as each of the four components can be present in the life of a person with an I/DD. Furthermore, the research on belonging indicates that it is an important need to be addressed for all people, whether one is disabled or not.

Rationale for Studying Belonging in IPSE Programs

IPSE programs often run parallel to the degree-seeking programs most undergraduates are enrolled in. At some colleges with IPSE programs, all students – disabled and non-disabled – eat in the same dining halls and have access to the same gyms and recreation centers. At other colleges, IPSE students are not able to live on campus and are restricted to a much smaller list of available classes than their non-IPSE counterparts. Can one feel that they fundamentally belong on their college campus if they do not have access to all the spaces and places a non-IPSE

student typically would? Is sense of belonging bolstered for IPSE students who do have access to residence halls, dining halls, recreation centers, and a comprehensive list of classes, although they are not enrolled in a degree-seeking program? Understanding IPSE students' sense of belonging while enrolled on a college campus can help existing, developing, and future IPSE programs provide a meaningful college experience that centers the fundamental need of belonging for its students. In this dissertation study, I qualitatively studied IPSE students' perceptions of school belonging on a college campus through individual interviews and observations.

Literature Review

Only 338 IPSE programs exist in the United States (ThinkCollege, 2024) compared to nearly 6,000 post-secondary institutions for students without I/DD (National Center for Education Statistics, 2022). Just as IPSE programs are a small fraction of the total colleges and universities available for students without I/DD, most of the higher education research is unrelated to IPSE programs. IPSE research is growing but remains limited (Whirley et al., 2020). Research on IPSE programs typically falls into one of three categories: (1) research evaluating the overall IPSE program or IPSE program components (e.g., Hill et al., 2023; Miller et al., 2019; Petroff et al., 2020; etc.), (2) intervention research, which attempts to address an alleged need of IPSE students by introducing a new strategy or device (e.g., Brady et al., 2022; Devine et al., 2022; Graff et al., 2018; etc.), and (3) perception research, which explores various stakeholders' perceptions about IPSE program components, students, or the IPSE program as a whole (e.g., Blaskowitz et al., 2022; Kubiak et al., 2021; Love & Mock, 2019; etc.). My own scoping review of the literature revealed that only two studies within the IPSE literature base

have examined the concept of belonging (i.e., Eisenman et al., 2020 and Schroeder et al., 2021). Both studies fall within the category of perception research.

Belonging for IPSE Students

The study conducted by Schroeder and colleagues examined belongingness during a college's inclusive first-year orientation program by individually interviewing each of 16 participants about their experiences either participating in or leading the orientation sessions (Schroeder et al., 2021). Participants (i.e., IPSE students $n = 6$, student orientation leaders $n = 5$, and faculty leaders $n = 5$) noted that shared space, shared experiences, shared understanding of topics discussed at orientation, and shared interests resulted in what they considered to be belongingness during the orientation sessions. However, participants also noted barriers to belonging in the inclusive first-year orientation program. Discussions about diversity, particularly around disability, left student orientation leaders feeling uncomfortable, while some IPSE students noted that they did not always understand the entirety of the conversation. Degree-seeking students sometimes created an "othering" environment in which they ignored IPSE students. Ultimately, study participants shared that the inclusive orientation design led to more group cohesion, unique perspectives, a new experience with diversity, and changes in implicit biases, among other benefits.

In the second study, Eisenman and colleagues (2020) explored the concept of belongingness by eliciting narratives from nine students with I/DD in an IPSE program. The researchers analyzed the narratives looking for microaggressions and microaffirmations, which they contend impacted the extent to which students claimed they belonged within various social groups. In this study, a major factor influencing one's feelings of belonging or exclusion in college was the extent to which IPSE students had access to the same places and opportunities as

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their non-IPSE peers did, such as living on campus. The researchers also found that when students shared stories about feeling respected, IPSE students indicated that they were not seen as or treated as "different" than non-IPSE students.

Belonging for People with Disabilities

IPSE research is limited, and so too is research on belongingness for people with disabilities. In a recent study, researchers reviewed the literature on belongingness for people with disabilities from their own perspective and noted not only the lack of literature on the subject, but also the underrepresentation of people with I/DD in belongingness research (Raines et al., 2023). For studies about belonging that include people with disabilities, researchers primarily use qualitative methods, and specifically interview methodology (Raines et al., 2023). However, quantitative methods, such as self-report surveys, are utilized in some cases (Raines et al., 2023). Although the scoping review conducted by Raines and colleagues (2023) included research studies from college students with disabilities (i.e., Eckleman, 2012; Hill-Shavers, 2014; Wilshire, 2011), as well as people with I/DD (i.e., Crouch et al., 2014; Hall, 2010; McMahon et al., 2008; Mejias et al, 2014; Williams & Downing, 1998), no studies in this review included a focus on belonging for college students with I/DD. Many of the reviewed studies at least partially conceptualize 'belonging' through the definition provided by Goodenow and Grady (1993) or assessment tools created by Goodenow, such as the Psychological Sense of School Membership Scale (e.g., Crouch et al., 2014; Hill-Shavers, 2014; McMahon et al., 2008).

Overall, people with disabilities report both positive and negative experiences with belonging (Lithari, 2019; Raines et al., 2023). In their review, Raines and colleagues (2023) noted that the people and places one interacts with greatly influence feelings of belongingness

for people with disabilities. For example, disabled people reported that they did not feel as if they belonged in situations where they were victims of ableism (Hill-Shavers, 2014; Mejias et al., 2014). Conversely, one study in the review noted that middle school students with disabilities in a co-taught class for students with and without disabilities felt a high sense of belonging in the classroom and at school overall (King-Sears & Strogilos, 2020).

In the college setting, experiences of belonging for students with disabilities have also varied greatly. According to disabled participants, the difference in their experiences can be due to many factors, such as the nature of their disability, the availability of accommodations, and the social attitudes of those around them (Mullins & Preyde, 2013). Vaccaro and colleagues (2015) found that for college students with disabilities, the ability to self-advocate, to master the 'student' role, and to develop social relationships contributed to their sense of belonging in college. Neither of these two studies included students with I/DD.

Theoretical Framework

The definitions of 'belonging,' and specifically 'school belonging,' include different constructs (e.g., social identity, sense of community, etc.) depending on which scholar's definition is used (Slaten et al., 2016). These frameworks and definitions, however, were all created without acknowledgment of the disabled experience and how that can impact school belonging. For a student with an I/DD, the steps needed to attend their neighborhood school instead of a specialized school for students with disabilities, for example, can be a barrier that non-disabled students do not have to contend with. Therefore, just being present in their local school is a step towards belonging that may not have the same impact as a non-disabled student attending their neighborhood school. Due to the differences in school experiences for disabled

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and non-disabled students, it is appropriate to use a conceptual framework that not only

acknowledges the disabled student experience, but was created with students with I/DD in mind.

Through the analysis of both research from other scholars about inclusion for people with

I/DD in a variety of contexts (e.g., school, church, work, etc.) and their own research related to

inclusive K-12 education for students with significant cognitive disabilities (e.g., I/DD), Carter

and Biggs (2021) developed the 10 Dimensions of Belonging (Carter, 2021). The 10 Dimensions

of Belonging are Present, Invited, Welcome, Known, Accepted, Involved, Supported, Heard,

Befriended, and Needed (see Figure 1). Present, the first of the 10 dimensions, means "to be

involved each and every day in the same places as everyone else in your school." The last

Dimension of Belonging, considered the "richest" and marked by absence, is *needed* — "When

others come to need you, your absence is missed. And when you are missed, you can be certain

you belong." Definitions of each of the Dimensions of Belonging are provided below in Table 1.

Figure 1

Dimensions of Belonging

Table 1

Dimensions of Belonging Definitions

Dimension	Definition
Present	To be present is to be involved each and every day in the same places as everyone else in your school.
Invited	To be invited is to have your presence or participation sought out by another person.
Welcomed	To be welcomed is to be received by others with warmth, friendliness, and an authentic delight.
Known	To be known is to be seen as a unique individual and appreciated for all of who you are.
Accepted	To be accepted is to be embraced gladly without condition and viewed as an equal
Involved	To be involved is to be actively engaged with and alongside peers in shared learning and common goals.
Supported	To be supported means having the individualized resources needed to reach one's full potential and thrive in everyday life.
Heard	To be heard means that your perspective is sought, listened to, and respected.
Befriended	To be befriended means having peer relationships marked by mutual affection and reciprocity.
Needed	To be needed involves being valued by others and considered an indispensable member of the community.

An early version of the 10 Dimensions of Belonging was utilized as a theoretical

framework in a study exploring belonging for children with I/DD in their churches (Carter et al.,

2016). In this study, Carter and colleagues (2016) individually interviewed 25 parents of children

with either I/DD or autism to learn about how the attitudes within and actions of religious

congregations impact how people with I/DD and/or their families feel and experience belonging

in the Christian Church. Parents spoke about how their church fostered or neglected each of the

10 Dimensions of Belonging for their disabled child and the rest of the family. Additionally, the

10 Dimensions of Belonging have been the focal point of multiple review articles (Carter, 2016;

Carter, 2022; Carter, 2020; Masters, 2023) and a response article (Masters, 2020), all in religious

journals. These articles urge the Church to consider, from a religious perspective, their call to

welcome and include all, especially congregants with I/DD or other significant disabilities. Each

article explains and encourages churches to utilize the 10 Dimensions of Belonging in order to

create a more welcoming faith environment where all feel that they belong. Although no

empirical articles have used the 10 Dimensions of Belonging as a conceptual base in school

settings, Carter (2021) advocates for the framework to be utilized in all aspects of life, including

schools.

I utilized Carter and Biggs' (2021) Dimensions of Belonging as the theoretical

framework underpinning this research project. Of the two studies that explore belonging for

students with I/DD in IPSE programs, neither the Schroder (2021) or the Eisenman (2020)

studies utilized a framework specific to belonging for students with I/DD, let alone the 10

Dimensions of Belonging. As this framework has not yet been used to study belongingness for

students with I/DD enrolled in IPSE programs, this dissertation study is particularly novel.

The current dissertation study further builds on both the study conducted by Eisenman and colleagues (2020) and Carter and Biggs' (2021) contribution by studying belongingness for students with I/DD in IPSE programs using the 10 Dimensions of Belonging as a conceptual framework. Due to the overall lack of research on belongingness in IPSE programs for students with I/DD, and the specific lack of research using a framework created for the I/DD population, I believe the present study provides a unique perspective and fills an important gap within the literature.

The Current Study

The purpose of this dissertation study is to gain understanding about the extent to which students with I/DD in IPSE programs in the United States feel like they belong within their greater campus community. The lure of IPSE programs is that inclusion and socialization with non-disabled peers are at the core. The belief that all students should be able to experience college, regardless of disability, is what grounds IPSE programs. Other post-secondary programs have proven track records in the areas of daily living skills and vocational preparation but lack the critical component of inclusion with non-disabled peers. Therefore, I explored how this difference of inclusion is perceived by participants in IPSE programs. Do IPSE students feel like degree-seeking college students, with access to all the "fun" parts of college? To that end, my primary research question is**: How do IPSE students with I/DD describe their experiences of belonging in college?** My secondary research questions are: **What factors impact feelings of belongingness for students with I/DD in IPSE programs? What factors are barriers to belongingness for students with I/DD in IPSE programs?**

Methods

Positionality

I identify as a white, middle class, cis-gender woman with a hidden disability. In many ways, I have privileges that may unintentionally bias my interpretation of participant responses. I can hide my disability from others and so when I walk through the world, I do not experience exclusion based on my disability or race. In particular, my school experiences may have been quite different than a student of color with I/DD, for example. Utilizing a second coder will help to lessen the effect of my personal biases on the interpretation of the data.

I acknowledge that I come to this dissertation work as an outsider (Evered & Louis, 1981), although one who is unwilling to forgo the empathy and respect the emic (insider) perspective is associated with (Ravitch & Carl, 2019). Being an insider, even one with peripheral membership, requires a role within the IPSE community that I simply do not have (Adler & Adler, 1987). I am not an IPSE student or staff member, and although I have a disability, it is not an I/DD. Ultimately, I use the pronouns "they" and "their" to speak of IPSE students, instead of "I" and "my," when discussing the findings of this study, therefore cementing my role as an outsider, without membership in this group.

Prior to beginning a Ph.D. in Special Education, I taught in the Koreatown and MacArthur Park neighborhoods of Los Angeles for eight years. As a K-12 special education teacher, I was an inclusive educator, fully including students with a range of disabilities (some intellectual and/or developmental) into general education classes with their non-disabled peers. During my time as a public-school educator, I never saw the inclusion model fail for any student, including students with I/DD, when the teachers and students were provided with all the

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necessary resources and supports. Due to these experiences, I am biased towards inclusive models of special education for all students, regardless of the impact of their disability. I see the failure of a child to thrive in inclusive settings as a systemic issue, often arising from teacher attitudes, lack of adequate training, and/or lack of sufficient resources. I do not see this as a failure of the child.

For some of my students, college was the clear choice for their post-high school progression. For others, I did not feel I had the knowledge to recommend any post-secondary programs. It was not until I stopped teaching high school that I learned about IPSE programs. As more and more programs have begun to emerge in California and around the nation, the more intrigued I have become.

Since my initial interest, I have had informational interviews and informal conversations with IPSE leaders and have attended several conference sessions and events related to IPSEs. Currently, I am an active member of the Association of University Centers on Disabilities (AUCD) IPSE Special Interest Group (SIG). Last summer, I completed an internship at the U.S. Department of Education (ED) under the direct supervision of Dr. Larry Wexler, who has supported the creation and development of IPSE programs since their inception in the U.S.

Although I currently have existing professional relationships with IPSE leaders and parents of IPSE students, I do not have any relationships, formal or informal, with IPSE students. I do, however, have plenty of meaningful relationships with children and adults with I/DD who would have or will benefit from IPSE programs. The most significant of these relationships is the one I have with my mother's brother, my Uncle Gregg, who lives in a group home in Costa Mesa, California. My experiences with my Uncle have shaped my beliefs about people with

I/DD. He is smart, capable, and experiences a range of emotions, just like any non-disabled person. Therefore, I believed in the abilities of my participants to provide rich responses when interviewed for my dissertation study.

Qualitative Study Rationale

I conducted a qualitative study, in which current IPSE students with I/DD participated in individual interviews about their experiences of belonging on a college campus while enrolled in an IPSE program. Four participants were also selected to be observed during a typical school day in their IPSE program. Qualitative methods, such as individual interviews, allow researchers to gather rich, detailed descriptions of experiences within context. They are ideal when a researcher seeks to understand how a population interprets an experience (Ravitch & Carl, 2019). In the current study, I attempted to understand how IPSE students experience or understand belonging in relation to their IPSE experience, making qualitative methods most appropriate. Additionally, qualitative methods are suitable for exploring a newer topic with limited research (Berkwits & Inui, 1998). IPSE research is a newer research topic, and further, the ability to critically analyze student experiences in IPSE programs has only recently become a research reality as IPSE programs are maturing and collectively graduating hundreds of students each year (ThinkCollege, 2023). Finally, research has demonstrated that people with I/DD are able to meaningfully participate in individual interviews (Hollomotz, 2018).

Participants

The voices of students with I/DD are largely unrepresented when studying IPSE programs, with researchers preferring to interview staff/faculty, parents, or non-disabled students instead (e.g., Blaskowitz et al., 2022; Lizotte et al., 2021; Miller et al., 2019, etc.). To center the disabled student voice in this study, I initially recruited and interviewed 15 IPSE students (ages:

15

19-25 years old) with I/DD attending an IPSE program in the United States. One individual interview was removed from the data analysis process due to heavy parental influence on the student's answers and the other was removed due to the lack of relevant and on-topic responses to the interview questions.

For inclusion in the study, participants needed to be a currently enrolled IPSE student, with I/DD, attending a four-year university in the United States, who had completed at least one year in an IPSE program, and was between 18-25 years old. This does not necessarily mean that the student was in a four-year IPSE program, just that their IPSE program was housed at a four-year university. For example, UCLA's IPSE program is two years, but UCLA is a four-year university, making students in UCLA's IPSE program eligible for the current study. There was no requirement that students needed speak verbally to participate in this study. However, there were no users of augmentative and alternative communication (AAC) who expressed interest in the study, and all participants chose to speak verbally in their interviews. Socio-economic status (SES) was not collected from participants, but likely varied immensely among participants. Some of the programs had partnerships with the state Department of Rehabilitation or the local Regional Center. These organizations paid for part or all of students' tuition and living expenses if they qualified under the organization's eligibility criteria. At the time of the study, one program was fully funded for all participants. This allowed for students of lower SES to participate in IPSE programs. For IPSE programs without funding sources, families paid out-of-pocket for the cost of tuition and living expenses. For an IPSE student, living on campus, with a meal plan at one of the private schools in this study, the yearly average cost for the family would

be approximately $42,000. Because yearly IPSE program costs can range from zero dollars to $42,000, it is likely the SES among IPSE students differs significantly, as well.

The participants enrolled in the study represented six different IPSE programs across the United States. While all six IPSE programs were designed for students with intellectual disabilities, the programs did differ on some aspects. All programs required students to be at least 18-years-old, and four of the six had an upper age limit, as well. Half of the programs were four-year programs, while the remaining were either two- or three-year programs. Some IPSE programs had very specific eligibility criteria, such as the ability to read at a third-grade level and to be one's own legal guardian (instead of in a conservatorship). Other programs had more general guidelines, such being able to manage medications independently and having "basic safety skills." The eligibility criteria for IPSE programs in general indicates the most appropriate participant in an IPSE program is someone with I/DD who has lower support needs. The participants in my study all had low- to moderate-support needs. The majority of the schools provided on-campus housing for IPSE students, but two programs only had off-campus housing options for IPSE students. This sample included two private universities and four public universities.

After disclosing her own disability, the interviewer asked participants to share their disability with the interviewer, to ensure participants had I/DD. Students were not asked to provide any medical records to prove that they are a person with I/DD. A major criterion for admission in IPSE programs is that a student has an I/DD. Therefore, if students were in an IPSE program and self-identified as a person with I/DD, they had the opportunity to be included in the study. Additionally, the required age range of 18-25 years old is reflective of the admissions

requirements of many IPSE programs in the United States (e.g., UCLA Pathway). The

demographics of each of the participants can be seen in Table 2.

Table 2

Participant Demographics

Pseudonym	Disability	Gender	Year in IPSE Program	Race	Age	School Pseudonym and Location
Hana*	I/DD + Speech	Female	3	Asian	25	Pineville College Northern CA
Lilly	Down Syndrome	Female	3	White	25	Pineville College, Northern CA
Oliver	Down Syndrome	Male	3	White	21	Pineville College, Northern CA
Levi	I/DD	Male	2	Hispanic	24	Oakwood College, Northern CA
Dominic*	I/DD	Male	2	Black	22	Oakwood College, Northern CA
Carter	I/DD	Male	2	Black	20	Oakwood College, Northern CA
Camila*!	Cerebral Palsy + I/DD	Female	2	White	20	Asterfield University, Southern California
Brian	Down Syndrome	Male	Summer before 2nd year	White	21	Whitetop University, Colorado
Isabela	Down Syndrome	Female	Summer before 3rd	White	20	Whitetop University,

			year			Colorado
Chad	Down Syndrome	Male	Summer before 2nd year	White	20	Whitetop University, Colorado
Daniel	I/DD + ADHD	Male	Summer before 2nd year	White	19	Bryony University, New York
Noah	Autism with I/DD	Male	Summer before 2nd year	White	20	Bryony University, New York
Henry	Down Syndrome	Male	Summer before 3rd year	White	21	Bryony University, New York
Ivan*	Autism with I/DD	Male	4	Indian	22	Hillside University, Texas

Note. * Indicates student was also observed ! Indicates student's interview was not used in the final analysis

Informed Consent

A common misconception is that people with I/DD lack the capacity to provide informed consent and understand study protocol well enough to meaningfully participate in research. A decade ago, Horner-Johnson and Bailey's (2013) study found this belief to be mostly false. When provided information about a study and a list of short questions relating to the study, over half of the 131 participants with I/DD answered every single question posed correctly. This study indicates that adults with I/DD have the ability to consent and participate in research.

Perhaps most importantly, adults with I/DD want to participate in research. McDonald and colleagues (2016) found that adults with I/DD strongly value the benefits research provides and want to participate in it. Additionally, the same study found that adults with I/DD rate their

interest in participating in research higher than stakeholders (e.g., friends and family members, IRB members, and researchers) expect them to.

UCLA, through the Human Research Protection Program, provides guidelines and ethical considerations for gaining informed consent from individuals with I/DD in research studies (Guidance and Procedure, 2021). Specifically, these protocols consider the capacity of a person with I/DD to consent. For each participant, I determined the ability of the individual to provide informed consent by utilizing the "Decision-Making Capacity Assessment Tool," as developed by UCLA's Office of Research Administration. This tool guides the researcher to ask questions of participants to better understand if the participants both truly want to participate in the study and if they have the capacity to provide informed consent. If the researcher determines that a participant either cannot make and express a choice about participating in the study or does not have the ability to provide informed consent, the participant is automatically excluded from the study. If participants are able to do both, they can continue on with the study. Participants were required to correctly answer questions regarding the study procedure and how to withdraw from the study, for example, in order to provide informed consent. When asking these questions, I was looking for participants to respond in their own words or to ask me clarifying questions, instead of repeating verbatim what I had told them about the study. If students were unsure of how to answer a question, we reviewed the procedures and consent form, and then I asked the question again to see if students were now able to answer the question correctly and in their own words. While the full Assessment tool can be found in Appendix B, some sample questions are included below.

- Does the individual understand he/she would be participating in research and that research is voluntary?

- Can the individual explain what he/she should do to stop being in this research study?

- Does the individual know who to contact if he/she experiences problems or has questions about the study?

Procedure

After obtaining UCLA Institutional Review Board approval, I utilized purposeful sampling (Ravitch & Carl, 2019) to recruit participants. First, I emailed the program directors of three IPSE programs in California. When this recruitment strategy did not yield enough participants, I amended my IRB, with the permission of my chair, to widen my recruitment to all IPSE programs in California. Using the directory on the ThinkCollege website, I emailed the director of every IPSE program in California that is housed in a four-year institution. There are a total of nine programs meeting this eligibility criteria. Again, after struggling to recruit a sufficient number of participants from the state of California, I submitted an amendment to the IRB to widen the recruitment to all IPSE programs in the United States who had received a Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID) grant from the US Department of Education. Program directors at some IPSE programs were also able to connect me with other program directors from around the country. This final round of recruitment yielded enough participants for the current study. With each round of recruitment, I asked the IPSE directors to share the recruitment email and flyer with current IPSE students who met the inclusion criteria and offered to Zoom into IPSE classes to explain the study to students.

I asked the program directors to please let me know if any students were willing to participate in the study and to provide me with their contact information. Some students emailed me directly to start the screening process.

In some cases, after being provided the contact information of interested students, I emailed students to set up a short Zoom meeting or phone call to further explain the study, determine if the student was able to provide informed consent, and finally, ask for verbal consent to proceed with the study (approved by IRB). We also discussed the best day and time for me to visit their campus or hometown in order to interview and potentially observe them. In other cases, new participants were recommended to me by current participants while I was already on their campus, and so the informed consent procedure happened in person, directly before the interview, instead of on Zoom. Text message and email conversations were also used to determine a place and time for the interviews with some participants. Although by the start of most interviews, I had already received informed consent electronically, I again explained the study and asked for consent a second time, to ensure participants truly wanted to engage in the interview.

Once I received informed consent from each participant in-person, I then conducted a verbal language assessment to ensure participants had the verbal ability of an average four-year-old. This screening was used to establish the ability of participants to provide sufficient spoken answers to the study interview questions. The four-year old cut off point was utilized as the average four-year old should be able to recall and retell events, "understand complex questions," and "answer 'why' questions" in sentences of four or more words, all of which are needed to productively participate in the interview portion of this dissertation study (CDC, 2023; Stanford

Medicine, n.d.). I conducted this assessment with four of the initial 15 participants. In

conversations prior to the interview, 11 of the 15 interviewed students had already demonstrated

their ability to provide adequate responses to questions. To me, this indicated that the verbal

assessment was unnecessary for these 11 participants, as the students clearly had verbal abilities

beyond a four-year-old capability. The four who had not demonstrated their verbal abilities prior

to the start of the interview were assessed on a verbal language assessment. I assessed the four

potential participants using the Spoken Language subtest of the Young Children's Achievement

Test (YCAT). The YCAT is an achievement test, with five subtests, designed for children

ranging from four years and zero months to seven years and 11 months (Hresko et al., 2000). The

authors of the YCAT contend that the results can be used to determine at-risk students and then

support school staff in providing appropriate educational interventions for students. The

developers of the YCAT describe the Spoken Language subtest below:

> On this subtest, knowledge of the spoken language is measured. Examinees are required
>
> to respond to a variety of items including repeating sentences and number sequence,
>
> verbally defining basic objects, and verbally describing how two things are similar. The
>
> examiner's manual also explains that phonemic awareness is assessed as it is fundamental
>
> to oral language comprehension (Hresko et al., 2000, p. 273).

Sample questions on the YCAT Spoken Language subtest include:

- What is a bridge?

- How are a sock and a shoe the same?

- See these? [test administrator points to bird, airplane, and kite] How are these

  things the same?

In this dissertation study, all four students who were assessed scored in the average range or higher for a four-year-old, and thus, they were able to continue with the individual interview.

Each participant who was eligible, provided informed consent, and demonstrated sufficient verbal ability was interviewed for the study. I conducted in-person, semi-structured interviews with 12 IPSE students (ages: 19-25 years old) with I/DD and Zoom interviews with three IPSE students. Two in-person interviews were not included in the coding and analysis process. In one of the excluded interviews, the student did not seem to understand multiple interview questions, providing off-topic and irrelevant responses. In the second excluded interview, a parent interjected heavily and influenced the responses of her child. For example, after the student responded to a question I asked, the parent encouraged her daughter to "tell the truth" and to "be honest." In many cases, the participant would change her answer based on what her parent would tell her. As the interviewer, it was difficult for me to understand what the participant's true beliefs were due to the mother's interference during the interview process. Therefore, a total of 13 interviews were included in the analysis. All interviews were audio recorded and most were video recorded (not all students provided consent for video recording) for transcription purposes. I employed research-based strategies for interviewing adults with I/DD, such as allowing the participant to take breaks during the interview (Hollomotz, 2018) and asking questions in plain language (Witwer et al., 2022), in order to obtain the most meaningful data from my participants. When necessary, I modified the questions to reflect the level of understanding of the participant (Hollomotz, 2018). Of the 13 included interviews, seven were conducted in-person on or near the college campus of the interviewee. Three participants were interviewed in-person, in their hometowns, after finishing the Spring 2024 semester. Three

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participants were interviewed on Zoom due to participant preference and/or travel limitations. Each participant was able to choose the location of the interview, with my only stipulations being that it was a place where they felt comfortable sharing their honest opinions with me.

Students were individually interviewed once between March 10th and June 13th, 2024. Most interviews lasted between 30-60 minutes, depending on how much a participant chose to share about and expand on their experiences. The shortest interview lasted 29 minutes and 41 seconds, and the longest interview was 70 minutes. The longer interviews were almost all marked by rich participant experiences and more descriptive answers to the interview questions. In some of these interviews, participants would share experiences that were not always relevant to the question being asked. In one of the longer interviewers, I repeatedly asked the participant to "say that again" as I had difficulty understanding his speech. At one point in this interview, it took me several minutes to understand that the participant was saying "hot chocolate." The shorter interviews were due to participants providing succinct responses to interview questions. If participants appeared to be bored or frustrated, general questions about the IPSE experience were skipped, in order to move more quickly to the questions about belongingness. The interviews in which some questions were skipped tended to be shorter. All participant interviews were recorded and later transcribed. To ensure the accuracy of the transcripts, I transcribed the interviews myself. Students who participated in the individual interview were provided with a $20 Amazon gift card upon completion of the interview.

After conducting individual interviews at each campus, I chose one of the interviewed students at the campus to observe during a full school day, to better understand a day in the life of an IPSE student. I selected a student who had elaborated significantly on their IPSE

experience during the interview and who had a variety of activities in their schedule (e.g., class, employment, etc.) during one of the days I was on campus. Due to academic schedules, I was able to observe four students from four different schools. The student was re-consented for the observation portion of the study and given an additional $5 Amazon gift card.

The Interview Protocol

Questions were divided into two parts during the individual interview. Part One (P1) of the interview was purposefully general, asking about the student's IPSE experience. Part Two (P2) narrowed the focus and specifically asked about belonging. During the first part, questions were asked about the participant's overall experience in their IPSE program, including the social and academic experiences they partake in, who they consider their friends to be and why, and their goals for the program. Sample questions from Part One include:

- What clubs, sports teams, or other activities are you involved in on campus?
    - Why do you like participating in [activity]?
    - Do you have any friends who participate in that activity with you? If so, can you tell me about them (including probing for whether they are an IPSE student or not)?
- Who do you eat lunch with and where do you eat?
    - Why do you eat with that person and why do you choose to eat in that location?

The second part of the interview narrowed in on the IPSE student's conceptualization and experience of belonging on their college campus. The Part Two questions were created with Carter and Biggs' (2021) Dimensions of Belonging in mind. For example, asking students in Part Two of the interview if and how professors make them feel like they belong in class, helped me

to understand if IPSE students are simply present (Dimension 1) in class, or if they are welcomed (Dimension 3) by their professors, or even if they have an indispensable role in class and are needed (Dimension 10). Each interview question is *potentially* aligned to at least one of the 10 Dimensions of Belonging, based on participant responses. The alignment matrix in Table 3 was utilized as a *guide* while coding, as some students did not refer to the expected dimension when responding to an interview question. The alignment of the interview questions with the 10 Dimensions of Belonging can be seen in Table 3. Sample questions from P2 include:

- What do you think it means to belong?
  - What is your definition of belonging?
  - If someone said, "I belong at [insert college name here], what do you think they mean by that?
- Has there ever been a time when you felt like you did not belong at [college]? Can you describe that experience to me?
  - What happened? Who was there? How did you feel?

In interviews with some participants, some of the P1 questions were skipped in order to move more quickly to the P2 questions, which are more directly related to the study aims. This happened when participants were showing signs of boredom or a lack of attention, such as looking around the interview room or repeatedly responding "I don't know." If, after answering the P2 questions, participants seemed more interested in the interview, they would be asked the remainder of the P1 questions that were skipped over. The full interview protocol can be reviewed in Appendix C.

Table 3

Alignment Matrix of Interview Questions to Dimensions of Belonging

Dimension	Present	Invited	Welcomed	Known	Accepted
Questions	P1: 2, 3, 9 P2: 3, 10	P1: 2, 3, 4 P2: 8	P1: 4, 7, 8 P2: 3, 4, 5, 11	P1: N/A P2: 15	P1: 3, 4, 7, 8 P2: 3-7

Dimension	Involved	Supported	Heard	Befriended	Needed
Questions	P1: 2, 3, 4 P2: 6, 7, 8	P1: 2, 3 P2: 3, 6	P1: N/A P2: 6, 7	P1: N/A P2: 3, 4, 8, 11, 15	P1: N/A P2: 12, 13, 14

Note. P1 indicates Part One of the interview, while P2 indicates Part Two of the interview.

The Observation Protocol

After being deemed eligible for the study, select students were asked if they were amenable to being observed for the second part of the dissertation study. Of the four observed students, two students were asked to participate in the observation because they had elaborated significantly on their IPSE experience during the interview and appeared very interested in the research study. The other two students were the only ones from their campus who agreed to be interviewed and therefore, were automatically selected as the student to be observed. All four students who were asked agreed to be observed and so, I explained to them what the process of being observed entailed and consented the participant to this part of the study.

Students participating in this part of the study were observed for the entirety of a school day, starting in the morning and ending after their final class or job shift ended, in the afternoon. Observations took place on a weekday during which the college/university was fully operational

(e.g., not on a holiday, not during winter or spring break). The longest observation was approximately six hours, and the shortest observation was approximately three hours. I followed the participants to class during all four observations and to work during one of the four observations. I was also able to observe students take public transportation ($n = 1$), eat in a dining hall ($n = 1$), and engage with students with and without disabilities during the observations ($n = 3$) . While observing the participant in class, at their job, or during other times, I took written notes about what I saw as it related to the 10 Dimensions of Belonging (e.g., was the student INVITED to be part of the turn & talk activity by any other student in the class?). During this portion of the study, I did not collect any audio or visual recordings, to protect the confidentiality of the other students, professors, or staff members who may have been in the vicinity of the observed student. When necessary, I asked the participant questions throughout the day relating to the specific class or activity they were participating in, in order to better understand the context of a particular relationship, class, or task. The observations all took place at public colleges/universities in the United States.

To capture field notes related to the 10 Dimensions of Belonging, an observation tool was utilized (see Appendix D). On the first page of the observation tool, I documented the activity or class the student was participating in, the time frame during which this activity took place, and any notes relating to belonging. On the second page of the observation tool, I documented instances in which each of the dimensions of belonging was demonstrated well or poorly during the observation.

Triangulation

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In qualitative research, triangulation is necessary to "enhance the quality and credibility" of one's research (Patton, 1999, p.1189). There are four types of triangulation: (1) methods triangulation, (2) triangulation of sources, (3) analyst triangulation, and (4) theory/perspective triangulation (Patton, 1999). In the current study, I triangulated sources using methods triangulation by both interviewing IPSE students and then observing a subset of IPSE students. The use of two different qualitative methods (i.e., interviewing and observing) allowed me to verify my findings and naturally contributed to richer phenomenological descriptions of belongingness for IPSE students (Patton, 1999). Ultimately, this dissertation study used multiple data collection methods in order to provide more credibility to the findings.

Data Analysis

When coding the transcripts of the recorded interviews with participants and the participant observations, I used NVivo, a coding software I have used on previous projects. Every transcript was manually coded and there was no use of any sort of automatic coding by NVivo or any other software/computer program. Using a hybrid approach, I first developed a codebook with 10 deductive codes relating to each of Carter and Biggs' (2021) Dimensions of Belonging (e.g., Present, Heard, etc.), and then later added 16 inductive codes based on what the data revealed (Fereday & Muir-Cochrane, 2006). One in vivo code, "Drama," was utilized as it was repeatedly spoken about in student interviews. The complete codebook is available in Appendix E.

Through the lens of the Dimensions of Belonging (Carter & Biggs, 2021), I utilized thematic analysis and a phenomenology approach to determine the "common meaning" of both belongingness and a lack of belongingness for students with I/DD enrolled in IPSE programs (Creswell & Poth, 2016, p.75). Using the sentences and phrases provided by participants, I

identified "significant statements" in the transcripts relating to each theme (Creswell & Poth, 2016, p.75). I similarly looked for additional noteworthy phrases in my observation memos. Subthemes were generated using the 10 Dimensions of Belonging, as well as the various factors that serve as barriers to belongingness, in order to achieve the research aims. Together, the themes and subthemes explain the "essence of the experience" of belongingness for students with I/DD while enrolled in IPSE programs (Creswell & Poth, 2016, p.75). The analysis process helped to determine whether experiences were common across participants, and thus requiring of a subtheme, or anomalous outliers. Through the data analysis process, I was able to understand and describe how students with I/DD perceive their own sense of belonging on their college campus while enrolled in an IPSE program - a major aim of this study.

In order to confirm the validity of my themes and subthemes, a second coder independently coded approximately 20% of transcript data to ensure intercoder reliability (ICR) (O'Connor & Joffe, 2020). The second coder is a qualitative student researcher, who is also working towards a PhD in Special Education in CSULA and UCLA's joint doctoral program. During an in-person meeting, she was provided with each of the 13 transcripts (clean), the codebook, and a brief explanation and demonstration of the coding process for this project. For each transcript, the second coder was instructed to code participant responses for six specific questions out of a total of 29 questions. Instead of statistically determining the level of agreement, both coders compared their coding of each transcript in a second in-person meeting. Initially, there were many discrepancies in coding, as the primary coder was more likely to double and triple code participant responses (e.g., code something as 'Present,' 'Welcomed,' and 'Involved') as compared to the second coder. Once realizing this, the second coder re-calibrated her approach to coding and was more likely to code more similarly to the primary coder. The two

coders were most aligned with the following codes: Belong_Actions, Belong_College, Belong_Feeling, Definition_Belong, Drama, Present, Neg_Belong, Neg_Belong_Feelings, and Supported. The two coders were initially less aligned when coding the more abstract codes, namely the majority of the 10 Dimensions of Belonging. To remedy this, when disagreements arose, the two coders discussed the operationalized definition of the code, as well as the implementation of it throughout the coding process and came to an agreement on how to utilize the code appropriately. After these discussions, the two coders ultimately applied each of the codes consistently. When presented with the themes and subthemes, the second coder agreed they were appropriate based on the coding she had done.

<p style="text-align: center;">Findings</p>

The majority of the findings in this dissertation are organized around the 10 Dimensions of Belonging and how - or *if* - participants experienced each dimension while in their IPSE programs. Two overarching themes - experiences of belonging and gaps in belonging - emerged from the data. Each of these themes is composed of several subthemes that ultimately tell the story of belonging, or lack thereof, for IPSE students. Figure 2 illustrates the themes and subthemes, as well as their relationship to one another.

Figure 2

Experiences of Belonging for IPSE Students
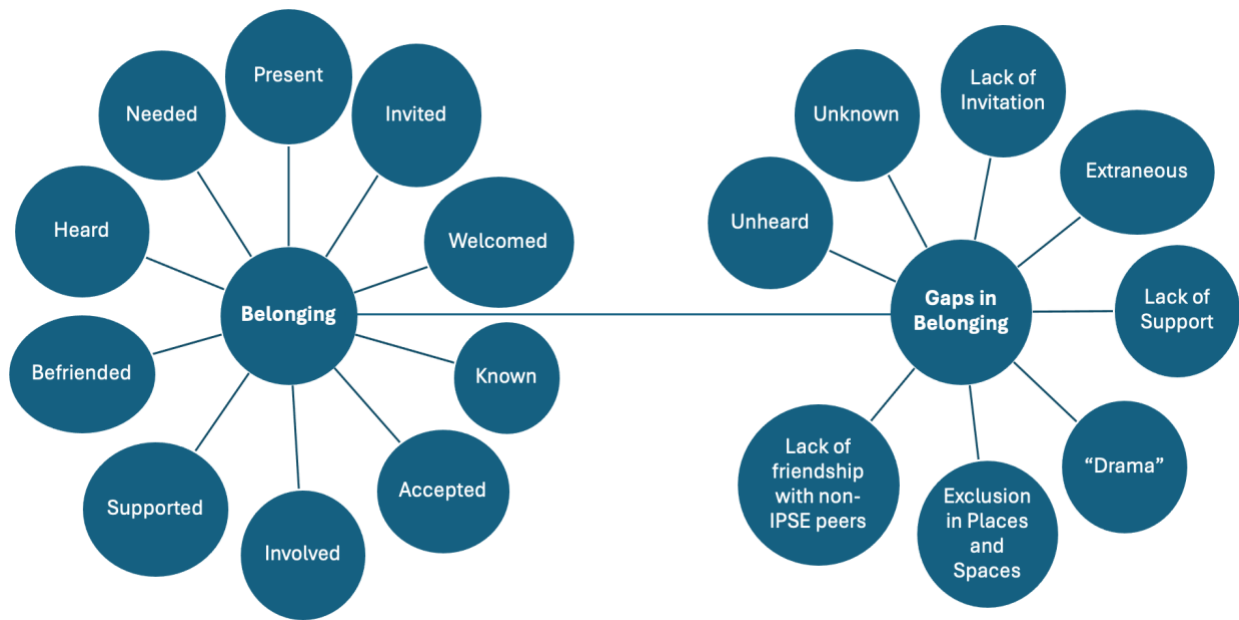
While the data illustrate a variety of experiences, both the narratives students shared about their IPSE programs and my observational data were overwhelmingly positive and indicated belonging. In fact, of the 2,270 total references coded, a total of 1,695 references indicated positive experiences with belonging. Conversely, 433 references indicated negative experiences with belonging. Therefore, almost 75% of the coded references indicated positive

experiences with belonging. Of the 26 codes used during the analysis process, 14 of them

indicated positive belonging experiences, 10 of them indicated negative belonging experiences

and two of them were neutral. This breakdown is further explained in Table 4 below.

Table 4

Code Disaggregation

Code	Positive, Negative, or Neutral Code?	Number of References	Proportion of Total Coded Responses
Accepted	Positive	126	5.6%
Befriended	Positive	249	11.0%
Heard	Positive	97	4.3%
Invited	Positive	56	2.5%
Involved	Positive	200	8.9%
Known	Positive	56	2.5%
Needed	Positive	87	3.9%
Present	Positive	256	11.3%
Supported	Positive	259	11.4%
Welcomed	Positive	126	5.6%
Belong_Actions	Positive	64	2.8%
Belong_College	Positive	99	4.4%
Belong_Feelings	Positive	20	0.9%
Belong_People	Positive	74	3.3%
Definition_Belong	Neutral	22	1.0%

Need_for_Connection	Neutral	46	2.0%
"Drama"	Negative	46	2.0%
Lack_Friendship	Negative	79	3.5%
Lack_Heard	Negative	24	1.1%
Lack_Invited	Negative	27	1.2%
Lack_Known	Negative	6	0.3%
Extraneous	Negative	15	0.7%
Neg_Belong	Negative	132	5.8%
Neg_Belong_Feelings	Negative	26	1.1%
Places_Exclusion	Negative	11	0.5%
Lack_Support	Negative	40	1.8%

Experiences of Belonging

While many of these Dimensions overlap, they are also all distinct and important in their own right. For example, if an IPSE student is 'Involved,' being 'Present' is usually a given. However, students may be 'Present' in a classroom, but not 'Involved' in the learning activities, instead choosing to sit in the back of the room and play computer games. In this case, grouping these two dimensions and subthemes together would be inappropriate. I contend that this was also true of the remaining subthemes and dimensions. Therefore, it was important to provide a distinct understanding of each of the 10 Dimensions and how IPSE students experience each one. Ultimately, this provided a richer and more nuanced understanding of how IPSE students relate

to each of the 10 Dimensions of Belonging while on their college campus, despite potential redundancy.

Present

To be present is to be involved each and every day in the same places as everyone else in your school (Carter & Biggs, 2021).

During the coding process, there were 248 references relating to the code "Present," spanning all 13 interviews. This dimension had the second highest number of references compared to the remaining 25 codes, indicating strong evidence that IPSE students are present in a variety of spaces and places on their college campus. Specifically, IPSE students in this study discussed being present in academic settings, campus facilities, and in their local communities.

For any student, a core aspect of going to college is attending classes. This is no different for students with I/DD. When asked about their class schedules, IPSE students in this study all reported attending at least one class per term with their degree-seeking, non-IPSE peers. The classes IPSE students took with their non-IPSE peers varied from a full slate of physical education classes ("I'm taking Table Tennis, Partner Dancing, … Jogging") to some more academically rigorous courses ("I'm taking a Korean History class… but next [term] I'm taking a Mythology class").

Feelings about attending classes varied among IPSE students. Some students prided themselves on being "an amazing student," and others shared that classes were undoubtedly their least favorite thing about college. Regardless of how students felt about their classes, they all had access to a wide range of college-level courses with their non-IPSE peers.

Beyond the classroom, all students enjoyed access to campus facilities, such as the gyms and dining halls (with meal plans), as well as campus events like football and basketball games.

When asked what her favorite thing about college was, Isabela, an IPSE student in Colorado, answered, "going to the gym and just working out." Conversely, Noah's favorite part of college was eating "a chicken and fries bowl" at an on-campus eatery and Lilly's was "eating out with friends and… going out for lunch." Access to the places and spaces on campus were not only important to IPSE students, but were among their favorite parts of the college experience.

Students were also present in their neighboring communities, for both social outings and skill-building opportunities. When asked, Oliver, who attends Pineville College, shared that one of his favorite things about attending college was "going to see cool places like Target." Carter's favorite memory of college was attending an off-campus event at a trampoline park with his IPSE peers from Oakwood College. Many students reported that they enjoyed going off campus to eat - fast food being a perennial favorite. IPSE students also shared that they regularly went off campus to practice independent living skills, such as taking the bus to work or staying within budget and making healthy selections at the grocery store. Beyond being in the classroom and at campus events, an important part of college for IPSE students was being able to explore the surrounding communities and all that they offer.

Invited

To be invited is to have your presence or participation sought out by another person (Carter &

Biggs, 2021).

When comparing each of the 10 Dimensions of Belonging, IPSE students in this study made references to being invited the least, only being coded 51 times in student interviews. However, in 12 of 13 interview transcripts, participants were able to describe being invited by another person, most often, their IPSE peers.

Fellow IPSE peers sought out the presence of IPSE students the majority of the time. Of his best friend at school, also an IPSE student, Carter shared, "he'll come by to my apartment ask me to hang out with him." IPSE students reported being invited to engage with their non-IPSE peers most frequently in the classroom setting, particularly when participating in partnerships or groups. When asked about group work in college-level classes, Carter shared:

People are welcoming, they just say, "Oh, come to our table." [They] don't leave me left out, so I'm like, I'm by myself. They'll call me over…They'll call me over to their table and we'll talk about, I have a topic that's there about the project.

IPSE students' participation and presence appeared to be sought out the most when in structured classroom environments.

Nearly all off-campus invitations revolved around food or drink. Hana, a student at Pineville College, commented on what her IPSE friends most often invited her to do: "It's usually, it's like a couple of my friends that I'm close with, like you know one is [IPSE student]. She and I like going out for getting ramen, boba, or coffee." Similarly, Henry's IPSE friend invited him "to get a drink at a bar." Most off-campus invitations came from fellow IPSE students.

Two students, in different IPSE programs, reported being invited off campus by non-IPSE peers. When asked what he did with his friends off-campus, Ivan, who is at Hillside University, replied that they usually "watch[ed] a game or like maybe we [would] get a drink somewhere, just hang out." Isabela, an IPSE student at Whitetop University, discussed making friends with the girls on the university's soccer team and being invited out with them multiple times over the past two years. Recalling one instance she shared, "[Soccer player] actually

invited me to go to her house!" Although invitations off-campus were primarily limited to within the IPSE cohort, some IPSE students were invited off-campus by their non-IPSE peers.

Welcomed

To be welcomed is to be received by others with warmth, friendliness, and an authentic delight

(Carter & Biggs, 2021).

All IPSE students reported or described situations in which they were welcomed by their peers (IPSE or non-IPSE), staff members, or professors. In their interviews, participants shared who was excited to see them and in which places they felt the most welcome. In the data analysis, the code 'Welcomed' accounted for 123 references across all 13 interviews.

When IPSE students were asked what happened when they walked into a classroom, they reported being welcomed by their peers most of the time. While some participants said their peers simply said "hi" to them, others remembered more warmth and excitement from their peers. Carter recalled a common interaction with his non-IPSE peers when he walked into his classroom, saying, "they say hi to me and they approach me, saying, 'hi!' They get so excited. They say, 'Hi! Hi Carter, how you doing?' I was like 'I'm doing good.'" Henry was also welcomed when entering classes noting, "[Non-IPSE students] react to be happy because they get excited to see me." Later in the interview, he added, "I have a lot of friends who makes me feel welcome." While Chad also thought students were happy to see him in class, he said that he believed one of his professors at Whitetop University was the most excited to see him.

When IPSE students were asked about the reactions of others outside of class, participants shared that both peers and school staff were happy to see them. At Special Olympics, Carter recalled, "my coach is excited to see me and mostly my teammates, too." Noah, an IPSE student in New York, felt similarly to Carter about his Special Olympics team.

Henry, who attends the same IPSE program as Noah, said that his roommate and boyfriend were the most excited to see him on campus. Noah believed a peer mentor in his program was most excited to see him, while Hana felt her entire program at Pineville College was excited to see her. Brian's sense of belonging was tied to the way he was welcomed by his non-IPSE peers at Whitetop University. He shared, "what other students outside of the [IPSE] program also do things, I belong because they help us, and they make us feel welcome." Every IPSE student was able to name at least one person who they felt was excited to see them at their respective universities.

In response to a series of questions about which places and which people made them feel most welcome, IPSE students in this study reported that they felt welcome in a variety of places on and off campus. Hana felt most welcome in classes with just other IPSE students. Henry thought people were both the kindest and most welcoming in his residence hall and reported that people were most excited to see him "at the dining hall, the dorms, everywhere." Isabela also felt most welcome on campus, particularly at a coffee shop "because all my friends are sometimes there." Ivan's and Lilly's responses to where they felt most welcome on campus were both "anywhere." Levi, a student at Oakwood College, shared, "I feel like I feel most welcomed, during the events… football games," and Oliver, who attends Pineville College, felt most welcome at a park, because he could "smell the nature's nature and relax." Although there was great diversity in who students felt most welcomed by and in which places students felt most welcomed at, it was evident that all participants had experiences of being welcomed.

Known

To be known is to be seen as a unique individual and appreciated for all of who you are (Carter & Biggs, 2021).

Every participant in this study shared that they felt personally known by at least one person at their university, whether it was a roommate, staff member, or friend. The depth of knowledge about IPSE students by their professors and peers was not identified in this study, so determining how well IPSE students are actually known is not possible in this dissertation. The purpose was to identify ISPE students' perceptions of belonging. During the data analysis process, the code 'Known' accounted for 53 references in interview data. All 13 IPSE students in the study identified at least one person on their college campus who they felt knew them

Ivan, who described himself as "the life of the party" claimed that "everyone" knew him when asked who knew him the best. He justified his response by saying, "because everybody knows what I like." Although it's unclear how well Ivan's peers and teachers know him on a deeper level, Ivan perceived he was well-known by everyone, further adding to his sense of belonging at his university.

While other IPSE students did not feel like they were personally known by "everyone," all could name an individual who they felt knew them. Most often, when asked who on campus knew them the best, participants responded that their IPSE peers did. Chad and Daniel, who attend different IPSE programs, both stated that their roommates (IPSE students) knew them the best, while Oliver said his girlfriend, also an IPSE student, knew him the best. Four other participants identified an IPSE friend as the person who knew them the best.

Participants also believed professors and IPSE staff members also knew them well, when responding to questions about which staff or faculty members knew them the best. Henry identified that a staff member designated for conflict resolution support knew him the best. Of this person, Henry said, "whenever you have a problem, you go to [staff member]."

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Only one student, Isabela, identified non-IPSE peers as the people who knew her best at college. Isabela served as the manager of Whitetop University's women's soccer team and thus, spent a considerable amount of time with these girls both on and off the soccer field. Isabela shared they often ate lunch together and had invited her off-campus before. Regardless of how deeply known participants in this study were, none said they were not known at all by anyone, and all could name a peer or staff member who knew them.

Accepted

To be accepted is to be embraced gladly without condition and viewed as an equal (Carter & Biggs, 2021).

There was an indication of IPSE peers being accepted in all 13 interviews. During the data analysis process for the individual interviews, the code 'Accepted' accounted for 103 references. IPSE students identified being accepted both at an institutional level and an individual level.

As all participants were considered enrolled students at their respective universities, they were all 'accepted' in the literal sense of being able to attend the university. Importantly, this demonstrates that universities with IPSE programs embrace students with intellectual disabilities - students who typically do not have access to higher education - and welcome them into their campus communities. When asked about the places Carter was and was not allowed to go at Oakwood College, he shared that even though he was an IPSE student at his university, he still had access to the campus amenities non-IPSE students had, such as the campus shuttle bus. Carter noted, "anyone can take- [non-IPSE students] can take the bus and [IPSE students] can take the bus." Furthermore, many of the participants' college campuses had Special Olympics teams, which cater directly to students with intellectual disabilities, in contrast to most other

clubs and sports teams on campus. When students did want to become involved in other clubs on campus, they were often accepted. Henry was part of Bryony University's television studio club and shared the duties he was entrusted with, saying, "I was in it because I was doing the cameras and stuff to film the video." Hana was part of a faith-based club and an anime club at Pineville College. Noah, a male participant at Bryony University, shared that he felt the most welcome in the women's gym at his school, indicating a lack of judgment from non-disabled peers. The acceptance of IPSE students at campus facilities, activities, and clubs further helped IPSE students belong at their respective colleges.

Acceptance of IPSE students also happened in the classroom. Participants were asked what they believed their professors and peers thought of them and whether they were respected in class. Based on his experience with professors at Whitetop University, Chad stated confidently, "Yeah, they think I'm smart." Similarly, speaking of his professors at Bryony University, Henry shared, "they know I'm a great student." Dominic also had positive experiences in classes at Oakwood College, but with his non-IPSE peers. He noted, "You know, I enjoy my classes because the [non-IPSE] students are very respectful as well. And they don't assume or [say], 'I don't want to talk to this person.'" Overall, participants reported that they felt respected by their professors and non-IPSE peers in their classes.

Internship and job experiences were also important aspects of IPSE programs and an additional setting where IPSE students were accepted. Hana shared how her internship at a clinic came to be, saying, "but the vet clinic, they're the one who kind of like came to [the IPSE program]. 'I wanna recruit from, you know, more people with disability type thing,' unlike the other jobs." Not only was Hana accepted at her place of employment, but a student with an intellectual disability was also actually sought out by the clinic. This epitomizes the concept of

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being accepted - Hana was "embraced gladly without condition and viewed as an equal" (Carter & Biggs, 2021). Although Hana's experience of being specifically sought out was an outlier, Carter held a long-term job outside of the university at a grocery store, and when asked where he felt the most welcome, he shared "I feel most welcomed at my job." Isabela's best friends from college were from the women's soccer team, where she interned as part of her IPSE program. To some IPSE students, their job placement was one of the places they felt accepted.

Throughout the interview process, there were two incidents in which students recalled instances of ableism by their degree-seeking peers, indicating a lack of acceptance. These instances were reported by two different participants, both at Oakwood College, and will be explored further in the 'Gaps in Belonging' section. Interestingly, Oakwood College does not allow IPSE students to have on-campus housing and seems to primarily enroll its IPSE students in PE classes. However, these instances were limited, and these experiences were not shared among the majority of participants. Instead, several participants reported that no one on campus had been disrespectful or mean to them because of their disability, when asked directly. For Henry, being accepted at his university was directly linked to his sense of belonging. When asked what at Bryony University made him feel like he belonged, he shared the following:

> That everyone in [college] is there for you, and accepts you and who you are. And it doesn't matter if anyone is straight or gay or who has a disability or something that's religion, but they still support people who, they still support people no matter what. 'Cause [college] is a family, it's just like a family.

Ultimately, every IPSE student believed they were accepted by their campus community, although some experienced being accepted more than others.

Involved

To be involved is to be actively engaged with and alongside peers in shared learning and

common goals (Carter & Biggs, 2021).

While for some students going to class and earning a degree is the primary goal of college, for IPSE students it is not. Therefore, being involved in college and gaining important social skills while learning new things is critical. Accordingly, in individual interviews, the code 'Involved' accounted for 196 references. Overall, 'Involved' was the fourth most coded item, after 'Supported,' 'Present,' and 'Befriended.' There was an indication of IPSE peers being involved with their peers in all 13 interviews. Participants in this study were involved not only in classroom settings, but also in extracurricular settings, such as in clubs, sports, and in their off-campus communities.

Many participants reported being seamlessly integrated into their college classes, with and without degree-seeking students, and involved in all lessons and activities. Carter shared that in his classes at Oakwood with non-IPSE students, he was involved in group work, with his peers often encouraging his participation. When asked how he found a group to work on classwork with, he shared the following:

> They'll call me over to their table and we'll talk about, I have a topic that's there about the project because I usually do a project on volunteering, And we usually talk about what we like to do about that job.

Similarly, about his college-level classes at Oakwood with non-IPSE peers Levi shared, "there are times where we would like get in a group and we would do like a group activity. And I do participate in that." In his PE classes, Carter noted that when tasked with finding a partner, sometimes he was the one to initiate the partnership and sometimes another student was, saying, "we both ask each other. So, we make sure that we do not, not anyone is being left out, so

everyone can actually play." Regardless of who initiates the partnership, Carter is involved in his class lessons and activities. The level of involvement of IPSE students in class may be attributed to the high expectations placed on IPSE students. Speaking of his professors, Levi shared, "well, they expect me to be in class, and participate in all of the activities that they want me to do." Although the class experience and learning goals may be a little different for IPSE students, their involvement is not only sought out, but required, in their college classes.

Almost half of study participants were involved on their campus through participating in Special Olympics sports teams. IPSE students in this study, spanning four different campuses, participated in a variety of Special Olympics sports including swimming, basketball, and track and field. All study participants who reported playing on Special Olympics sports teams also said they enjoyed the experience, although Levi decided to drop Special Olympics basketball because he "really wasn't committed to basketball" and wanted to focus on track and field. While not involved in Special Olympics, Ivan was a big fan of his school's men's basketball team. He joined a club in which the purpose was to cheer on the Hillside University men's basketball team at both home and away games. He explained, "it was like a basketball group, and we got to travel to different states… We got to travel like Arkansas, LSU, Ole Miss, we got to all these colleges." Ivan was the only IPSE student at his school to participate in this club. Other IPSE students participated in different student-run clubs, such as an anime club, film and production club, and a musical theater club.

While not all participants were involved in clubs, they still managed to find ways to be involved on campus. For some students, their involvement included having on-campus jobs. Isabela held the position of manager of the women's soccer team at her university. Ivan had a variety of jobs and internships throughout his four years of college, including working at a

clothing store, with the basketball team, and at a hotel on campus. Other IPSE students stayed involved on campus by attending social events. Responding to a question about his favorite activities on Bryony's campus, Daniel shared about various events hosted by a late-night programming group at his university, such as "bowling, doing arcades, and activities where people can get together." Noah's favorite memory at Bryony was "playing Mario Kart with [campus esports]." Levi's participation in campus events at Oakwood helped to solidify his sense of belonging at his college. When asked what makes him feel like he belongs, he shared, "what makes me belong is that I'm very social and I like to talk to a lot of people, and I like to participate a lot in a lot of events so that's why I belong at [college]." Campus jobs, internships, and events all appear to have been important in helping IPSE students become more involved in college life.

IPSE program staff also provided opportunities for IPSE students to be involved in their school and local communities. Many participants recalled attending college sporting events, and two IPSE programs were even recognized during these games. Hana remembered this experience clearly, as it helped her feel a sense of belonging. When asked where she feels like she belongs at Pineville College, Hana said, "some games has pointed out our program a couple of times, and some of the [IPSE students] has interacted in those sports games... So, we're- I feel like we're belong because of those connection type of things." At Carter's school, IPSE staff have created various events for their IPSE students to participate in off campus. In response to a question about his favorite memory, Carter shared:

> My favorite memory so far, is that I got to do mostly activities… I have this app called
> Signup Genius. And I usually signed up on Signup Genius to actually look at activities I
> can sign up for… Like the trampoline park, the Sky Zone trampoline park was fun... It's

just for [IPSE students], yes.

With access to both campus and the greater community, IPSE students have found themselves to not only be present, but also to be involved in class, clubs, sports, and many other aspects of college life.

Supported

To be supported means having the individualized resources needed to reach one's full potential and thrive in everyday life (Carter & Biggs, 2021).

IPSE students were supported academically and emotionally, in addition to receiving support for employment, cooking, and other aspects of college life, by a variety of people on their college campuses. In fact, 'Supported' was the most frequently coded item in the study with 225 references across the 13 interviews.

Every student reported receiving academic support, which was often provided in classroom settings in the form of professor assistance or academic accommodations. When asked what his accommodations at Oakwood were, Carter shared, "audio recording, taking [extra] time for testing, and other things… note taking." In response to a question about who helps him in class at Pineville, Oliver reported receiving assistance from his professor in a Media and Literature course that he took with non-IPSE students: "My teacher, he's the one who actually helps me out with like certain assignments… Actually, they been giving me like a shortened amount of the assignments." While this type of support is legally required under the Americans with Disabilities Act (1990), it is encouraging that students reported actually receiving these accommodations.

In some IPSE programs, peer mentors attended college-level classes with an IPSE student to support them throughout lectures or discussion sections. Noah noted that his peer mentor sat

next to him in all three of his college-level courses at Bryony. Similarly, Daniel noted, "I sit next to my mentor that will come with me to class usually... and they'll take notes and stuff" in response to a question about who helps him in class at Bryony. Although academic mentors at Hana's school (Pineville) were not required to attend classes with IPSE students, Hana shared that if IPSE students coincidentally enrolled in classes that peer mentors had also enrolled in, the peer mentors would often sit next to IPSE students, so they were not sitting alone. If she needed help with her classes, Hana would speak to her academic mentor later in the week to get support. Peer support for college-level courses was both appreciated and utilized frequently among IPSE students.

In addition to the college-level courses IPSE students take with their non-IPSE peers, many IPSE programs also required their students to take targeted classes designed just for IPSE students. These classes may be health and nutrition, employment/internship, sexual health, or an appropriate level math or literacy class. Hana says this about her targeted math class with her IPSE peers: "It's teaching actually more like how to budget. So, once we go [to the] outside world, we can have a little more knowledge." These practical classes provide the skills needed for IPSE students to thrive in the real world, post-graduation.

In an effort to develop the whole person during the IPSE program, students received emotional support from both staff and students. Oliver's sense of belonging was linked to the support for interpersonal conflicts he and his cohort received at Pineville. When asked what makes him feel like he belongs at his college, he replied, "I belong here at [college] because of the teachers [who have] been supportive to all of us, and they have been helping us with our drama stuff." Isabela was grateful for the emotional support she received from her non-IPSE peers at Whitetop saying, "They really help me go through stuff," in response to a question about

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why certain people were her best friends. Dominic appreciated his non-IPSE peers, as well, remarking that "people are there for me, supportive, encouraging." In a time of great transition, such as college, having emotional support is critical to the continuous growth of IPSE students.

IPSE students living on or near campus also received independent living support. Carter credited the IPSE program director at Oakwood for this independent living support:

> She's making sure that they be on time. She's making sure that… the students are doing a good job, and like, by their progress and everything. Like, how good are they doing on cleaning their apartment and things like that.

At Hana's school, peer mentors supported students academically, as well as with independent living tasks and social outings. In fact, Hana had five mentors: "All of us has, each [IPSE student] has a social, health and wellness, residential, academic, and employment mentor." This wrap-around support, not only for academics, but for other key aspects of college life, was evident in each IPSE program.

Heard

To be heard means that your perspective is sought, listened to, and respected (Carter & Biggs, 2021).

'Heard' was coded 95 times and referenced in all 13 interviews. In their interviews, all participants identified that they felt heard during their college career, although by different stakeholders. Some students' opinions were sought out by IPSE staff and professors, while other students reported only their friends asked for their opinions. Whether or not their opinions were asked for, overall, IPSE students felt listened to and respected by staff and some of their peers.

When asked directly, every participant agreed that all of their professors, including professors teaching college-level courses with both IPSE and non-IPSE students, listened to

them and respected their opinions. Additionally, some participants said that their professors asked for their opinions. Brian thought that his professors at Whitetop asked for his opinions more than anyone on campus. Hana reported that her professors asked her a variety of things relating to her comfortability and success in class. In response to a question about what her professors ask her opinion about, Hana recalled the following:

 It's been like how things are going or like, do you want- If I need to change something, or like, if we do something like, add things, or like like the homework part of like, if you need help, help in homework or "are you okay doing it on your own?" And, you know, those type of things.

Although Levi could not think of an instance where a professor at Oakwood directly asked for his opinion, he shared that when he raised his hand in class, his professor would call on him, indicating that he valued what Levi contributed.

Most participants also reported that they felt heard by their peers – both IPSE and non-IPSE students – in response to a series of questions about whether IPSE students felt listened to and respected. Carter believed that IPSE students at Oakwood respected his opinion more than his non-IPSE peers as "they give their full attention to me. They pay more attention to me." Daniel also felt more respected by his IPSE peers at Bryony, but for a different reason. He shared, "they know what my disability is, and it makes me feel more comfortable." Lilly's opinion was often sought out by her IPSE friends at Pineville College who needed her perspective. About a particular incident, she shared, "one was telling me one side [of the] story and the other one's telling me another… I'm trying to make opinions, but at the same time I have a hard time with it." While not all IPSE students reported that their opinions were sought out by their peers, most of them still agreed that their opinions were valued and respected by their peers.

Finally, when asked about who sought out and listened to their opinions, IPSE students cited IPSE staff. A few students reported that their opinions were mostly asked about how they were doing in classes and with independent living tasks (e.g., cleaning the bathroom) in response to a question about what IPSE staff asked them. Carter illustrated this with the following example of what his staff at Oakwood asked him:

> "How you feel like you doing being independent on your own? How you feel about- how you feel about the process of doing tours [for incoming students] and everything? Us coming over to check on you? How you doing with cleaning the restroom? How you doing with cleaning your bedroom? How you clean?" Yeah, so it's most specific like residential stuff.

While Carter was asked to share his opinions on issues relevant only to himself, Brian said his perspective was needed not only for personal matters, but also to help staff determine next steps with some program-wide issues. He stated:

> They ask me how I'm doing and like making sure everything's good. They ask my opinion on like what needs to change and who should be kicked out of the dorms or whatever. 'Cause apparently, we had a lot of drama and fights and a lot of stuff.

Participants in this study all indicated there was at least one person who listened to and respected their point of view, while some IPSE students also had the experience of having their opinions sought out by friends, roommates, professors, or school staff.

Befriended

To be befriended means having peer relationships marked by mutual affection and reciprocity (Carter & Biggs, 2021).

For IPSE and non-IPSE students alike, one of the most exciting aspects of college is the prospect of making life-long friends. Indeed, during the data analysis process, 'Befriended' was identified as the third most common code with 245 references in interview transcripts. This code was referenced in all 13 interviews. Unsurprisingly, many participants in this study said that one of their favorite things about college was "hanging out with friends," and all students could name at least one person at college who they considered a friend.

When asked who their friends were at college, most participants identified fellow IPSE peers, with four participants identifying only IPSE students as friends. With their IPSE friends, participants reported that they usually went to eat in the cafeteria or other on-campus eateries. For those old enough, they enjoyed going out to bars with their friends. Daniel liked going grocery shopping and attending nighttime events with his friends on campus, while Henry enjoyed going to the movies or on a walk. Beyond meeting IPSE peers at program events and in classes, some IPSE students developed friendships with other IPSE students through participation on Special Olympics teams.

In addition to their IPSE friends, some students also identified non-IPSE students as friends, as well. One of Carter's non-IPSE friends played on the men's basketball team at Oakwood College. When asked how they know each other, Carter reported that they live in the same off-campus apartment building. In response to a question about what Carter and his non-IPSE friend do together, he said they "usually collab almost like three days a night, three days a week," speaking to his love of music. Chad made non-IPSE friends through his participation in a musical theater club.

University staff and volunteers, directly and indirectly involved in their college's IPSE program, were also considered friends by almost half of the participants in this study. Some

students identified IPSE program directors as friends, while others identified non-IPSE students who work with IPSE students as peer coaches or mentors as friends. Additionally, professors and teachers of various classes within the university were considered friends by IPSE students.

Two participants were in unique situations relating to their friendships. Ivan identified a plethora of IPSE and non-IPSE friends in clubs and classes saying, "I have a lot of best friends to where like I have too many." Ivan spoke of many meaningful memories with his non-IPSE friends at Hillside throughout his four years in college, one of which is documented below:

> When it's the night before the [basketball] game, the [club] leaders here at [college], they tell stories about the other team, and we do all the chants before the game and all that stuff. And so going to [this event] was really cool, and just me like travel[ing] to other states was really cool, and we always had tradition of we're going to like a Waffle House and so we, me and my friends, kept on that tradition all four years of college of going to like a Waffle House, when we were on road trips and stuff.

Ivan appeared to have seamlessly navigated friendships both with his IPSE peers and his non-IPSE peers.

Conversely, Isabela was the one participant who said she had no friends within her IPSE program, reminding me that her boyfriend (another IPSE student) was not included as a 'friend.' Although Isabela did identify many of the students in her IPSE program at Whitetop as "nice," she clarified that she did not think of them as friends. Instead, she identified girls on the university's women's soccer team, the organization where Isabela completed her internship, as her best friends. She reported that she also made a best friend in one of her college-level classes. In response to a question about what she does with her friends, Isabela said, "we just have fun and just going out for food or like dinner or like lunch or something like that or like getting a

drink or any of that type of stuff." When Isabela returns to school in the Fall, she reported that her suitemate will be a friend from the women's soccer team. The type and quality of friendships that IPSE students had varied, but ultimately, each was able to describe a friend on their university campus.

Overall, there were no individual differences among participants that impacted their ability to make and keep non-IPSE friends. For example, Ivan and Isabela reported having the most non-IPSE friends. Ivan and Isabela are different genders, attend different schools, in different parts of the country, and although they both have I/DD, Isabela has Down Syndrome and Ivan has autism. Isabela's program appears to be more controlled, in that students have to ask to go off campus, than Ivan's program. At the time of their interviews, Isabela had just finished her second year in an IPSE program and Ivan was finishing his fourth year.

The one potential area that may make a difference in belonging is involvement with college-level sports. Students who were more involved with college-level sports, not Special Olympics, appeared to have more non-IPSE friends. As discussed above, Ivan was part of a club that supported the men's basketball team and Isabela was a manager for the women's soccer team. Carter's non-IPSE friend plays on his school's men's basketball team, too.

Needed

To be needed involves being valued by others and considered an indispensable member of the community (Carter & Biggs, 2021).

Every participant in this study identified at least one instance in which they felt they were needed by someone at their college, whether it was in class, at Special Olympics, or at their jobs. During the transcript coding process, the code 'Needed' emerged a total of 72 times, across all 13 interviews.

Some IPSE students believed their presence in and contributions to their classes would be missed by their non-IPSE peers and sometimes, by their professors, if absent. When asked if she would be missed in class, Hana surmised that in her college-level Disability Studies class at Pineville, taken with non-IPSE peers, her absence might have "maybe a little more impact, because [IPSE students]... we're like a living proof" about the disability topics studied in class. Specifically in his Table Tennis PE class at Oakwood, Carter thought that his non-IPSE peers would miss him if he were absent. Carter speculated his classmates would say the following:

> They say, "Where's my- where's my partner? Where's my favorite partner? I used to like hanging out with him." That's what they will most say…"He's always in the good mood. He's always in the good mood at the perfect time. When he's feeling down, he's always trying to fight the emotion that he has."

When asked how his peers would react to his absence, Carter contended his presence would be missed in Table Tennis because of both his positive attitude and his ability to teach his peers. Carter shared the following regarding his impact on the class:

> [Table Tennis class is] better when I'm there because of... So, that way I can be there to support [non-IPSE students] on using the ping pong paddle. And that way I can teach them different ways and different techniques they can move their movements, with the ping pong.

Dominic also thought his presence would be missed in his Hip-Hop PE class at Oakwood, "because I've been motivating all of the students to get out of their comfort zone and actually dance and participate in the events." Although not overwhelmingly common, five IPSE students in this study said that they believed their professors would miss them if they were absent from class.

Many IPSE students felt they were needed as important members of their Special Olympics sports teams in college. Specifically, Noah speculated that his teammates would feel "disappointed", and his coach would feel "frustrated" if Noah missed a practice, indicating that Noah is indeed a valued member of his Special Olympics basketball team at Bryony. Similarly, Lilly believed "they would be really upset if I'm gone" from a Special Olympics swim practice at Pineville. Although many IPSE students did not participate in Special Olympics, those that did felt that they were an important member of their team, and thus, needed.

Several IPSE students held jobs or internships to better their employment skills and make them more marketable employees in the future. Carter reported that he felt valued at his job, saying "they're happy that I work there." Additionally, Dominic described how quickly his job duties have progressed at a local food establishment explaining, "at first, I was supposed to be just a busser, but I picked up really fast, so they started having me do everything. So now I do cash register, bussing, sweeping, food running." As his job duties increased, Dominic became an indispensable employee. With the opportunity to work in competitive employment settings, IPSE students proved themselves to be valuable employees.

In addition to class, sports, and employment, some IPSE students also indicated they were needed in other areas, such as in friendships and other clubs. For example, throughout her interview, Hana described herself as "the mom of the [IPSE student] group" and stated, "I care for [IPSE students]." Similarly, Henry illustrated his value in friendships saying, "I'm a good friend because I support them. I help them out if they have a problem. I'm there for everyone," when asked what makes him a good friend. Carter's best friend at his IPSE program "reaches out when he's not feeling great, if he's feeling sick" and Carter took on a nurturing role, noting, "I'll probably get him some of my medicine in my bathroom, so [I can] make him feel better." Ivan

participates in two clubs with non-IPSE peers on campus and believed he would be missed if absent from either one of them. Ivan also speculated that club members would reach out via text message to ask him why he was absent. Finally, Henry felt his non-IPSE clubmates would feel "disappointed" if he missed a meeting.

On a more macro level, a few IPSE students indicated that their IPSE programs were needed to better their universities. When asked if she thought her IPSE program benefited the college campus as a whole, Hana explained that her non-IPSE peers at Pineville knew a lot about more high-incidence disabilities, but were unfamiliar with intellectual disabilities, making her IPSE program important. She stated:

> I think it's good to have [the IPSE program], because, having the awareness of people like, I mean, there's already like awareness about like race, like race of different race. And also, it's like people- it's just the common, like [ADHD] or people having dyslexia and they're pretty common… But people with like intellectual disability, that's a disability. And that's that's something different than what is- whatever [ADHD and dyslexia] are… [The IPSE program] will give us more like aware from other people who may like have like like, "Oh, I have a family member who has a disability," but they never been… they haven't been any- in any program, or that they haven't been around people with disability itself.

Brian also believed that the lack of an IPSE program at Whitetop would negatively impact students without disabilities. In response to a question about how his non-IPSE friends would feel if the IPSE program did not exist on campus, Brian stated that they would be "upset that they won't get to meet [IPSE students]." IPSE students perceived that not only were they needed in a variety of domains, including in class, work, clubs, sports, and friendships, but that their

IPSE programs were important to their respective universities, as well. One of the richest forms of belonging is being needed, and every IPSE student in this study was able to identify at least one instance in which they were needed, indicating strong belonging in this area.

Observational Analysis

Four students – Hana, Camila, Ivan, and Dominic – were observed as part of this study. Each of these students attended different universities across the United States. Camila attended a university in Southern California, while Hana and Dominic attended two different universities in Northern California (Pineville and Oakwood, respectively). Ivan attended a university in the Southern United States. Overall, IPSE students reported a higher frequency of positive experiences with the 10 Dimensions of Belonging than what was observed. There was a significantly lower frequency of all of the codes in the observation data as compared to the interview data. This is likely due to the sheer number of interviews ($n = 13$) as compared to observations ($n = 4$), as well as the limited amount of time students were observed (one day). In general, the observation data served to corroborate and confirm the findings from the interview data. However, for some dimensions (e.g., befriended and invited), the interview and observation data did not appear aligned.

In the observation data, 'Present' was coded eight times across three of the four observations. Observations of Dominic and Ivan confirmed that IPSE students do indeed take classes with their non-IPSE peers. The institution students attended seemed to impact what type of classes they took. For example, at Dominic's college, he and his IPSE peers appeared to take only PE classes with non-IPSE peers. While at Hana's school, IPSE students appeared to take more academically rigorous courses. At Ivan's school, he took a combination of both PE and more academically challenging courses. Besides differences in program directors and staff, no

discernable differences among the three institutions were evident. All three of these students attend public universities and Hana and Dominic both attend college in Northern California, while Ivan attended a school in Texas.

In the interview data, 'Invited' was the least coded item. However, this was not the case in the observations. 'Invited' was coded five times across three of the observations, and while this was not one of the most frequently coded items for the observations, it certainly was not one of the least coded items, either. While observing Hana, many of her IPSE peers invited her into conversations, both formal and informal, as well as to meals. In a physical education class, I observed Dominic being approached by non-IPSE peers to engage in small talk and fist bumps before class started. During Ivan's last class of his college career, also a physical education class, a non-IPSE peer invited Ivan to "take another class; stay one more semester!"

Of the four observations, there was only evidence of IPSE students being 'welcomed' by their non-IPSE peers in two observations and coded three times. Conversely, in the interview data, 'welcomed' was one of top five coded dimensions. In an observation of Dominic during a PE class, his non-IPSE peers were giving him fist bumps and hugs before and after class. Additionally, some of his peers asked him how he was doing and engaged in a short conversation with him.

The dimension of 'befriended' was only present in one observation and was coded four times, making it one of the least referenced codes in the observation data. This represents a large discrepancy between the interview and observation data, as 'Befriended' was the third most referenced code in the interview data. The one student who was observed being befriended was Hana. She was observed with her IPSE friends dancing and laughing before the start of class, as well as engaging in informal conversations about shared interests during class. The three

observations in which befriended was not coded appear to contradict IPSE student interview data in which students talked about having a lot of friends, both within their IPSE program and outside of it. While many non-IPSE students were friendly to IPSE students, the observations did not indicate the reciprocity needed for a true friendship.

'Known' was coded three times in two observations, compared to all 13 interviews. Interestingly, the two observations in which students appeared to be known were in PE classes with non-IPSE peers. Observational data for the two students, who were in more academic classes with just their IPSE peers, did not yield any references to being 'known.' I observed Dominic in a class led by the teacher who he believed knew him the best. Informal comments by the teacher about how much weight Dominic had lost over the year corroborated Dominic's belief that this teacher knew him, at least at a surface level. Indeed, while observing him in his PE class, Ivan did seem to be quite well-known by both his peers and professor. Throughout the class period, multiple comments were made to Ivan about his impending graduation, and at the end of class, the MVP of the class tournament congratulated Ivan in his speech. Another non-IPSE classmate drove Ivan home after class, just as he does every week.

'Accepted' was coded 23 times across three observations. This was the second most frequently coded item in the observations, while it was the sixth most coded item in the interviews. While observing Dominic and Ivan in their respective PE classes, non-IPSE students in both classes worked with either student and appeared to accept them. In both situations, neither boy was talked down to or treated any differently than the other students in the class. In my observation notes of Dominic, I wrote that I "could not tell Dominic from his non-IPSE peers" in class. He was fully accepted in his PE class. Additionally, during Hana's observation, she and her peers used her school's learning management system (i.e., Canvas) to complete an

assignment. To have access to a campus website only available to students indicated that her college accepted her as a student and did not differentiate or 'other' her based on her IPSE student status.

In the four observations, 'Involved' was coded four times. As all four observations demonstrated that IPSE students were involved, there was a strong alignment with the interview data, in which all 13 participants spoke about being involved. During the observations, IPSE students were engaged and involved in their classes and participated in all the class activities. Camila asked questions of her IPSE peers. Ivan paired up with non-IPSE peers for partner work. Hana engaged in informal conversation about scary movies. Dominic gave and received fist bumps and hugs from non-IPSE peers.

'Supported' was coded 34 times across all four observations. The frequency that 'supported' was coded in the observations further corroborated the interview data that IPSE students are indeed supported at their respective colleges. I observed a professor support Ivan by reminding him about a specific rule in a game that Ivan was about to break, which would have had negative consequences for his team. In an observation of Dominic in a dance class, he was allowed to walk freely around the classroom, while other students were not. This allowed Dominic to move his body in a way that met his sensory needs without fear of punishment. Additionally, I observed an employment class at Hana's school, in which IPSE students were developing a profile on Handshake, an online platform to help college students get jobs. At Camila's school, I observed IPSE students give presentations on their future aspirations in another career-related class, just for IPSE students. During an observation, I witnessed a peer coach and Levi working together to make a quesadilla on the stove.

'Heard' was coded only twice - once each across two different observations. Conversely, IPSE students in all 13 interviews indicated that their voices were heard. In an observation of Hana in class, she was asked how she had grown over the academic term as a student and an employee. When IPSE students in the class asked what their jobs or internship experiences would be next quarter, they were told, "We'll ask you what you prefer," indicating that opinions of IPSE students would both be sought out and listened to. Additionally, I observed Camila's professor presenting her with two options in regard to a presentation she was giving in class that day. The choice Camila made was respected, although the professor had made it clear that she preferred the choice Camila did not select. Her opinion was sought out, she was heard, and her choice was respected.

'Needed' was coded 15 times across three of the observations, while it was coded in all 13 interviews. The observations indicated that students were needed by their colleagues and peers. For example, I observed Hana at her internship in a medical facility where she handled both confidential paperwork and money. Additionally, her boss gave her a task stating, "it has to get done," communicating the importance of Hana's work. This observation indicated to me that not only is Hana trusted at her internship, but is also valued and needed by her colleagues. Dominic's positive attitude and smiling face seemed to impact students in one of his PE classes . At the end of class, I observed Dominic holding open the door and telling students to "have a great day!" Similarly, after observing Ivan in his PE class, I believe he would be missed by his peers if absent. Ivan was truly an integral part of his team, scoring a goal, playing goalie, and cheering on his team. Without him, I do not believe his team would have had as much success as they did in the day's class.

Summary of Findings

The IPSE student experience of belongingness appears to be aligned to the 10

Dimensions of Belonging as conceived of by Carter and Biggs (2021). There was ample

evidence, based on both individual IPSE student interviews and observations of IPSE students,

that each of the 10 Dimensions of Belonging were a part of the experience of belonging for IPSE

students. Some Dimensions, such as 'Befriended,' 'Present,' and 'Supported' were more

frequently coded in interviews, indicating that IPSE students perceived they had more

experiences with these Dimensions. Conversely, 'Invited,' 'Heard,' and 'Known' were

referenced the least in interviews, implying that, in their opinions, these experiences of belonging

were less frequent for IPSE students.

For the most part, individual differences among participants (e.g., gender, disability,

institution, etc.) did not appear to impact feelings of belongingness. However, students who were

involved with college-level sports reported they had more non-IPSE friends, specifically student

athletes from the teams they were associated with. Additionally, based on observational data,

participants appeared to be more 'known' in PE classes, as compared to more academically

focused classes.

Gaps in Belonging

Overall, IPSE students expressed that the majority of their experiences indicated

belonging. However, participants also raised situations and issues in which they felt a lack of

belonging. While these gaps in belonging were certainly evident during observations and

interviews, the positive IPSE experiences far outweighed the negative ones. During the coding

process, a total of 433 references, representing ten different codes, indicated negative

experiences with belonging. In comparison, 1,695 references, representing 14 codes indicated

positive experiences with belonging. About 20% of the belonging experiences IPSE students described were negative.

Using the 10 Dimensions of Belonging as an initial guide, I identified areas in which IPSE students are not fully included in their college communities. Some of the following subthemes are the direct opposites of the subthemes related to belonging (e.g., 'Unheard' is the opposite of 'Heard'), while others are seemingly unrelated to the 10 Dimensions (e.g., 'Drama'). Importantly, some IPSE students do not feel as though they are missing out on anything even when a gap in belonging is revealed for them.

Notably, while IPSE students do report a lack of belonging in some areas, they largely do not attribute these experiences to having a disability. In fact, only two students identified an experience of ableism throughout the 13 participant interviews. These ableist experiences were considered outliers as they were not common experiences among multiple participants at multiple schools. Both of the ableist incidents happened at the same college. In one incident, an IPSE student reported a non-IPSE student in one of his classes making fun of his disability. In the other incident, an IPSE student was informed by a library employee after winning a prize at the campus library that he was ineligible because he had "a disability and [was] not an actual [college] student."

Exclusion in Places and Spaces

IPSE students reported that most often, they were present in all the same places and spaces their peers were. In fact, there were 248 interview references relating to the code "Present," while 38 interview references related to the code "Places_Exclusion." However, as 11 of 13 participants had at least one experience with being excluded on their college campus, this issue merits examination. For the most part, access to and exclusion from areas on or near

campus was based solely on an IPSE student's institution. If you attended a certain program, you automatically would not have access to on-campus housing. If you attended a different program, you automatically had a curfew.

While the majority of students in this study had the opportunity to live in on-campus residence halls during their IPSE experience, the three students attending Oakwood did not. For these three students (and the rest of their IPSE peers), off-campus housing was secured by the IPSE program. This distinction was apparent to IPSE students, as Levi stated that on-campus housing is "only if you're a regular student." These living arrangements caused a lack of belongingness for one student in particular. After being asked if there were places on campus he was not allowed to go to, Dominic explained:

> They had a gathering party by the [college] dorms and when I went over there they told
>
> me I couldn't participate in it because I lived at the [off-campus apartments], not at the
>
> dorms… they made me feel like I didn't belong."

Carter, another student in the same IPSE program as Dominic and Levi, noted in his interview that he did not have "a right to go to the student housing events that they have [at the on-campus residence halls]," but seemed less frustrated by this as he added that his off-campus apartment building "has their own events, as well." Currently, not all IPSE students have access to on-campus housing like their non-IPSE peers.

Most students had the opportunity to live on campus, but their choices were often limited. When questioned about how he came to live on-campus, Henry reported "either [residence hall 1] or [residence hall 2]" were his only on campus housing options at Bryony. Hana, an IPSE student in a different program from Henry, explained that the IPSE program coordinator at Pineville had to "work things out with people [who are] in control of certain areas. They'll be

like, okay, 'we have room for them,'" after being asked what would happen if students

hypothetically wanted to live in a residence hall that IPSE students had not previously lived in.

However, Hana explains that this is not a common request as "it's more like, just like, follow the

leader type thing. Like follow what [the IPSE program director] has planned for us and just go

along with that." Instead of access to the various living options that non-IPSE students have,

many IPSE students have limited choices for on-campus housing.

While not fully excluded from the surrounding area of campus, when asked if there were

places they were not allowed to go, some students reported that unlike their non-IPSE peers, they

had to ask for permission to leave campus, effectively limiting their access to the local

community. Brian shared that although he understood this as a rule, he simply chose not to

follow it, saying, "I have to ask first to go off campus so, but I don't." Isabela, another student in

Brian's IPSE program at Whitetop, described a situation in which she went off campus with a

non-IPSE peer, without informing anyone "and everyone was worried." Hana's IPSE program

had the same rule of informing someone before going off campus, as well as a curfew. Hana

noted, however, that the curfew is flexible, saying, "if we go past our curfew, we have to

message [IPSE program director] like where I'm going." Whether students appreciate these

boundaries or loathe them, these rules nonetheless limit if and when students are able to be

present in their local communities.

Other places students reported being excluded from were common to both IPSE and non-

IPSE students, including "the sewers," the campus bar (the student was not yet 21 years old), and

"the professor's place." While students had experiences with exclusion in places on or around

campus, when probed, most felt similarly to Levi, who stated, "I belong anywhere in [college]."

Overall, IPSE student interviews demonstrated that IPSE students had access to many of the

same places and spaces as their non-IPSE peers, although with perhaps limited access to on-campus housing and the outside community within some IPSE programs.

Lack of Invitation

While the code 'Lack_Invited' only yielded 25 references in participant interviews, this code was found in 12 of the 13 interviews. Additionally, the code 'Invited,' indicating positive belonging experiences, was referenced only 56 times. Therefore, of experiences relating to being invited, about two-thirds of them were positive, while the remaining one-third were negative. There were no instances in which IPSE students reported being uninvited from an event or outing. However, students did share experiences of not receiving invitations. Explicit invitations, specifically from non-IPSE peers, were particularly scarce.

When asked questions about being invited off-campus by peers, nine participants reported never being invited out by non-IPSE students at their college. Levi also shared that he never received an invitation to go off campus from an IPSE peer at Oakwood. Two participants noted that they were not invited nor encouraged to join clubs on campus after being questioned about who was integral in getting them to join campus activities, like clubs. When asked if there were more things that he wishes people would do on campus to make him feel like he belongs, Levi stated that in the future, the following actions would help his sense of belonging:

> Definitely more hangouts like I would, I would like if a [non-IPSE] student would get in touch with me and say like, "Do you want to come hang out with me on campus?" Because usually I don't receive that from a [non-IPSE] student. But I would like for someone to at least try to ask me if they can do that.

Conversely, when directly asked, Hana stated that she was not bothered by the lack of invitations from her non-IPSE peers. Regardless of how each IPSE student felt, the absence of invitations was apparent throughout participant interviews.

Some IPSE students took the initiative to invite others and experienced rejection. When asked if he had ever tried to ask a peer to be his partner, Carter shared an experience in which he asked a non-IPSE student to be his partner in a physical education class and "they don't wanna be [his] partner." This event "made me feel sad," Carter explained. Daniel reported inviting another IPSE student off-campus and was turned down ("he said 'no, thanks', so…"). Despite having the skills to invite other students, IPSE students' invitations were still refused.

Lack of Friendships With Non-IPSE peers

While participants indicated strong peer relationships within their IPSE programs, reciprocal relationships between IPSE students and non-IPSE students were significantly less common. In fact, of the 76 references in interview transcripts related to Lack of Friendships, most concerned non-IPSE peers, while of 249 references of 'Befriended,' most were about IPSE peers.

Reflecting what many participants shared, Hana noted, "it's hard to make friends…outside of [the IPSE program]... it's so hard." Carter wanted non-IPSE students to "build trust and understand how I feel, like how they can be my real friend and how they can actually like build a friendship… with me." Daniel said that non-IPSE students do not support his sense of belonging at Bryony after being asked if students on his campus make him feel like he belongs. When asked about who their friends were, most participants stated that they were not friends with any non-IPSE students at their respective colleges.

Although most participants reported friendships within their IPSE programs, Dominic struggled with developing and maintaining friendships both in and out of the program. In response to a question about friends on campus, he shared:

And, you know, it's funny, because I call them friends, but a real friend is someone who checks up on you, too. Not just when they see you in person and say, "hey." It's a whenever-I-see-you type of thing with them. It's a whenever-I-see-you type of thing with the church people. It's also a whenever-I-see-you thing with the [IPSE] students.

Building friendships on a college campus may be difficult for students with I/DD, but it is certainly possible with the appropriate support.

"Drama"

The majority of IPSE students discussed "drama" or interpersonal conflict in their interviews as a barrier to belonging. During the coding process, a total of 45 references were made about 'Drama,' spanning 10 interview transcripts. Interestingly, six students used the word "drama" without the interviewer previously introducing it. Other phrases used to describe interpersonal conflict were "fights," "tension," and "personal problems." For five students, when asked about their least favorite thing about college or their worst experience of college, their responses centered around "drama" or interpersonal conflict with other students in their IPSE program. Henry described one such situation:

One of my friends, Corbin, he turned me down. He got me mad and stuff… There was this big fight over a Super Bowl, and he told me that I'm "not hosting. I am." And I told him, "no, I am. I have the food." And I got mad at him because he was hosting it… He punched me. And he called me weak. And I ended up getting pissed, and I was upset but when I got up, I was about to fight him… I came into him, and I showed him my fist, but

I did not actually punch him. I just walked away, crying.

Although not all drama ends in physical confrontation, students described these situations as making them feel "homesick" and "angry." Henry described a second instance of drama in which he was "heartbroken" to the point of throwing up. Lily was asked to describe an experience where she felt like she did not belong, while at Pineville College. In her response below, she clearly illustrated how drama impacts her feelings of belonging:

So basically, what I'm dealing with is one [IPSE student] who has anger problems. It makes me um, not want to belong here… Yeah, it makes me feel like I don't belong here. Because it's not just lashing. It's also like lying, like making up stories about me.

Overall, almost every participant mentioned the negative impact of drama during their interview.

Managing the drama was one of the most common responses when participants were asked what would better support their sense of belonging on campus. Some students felt the IPSE program and staff were responsible for ensuring harmonious relationships among IPSE students. Henry's request of staff at Bryony was clear; in order to feel more like he belonged at college "[IPSE staff] need to have a better way to control the drama." Similarly, Chad wanted his program at Whitetop to help two fellow IPSE students to "calm down." Other participants wanted their peers to take responsibility for their own actions. Lilly wished "one [IPSE student] would get along." Likewise, Carter shared:

I wish that [IPSE students] can just not be too high of themselves… Mostly [IPSE] students really doing a lot of drama and a lot of, a lot of things like, "Oh I didn't do this. I didn't use a dish." But it's like I told them, I just want them to take responsibility when they borrow something from me.

Whether it was an argument over chores or false rumors about who was dating who, IPSE students overwhelmingly mentioned that "drama" made them feel excluded and were eager to remedy this issue.

Extraneous

When someone is extraneous, they are not needed by their peers, professors, teammates, or coaches in any capacity. If one is not needed, they will not be missed if absent from class or missing from sports practice. 'Extraneous' was coded 15 times in eight different transcripts. While this was not a universal feeling among all participants, many IPSE students described an experience or hypothesized that if they missed a club meeting or class session they would not be missed. Interestingly, students did not feel this way about their involvement with Special Olympics sports teams.

When asked what would be different about class if they were to be absent, IPSE students most frequently identified that they would not be missed in academic settings by their non-IPSE peers or professors. The following interview exchange illustrates this:

Daniel: And if I wasn't in class, I don't think it would be any different in the class without me, really.

Emily: Do you think anyone would be sad or upset that you weren't there?

Daniel: No.

Carter felt similarly to Daniel stating, if he were to miss class "some people will forget that they met me, and they probably [will] forget that they know me." Oliver surmised that without him there, class at Pineville College would actually be better for his peers "because they will get the assignment done." Finally, some participants struggled to speculate what their peers or professor

might think and simply stated they "don't really know," when asked if they would be missed or not.

Unheard

Throughout their interviews IPSE students spoke about their perspectives not being sought out or listened to 24 times, across 10 different transcripts. Responding to a question about which people ask for his opinion, Levi contended that no one at Oakwood ever asked for his opinion. Daniel felt similarly about the staff and faculty at Bryony, but stated his roommate sometimes asked for his opinion. Conversely, Hana said that while the IPSE staff at Pineville sought out her opinion, her IPSE friends did not. The first step to being heard is being queried. Only after IPSE students' opinions are requested by their peers, professors, and IPSE staff, can they begin to feel heard.

IPSE students also spoke about their voices not being valued in the college setting, even when sought out. Carter, speaking about non-IPSE students at Oakwood, said, "they don't give me their full attention. They're always on their phones, like always." When asked if she felt like her classmates listened to and respected her opinions, Isabela said she felt like one specific IPSE student in her classes did not listen to or respect her opinions. Dominic struggled when his point of view was not acknowledged by other parties during interpersonal conflicts. In response to a question about his worst experience at Oakwood, Dominic expressed his frustration with "people who don't really understand, who are having trouble understanding, I guess, understand where my perspective or where I'm coming from." Furthermore, when asked if anyone made him feel like he did not belong at college, Dominic shared that "it was just me not being heard by certain people in the program that just made me not, just made me feel like I don't belong here." Overall,

the majority of participants in this study perceived that in at least one incident during their college careers, their voices were ignored.

Unknown

Three IPSE students explicitly spoke about being unknown by their non-IPSE peers in their interviews. 'Lack_known' was the least frequently coded item of the 26 codes and only accounted for six of the 2,270 total references made. Despite only being coded 6 times, the fact that over 20% of participants felt a lack of belonging in this area underscored its importance in better understanding the gaps in belonging for IPSE students.

Henry was one of the participants who spoke about being unknown. When asked if his non-IPSE peers made him feel like he belonged, Henry said plainly, "they don't know me." Henry explained that he wanted non-IPSE students at Bryony "to get to know me more" in response to a question about what non-IPSE student could do to improve his feelings of belonging at school. Dominic reported that "even those students that don't even know me" are still welcoming to him on campus after being questioned about who was welcoming to him at Oakwood. When inquiring about who knew him the best at Oakwood, Levi shared that he believed his professors did, indicating that his peers did not. Levi thought his professors knew him the best "because they remember my name." Whether IPSE students clearly expressed being unknown or if it was inferred based on their interviews, being known personally by a variety of college peers and staff members is a gap in belonging for IPSE students.

Lack of Support

IPSE students received a great deal of academic, emotional, and residential support, as evidenced by the 225 references under the code 'Supported.' However, every participant also

reported at least one incident in which they felt they lacked support, as demonstrated by the 38 references of 'Lack_Support' across all 13 interviews.

Multiple times during his interview, Carter referenced the lack of academic support he felt he received at Oakwood. When asked what would help him belong more, he replied, "they can be more actually going, actually supporting the student at their classes. They can be going, they can be going to the student's class and helping that student with the class assignment." Similarly, Ivan had an academic experience that left him without a strong sense of belonging:

Because there was one semester where I took a really hard class, and I didn't really feel like I was belonged in that class because it was too hard…The teacher was like really fast and they just, I didn't really kept up like with what they said and everything.

Conversely, Hana felt like her targeted IPSE classes at Pineville were holding her back from reaching her full potential. When discussing what her program could do better to make her feel more like she belonged, Hana shared the following:

Everybody is going [at the] same pace and [doing the] same thing…I feel I'm stuck in in a position where, like, I know how to do this and I want to slide forward, but I can't, because I'm stuck with [the] rest of my classmates.

For these students, more or different academic resources were wanted to better support their sense of belonging in college.

Emotionally, a couple of students also wanted more support from their programs. When asked what his program at Bryony could do better, Noah wanted more "support groups" and "other people to volunteer" to assist students in the program. Likewise, Dominic recommended "maybe more support with the students that are going through things. Maybe like a therapy." Although not a particularly common request among IPSE students, Noah and Dominic's

suggestions, combined with the need for assistance around interpersonal conflict and "drama," indicates a gap in belonging for IPSE students.

Observational Analysis

In some ways, the observational data of the four IPSE students supported the experiences shared in the interviews about a lack of belonging. However, observations did not yield any additional data for four of the eight Gaps in Belonging subthemes (i.e., exclusion, unheard, unknown, and extraneous subthemes), and therefore could not corroborate the interview findings related to these subthemes. This may be because it can be more difficult to observe a lack of something, such as a lack of being known, as limited opportunities present themselves over the course of one observation. As with the positive experiences of belonging, IPSE students reported a higher frequency of negative experiences than what was observed. Again, this is probably due to the difference in interviews ($n = 13$) as compared to observations ($n = 4$).

The code 'Lack_Invited' was referenced twice – once in each of two observations. Comparatively, this same code was referenced 25 times across 12 participant interviews, indicating that students reported more incidents of not being invited than I observed. In an observation of Dominic in his third PE class of the day, he was not approached by any students to engage in optional partner work. Instead, Dominic did the workout individually, although many of his classmates had partnered up.

'Lack_Friendship' was coded three times across three observations. Similarly, almost all of the participants reported experiences with a lack of friendship, as the same code was referenced in all but one of the individual interviews. When observing Hana in the dining hall, she immediately sat with a group of only IPSE friends. In fact, this entire section of the dining hall was taken up by IPSE students and none of their non-IPSE peers, indicating a lack of

friendship with non-IPSE students. Similarly, when observing Dominic in a class, he chose not to work with a peer, and no one approached him to be his partner, indicating a lack of friendships in this class. In an observation of Camila in an IPSE-specific class at a different university, she chose to sit two seats away from her closest IPSE peer, although the class was quite full, and all other students were sitting next to at least one other classmates.

'Drama' was only referenced once, during one observation. However, in individual interviews, it was referenced significantly more – 45 times across 10 interviews. During the observation, drama within with program was casually mentioned by an IPSE student. On her walk to class with two of her IPSE friends, one of Hana's friends mentioned how many of the students in the IPSE program were dating each other. The second friend referred to this as "drama," but declined to answer further questions when I asked what she meant by this.

The code 'Lack_Support' was referenced twice and in only one observation. In comparison, the same code was referenced 38 times across all 13 interviews. In the observation, Camila's assigned peer tutor showed up 30 minutes late for a one-on-one session. Unfortunately for Camila, her peer tutor was late on the day Camila was set to present a project in her class and planned to use all of her peer tutoring session to prepare for her presentation. While in class later that morning, Camila's professor asked Camila and the peer tutor to step outside the class two different times to remedy a file format error with her presentation. While there is no way to know if an additional 30 minutes with the peer tutor would have resulted in a smoother presentation day for Camila, it was clear that she would have benefitted from some additional support prior to class.

Summary of Findings

While the experiences of IPSE students were largely positive as they related to belonging, the negative experiences participants shared cannot be ignored. The negative experiences did not dominate any one interview or observation, but were nonetheless important in understanding the ways in which IPSE students do and do not experience belonging on their college campus. In this study, IPSE students indicated a lack of belonging in eight areas (i.e., exclusion in places and spaces, lack of invitation, lack of friendships with non-IPSE peers, extraneous, 'drama,' unheard, unknown, and lack of support).

Overall, individual factors, such as race, gender, or disability diagnosis did not appear to impact what study participants reported. In some areas, however, one particular college institution seemed to negatively impact IPSE students' perceptions of belonging on their campus more than others. 'Exclusion' on or near their college campus was largely reported by students at this institution, as IPSE students did not have access to on-campus housing. Additionally, one student in this program was the only student in the study to report that he was never invited out by any peer – IPSE or non-IPSE. All instances of reported ableism were perpetrated at this one university, indicating a lack of acceptance of IPSE students. This university appeared to be less inclusive than the others, as there was no on-campus housing for IPSE students and IPSE students only seemed to be enrolled in PE classes with their non-IPSE peers, as opposed to more academically rigorous courses. Interestingly, students in this program were one of the least likely to report feeling 'extraneous' or unneeded.

Discussion

The goals of this study were multiple. As people with I/DD are underrepresented in belongingness research, I wanted to amplify their experiences in this important research area (Raines et al., 2023). Secondly, I wanted to better understand the ways in which students with I/DD feel a sense of belonging when participating in IPSE programs, particularly in relation to the 10 Dimensions of Belonging (Carter & Biggs, 2021). Finally, I hoped to identify the factors that contribute to a lack of belonging for IPSE students.

The results of this study are consistent with other research about belonging for IPSE students, although this literature base is quite small. As was reflected in the study conducted by Eisenman and colleagues (2020), IPSE students reported a range of experiences at college, both positive and negative, in the current dissertation. This further aligns with research about belonging for people with disabilities (Lithari, 2019; Raines et al., 2023). Each of the 10 Dimensions of Belonging was experienced by participants in this dissertation study, further supporting that the main elements of this framework represent the experiences of many IPSE students with I/DD (Carter & Biggs, 2021).

Consistent with the findings in the study conducted by Schroeder and colleagues (2021), IPSE students' shared interests both within an IPSE cohort and with non-IPSE peers were positively related to feelings of belongingness in this dissertation study, as well. For example, in the current study, Ivan's love of college basketball led him to join a club with non-IPSE peers in which he traveled to away basketball games with a group of guys who Ivan referred to as friends. Previous research has demonstrated that access to shared spaces for IPSE and non-IPSE students has an impact on belonging (Eisenman et al., 2020; Schroeder et al., 2021). The results of the current study, particularly in relation to on- or off-campus housing, re-affirmed this finding.

Additionally, students in the study conducted by Schroeder and colleagues (2021), spoke of not always being able to understand the content of their orientation conversations and the adverse effect this had on their overall sense of belonging during the orientation session. Similarly, students in this dissertation study, like Carter and Ivan, spoke about struggling to understand material in some of their academic classes and the negative impact that had on their own sense of belonging.

There was one finding that appeared to contradict previous research on belonging for IPSE students. Overall, the "othering" environment students spoke of in the study conducted by Schroeder and colleagues (2021), was not experienced by IPSE students in the current dissertation study. While there were two reported instances of ableism in this study by two different participants, this was not a consistent theme or trend among the remaining participants. This finding, although it differs from past research, is promising in that students and staff on college campuses may be more accepting and inclusive of IPSE students than they were even a few years ago.

Recommended Changes to the 10 Dimensions of Belonging

Based on the data collected and analyzed in this study, I am recommending two subtle, but important changes to the way we think about belonging for students with intellectual disabilities at the college level. While the 10 Dimensions of Belonging may illustrate belonging at the K-12 level, in its current form, they are not completely aligned to belonging for IPSE students.

The current wheel shape of the 10 Dimensions of Belonging may imply to some that a particular dimension is sequentially preceded and followed by other particular dimensions. For example, 'Invited' is preceded by 'Present' and is followed by 'Welcomed' (see Figure 1).

However, IPSE students in this study did not appear to experience the dimensions sequentially. To illustrate, 'Needed' is considered the richest and final dimension. It is preceded by 'Befriended,' indicating that first students need to be befriended by non-IPSE students before they can be needed by them. In this study, however, IPSE students reported that they believed they were needed by their non-IPSE peers, even if they did not have friends outside of the IPSE program. Dominic shared that he was needed in his PE class to motivate his non-IPSE peers and help them learn dance choreography. However, he never referred to the students in this class as his friends. Since IPSE students do not seem to experience the dimensions sequentially, it follows that the wheel shape is not appropriate. Instead, I recommend a radial shape, in which each dimension originates from a central point, such as Figure 3 below.

Figure 3

Proposed Model of Belonging for IPSE Students

In a radial shape, while all the dimensions are all still present and related to belonging, one does not necessarily need to move through a particular dimension to experience another. The illustration of the 10 Dimensions of Belonging in a radial shape more accurately portrays the experiences of belonging Dominic – and many of his IPSE peers – had. Experiencing one dimension of belonging is not contingent upon experiencing another.

With the knowledge that the dimensions are not sequential, IPSE staff may be able to provide better support to their students. If using the wheel shape as a model, some IPSE staff may believe they need to teach IPSE students skills sequentially related to each dimension. For example, since 'Invited' is before 'Known' on the wheel, IPSE students may first be taught how to recognize and respond to an invitation from a peer before being taught how to engage in a reciprocal conversation, in an effort to be 'known.' However, treating the dimensions as sequential is not in the best interest of IPSE students. Instead of simply targeting the next dimension on the wheel, IPSE staff should target the dimension of belonging that is most important for the student. If an IPSE student shares he wants to be involved in a club on campus, but has not expressed a desire to be warmly welcomed in class, IPSE staff should honor the student's wishes and help them identify and join a club on campus, instead of focusing their energies on creating a welcoming classroom environment for the student just because "welcomed" is next on the wheel. Understanding each dimension as an individual subset of belonging, not sequentially preceded or proceeded, can help IPSE staff to better support the needs and wants of their students.

Along with focusing on the positive dimensions of belonging (e.g., present, invited, welcomed, etc.), I contend that it is just as essential to proactively address the potential gaps in belonging that IPSE students may feel, as evidenced by this study. Therefore, in addition to the

radial shape, I propose a second, but interconnected, radial chart which identifies common areas

of need for IPSE students (see Figure 2 below).

Figure 2

Experiences of Belonging for IPSE Students
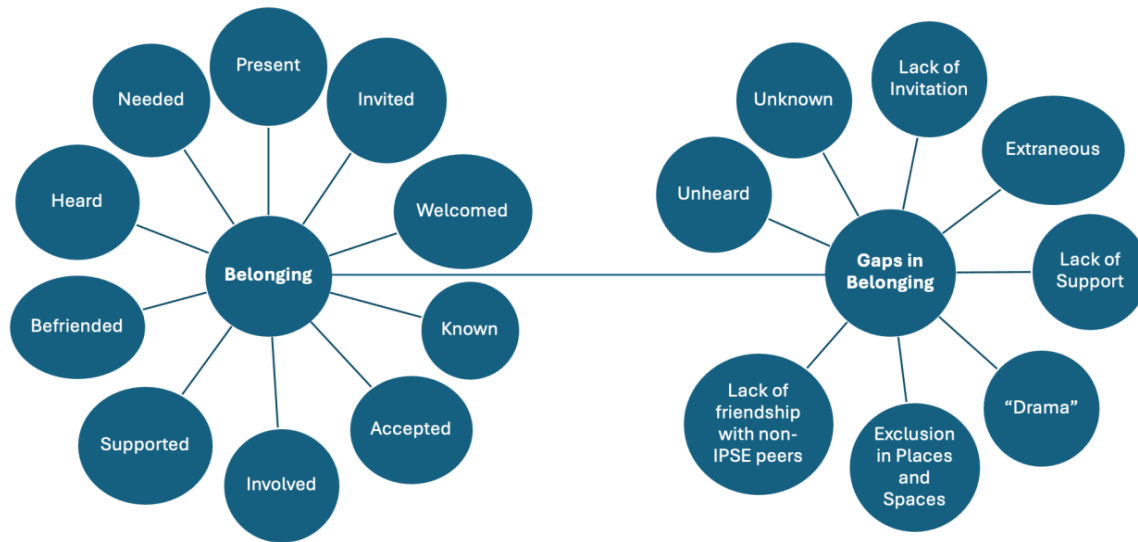
Further research will need to be conducted to understand if the eight gaps in belonging

identified in this dissertation study are consistent with the experiences of other IPSE students.

Conflict and negative experiences will naturally happen in college, for any student, regardless of

disability. What is important, however, is ensuring IPSE staff have the tools to support students

through these incidents in a way that promotes the future success of IPSE students in similar

instances. By preparing for potential situations, such as "drama" or lack of invitations, IPSE staff

can work to proactively teach students how to appropriately confront these situations. Hopefully,

this will lead to an IPSE experience that ensures belonging for all students.

At this point, I do not advocate for changing any of the 10 Dimensions of Belonging or

adding any new positive dimensions. While there is inevitable overlap among the dimensions,

each are operationalized differently and indicate belonging in a slightly different way. Based on

the data from this study, the 10 Dimensions appear to accurately reflect the IPSE experience of

students with I/DD. Researchers should continue to explore how IPSE students experience belonging in an effort to refine or revise the dimensions. Until then, all 10 Dimensions of Belonging, in their current form, are important for IPSE program directors and staff to continue focusing on to help their students belong.

Recommendations for IPSE Programs

Based on the experiences IPSE students recalled to me, I have identified some recommendations to further support IPSE student belonging while in college.

The most common place of exclusion for IPSE students was on-campus housing, at one university in particular. Conversely, some schools have successfully secured on-campus housing for IPSE students. Moving forward, I recommend that as much as possible, IPSE staff partner with campus housing departments to ensure access to on-campus housing for IPSE students. While access to on-campus housing may ameliorate the lack of belonging some IPSE students feel, non-IPSE students may also benefit from living in the same building as IPSE students. There are no current studies that indicate how living with IPSE peers impacts non-disabled students. However, non-IPSE peers who interacted with IPSE students in a variety of roles (e.g., mentors, classmates, resident assistants, etc.) have reported the positive impact knowing and working with IPSE peers had on their own academics, personal growth, social life, attitudes about disability, and future profession (Carter & McCabe, 2021). Providing on-campus housing to IPSE students can enrich the college experience for all students.

Some IPSE students identified peer mentors or coaches as their friends. However, when a transactional relationship exists, such as the one in an employee (i.e., IPSE coach) and client (i.e., IPSE student) relationship, reciprocity is often lacking. Both interview data and observational data supported this assertion. In observations, while I watched a peer mentor

support Camila with an upcoming presentation and Levi with cooking a quesadilla, there was no indication that either of the IPSE students contributed to a friendship with their peer mentor in a meaningful way. Additionally, during individual interviews, IPSE students did not share how they added value to a friendship with peer mentors or coaches. Moving forward, I would encourage IPSE programs to heavily focus both on the concepts of reciprocity in friendships and the difference between being friendly versus being friends. Programs such as PEERS for Young Adults may help to support the nuanced understanding of relationships that some IPSE students need (Laugeson et al., 2012).

Several IPSE students in this study wanted more interaction with their non-IPSE peers. This must be supported by IPSE staff. While access to on-campus dining halls, the gym, and classes gives IPSE students the opportunity to interact with their non-IPSE peers, it does not give them the confidence nor the skills to initiate an interaction. This is another area in which PEERS for Young Adults or the PEERS Friendship Bootcamp can support IPSE students (Laugeson et al., 2012). Additionally, non-IPSE students should be aware of IPSE programs on their campus and receive information about engaging with non-IPSE peers. Previous research has demonstrated that university-based education interventions can improve the attitudes college students have about people with I/DD (Li et al., 2014). Perhaps a bit of education would encourage non-IPSE students to initiate a conversation with a student with I/DD in one of their classes. Opportunity to interact must be supported, at least initially, in order to help IPSE students develop meaningful relationships with their non-IPSE peers.

Many IPSE students struggled with the "drama" or interpersonal conflict among their IPSE peers. For example, participants referred to rumors about relationships, arguments over hosting parties, and personality clashes with their IPSE peers as "drama." Again, "drama" is

inevitable, particularly among young adults experiencing major transitions in their life, such as moving from high school to college, from their hometown to an unknown city, from their friends and family to strangers. One way to prevent drama may be to more carefully consider the cohort model many IPSEs utilize. When a small group of students spend the majority of their time together, it is possible that more drama may arise among the cohort. Additionally, in a traditional cohort model, I argue that the key is not to eliminate interpersonal conflict but to provide students with the tools to work through it in a way that maintains the dignity of all parties. Utilizing evidence-based practices, such as social skills training, to teach students how to manage conflict is critical in helping students cope with interpersonal conflict (Jacob et al., 2022).

Many of the gaps in belonging identified in this study require small changes. If IPSE students feel unheard, not only must IPSE student voices be sought out, but peers, professors, and IPSE staff also need to recognize and appreciate them. IPSE staff must communicate this concern to professors and peer mentors so they can better meet the needs of IPSE students. With the implementation of social skills training and as friendships between IPSE and non-IPSE peers grow, lack of invitation should be an area in which IPSE students no longer feel a gap in belonging. Additionally, IPSE staff should frequently work one-on-one with IPSE students to identify their individualized support needs for academics, independent living, and other areas of college life. Instead of a blanket policy where peer mentors attend all classes with all IPSE students or no classes with IPSE students, an individualized approach to supports and accommodations should be taken, much like what students experienced in K-12 settings. The more authentic friendships IPSE students make, the more heard students feel, and the more they receive individualized supports, the more IPSE students may report being known by their peers,

professors, and staff. Ultimately, proactive support in some areas may positively impact feelings of belongingness in others.

Implications

Only one study has ever explored the construct of belongingness in IPSE programs as reported by the most important stakeholders – the students (i.e., Eisenman et al., 2020). In a break from current literature, my study centers the voices of disabled students to better understand their perceptions of belongingness in their IPSE programs, using a theoretical framework developed specifically for students with I/DD in inclusive settings. By eliciting the experiences of students with I/DD, this study allows perspectives to be heard that are often absent from educational research, contributing novel research to the inclusive education literature base.

With only 338 IPSE programs in the United States, offering no more than 12-15 spots each year, enrollment in an IPSE program is rare for adults with I/DD (Think College, 2024). If research like mine can effectively communicate the benefits IPSE students derive from IPSE programs, hopefully, more colleges and universities will be willing and excited to start an IPSE program on their campus. The development of new IPSE programs means more and more students will be able to experience them. With further recognition of IPSE programs as a viable and important post-secondary option for students with I/DD, I hope Regional Centers and Departments of Rehabilitation around the country are able to provide full funding and/or partial scholarships to students with I/DD in order to gift the IPSE experience to students who would otherwise be unable to afford college.

The gaps in belonging that were found as a result of this dissertation study allow for IPSE leaders to reflect on and revise the structure of their IPSE program, making the IPSE experience more joyful and inclusive for all.

Policy Implications

In 2008, the 110th Congress passed the Higher Education Opportunity Act (HEOA), providing, for the first time, financial assistance to students with I/DD attending IPSE programs that met certain requirements. HEOA also created Transition and PostSecondary Programs for Students with Intellectual Disability (TPSID) grants, for which IPSE programs around the country compete. These grants allow current IPSE programs to either expand their program, allowing for additional students to enroll, or improve the program they currently have (e.g., establishing more targeted life skills classes). There are currently 22 IPSE programs, in 16 states, being funded through a TPSID grant (Think College, 2024). Additionally, HEOA funds ThinkCollege, a project developed and curated by University of Massachusetts, Boston, which serves as the national coordinating center for IPSEs in the United States.

The current political landscape in Congress, particularly as it relates to funding higher education, is, in a word, contentious. If HEOA were to be underfunded or not funded at all, the impact on IPSE programs would be catastrophic. Not only would current programs with TPSID grants suffer, but current students could also lose the possibility of financial aid. Additionally, the loss of ThinkCollege would be harmful to prospective IPSE students and their families, IPSE staff members, and researchers. This national coordinating center provides information on all 338 IPSE programs, supporting students and families in making the right college choice, allowing program directors to connect with other IPSE leaders across the country, and providing researchers with IPSE data that is not housed in any other database.

My hope is that college access for students with I/DD can remain a bipartisan issue that all legislators can support. IPSE research, like the current dissertation study, helps to shine a light on the tremendous positive impact IPSE programs have on not only IPSE students, but their peers, professors, and employers, as well.

Limitations

Recruiting eligible participants for this study was difficult. As the contact information for students eligible for this study was not publicly available, I had to rely on IPSE program directors to send out my recruitment materials to their students. Some program directors responded to the initial recruitment email, saying they would share the opportunity with students, but did not respond to further attempts to follow up. One program director declined to pass along the study flyer and information to its students citing that the program was still new, had few students, and a graduate student was already conducting thesis research about the program. At another school, the program director was encouraging, but noted that students have completed several research surveys already and were not necessarily interested in more research opportunities. Many programs simply did not respond to multiple email and phone call attempts. Because of this, only a limited number of participants were consented and enrolled in the study. Specifically, while students on the west coast were well represented in this study, the voices of students attending IPSE programs in other regions of the United States, particularly the midwest, were underrepresented. Thus, only a limited number of student voices were heard as a result of this study, potentially excluding a range of diverse perspectives which could have further enhanced the findings of this dissertation.

Due to the small number of spots in IPSE programs and the considerable expense they require, enrollment in an IPSE program largely means one has a family who is savvy enough to

navigate various social service systems for tuition funds or who can pay out-of-pocket. One of

the schools did not list the cost of attendance on their IPSE website and encouraged families to

apply for financial aid through the Free Application for Federal Student Aid (FAFSA).

Unfortunately, many families cannot afford the debt accrued from college loans for their child

with I/DD. Simply, not all IPSE programs are accessible to all families. This reality limited my

ability to interview a diverse group of IPSE students, particularly at some universities, about

their experience of belonging. Specifically, I would have liked to interview more IPSE students

who come from low-income backgrounds and students whose home language is not English.

Interestingly, IPSE programs who had more funding sources tended to have more racial diversity

within their student cohorts than IPSE programs that encouraged FAFSA and private payment to

cover the cost of the program.

The current dissertation study utilized two qualitative methods: individual interviews and

observations. It is possible that not all participants were able to fully express themselves through

the semi-structured interview format. Additionally, in at least one situation, a potential

participant opted out of the interview, and ultimately, the full study, because she was too

nervous, although she was rather interested in the research topic. Using an in-person

interviewing format may have discouraged potential participants from becoming involved with

the study. Potential participants may have felt more comfortable with different interview

methods, such as the ability to type and send answers electronically instead of an in-person

format. Future researchers should consider alternative methods to corroborate or contradict the

findings of this study in order to better support students in IPSE programs. For example, a mixed

methods study with both qualitative and quantitative data on belonging, will lead to a more

complex analysis and perhaps, richer findings. Additionally, for a more thorough understanding of belonging in specific programs or subsets of students (e.g., students with Down Syndrome, students of color, LGBTQ+ students, etc.), a case study approach may be most appropriate.

During the data analysis process, I took a variable-centered approach, focusing on the 10 Dimensions of Belonging, instead of taking a participant-focused approach. Because of this, the individual stories of each participant were not clearly illustrated throughout the Findings section. Future researchers can use a more person-centered approach to better understand the individual experiences of belonging of each participant.

All participants appeared to be honest about their IPSE experiences with me, however, it is possible social desirability bias was present in participant responses. Often, social desirability bias refers to presenting *oneself* in a positive or socially desirable manner (Bergen & Labonté, 2020). In this study, however, it is possible that participants wanted to present *their IPSE program* in a socially desirable manner, and shared only a limited number of negative experiences to achieve this. Although I assured students they would not be identified as someone who participated in the study and their responses would be kept confidential, it is possible some IPSE students were nervous that reporting poor things about their program would result in negative consequences or disappointment from IPSE staff.

The opinions of qualitative researchers have long differed about the most appropriate way to measure intercoder reliability (ICR). Some researchers have referred to it as "inappropriate or unnecessary" (O'Connor & Joffe, 2020, p.1), while others utilize complex statistical methods to calculate ICR. In this study, I did not calculate or provide a percentage agreement, Cohen's kappa, Krippendorff's alpha, or any other mathematical representation of ICR. Instead, I

provided a thorough procedure of how consensus on differently coded items was reached, which

provides a necessary explanation regarding the trustworthiness of the analysis process. However,

this will be insufficient for researchers who desire a mathematical representation of ICR.

Finally, as with all qualitative research, the findings in this study will not generalize to

IPSE programs outside of the United States or IPSE programs housed at community colleges,

although they may be transferable.

Future Directions

Only IPSE students who were attending a program at a four-year university were able to

participate in this study. This inclusion criteria excluded students attending community college

IPSE programs. While there is a dearth of IPSE research overall, the IPSE research about

community college campuses is non-existent. Just as the four-year college experience and

community college experience differ for non-disabled students, these experiences also differ for

IPSE students. Perhaps one of the biggest differences is being a commuter student at a

community college IPSE program compared to most IPSE students living in a residence hall or

apartment on a four-year college campus. Although one student in this study identified as a

commuter, the experiences of commuter students were not adequately researched in this

dissertation. How might commuting, instead of living on campus, change an IPSE student's

perceptions of belongingness at their college? More research must be conducted about IPSE

programs housed at community colleges to better understand how IPSE student experiences in

community college programs inform feelings of belongingness or exclusion on one's college

campus.

With the elimination of Diversity, Equity, and Inclusion (DEI) offices in higher education in states such as Texas, Florida, and Utah, one must wonder what the impact will be on IPSE programs, which are often considered DEI initiatives (e.g., Redwood Seed Scholars at UC Davis). Currently, Texas offers 18 IPSE programs, Florida offers 25, and Utah offers three (ThinkCollege, 2024). Interestingly, the state of Florida has lost one IPSE program in the last few months, although the reason is unknown. Further research must be conducted not only in order to better understand the impact of DEI bans on students enrolled in IPSE programs, but also feelings of belongingness for students in IPSE programs in these states.

While I asked questions about how the intersectionality of IPSE students' identities impacted their experiences of belongingness, this was not explicitly explored in the findings. For example, Carter shared that he believed his Blackness helped him in college. Ivan, however, did not think being Indian impacted his relationships at college at all. Future researchers should more thoroughly investigate how being an IPSE student with various identities (e.g., student of color, LGBTQ+ student, religious student, etc.) impacts feelings of belongingness.

Further IPSE research is needed in more countries in order to better programs across the world. This research can help to highlight areas of growth for IPSE programs in certain geographic regions. Additionally, understanding the strengths of various programs around the world may encourage existing IPSE programs to make programmatic changes for the betterment of their IPSE students. Ultimately, any study that illuminates the positive impact IPSEs can have on students with I/DD has the potential to increase college-going opportunities for students with I/DD.

Conclusion

This dissertation aimed to not only better understand how IPSE students experience belonging - or a lack thereof - on their college campus, but also to amplify the voices of students with I/DD, who so often, are not involved in the research that impacts their lives. Overall, participants loved their experience as an IPSE student and felt like they belonged at their college. Henry epitomized the school spirit of many IPSE students when trying to convince me not to protect his anonymity. After explaining the precautions I was taking to ensure confidentiality, he said, "yeah, can I gonna be honest with that? I still would keep my name and my school, [college], because that's my second home." Although IRB does not allow me to comply with Henry's request, his appeal to me speaks to the impact college is having on many IPSE students, not just Henry.

Participants in this study experienced the 10 Dimensions of Belonging (Carter & Biggs, 2021) while enrolled in an IPSE program, although not all dimensions were experienced by all participants, and they certainly were not all experienced equally for each participant (see Appendix F). Participant interviews and observations also indicated gaps in belonging for IPSE students and ultimately resulted in recommendations for IPSE programs. Future research about IPSE programs should be in the service of improving and growing these college-going opportunities for students with I/DD. After all, everyone deserves to find their "second home."

Appendix A: Key Concepts and Terminology

School Belonging

The most commonly cited definition of school belonging, developed by Goodenow and Grady (1993), will be the one utilized for the current study. Goodenow and Grady (1993) comprehensively define school belonging as:

> Students' sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class. More than simple perceived liking or warmth, it also involves support and respect for personal autonomy and for the student as an individual.

Intellectual and Developmental Disability (I/DD)

People with intellectual and developmental disabilities (I/DD) are diagnosed before their 18th birthday, often at birth, and have difficulty with both intellectual tasks and adaptive tasks (American Psychiatric Association, 2021). Adaptive tasks are commonly referred to as "tasks of daily living," such as bathing oneself, safely getting from one location to the next, and communicating with others. Examples of intellectual and developmental disabilities include Down syndrome, Fragile X syndrome, and some forms of Cerebral Palsy. The Individuals with Disabilities Education Act (IDEA) in the United States defines intellectual disability as "significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance. The term 'intellectual disability' was formerly termed 'mental retardation [sic].'" (IDEA, Sec. 300.8, 2004).

Individualized Education Program (IEP)

In the United States, public school students with one or more disabilities may be eligible for an Individualized Education Program (IEP). There are 13 IEP eligibility categories, each constituting a different type of disability (e.g., orthopedic impairment, autism spectrum disorder, deafness, etc.) (IDEA, Sec 300.8, 2004). Students are eligible for an IEP if, through a battery of standardized assessments, interviews, and observations, it is demonstrated that their disability or disabilities either indicate "severe educational needs" or "adversely affect educational performance" (IDEA, Sec 300.8, 2004). An IEP is a legal document, provided by the public school, with information about the student's progress, goals, special education services, placement, and accommodations (or modifications, if appropriate) (Wrightslaw, n.d.).

Certificate of IEP Completion / Certificate of Completion (CoC)

Instead of a traditional high school diploma, many students with I/DD receive what is commonly referred to as a Certificate of Completion (CoC), indicating they have met certain requirements in terms of attendance, modified or alternate curriculum, and IEP goals. Just as the requirements for traditional high school diplomas differ from state to state, so too do CoCs for students with I/DD. The U.S. Department of Education (DoE) refers to CoCs awarded to students with IEPs as Certificates of IEP Completion. The Classification of Instructional Programs division of the DoE defines a Certificate of IEP Completion as the following: An instructional program that defines the requirements for meeting specified goals pertaining to an Individual Educational Program established by a local school system under the authority of a state or other jurisdiction. Specific content varies by student and may or may not equal a regular high school/secondary school program. (National Center for Education Statistics, 2020)

Transition

'Transition' refers to the time frame when students with disabilities complete or age out of high school and must make important decisions about the future trajectory of their life. For students with more extensive support needs, such as students with I/DD, there are a variety of transition options that do not involve college. Some include supported living, supported employment with job coaches, and life skills programs. Inclusive Post-Secondary Education programs, or IPSEs, are one type of transition option available to students with I/DD who want to pursue college.

Transition-Aged Youth

Students with disabilities typically leave or age out of high school between 18 years old and 22 years old and must consider transition options for the next phase of their life. Young adults at this stage in their life are commonly referred to as 'transition-aged youth.'

Inclusive Post-Secondary Education (IPSE)

Inclusive Post-Secondary Education (IPSE) programs are one of the most highly sought after transition offerings for students with I/DD. IPSE programs offer the college experience to students with I/DD who earned a CoC from their high school. IPSE programs vary across the world, with differing curriculums, internship or employment opportunities, residential options, length of program, and levels of inclusion within the college campus community. Graduates of IPSE programs typically do not receive diplomas and instead are offered a Certificate or an Award of Completion in Learning and Life Skills (e.g., at UCLA's IPSE program) or another related area. Research has previously demonstrated IPSE students' growth in adaptive behavior and self-determination (Lee et al., 2021).

Appendix B: Decision-Making Capacity Assessment Tool

UCLA | **Research Administration**
Human Research Protection Program

DECISION-MAKING CAPACITY ASSESSMENT TOOL

INSTRUCTIONS: This form may be used to assess the decision-making capacity of potential subjects who may have or may be experiencing cognitive impairments.

Who should assess capacity? In general, the consent assessor should be a member of the research team or consultant familiar with dementias and/or cognitive impairment, and qualified to assess and monitor capacity to consent on an ongoing basis.

Potential Subject Name:_____ **IRB Protocol #:**_____

Study Title: _____

ASSESSMENT QUESTIONS:

1. Does the individual understand he/she would be participating in research and that research is voluntary?
   ☐ Yes   ☐ No

2. Does the individual understand what will happen to him/her if he/she decides to participate?
   ☐ Yes   ☐ No

3. Does the individual know how long he/she will be in the research study?
   ☐ Yes   ☐ No

4. Can the individual explain one or two risks associated with the research study?
   ☐ Yes   ☐ No

5. Can the individual explain what he/she should do to stop being in this research study?
   ☐ Yes   ☐ No

6. Does the individual know who to contact if he/she experiences problems or has questions about the study?
   ☐ Yes   ☐ No

7. **Interventional studies:** Can the individual explain what alternatives there are if he/she chooses not to participate?
   ☐ Yes   ☐ No

INVESTIGATOR EVALUATION:

8. Does the individual express a choice about whether or not to participate?
   ☐ Yes   ☐ No*

9. Does the individual have the decision-making capacity to give informed consent for this study?
   ☐ Yes   ☐ No*

_____
Printed Name of Investigator   Signature of Investigator   Date

* NOTE: Potential subjects who are found to have diminished capacity must be excluded **unless** the UCLA IRB has approved the use of surrogate consent from legally authorized representatives for the study in question.

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Appendix C: Interview Protocol

Topic(s)	Questions
Welcome and Demographics	Welcome. My name is Emily, and I am a graduate student at UCLA. I really appreciate you taking the time to share your views and experiences with me. I would like to learn more about your time as a _____ student and if you feel like you belong at all the places at your school. Before we start, I am going to ask a few questions to learn more about you. 1. What is your name? 2. How old are you? 3. Where do you go to school? Can you show me your school ID? 4. What is your gender? 5. What is your race and/or ethnicity? 6. I am a college student with a disability. My disability is called OCD. Do you know if you have any disabilities? Do you know the name of your disability? 7. *If on Zoom:* Can you keep your camera on during the interview? (turning it off for a few seconds is okay, but it should remain on for most of the interview) 8. *If on Zoom*: Do you need any Zoom accommodations to participate in this interview? (e.g., closed captions)
Review of Consent, Confidentiality, and Procedures	This interview is voluntary, which means you can leave whenever you want, and you do not have to talk about anything that you do not feel comfortable discussing with me. All information you share will be kept confidential. For example, if

	I write a paper about your interview, I will not write your name or any other information about you that could help people know that you talked to me.
	If it is okay with you, I am going to record our interview so I can listen to it later. I will remove the interview from my computer and my Zoom cloud, which is part of the internet, at the end of the study.
	Knowing all of this, are you still willing to talk to me today?
Interview	When we talk today, I'd like you to be honest with me about your experiences. You will not get in trouble for being honest, and no one will know what you said except for me. If you need a break, please let me know! We can pause the interview whenever you want.
	Part 1 Questions
	1. What are your favorite things about college? What are your least favorite things about college?
	2. What clubs, sports teams, or other activities are you involved in on campus? Why do you like participating in [activity]? Do you have any friends who participate in that activity with you? If so, can you tell me about them (including probing for whether they are an IPSE student or not)? Did anyone encourage or suggest you participate in these activities? If so, who?
	3. What classes are you in? Who is in each class with you— other students in your program (e.g., Explorers, LIFE, Pathway) or students who are not in your program? How are you doing in your classes? What are you enjoying about your classes? What don't you like about your classes? Who

	do you sit next to in your classes? Why do you sit next to this person? (probe for whether they are an IPSE student or not) Does anyone encourage you in class? If so, who? How do they encourage you? What do they do to encourage you?
	4. Have you ever had to work in groups either in class, for a project, or doing an activity for a club? If so, who is usually in your group? Do you start the group? Does the professor or leader of the club tell you which group you are in? Do you ever get invited into a group that other people have started? If so, can you explain that experience? Who asked you to join their group? How did they ask you? How did you feel when they asked you to join their group?
	5. You go to a small/medium/large college. What is the best thing about attending a small/medium/large college? What is the worst thing about attending a small/medium/large college? Overall, do you like going to a small/medium/large college? Why or why not?
	6. You go to a college in [geographic region]. What is the best thing about attending a college in [geographic region]? What is the worst thing about attending college in [geographic region]? Overall, do you like going to a college in [geographic region]? Why or why not?
	7. How do you think being a person with an I/DD impacts your experience on campus? When other college students see you in class for the first time how do they react to you? Does this change over time? How do the staff who work here treat you when you pick up something to eat or buy a ticket for a sports game? Has anyone ever been mean to you at college because of your I/DD? Has anyone every spoken down to you or assumed you couldn't do something at

[college] because of your disability? Can you describe this experience to me?

8. If applicable: How do you think being a student of color impacts your experience in college? How do you think being an LGBTQ+ student impacts your experience as a college student at this school?

9. Who do you eat lunch with and where do you eat? Why do you eat with that person and why do you choose to eat in that location?

10. What has been your worst experience of college so far? What was happening? Where was it? Who was there? How did you feel? What makes this your worst experience?

11. What has been your favorite memory of college so far? What was happening? Where was it? Who was there? How did you feel? What makes this your favorite memory?

12. What are your goals for your [IPSE program]? By the time you graduate from [college], what do you hope to have accomplished?

ASK PARTICIPANT IF THEY WOULD LIKE A 5 OR 10 MINUTE BREAK OR IF THEY WANT TO CONTINUE. Participants can also request to schedule a new time for the Part 2 questions, if they no longer want to continue with the interview in one sitting.

Part 2 Questions

1. What does it mean to belong? What is your definition of belonging? If someone said, "I belong at [insert college name here], what do you think they mean by that?

2. How does belonging make you feel? When you belong

	somewhere, how do you feel?
	3. Do you feel like you belong at [college]? What makes you feel like you belong? What makes you feel like you don't belong? Are there places at school where you feel like you belong and other places where you don't belong? Where are those places? Who makes you feel like you belong? Who makes you feel different or like you don't belong?
	4. Do other students make you feel like you belong here, at [college]? (Probe for students both in IPSE program and not in IPSE program) What do they do to make you feel like you belong? Are there more things you wish they would do to make you feel like you belong?
	5. What about professors—do they make you feel like you belong? (Probe for classes that are audited on main campus and core classes in IPSE curriculum). When you walk into a classroom at school, what happens? Do people say hi to you? Is everyone quiet? Does this happen in all of your classes or just some?
	6. When you are in class, do you feel like your professor listens to you and respects what you have to say? Do you feel like your classmates listen to you and respect what you have to say? Do you feel more respected when you are in classes with just other [IPSE program] students? Or when you are in classes with other students too? Why do you think this is? Does anyone help you in class to make sure you understand what is being taught? Who does that? How do they do that? Do you ever get special things in class that other students don't? OR Do you know of any accommodations you receive for your classes?
	7. Does anyone at college ever ask for your opinion? Your

friends? People in class? [IPSE program] Staff? Professors? What kind of things do they want your opinion about? Who asks your opinion the most? Who respects your opinion the most?

8. Do other students invite you off campus anywhere? Who invites you out? Where do you go?

9. I want you to take some time to think about this one. We all have times when we feel like we don't belong in college. Has there ever been a time when you felt like you did not belong at [college]? Can you describe that experience to me? What happened? Who was there? How did you feel?

10. Are there any places at your college where you aren't able to go and other students are able to go? Can you eat in the dining halls? Can you live on campus if you want? Can you live anywhere on campus or only one building/floor?

11. Who gets excited to see you at [college]? When you walk into class is anyone excited to see you? What about when you show up at [extracurriculars]? Where do you feel most welcome on campus? Where are the people the kindest to you and the most excited to see you?

12. How do you think your classes are different when you are absent? If you work in groups in class, what do you think your group members say when you are absent? Do you think your group members have a harder time when you are not there? Why/why not? Do you think class is better when you are there?

13. You told me earlier that you participate in [extracurricular activity]. How do you think [activity] is different when you are absent? What do you think people say when you are absent from [extracurricular]? Do you think

	[extracurricular] is better when you are there?
	14. How do you think [college] would be different if the [IPSE program] didn't exist and students like you, with I/DD, weren't allowed to be on campus? Do you think having the [IPSE program] is good or bad for [college]? Why? Why is it important for the [IPSE program] to be at [college]? What about [college] would be worse if the [IPSE program] didn't exist?
	15. Who knows you best at college? Who are your best friends at college? How did you meet? What makes that person/people your best friend(s)? How are they a friend to you? What kind of things do you and your best friend do? What is your favorite thing about your best friend? If you had to guess, what do you think [best friend] likes about you the most? Is your best friend part of [IPSE program]?
	16. What do you think [college] and the [IPSE] program does well to make sure you feel like you belong and have a good experience at [college]?
	17. Can you think of anything that [college] can do better to make you, or other [IPSE] students, feel more like you belong?
	Do you have any questions for me?
	Thank you so much for spending time with me and sharing your honest thoughts with me. If you think of anything else you want to share, please feel free to reach out to me. Is it okay if I reach out to you, if I have any additional questions?

Appendix D: Observation Protocol

"Go Along" Observation Protocol (adapted from the TIES Center Belonging Reflection Tool)

Date:_____   **College:** _____

Student observed: _____

Time Frame	Class/Activity	Notes

Holistic Belonging Review (to be completed at the end of the observation day)

Dimension of Belonging	+ Going Well	- Opportunity for Improvement
Present Are IPSE students involved in all of the same spaces and activities as their peers?		
Invited Is the presence and participation of IPSE students actively sought out and encouraged by others at [college]?		
Welcomed Are IPSE students received by others at [college] with warmth, friendliness, and authentic delight?		
Known Are IPSE students viewed as unique individuals, recognized by their strengths, and appreciated for who they are?		
Accepted Are Pathway students embraced without condition and viewed as equals by their peers?		
Involved Are IPSE students actively engaged with their peers in shared learning and common goals?		
Supported Are IPSE students given what they need to reach their full potential and truly thrive?		
Heard Are the perspectives of IPSE students sought out, listened to, and respected by others?		
Befriended Have IPSE students developed relationships with their peers that		

are marked by mutual affection and reciprocity?		
Needed Are IPSE students valued by others and considered to be indispensable members of the school community?		

Room for sketches (e.g., classroom layout, where IPSE student is sitting compared to other students, etc.):

Code	Definition
Present	Evidence of IPSE student(s) being present and involved each and every day in the same places as everyone else at their school.
Invited	Evidence of IPSE student(s) being invited or having their presence or participation sought out by another person.
Welcomed	Evidence of IPSE student(s) being welcomed or being received by others with warmth, friendliness, and an authentic delight.
Known	Evidence of IPSE student(s) being known or being seen as a unique individual and appreciated for all of who one is.
Accepted	Evidence of IPSE student(s) being accepted or embraced gladly without condition and viewed as an equal.
Involved	Evidence of IPSE student(s) being involved or actively engaged with and alongside peers in shared learning and common goals
Supported	Evidence of IPSE student(s) being supported or having the individualized resources needed to reach one's full potential and thrive in everyday life.
Heard	Evidence of IPSE student(s) being heard means that their perspective is sought, listened to, and respected.
Befriended	Evidence of IPSE student(s) being befriended means having peer relationships marked by mutual affection and reciprocity.
Needed	Evidence of IPSE student(s) being needed involves being valued by others and considered an indispensable member of the community.
Drama	Direct quote from or evidence of IPSE student(s) inter-personal struggles with other college students.
Neg_Belong	Evidence of IPSE student(s) having a negative experience with belonging or feeling excluded.
Lack_Friendship	Evidence of IPSE student(s) identifying a lack of friendship. Lack of peer relationships marked by mutual affection and reciprocity.

Lack_Support	Evidence of IPSE student(s) lacking support or the individualized resources needed to reach one's full potential and thrive in everyday life.
Def_Belonging	IPSE student definition of belonging.
Belong_College	IPSE student explicitly indicating whether or not they belong at their specific college.
Belong_Feelings	IPSE student indicates what feelings they associate with belonging.
Lack_Invited	IPSE student indicates they were not invited or encouraged to participate in college-related events or activities.
Belong_People	IPSE student indicates who makes them feel like they belong at their college.
Belong_Actions	Actions people take that indicate to IPSE students that they belong. Actions IPSE students wish were taken to show them they belong.
Neg_Belong_Feelings	IPSE student indicates what feelings they associate with negative experiences related to belonging.
Places_Exclusion	Places IPSE students are not allowed to go that their degree-seeking peers are allowed to go.
Extraneous	IPSE student indicates that they will not be missed by peers, professors, etc.; invisibility; "they'll forget about me"
Need_for_Connection	IPSE student indicates a need for human connection during college.
Lack_Heard	Evidence that IPSE student(s) opinion is not being sought out OR is not being listened to.
Lack_Known	Evidence that IPSE student is not known by peers or staff. "They don't know me."

Appendix F: Frequency of Dimensions of Belonging in Interviews as Experienced by IPSE Students

Pseudonym	Present	Accepted	Heard	Invited	Befriended
Hana	42	23	12	15	31
Lilly	10	4	8	2	12
Oliver	13	1	9	1	17
Levi	17	3	5	1	8
Dominic	16	6	5	1	14
Carter	19	14	10	8	23
Brian	16	5	8	5	24
Isabela	13	13	6	2	26
Chad	17	9	4	6	20
Daniel	14	5	5	0	9
Noah	21	2	5	3	9
Henry	28	11	9	4	28
Ivan	22	7	9	3	24

Pseudonym	Welcomed	Known	Supported	Involved	Needed
Hana	18	18	35	32	8
Lilly	7	1	10	9	4
Oliver	10	1	18	13	3
Levi	7	2	16	14	1
Dominic	7	3	21	14	6
Carter	12	5	25	14	9
Brian	11	2	17	11	10
Isabela	11	1	14	12	4

Chad	8	1	9	16	2
Daniel	6	3	8	6	3
Noah	9	1	14	16	6
Henry	9	14	22	17	9
Ivan	8	1	16	22	7

References

Adler, P. A., & Adler, P. (1987). *Membership roles in field research* (Vol. 6). Sage.

Allen, K. A., Kern, M. L., Rozek, C. S., McInerney, D. M., & Slavich, G. M. (2021). Belonging: A review of conceptual issues, an integrative framework, and directions for future research. *Australian journal of psychology*, *73*(1), 87-102.

American Psychiatric Association. (2021 August). What is intellectual disability? https://www.psychiatry.org/patients-families/intellectual-disability/what-is-intellectual-disability#section_5

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Interpersonal development*, 57-89.

Bergen, N., & Labonté, R. (2020). "Everything is perfect, and we have no problems": Detecting and limiting social desirability bias in qualitative research. *Qualitative Health Research*, *30*(5), 783-792. https://doi.org/10.1177/1049732319889354

Bigby, C., Anderson, S., & Cameron, N. (2018). Identifying conceptualizations and theories of change embedded in interventions to facilitate community participation for people with intellectual disability: A scoping review. *Journal of Applied Research in Intellectual Disabilities*, *31*(2), 165-180.

Blaskowitz, M., Pustorino-Clevenger, A., Licata, A. M., Killion, M., Borovich, O., Becker, C., Naegler, E., & Scott, P. (2022). A Comparison of student attitudes on inclusive post-secondary education at two mid-Atlantic universities. *Journal of Inclusive Postsecondary Education, 4*(1). https://doi.org/10.13021/jipe.2022.3064

Carlson, J. A. (2010). Avoiding traps in member checking. *Qualitative Report*, *15*(5), 1102-1113.

Carter, E. W. (2021). Dimensions of belonging for individuals with intellectual and

developmental disabilities. *Belonging and resilience in individuals with developmental disabilities: Community and family engagement*, 13-34.

Carter. (2016). A place of belonging: Research at the intersection of faith and disability. *Review and Expositor (Berne), 113*(2), 167–180. https://doi.org/10.1177/0034637316637861

Carter. (2022). A place of belonging: Including individuals with significant disabilities in faith communities. *Inclusive Practices*, *1*(1), 6–12. https://doi.org/10.1177/2732474520977482

Carter. (2020). The absence of asterisks: The inclusive church and children with disabilities. *Journal of Catholic Education*, *23*(2), 168–. https://doi.org/10.15365/joce.2302142020

Carter, E. W., Biggs, E. E., & Boehm, T. L. (2016). Being present versus having a presence: Dimensions of belonging for young people with disabilities and their families. *Christian Education Journal, 13*(1), 127-146.

Carter, E. W., & Biggs, E. E. (2021). *Creating communities of belonging for students with significant cognitive disabilities (Belonging Series)*. Minneapolis, MN: University of Minnesota, TIES Center. Retrieved from:
https://publications.ici.umn.edu/ties/peer-engagement/belonging/introduction

Carter, E. W., Gustafson, J. R., Mackay, M. M., Martin, K. P., Parsley, M. V., Graves, J., Day, T. L., McCabe, L. E., Lazarz, H., McMillian, E., Schiro-Geist, C., Williams, M., Beeson, T., & Cayton, J. (2019). Motivations and expectations of peer mentors within inclusive higher education programs for students with intellectual disability. *Career Development and Transition for Exceptional Individuals, 42*(3), 168-178.
https://doi.org/10.1177/2165143418779989

Carter, E. W., & McCabe, L. E. (2021). Peer perspectives within the inclusive postsecondary education movement: A systematic review. *Behavior Modification*, *45*(2), 215-250.

Center for Disease Control [CDC]. (2023). *Important Milestones: Your Child by Four Years.*

> https://www.cdc.gov/ncbddd/actearly/milestones/milestones-4yr.html

Clarke, V., & Braun, V. (2013). Successful qualitative research: A practical guide for beginners. *Successful qualitative research*, 1-400

Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage publications

Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behavior, 41*, 1319-1320. https://doi.org/10.1007/s10508-012-0016-6

Ekelman, B. A. (2012). The well-being of college students with disabilities: An occupational perspective [Doctoral dissertation, Capella University]. ProQuest Dissertations and Theses Global.

Eisenman, L. T., Rolón-Dow, R., Freedman, B, Davison, A., & Yates, N. (2020). "Disabled or not, people just want to feel welcome": Stories of microaggressions and microaffirmations from college students with intellectual disability. *Critical Education*, *11*(17), 1-21. Retrieved from:

> http://ojs.library.ubc.ca/index.php/criticaled/article/view/186499

Evered, R., & Louis, M. R. (1981). Alternative perspectives in the organizational sciences: "Inquiry from the inside" and "inquiry from the outside" *Academy of Management Review*, *6*(3), 385-395.

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1), 80-92.

Goodenow, C., & Grady, K. E. The relationship of school belonging and friends' values to

academic motivation among urban adolescent students. *The Journal of Experimental Education* 1993, *62*(1), 60-71.

Gopalan, M., & Brady, S. T. (2020). College students' sense of belonging: A national perspective. *Educational Researcher*, *49*(2), 134-137. https://doi.org/10.3102/0013189X19897622

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82.

Guidance and Procedure: Research Involving Persons with Cognitive Impairments (last updated March 2, 2021) https://ora.research.ucla.edu/OHRPP/Documents/Policy/9/Cognitive_Impairments.pdf

Gur, A., & Bina, R. (2023). Facilitators of sense of belonging among people with intellectual and developmental disabilities: A systematic review. *Journal of Intellectual Disabilities*, *27*(2), 516-538.

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, *292*, 114523.

Higher Education Opportunity Act of 2008. Public Law 110-315. 5 U.S.C. 5313 and 552a

Hollomotz, A. (2018). Successful interviews with people with intellectual disability. *Qualitative Research*, *18*(2), 153-170.

Horner-Johnson, W., & Bailey, D. (2013). Assessing understanding and obtaining consent from adults with intellectual disabilities for a health promotion study. *Journal of Policy and Practice in Intellectual Disabilities, 10*(3), 260-265. https://doi.org/10.1111/jppi.12048

Hresko, W. P., Peak, P. K., Herron, S. R., & Bridges, D. L. (2000). Young Children's Achievement Test. Austin, TX: PRO-ED. DOI: 10.1177/0734282906286340

Individuals with Disabilities Education Act (IDEA), 20 U.S.C. § 300.8 (2004).

Jacob, U. S., Edozie, I. S., & Pillay, J. (2022). Strategies for enhancing social skills of

individuals with intellectual disability: A systematic review. *Frontiers in rehabilitation sciences*, *3*, 968314.

Kaehne, A., & O'Connell, C. (2010). Focus groups with people with learning disabilities.

Journal of intellectual disabilities, *14*(2), 133-145.

Laugeson, E. A., Frankel, F., Gantman, A., Dillon, A. R., & Mogil, C. (2012). Evidence-based

social skills training for adolescents with autism spectrum disorders: The UCLA PEERS program. *Journal of autism and developmental disorders*, *42*, 1025-1036.

Lee, C. E., Day, T. L., Carter, E. W., & Taylor, J. L. (2021). Examining growth among college

students with intellectual and developmental disability: A longitudinal study. *Behavior Modification, 45*(2), 324-348. https://doi.org/10.1177/0145445520982968

Li, C., Wu, Y., & Ong, Q. (2014). Enhancing attitudes of college students towards people with

intellectual disabilities through a coursework intervention. *Journal of Developmental and Physical Disabilities*, *26*, 793-803.

Lizotte, M., Dimond , E., Landon, T., Gerald, M., & Reeves, S. M. (2021). Mental health needs

for students enrolled in inclusive postsecondary education programs. *Journal of Inclusive Postsecondary Education, 3*(1). https://doi.org/10.13021/jipe.2021.2925

Luborsky, M. R., & Rubinstein, R. L. (1995). Sampling in qualitative research: Rationale, issues,

and methods. *Research on aging*, *17*(1), 89-113.

Marlow, N. M., Xie, Z., Tanner, R., Jacobs, M., Hogan, M. K., Joiner Jr, T. E., & Kirby, A. V.

(2022). Association between functional disability type and suicide-related outcomes among US adults with disabilities in the National Survey on Drug Use and Health, 2015–

2019. *Journal of Psychiatric Research*, *153*, 213-222.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review,50*, 370–396

Masters. (2020). Parish inclusion: A response from the field. *Journal of Catholic Education,*
    23(2), 189–. https://doi.org/10.15365/joce.2302152020

Masters. (2023). A Spirituality for Synodality—Hope for Persons with Disabilities? *Spiritus*,
    23(1), 77–99. https://doi.org/10.1353/scs.2023.a899756

Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A., Wolniak, G. C., Pascarella,
    E.T., & Terenzini, P. T. (2016). How college affects students: 21st Century evidence that
    higher education works (Vol. 3). Jossey-Bass.

McDonald, K. E., Conroy, N. E., Olick, R. S., & Project ETHICS Expert Panel. (2016). Is it
    worth it? Benefits in research with adults with intellectual disability. *Intellectual and*
    Developmental Disabilities, 54(6), 440-453. https://doi.org/10.1352/1934-9556-54.6.440

McMahon, S. D., Parnes, A. L., Keys, C. B., & Viola, J. J. (2008). School belonging among low-
    income urban youth with disabilities: Testing a theoretical model. *Psychology in the*
    Schools, *45*(5), 387-401.

Miller, S.C., Sax, C. L., & Tucker, M. S. (2019). Examining associations between postsecondary
    education, earnings, and provision of college and university training related to
    individuals with intellectual and developmental disabilities served by vocational
    rehabilitation. *The Journal of Rehabilitation, 85*(1), 22–34.

Mullins, L. & Preyde, M. (2013) The lived experience of students with an invisible
    disability at a Canadian university, Disability & Society, 28:2, 147-160, DOI:
    10.1080/09687599.2012.752127

National Academies of Sciences, Engineering, and Medicine. (2017). *Supporting Students'*

  College Success: The Role of Assessment of Intrapersonal and Interpersonal

  Competencies. Washington, DC: The National Academies Press.

  https://doi.org/10.17226/24697.

National Center for Education Statistics. (2022). Table 105.50. Number of educational

  institutions, by level and control of institution: 2010–11 through 2020–21. U.S.

  Department of Education, Institute of Education Sciences.

  https://nces.ed.gov/programs/digest/d22/tables/dt22_105.50.asp

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and

  practical guidelines. *International Journal of Qualitative Methods*

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health*

  services research, *34*(5 Pt 2), 1189.

Raines, A. R., Francis, G. L., Fujita, M., & Macedonia, A. (2023). Belonging from the

  perspectives of individuals with disabilities: A scoping review. *Psychology in the*

  Schools.

Rainey, K., Dancy, M., Mickelson, R., Stearns, E., & Moller, S. (2018). Race and gender

  differences in how sense of belonging influences decisions to major in STEM.

  International Journal of STEM education, *5*, 1-14.

Ravitch, S. M., & Carl, N. M. (2019). *Qualitative research: Bridging the conceptual, theoretical,*

  and methodological. Sage Publications.

Schroeder, E. T., Carter, E. W., & Simplican, S. C. (2021). First-year orientation programs

  involving undergraduates with intellectual disability: Exploring barriers and belonging.

  Journal of Postsecondary Education and Disability, 34(3), 239-252.

Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences.* Teachers college press.

Slaten, C. D., Ferguson, J. K., Allen, K. A., Brodrick, D. V., & Waters, L. (2016). School belonging: A review of the history, current trends, and future directions. *The Educational and Developmental Psychologist, 33*(1), 1-15. https://doi.org/10.1017/edp.2016.6

Stanford Medicine. (n.d.). *Age-Appropriate Speech and Language Milestones.* https://www.stanfordchildrens.org/en/topic/default?id=age-appropriate-speech-and-language-milestones-90-P02170

Strnadová, I., Johnson, K., & Walmsley, J. (2018). "… but if you're afraid of things, how are you meant to belong?" What belonging means to people with intellectual disabilities?. *Journal of Applied Research in Intellectual Disabilities*, *31*(6), 1091-1102.

ThinkCollege. (2023, 2024). College search. https://thinkcollege.net/college-search

Trevisan, F. (2021). Making focus groups accessible and inclusive for people with communication disabilities: A research note. *Qualitative Research*, *21*(4), 619-627. https://doi.org/10.1177/1468794120941846

U.S. Bureau of Labor Statistics. (2021). Persons with a disability: Labor force characteristics summary. Economics News Release.

Vaccaro, A., Daly-Cano, M., & Newman, B. M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development*, *56*(7), 670-686. Retrieved from: https://digitalcommons.uri.edu/hdf_facpubs/25/

Whirley, M. L., Gilson, C. B., & Gushanas, C. M. (2020). Postsecondary education programs on college campuses supporting adults with intellectual and developmental disabilities in

the literature: A scoping review. *Career Development and Transition for Exceptional Individuals, 43*(4), 195-208. https://doi.org/10.1177/2165143420929655

Willms, J. D. (2000). Monitoring school performance for 'standards-based reform'. *Evaluation & Research in Education*, *14*(3-4), 237-253. https://doi.org/10.1080/09500790008666976

Wilshire, L. B. (2011). The lived experience of physically disabled adults in college [Doctoral dissertation, Grambling State University]. ProQuest Dissertations and Theses Global.

Witwer, A. N., Walton, K., Held, M. K., Rosencrans, M., Cobranchi, C., Fletcher, R., Crane, J., Chapman, R., & Havercamp, S. (2022). A scoping review of psychological interventions, accommodations, and assessments for adults with intellectual disability. *Professional Psychology: Research and Practice*. https://doi.org/10.1037/pro0000474

Wrightslaw. (n.d.). IDEA 2004: What you need to know about IEPs & IEP meetings. https://www.wrightslaw.com/idea/art/template%20idea%202004%20articles.htm