Intellectual and Developmental Disabilities

Friendships Through Inclusive Postsecondary Education Programs: Perspectives of Current and Former Students with IDD
--Manuscript Draft--

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Perspectives of Current and Former Students with IDD

Abstract

The formation of friendships is central to the college experience. Yet little is known about the

relationships young adults with intellectual and developmental disabilities (IDD) form through

their inclusive postsecondary education programs or maintain after graduation. We interviewed

12 current students and alumni about their social networks and their views regarding friendships.

Participants shared their perspectives on the multiple meaning of friendship, the size and

composition of their social networks, and the areas in which college has positively impacted their

social lives. We offer recommendations for research and practice aimed at understanding and

enhancing friendship formation within the inclusive higher education movement.

Keywords: friendship, social networks, post-secondary education, inclusion, intellectual

and developmental disabilities

Friendships and Social Networks of Students and Alumni

of an Inclusive Postsecondary Education Program

College is a thoroughly social endeavor. Whether they are in their classes, internships, student clubs, volunteer experiences, dormitories, or other campus activities, undergraduates spend most of their time in the close company of peers. The friendships young adults form during their college years can be influential (McCabe, 2016). In addition to the enjoyment they bring, peer relationships can provide access to an array of emotional and practical supports, expose students to new perspectives on the world, promote their academic achievement, contribute to a sense of belonging, and facilitate college completion. Indeed, research suggests these relationships are not merely an incidental benefit of the postsecondary experience, but are instead a key factor shaping overall college success (e.g., Bronkema & Bowman, 2019; Pascarella & Terenzini, 2005; Tinto, 1993). Although cost and completion rates dominate most scholarly discussions about postsecondary education, it is the friendships students develop during this time that tend to mark their memories most.

College is an increasingly common pursuit for young adults with intellectual and developmental disabilities (IDD). More than half of high school students with IDD expect to pursue some type of postsecondary education after graduation (Lipscomb et al., 2017). To date, almost 300 inclusive post-secondary education (IPSE) programs have been established at two- and four-year institutions across the United States (Grigal & Papay, 2018). These programs are specifically designed to support the participation of students with IDD in all aspects of the collegiate experience—including coursework, field experiences, part-time jobs, student organizations, campus events, and (when applicable) residential life. Each of these activities is replete with opportunities for meeting, spending time with, and developing friendships with fellow college students. Indeed, the Higher Education Opportunity Act of 2008 emphasized

having students with IDD participate in all of these activities right alongside typically matriculating college students without disabilities.

The new social opportunities introduced through the IPSE movement are especially important for young adults with IDD. Available research describes their social networks as smaller and more fragile than those of their same-age peers without disabilities (e.g., Biggs & Carter, 2017; van Asselt-Goverts et al., 2015). For example, Newman et al. (2011) found that only 58% of young adults with intellectual disability saw friends outside of school or work at least weekly. Likewise, 17% of young adults with IDD (ages 18-22) have no friendships outside of family members or paid staff and 48% sometimes or often felt lonely (National Core Indicators, 2017). Not surprisingly, most IPSE programs have placed special emphasis on facilitating social connections for their students with IDD. This often involves establishing formal avenues through which peers provide individualized support within and beyond the classroom (Carter et al., 2019; Griffin et al., 2016). In addition, students with IDD are encouraged to participate in campus programs and activities that will connect them to peers who share their same interests or backgrounds (Grigal et al., 2019).

Although friendships are a prominent focus of IPSE programs, they have received scant attention in the research literature (Whirley et al., 2020). Several aspects of these peer relationships should be explored further. First, little is known about how young adults with IDD conceptualize friendship. Students will interact with a constellation of people during college— program staff, faculty, staff, co-workers, classmates, teammates, dormmates, family members, and many others. But friendships reflect a distinct form of relationship. For example, conceptualizations of friendship often reference the reciprocity, supportiveness, companionship, commonalities, and enjoyment that characterize these distinct relationships (Bukowski et al., 2020; Sullivan, 1953; Spencer & Pahl, 2006). Knowing how young adults with IDD describe

their friendships would shed light on what makes these relationships unique and personally

significant. Several studies have asked adolescents with IDD about the qualities that comprise a

friendship (e.g., Fulford & Cobigo, 2018). Yet only two studies have focused centrally on young

adults with IDD. In their interviews with seven young adults with IDD (ages 20-24), Hurd et al.

(2019) captured idiosyncratic definitions of friendship that sometimes focused on particular

qualities, shared activities, intimacy, and/or frequency of contact. Through focus groups with 14

students with IDD (ages 18-22), Nasr et al. (2015) identified two overarching features of

friendship—emotional support and companionship.

Second, the social networks of young adults with IDD should be explored. Inclusive

college experiences offer abundant opportunities to meet and get to know similar-age peers. The

extent to which these formal and informal opportunities actually translate into new friendships is

uncertain. In the only study to date, Eisenman and colleagues (2013) used social network

analysis to examine the relationships of 12 college students with IDD and the activities they did

with others. More than a third of relationships were with "authority figures" (e.g., teachers,

supervisors) and 30% were with family members; less than one third of their network comprised

peers (e.g., co-workers, friends, peer mentors). As students graduate from their IPSE programs, it

is unclear whether the friendships they formed maintain beyond the campus. Examining the

social networks of recent program alumni could provide valuable insights into the potential

durability of these networks.

Third, most evaluations of IPSE programs have focused on the employment and

independent living outcomes of students with IDD (e.g., Butler et al., 2016; Moore & Schelling,

2015). The ways in which the college shapes the social lives of young adult with IDD has

received much less attention. High-quality programs invest in the facilitation of social activities

and fostering connections to peers without disabilities (Grigal et al., 2012). Yet the ways in

which those experiences contribute to friendship formation should be explored further. Prohn and colleagues (2019) interviewed 15 peer mentors about the social experiences and outcomes of the students with IDD whom they were paid to support on their campus. They identified ways in which their involvement expanded the breadth of students' social networks, led to new friendships, and strengthened their social-related skills. Current students and alumni with IDD should also be asked for their perspectives on how college has shaped their social outcomes (Carter & McCabe, in press).

The purpose of this qualitative study was to examine the friendships and social networks of college students and alumni with IDD. We addressed three research questions: What does friendship mean to current and former students with IDD? Who comprises the social networks of current and former students with IDD? How do they feel their IPSE experience has contributed to their friendships?

Method

Participants

Participants were 12 young adults with IDD (9 male, 3 female) who were current students ($n = 5$) and alumni ($n = 7$) of a 2-year IPSE program (see Table 1). Participants ranged in age from 19 to 31 years ($M = 24$). Among the five current students, three were in their first year and two were in their second year. Among the seven alumni, three graduated 2 years prior to the study, one graduated 4 years prior, one graduated 5 years prior, and two graduated 5.5 half years prior. To participate in the university's IPSE program, students had to (a) be 18-26 years old, (b) have a diagnosis of an intellectual or developmental disability, (c) have completed high school and received a standard or alternate diploma (i.e., occupational or special education), (d) not met eligibility requirements for admission into a standard college program, and (e) have a strong personal desire to attend college. Although all had cognitive impairments—as confirmed through

the admissions process—they each described their own disabilities in distinct ways (see Table 1).

IPSE Program

This IPSE program was housed at a private, research-intensive university with approximately 6,800 undergraduate students. The undergraduate study body was 51% female and 49% male. Almost half (45%) of the class were students of color, and 8% were international students. The university had offered a non-residential IPSE program since 2010. The program began as a two-year program, but expanded to a four-year Certified Transition Program (CTP) the year the study was conducted. All students accessed academic coursework, career development experiences, student organizations, service-learning experiences, and available campus events. Students audited one or two typical university classes each semester (3-6 hours/week), took three specialized seminars with other students with IDD from the program (3 hours/week), accessed student organizations and extracurriculars, participated in internships and other work-experiences (6-10 hours/week), and enjoyed other campus activities based on their individual interests. Three person-centered planning meetings provided the context for making individualized decisions about each student's college experience. The meetings took place just prior to matriculation and toward the end of each academic year. They involved the student, their family members and friends, IPSE program staff, and anyone else with valuable perspectives.

A peer mentor program provided a formal avenue through which social connections are encouraged across campus (Griffin et al., 2016). Each year, more than 100 undergraduate students provided support in one or more of the following areas of campus life: (a) academic tutoring; (b) daily planning, scheduling, or organizational skills; (c) eating meals together; (d) work or internships; (e) social activities; (f) exercise; and/or (g) campus activities. These peer mentors spent an average of two hours each week supporting one or more students with IDD; each student is connected to a circle of 4-8 peer mentors, depending on their preferences and

support needs. Informally, students also have opportunities to meet other undergraduate students through shared activities that take place as part of their courses, internships, student organizations, and campus events. The peer mentor program was entirely voluntary based on interest; peers received no payment, course credit, or other remuneration.

Recruitment

After receiving approval from the university's institutional review board, the IPSE program director sent a recruitment email to all current students ($n = 12$) and program alumni ($n = 31$). The email included a description of the research study. Print copies of consent and assent forms were then mailed home on behalf of the IPSE director. Signed forms were returned directly to the researchers by mail. In addition, we provided a verbal description of the study to students at a program event.

Data Collection

Individual interviews took place over a two-month period at times selected by each participant. They were completed by the first author, a graduate student studying in the area of special education. All interviews took place in-person at either the student's home or on the university campus (e.g., private office, meeting room) based on the participant's choosing. The first author completed all interviews, which ranged in length from 41 to 82 min ($M = 58$ min). All interviews were audio-recorded. Each participant received a $25 USD gift card.

The research team—comprised of the graduate student and a faculty member with expertise in social relationships and inclusion—developed a semi-structured interview protocol aligned to the research questions. The same protocol was used with current and former students. The interview protocol (available by request) incorporated 28 questions addressing (a) participants' backgrounds, (b) their reasons for enrolling in the IPSE, (c) the meaning of friendship to them (e.g., "Tell me what a friend means to you." "What makes someone a good

friend?"), (d) the importance of different types of relationships to the participants (e.g., "Why are

these people important to you?"), (e) the activities they did with their friends (e.g., "Tell me

about the activities you do with your friends."), (f) the factors that support their friendship, and

(g) how participating in an IPSE program has impacted them socially.

As part of the interview, the participants and interviewer completed a social network

chart based on Biggs and Carter (2017; see Figure 1). The chart depicted four categories of

relationships: *family*, *friends*, *other peers* ("people that you know, but you don't know very well;

they are not very close to you and you wouldn't call them friends"), and *paid supports and*

professionals ("adults who have a job where they are paid to help you like your teachers, job

coaches, and the IPSE staff"). When completing the social network chart, participants were

asked to name aloud the people in their lives who fit into each of the four categories. The

interviewer wrote each name in the corresponding category. When participants paused while

listing people, she asked whether there were more people they would like to add. When

participants said they had too many friends to list, she encouraged them to list as many as

possible. Participants were also asked where they met their *friends* and *other peers*.

Data Analysis

All interview recordings were transcribed, checked for accuracy, and de-identified. We

used a team-based approach to enhance the trustworthiness of our analyses. We coded all

interview transcripts using thematic analysis (Braun & Clark, 2006), as well as adopted a

constant comparison method in which existing codes were frequently compared with previous

uses to ensure consistency (Strauss & Corbin, 2008). The first author independently coded three

interviews by identifying segments of each transcript aligned to our questions and assigning

labels to each segment. Coded segments ranged from one or two sentences to a paragraph or

more. She organized similar labels into an initial set of codes. Next, the faculty member

reviewed the codes and the transcripts. We met to compare and discuss our preliminary codes

and reach consensus on an initial coding framework. The first author coded the next three

interviews using this framework, adding additional codes and revising definitions as needed. We

met again as a team to discuss the revisions and our reflections. Finally, the first author coded the

remaining six interviews. Again, new codes were added as needed and each code was compared

to existing ones to ensure consistency across the transcripts. We met for a final time to discuss

the revised framework to improve its organization and clarity. The first author then revisited all

transcripts using the final framework to ensure all codes had been appropriately assigned.

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

What does Friendship Mean to Young Adults with IDD?

Eight qualities of friendship emerged from our conversations with current and former

students with IDD. For each theme, we provide a description and illustrate with relevant quotes.

Supportive. All twelve participants described a friend as someone who is supportive. For

many participants, to be supportive meant to provide emotional support, especially during hard

times. For example, Jeremiah described a friend as "…someone that's there to help you during a

tough time." He illustrated with an example of emotional support he had received from his

friends, "Like for instance, one of my grandmas passed away last summer and it's been very hard

on me. They'd call me on Facebook or they'd send me a message letting me know—Jeremiah,

it's going to be okay, she's in a better place now." For Connor, emotional support came through

encouragement and showing concern for others. As he described, "A friend, in my opinion, is

somebody who is caring . . . They really want to impact you and just how your everyday life is."

He went on to say, "They keep telling you to reach for the stars, go the distance, and just make

sure that you're happy to be who you are inside." Another supportive aspect of friendships

mentioned was instrumental support. This involved providing help with more tangible, practical

problems as opposed to dealing with abstract emotional situations. As Prisha elaborated, "They help you with your homework, they help you get stuff out of your backpack . . . 'cause that's me with limited mobility."

Compatible. All twelve participants mentioned the importance of compatibility, noting their strong connection with another person and their enjoyment of the relationship. For example, when talking about one friend in particular, Wyatt noted, "He's been like—he's been one of the best friends I've had forever." He also explained the connection that existed between a group of his friends by saying, "We're like the three amigos somehow—which is scary, but still fun." Hadley also emphasized concisely the enjoyment that comes through compatibility, "…I love to hang out with her." According to Prisha, a friend is "someone that immediately starts a conversation with you." She emphasized the ease of engaging with people with whom one shares a strong connection. When describing two of her friends, she continued, "I cannot say enough about these two . . . Being with them is just—it makes me happy and it makes me smile."

Has attractive qualities. Eleven participants described a friend as someone with positive qualities that they find appealing. According to Wyatt, "A friend means that they're good, honest people. And that they don't lie. And they speak the truth." Prisha described a friend as someone who is "loving" and "caring." For Jack, good friends "follow the rules." Each person pointed to somewhat different qualities they considered to be winsome.

Provides companionship. Ten participants described a friend as someone with whom they hang out and do activities. Often, companionship was revealed through examples given by participants of the *discrete* activities that they do with their friends rather than *ongoing*, shared experiences (e.g., participating on the same sports team). Cassidy illustrated this aspect of friendship by explaining, "A friend mean[s] to me having someone to talk with and hang out with and do things with, like go to the mall or the movies." Companionship was also important

to Scott:

> Well, let's see, they're awesome friends because I can talk to 'em almost about anything. I can hang out with them a lot. And just being able to hang out with them and to just enjoy their company and camaraderie of friends.

For Aaron the power of companionship meant "that I'm not alone."

Involved in the same experiences. Nine participants explained that their friends are people with whom they have shared life experiences. Here, participants emphasized an *ongoing* experience shared with a friend as opposed to *discrete* social opportunities (e.g., going out to eat). For example, after stating where she met a friend, Emily reflected on the experiences they had together, stating, "So, we went to some of elementary school together and then we were in Girl Scouts together…." Both Hadley and Noah reflected on how they made friends through their jobs. Hadley reported he had many friends who were co-workers with whom he liked to hang out. Noah explained how he became friends with a specific person, saying, "So, I worked with her for about seven months and we just became really good friends."

Stable. Nine participants emphasized the dimension of durability, describing friends as people with whom they had maintained a relationship for long time. For example, Emily mentioned how a cluster of her friends has "been a tightknit group since we were little." Noah illustrates the stability of friendship when talking about his friend Portia:

> Portia and I, we've been friends for 14 years and she and I go way back so we know each other like that. And just knowing like what her struggles, what her weakness is, and what she struggles on, you know, and knowing her personality, and everything about her, all of her qualities. That really helps me know like, oh, she's still a good friend and, I mean, she knows who I am.

Connor desired stable relationship with some of his new friends when saying, "You know, you just want to keep in touch with the art directors. I mean I consider all of them to be friends."

Similar. Nine participants referred to friends as people with whom you share commonalities such as interests or other characteristics. For example, when explaining why he

was friends with a particular person, Aaron referred to their shared interests, "we like a lot of the same things, like fishing." Participants also addressed common characteristics. For example, Jeremiah described how one of his friends was a "blessing" to him because "he's a Christian friend like I am. We share something in common. We both love the Lord and both want to go to church every Sunday." Noah described such matches as sometimes elusive: "It's hard to find that good match [with] a person that you have [things] in common with, but it's great though."

Like family. Eight participants also described their friends as functioning like family members, mostly brothers and sisters, to emphasize the closeness of these relationships. According to Wyatt, good friends are "part of your life, like your brother or sister and aunts." Some participants described how their friends took on the roles of family members they never had. When describing one of his friends, David said, "Despite I don't have a brother in my family, I, he's my non-biological brother, you know…." When talking about one of his friends, Scott reflected in a more general fashion, "I'm like family to her." In some cases, the reverse was true—actual family members were described as friends. For example, Emily explained, "Randy's my sibling and Christy's my sister-in-law, but I still, I think of them also as friends." Similarly, Connor reflected, "If I have to call anybody my friend, I [would] have to say my mother."

Who Comprises the Social Networks of Students and Alumni with IDD?

In this section, we describe the size and composition of participants' social networks, as well as the places where friends first met and whether those friends had formal roles (e.g., peer mentors within the IPSE program).

Social networks. The social networks of students and alumni were highly variable (see Table 2). The range of total social network size spanned from 15 members to 93 members. On average, the social networks of students and alumni consisted of 47.3 members. The number of *family members* ranged from 3 to 40 people (*Mdn* = 7). The number of *friends* ranged from 7 to

52 people (*Mdn* = 20). The number of *other peers* ranged from 0 to 10 people (*Mdn* = 3). The

number of *paid supports and professionals* ranged from 0 to 14 people (*Mdn* = 5.5). Eighteen

people were placed by a participant in more than one category.

 Where friends were met. Students and alumni met their friends in various contexts (see

vTable 3). Across all of the friends named by participants, 111 met through the IPSE program,

31 met through disability organizations, 28 met through other people, 27 met through a job or

internship, 20 met through some other university event, 19 met through sports activities, 18 met

through Best Buddies, 17 met in multiple places (e.g., one friend was met through IPSE and a

camp experience), 12 met before high school (i.e., pre-K to grade 8), 12 met in high school, 8

were neighbors, and 1 met through a faith community. The remaining 25 friends met in other

miscellaneous contexts (e.g., scouting, on a trip).

 Types of friends met through the IPSE experience. Among those 131 friends who met

through the IPSE and elsewhere on the university campus, almost half (*n* = 56) were formal peer

mentors. Participants identified an average of 4.7 peer mentors as friends (range, 0 to 23).

Another 40 of these friends were fellow students with IDD who were enrolled in the same IPSE

program. Participants identified an average of 3.3 fellow students (range, 0 to 10) as friends.

Finally, 15 of the friends were affiliated in the IPSE program in some other way (e.g., alumni,

staff). Participants identified an average of 1.3 (range, 0 to 7) individuals in these roles as

friends. Only 8 friends were made in participants' inclusive university classes. Participants

identified an average of 0.7 (range, 0 to 2) classmates as friends. Only one participant made

friends (*n* = 2) through clubs or sports on campus. The remaining 10 friends came from

elsewhere on campus (e.g., internships, cafeteria, university staff). Participants identified an

average of 0.8 (range, 0 to 5) other people from campus as friends.

How Has Their IPSE Experience Contributed to Friendship Formation?

Participants attributed several social benefits to their involvement in the IPSE program.

Friendship development. The development of new friendships was a key outcome of their experiences. Every participant mentioned making at least one friend in college. Likewise, each participant befriended at least one IPSE classmate or peer mentor. Some participants reported they also gained new acquaintances, who we categorized as *other peers* in the social network analysis. Although Emily reported making friends with a peer mentor and a student from a university class, she noted that she did not maintain either friendship. Thus, she categorized them as *other peers*. Noah reflected on his experience with friendships in college:

> You know I learned that having friendships, you know, especially when you're in college, is always such a memorable thing. And a lot of people, you know, just like to focus on the schoolwork and they come to college, not wanting to have friends. That they're just here to, you know, take their time for school and focus only on their career I think. For me, I was really lucky that I met Karen and Joanna and all the other undergrad, you know, students. They really educated me well on what, on why having a friendship in school is really important, and that it taught me a lot about how it's a blessing. But it's also, you know, those friendships last a lifetime.

Formal and informal social opportunities. Participants discussed both formal and informal social opportunities they accessed through the IPSE program. Formal opportunities included sessions with their peer mentors, peer mentor group activities, and other events coordinated by the IPSE program. Hadley said the peer mentor program helped him "get a feel of the" program. For informal social opportunities, participants took it upon themselves to reach out to people they met through the IPSE program and they also responded to the initiations of those they met. They reported hanging out, calling, texting, and being Facebook friends, among other informal social opportunities.

Social skills development. Eight participants spoke about the social skills they were taught or incidentally learned throughout their IPSE experience. Some participants learned how to use technology to connect with their friends by learning about tools such as Facebook and

email. Other participants reported learning how to solve problems with their friends. For

example, Aaron said he learned "that you talk it out" when experiencing problems with friends.

Prisha learned to "only text them only once, or call them only once, and not a million times."

Connor explained what he learned about planning activities with others, "Just how to use your

time wisely. You don't want to waste the other person's time. You have to be respectful about

the other person's time limit and what they want to do next."

     Engagement with the greater campus community. The IPSE experience also enhanced

friendships by providing opportunities for greater campus engagement, which increased their

social contacts. This was most often illustrated by participants reporting new relationships or

friendships with classmates from typical university courses or specialized seminars. Other

participants ($n = 4$) noted a more global sense of social support on campus. For example,

according to Wyatt, "[University] students are like your friend. They're there for you." Scott felt

that "just having the camaraderie with my fellow student peers and the peer mentors just helped

me grow from there."

     The IPSE experience also offered the opportunity for participants to be involved in clubs

and sports in the greater campus community. However, only two of the participants reported any

involvement in clubs or sports. Prisha, who had such involvement, discussed how she got to

experience social events related to "Halloween, Christmas, bowling, movies, [and] pizza"

through the Best Buddies student organization. According to Prisha, involvement in Best

Buddies through the university allowed her to get "to know more people, like where they're

from, what their interests are, what they like, what they don't like." Others reflected on how they

would have liked to be involved in such student organizations. Wyatt illustrated this regret by

saying, "I have not taken any clubs. I really wanted to do like the martial arts club. And if I had

to go back and do a club, it would be the martial arts club."

Improved social confidence. Four participants noted they felt more comfortable engaging socially with others as a result of the IPSE program. For example, Aaron explained that he became "more willing to talk to people." Cassidy reflected on her social transformation:

> [University] helped me grow because when I, when I first came into the program, I was kind of shy and quiet-spoken. And when I came here it like my talk, it just had just increase and I kinda like being more independent and I have a lot of friends.

Connecting participants with natural supports through internships. The IPSE experience also connected participants with natural supports through the program's employment internships. Four participants mentioned friendship and social connections through internships. David shared his experience with natural supports during his internship with the IT Department:

> Everybody in there really liked me. They thought I was a really cool dude! The first day I really didn't know any of 'em, but then it's like one of 'em introduce me to the app called Backandforth. They innovate make it stop, start motion. It's like it's, you've got, they introduced me to apps that I didn't know were out there, and like showed me how to do things that I didn't know how to do.

Facilitating previously developed relationships. Three participants knew classmates in the IPSE program prior to their enrollment. The program facilitated continuation of established relationships. For example, David had been friends with a classmate since middle school.

Discussion

Friendships are fundamental to human flourishing. Scores of studies emphasize the contributions satisfying social relationships can make toward mental and physical health (Holt-Lundstad et al., 2010; Santini et al., 2015). Yet these important relationships can be few or fleeting for many young adults with IDD. We examined the meaning and experiences of friendship among current students and alumni of an IPSE program. Our findings extend the literature on inclusive higher education in several important ways.

First, participants provided important insights into what friendship meant to them

personally. Friends were characterized as individuals who are supportive, who provide

companionship, who are compatible, and who have attractive qualities that make getting along

with them easy. Furthermore, they noted that friends are individuals who have had the same life

experiences, who have been an enduring part of their life, are like family members, and share

similarities. Although our study is unique in its focus on the college context, this portrait of

friendship resembles some key themes from a study by Nasr et al. (2015). Young adults enrolled

in a university-based transition program named emotional support and companionship as

components of friendship and referenced friends who were like family. Similarly, a literature

review by Fulford and Cobigo (2016) focused on individuals with intellectual disability (ages 14

and older) who described shared activities, similarities, mutual support, and desirable personality

and physical traits as common characteristics of a friend. Such conceptualizations of friendship

resemble those identified in studies addressing individuals without disabilities (Bukowski et al.,

2020; Spencer & Pahl, 2005). For example, Weiss and Lowenthal (1975) outlined six dimensions

of friendship: similarity, reciprocity, compatibility, structural dimensions (e.g., duration and

proximity), role model, and miscellaneous. These resemble many of the friendship qualities

described by our participants. One point of divergence related to mutuality, which was not very

prominent in the responses of our participants. The similarities between these conceptions

suggest students with and without IDD may be looking for similar qualities in their friendships.

Second, participants reported having fairly large social networks. Current and former

students reported social networks with an average size 27 members (range, 15 to 93). Such

portraits diverge from those described in related studies. For example, Eisenman and colleagues

(2013) reported an average network size of 22 (range, 10 to 52) among college students with

IDD. Van Asselt-Goverts and colleagues (2015) reported that individuals with intellectual

disability had an average social network size of 14 and individuals with autism spectrum disorder

had an average social network size of 11. Forrester-Jones and colleagues (2006) found that

middle-aged adults with mild to moderate intellectual disability had between 3 and 51 social

network members. These variations could be attributed to differences in samples, measurement,

or other factors. Regardless, they prompt important questions about how whether and how the

social networks of students with IDD are impacted by their involvement in college. Future

comparative and longitudinal research are needed to examine the real impact of IPSE in this area

of friendship formation.

Third, IPSE may be a catalyst for friendship development. College provided a context in

which every participant met at least one friend, and often multiple friends. In addition to

fostering these new friendships, participants reported that they learned new social skills and

gained social confidence as a result of participating in the IPSE program. Although the social

dimensions of schooling are emphasized less often as academic and career outcomes, this may

represent a third area of impact that warrants a much closer look. As with inclusive education in

K-12 schools, academic and social outcomes should be seen as companion rather than competing

priorities (Carter, 2018). We were somewhat surprised, however, by how few friendships were

said to have originated within inclusive university courses (i.e., just 8 of 131). This may be

because students take just 1-2 typical courses each semester (compared to 4-5 for undergraduate

students without intellectual disability) or because most did not have formalized peer support

arrangements within these classes. Moreover, because students do not formally "major" in a

particular discipline, they do not take a common set of courses with a consistent set of

schoolmates. IPSE programs should consider how their course-taking practices and supports

might impact the development of friendships for students with intellectual disability.

Limitations and Future Research

Future research should address several limitations of this study. First, participants were

recruited from a single higher education institution. Because each IPSE program is unique in its program structure, the campus on which it is housed, and available resources, the young adults participating in these programs may have different experiences and perspectives than students on other campuses. Future studies should recruit participants from multiple different IPSE programs and explore the contributions of context to students' social networks. Furthermore, it will be important to examine whether young adults with IDD who experience IPSE have different views and opportunities than young adults with IDD who take another pathway after high school.

Second, we did not collect diagnostic and assessment information related to current and former students. Instead, we relied on program entry criteria to categorize students as having IDD and incorporated students' self-descriptions of their disabilities. Although it was not our focus in this study, comparing the perspectives of individuals with varying diagnoses and levels of support needs could lead to a better understanding of differences in perspectives of friendship within groups of young adults who have attended an IPSE program.

Third, we only conducted interviews with young adults who could communicate verbally. Future research should include young adults who use augmentative and alternative forms of communication. Furthermore, researchers could adopt participatory action research methodologies to gain a better understanding of the experiences of friendship of young adults in IPSE programs. For example, participants could share videos or photographs as a way of speaking to friendships and their importance.

Fourth, friendships involve more than one person. We only captured the perspectives of students and alumni with IDD to the omission of those individuals who were nominated as friends. Future research should solicit the perspectives of all parties to better understand whether these views are reciprocated. For example, peer mentors nominated as friends could be asked about their relationship with their fellow college students with IDD. In addition, we did not ask

participants about their satisfaction with each of the relationships they identified or their overall social network size and composition.

Implications for Practice

We present suggestions for how IPSE program staff could support the friendships of current and former students, how young adults with IDD can establish and maintain friendships, and the role of parents and service providers in facilitating the friendships.

IPSE program staff. Our findings suggest that IPSE experiences may contribute to the development of new friendships among students with and without IDD. However, efforts should be made to expand the range of individuals on campus with whom students with IDD might develop these friendships. Participants had few friendships beyond fellow students with IDD or peers who volunteered as formal supports. Likewise, few relationships developed among classmates in inclusive courses or with other students from campus organizations. IPSE programs should focus on supporting access to those campus activities that are identified as interesting or important to students. Most campuses are replete with opportunities to connect with other students on the basis of shared interests or common backgrounds. For example, the university where this study took place offered more than 350 student organizations. Similarly, efforts could be made to connect students with and without IDD in college courses using collaborative groups, peer support arrangements, or other peer-mediated approaches (Christopher-Allen et al., 2017).

One way the IPSE program in this study connected the participants with other university students was through a formal peer mentor program. Although many IPSE programs have established similar programs, not all do (Grigal et al., 2019). Developing a formal peer mentor program expands the social opportunities and supports available to students. At the same time, IPSE programs should identify ways of engaging other students who may not have the time or

inclination to serve as a peer mentor. Ideas include creating an inclusive student organization, developing inclusive service-learning projects (Manikas et al., 2018), or hosting an inclusive study abroad program (Prohn et al., 2015).

Some alumni noted that they no longer spent time with the friends they had made in the IPSE program. The transition to life after graduation can lead to the loss of established connections. This may be especially true when a university attracts students from all across the country (who then leave the area of graduation), but IPSE students are primarily local. IPSE programs should prepare students with the skills and strategies needed to maintain their new friendships over time. For example, IPSE staff could teach students to find relevant social experiences and activities within their communities. This may involve undertaking a community mapping process focused on social opportunities. Many participants also identified transportation as a barrier to sustaining friendships. IPSE programs should teach students to use available transportation options or arrange alternatives. Even when transportation is limited, students can learn how to bridge the distance through calls, texts, video chat, and social media. IPSE staff should teach their students about how to use these technologies effectively and wisely.

Young adults with IDD. Some participants said they developed greater social confidence through their college experience. Students with IDD should take advantage of the formal and informal social opportunities introduced through IPSE program. For example, they can have lunch with fellow classmates instead of eating alone. They can also pursue involvement in interesting clubs, teams, or other student organizations that align with their interests. Students may need guidance on how to identify relevant groups and take the necessary steps to join them. They may also benefit from pursuing new skills and knowledge that would strengthen their social competence and enhance the quality of their interactions. This might include building skills related to social and communication skills, self-determination, and technology use (e.g.,

Caton & Chapman, 2016; Getzel & Thoma, 2008). Students must play an active—indeed

leading—role in pursuing peer relationships during the college years.

Alumni who are no longer part of an IPSE program should get involved with different

experiences in the community to make new friends. For example, some participants mentioned

being part of Special Olympics, Best Buddies, or other specialized programs that had a social

focus. Most communities are replete with affinity groups, service and civic clubs, congregations,

recreation activities, and community-wide events. Alumni—independently or with support from

others—should learn strategies for finding and connecting with others (see Amado, 2013).

Websites, apps, and social media provide avenues for learning about these groups and activities.

In general, adults with IDD should be proactive and take the initiative needed to contact others

and set up activities, especially if others are not reaching out to them.

Families and adult service providers. Families and adult service providers (e.g.,

residential staff, personal care assistants) can be instrumental in the area of fostering

relationships. A prominent barrier to relationships was transportation. Families and service

providers can help individuals with IDD arrange transportation to social events. Another

suggestion from participants in relation to transportation challenges was to teach individuals to

use ride-shares safely. Families and service organizations can also help adults with IDD

overcome the transportation barrier by helping them to plan and host social events in their home

such as poker or movie nights. It could be that providing access to a collaborative group of

individuals fostered the development of friendships in participants. Parents and adult service

providers can help adults with IDD to identify interesting social opportunities in the community

It is important that the experience be collaborative so that the adult with IDD is not simply in the

vicinity of other people, but involved and engaged with them.

Conclusion

Social relationships can contribute substantially to our thriving. This study illustrates the ways in which young adults with IDD characterize their current friendships, the extent to which they experience friendships during and after college, and the ways in which their college experience shaped those friendships. We hope these findings will encourage further reflection on the relationships students with IDD develop during their time in college and spur additional efforts to encourage and support enduring friendships that extend beyond college graduation.

References

Amado, A. N. (2013). *Friends: Connecting people with disabilities and community members*. University of Minnesota, Institute on Community Integration.

Biggs, E. E., & Carter, E. W. (2017). *Supporting the social lives of students with intellectual disability.* In M. L. Wehmeyer and K. A. Shogren (Eds.), *Handbook of research-based practices for educating students with intellectual disability* (pp. 235-254)*.* Routledge.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Bronkema, R. H., & Bowman, N. A. (2019). Close campus friendships and college student success. *Journal of College Student Retention: Research, Theory, & Practice, 21*(3), 270-285. https://doi.org/10.1177/1521025117704200

Bukowski, W. M., Laursen, B., & Rubin, K. H. (Eds.) (2020). *Handbook of peer interaction, relationships, and groups* (2nd ed.). Guilford Press.

Butler, L. N., Sheppard-Jones, K., Whaley, B., Harrison, B., & Osness, M. (2016). Does participation in higher education make a difference in life outcomes for students with intellectual disability? *Journal of Vocational Rehabilitation, 44*(3)*,* 295-298. https://doi.org/10.3233/JVR-160804

Carter, E. W. (2018). Supporting the social lives of secondary students with severe disabilities:

Critical elements for effective intervention. *Journal of Emotional and Behavioral Disorders, 26*(1)*,* 52-61. https://doi.org/10.1177/1063426617739253

Carter, E. W., Gustafson, J. R., Mackay, M. M., Martin, K., Parlsey, M., Graves, J., Day, T., McCabe, L., Lazarz, H., McMillan, E., Beeson, T., Schiro-Geist, C., Williams, M., & 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. (in press). Perspectives of peers within the inclusive postsecondary education movement: A systematic review. *Behavior Modification*.

Caton, S., & Chapman, M. (2016). The use of social media and people with intellectual disability: A systematic review and thematic analysis. *Journal of Intellectual & Developmental Disability, 41*(2), 125-139. https://doi.org/10.3109/13668250.2016.1153052

Christopher-Allen, A., Hunter, W., Brown, S., Carter, E. W., & Schiro-Geist, C. (2017). Utilizing peer-mediated instruction within post-secondary classrooms. *Journal of Forensic Vocational Analysis, 17*(1)*,* 27-36.

Eisenman, L. T., Farley-Ripple, E., Culnane, M., & Freedman, B. (2013). Rethinking social network for students with intellectual disabilities (ID) in postsecondary education. *Journal of Postsecondary Education and Disability, 26*(4), 367-384.

Forrester-Jones, R., Carpenter, J., Coolen-Schrijner, P., Cambridge, P., Beecham, J., Hallam, A., Knapp, M. & Wolff, D. (2006). The social networks of people with intellectual disability living in the community 12 years after resettlement from long-stay hospitals. *Journal of Applied Research in Intellectual Disabilities, 19*(4), 285-295. https://doi.org/10.1111/j.1468-3148.2006.00263.x

Fulford, C., & Cobigo, V. (2016). Friendships and intimate relationships among people with

    intellectual disabilities: A thematic synthesis. *Journal of Applied Research in Intellectual*

    Disabilities, 31(1), 98-105. https://doi.org/10.1111/jar.12312

Getzel, E. E., & Thoma, C. A. (2008). Experiences of college students with disabilities and the

    importance of self-determination in higher education settings. *Career Development for*

    Exceptional Individuals, 31(2), 77-84. https://doi.org/10.1177/0885728808317658

Griffin, M. M., Wendel, K., Day, T. L., & McMillan, E. (2016). Developing peer supports for

    college students with intellectual and developmental disabilities. *Journal of*

    Postsecondary Education and Disability, *29*(3), 263-269.

Grigal, M., Hart, D., Papay, C., Smith, F., Domin, D., & Lazo, R. (2019). *Year four annual*

    report of the TPSID model demonstration projects. Institute for Community Inclusion.

Grigal, M., Hart, D., & Weir, C. (2012). *Think College standards, quality indicators, and*

    benchmarks for inclusive higher education. Institute for Community Inclusion.

Grigal, M., & Papay, C. (2018). The promise of postsecondary education for students with

    intellectual disability. *New Directions for Adult & Continuing Education, 2018*(160), 77-

    88. https://doi.org/10.1002/ace.20301

Higher Education Opportunity Act of 2008, 20 U.S.C. § 1001 *et seq*. (2008).

Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A

    meta-analytic review. *PLoS Medicine, 7*(7), e1000316.

    https://doi.org/10.1371/journal.pmed.1000316

Hurd, C., Evans, C., & Renwick, R. (2018). "Having friends is like having marshmallows":

    Perspectives of transition-aged youths with intellectual and developmental disabilities on

    friendship. *Journal of Applied Research in Intellectual Disabilities, 31,* 1186-1196.

    https://doi.org/10.1111/jar.12493

Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., & Thurlow, M. L. (2017). *Preparing for life after high school: The characteristics and experiences of youth in special education* (Vol. 2). U. S. Department of Education.

Manikas, A., Carter, E. W., & Bumble, J. L. (2018). Inclusive community service among college students with and without intellectual disability: A pilot study. *Journal of Postsecondary Education and Disability, 31*(3)*,* 225-238.

McCabe, J. M. (2016). *Connecting in college: How friendship networks matter for academic and social success*. University of Chicago Press.

Moore, E. J., & Schelling, A. (2015). Postsecondary inclusion for individuals with an intellectual disability and its effects on employment. *Journal of Intellectual Disabilities, 19(2),* 130-148. https://doi.org/10.1177/1744629514564448

Nasr, M., Cranston-Gingras, A., & Jang, S. (2015). Friendship experiences of participants in a university based transition program. *International Journal of Whole Schooling, 11*(2), 1-15.

National Core Indicators. (2017). *Chart generator 2016-17*. Available at www.nationalcoreindicators.org

Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., & Wei, X. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school.* SRI International.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students*: *A third decade of research*. Jossey-Bass.

Prohn, S. M., Kelley, K. R., & Westling, D. L. (2015). Studying abroad inclusively: Reflections by college students with and without intellectual disability. *Journal of Intellectual Disabilities*, *20*(4), 341-353. https://doi.org/10.1177/1744629515617050

Santini, Z., Koyanagi, A., Tyrovolas, S., Mason, C., & Haro, J. (2015). The association between

social relationships and depression: A systematic review. *Journal of Affective Disorders, 175*, 53-65. https://doi.org/10.1016/j.jad.2014.12.049

Spencer, L., & Pahl, R. (2006). *Rethinking friendship: Hidden solidarities today*. Princeton.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage.

Sullivan, H.S. (1953). *The interpersonal theory of psychiatry*. Norton.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). University of Chicago Press.

van Asselt-Goverts, A.E., Embregts, P. J., C, M., Hendriks, A. H., C., Wegman, K. M., & Teunisse, J. P. (2015). Do social networks differ? Comparison of the social networks of people with intellectual disabilities, people with autism spectrum disorders and other people living in the community. *Journal of Autism and Developmental Disorders, 45*, 1191-1203. https://doi.org/10.1007/s10803-014-2279-3

Weiss., L., & Lowenthal, M. F. (1975). Life-course perspectives on friendship. In Lowenthal, M. F., Thurnher, M., & Chiriboga, D. (Eds.), *Four stages of life: A comparative study of women and men facing transitions* (pp. 48-61). Jossey-Bass.

Whirley, M., Gilson, C., & Gushanas, C. (2020). Postsecondary education programs on college campuses supporting adults with intellectual/developmental disabilities: A scoping review. *Career Development and Transition for Exceptional Individuals, 43*(4), 195-208. https://doi.org/10.1177/2165143420929655

Table 1
Participant Demographics

Pseudonym	Age	Sex	Race	Status	Self-description of disability
Connor	19	Male	White	First-year student	"Nothing to be dissapoitent [sic] of."
David	20	Male	White	First-year student	"Staying focused for long periods of time."
Prisha	20	Female	Asian	First-year student	"CP- limited transportation issues"
Jack	21	Male	White	Second-year student	Did not provide description
Jeremiah	20	Male	Black	Second-year student	"Autism," "Asperger's Syndrome"
Cassidy	23	Female	White	Graduated 2 years ago	"Unique"
Hadley	26	Male	White	Graduated 2 years ago	"I tend to ask questions frequently to help remind me."
Wyatt	29	Male	White	Graduated 4 years ago	"Left handed"
Scott	31	Male	White	Graduated 5 years ago	"Learning disability and I stutter."
Emily	29	Female	White	Graduated 5.5 years ago	"Mild cerebral palsy"
Aaron	29	Male	White	Graduated 5.5 years ago	"Hard to focus with a lot going on."
Noah	24	Male	White	Graduated 2 years ago	"Very mild"

Table 2
Social Networks of Current Students and Alumni

Pseudonym	Family	Friends	Other peers	Paid supports and professionals	Multiple	Total
Current students						
Connor	40	10	5	4	1	59
David	8	11	0	7	0	26
Prisha	29	38	5	14	0	86
Jack	3	39	0	9	3	51
Jeremiah	7	14	0	3	0	24
Alumni						
Cassidy	3	10	4	6	0	23
Hadley	7	8	5	5	0	25
Wyatt	33	52	2	6	5	93
Scott	5	28	1	0	1	34
Emily	6	7	2	0	3	15
Aaron	4	52	4	4	1	64
Noah	18	26	10	14	4	68

Note. The Multiple category is composed of the number of social network members who were categorized within more than one category. In this situation, the social network member was counted as only part of the category where they fit best, unless otherwise specified by the participant, and in the Multiple category. The Multiple category was not counted towards the total of the social network.

Table 3

Where Current Students and Alumni with IDD Reported Meeting their Friends

Pseudonym	Before high school	High school	Neighbor-hood	Work or internship	Faith community	Sports	Disability organi-zations	Best Buddies	IPSE	University	Through others	Multiple	Other
Connor	X	-	-	-	-	-	-	-	X	-	-	-	X
David	X	-	X	-	-	-	-	-	X	X	-	-	X
Prisha	-	X	-	X	-	-	X	X	X	X	X	X	X
Jack	-	-	-	X	-	-	-	X	X	X	-	X	-
Jeremiah	-	-	-	-	-	-	-	-	X	X	X	-	-
Cassidy	-	-	-	-	-	-	-	-	X	X	-	-	-
Hadley	-	-	-	X	X	-	-	-	X	-	-	-	X
Wyatt	-	-	-	X	-	X	X	-	X	X	X	X	X
Scott	-	X	-	X	-	-	-	X	X	X	X	X	X
Emily	X	-	X	-	-	X	-	-	-	-	X	X	X
Aaron	X	-	X	-	-	X	X	X	X	X	X	X	-
Noah	X	X	-	X	-	-	-	X	X	X	X	-	X

IPSE = Inclusive postsecondary education program.

Note. Emily reported making friends through the IPSE and the university while she was an IPSE student, but she did not maintain those friendships.
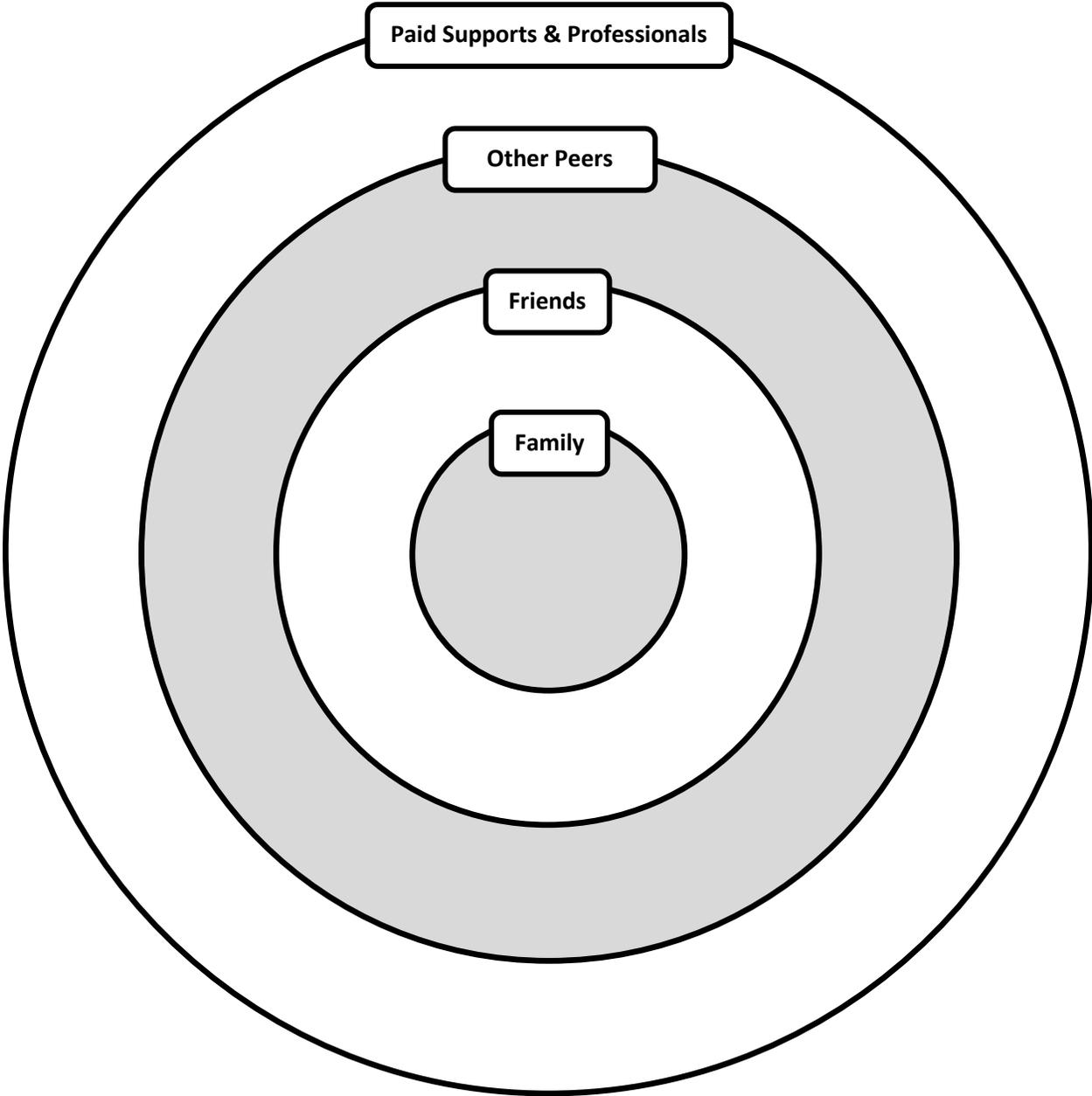
Figure 1. *Social network chart used during individual interviews.*

December 22, 2020

Dear Dr. Hewitt,

Thank you for your review of our manuscript, "Friendships Through Inclusive Postsecondary Education Programs: Perspectives of Current and Former Students with IDD." We appreciate the constructive feedback provided by the two reviewers. We detail below the changes we made related to each point raised by each reviewer. We have also emailed you a version showing all changes tracked in case it is easier to identify the specific changes.

EDITOR

In addition to responding to each of the reviewer requests, we also carefully edited the manuscript to improve clarity and update references.

REVIEWER #1

1. The reviewer asked that we say more about the preparation of peer mentors and their status as paid or unpaid in their role.

This is a great question, as the status of peer mentors varies widely across inclusive higher education programs. We have clarified on page 7 that serving as a "peer mentor" was a voluntary role for which students were not paid, nor did they receive any other type of remuneration (e.g., credit).

2. The reviewer suggested that we add more discussion about the very low levels of reported friendships made in courses with matriculated students.

We have done so on page 18. It is hard to situate this finding, as there is no literature on the specific settings in which college students without disabilities make friends. On a residential campus like ours, friendships may be more likely to be sparked within dorms, student organizations and campus activities, and through existing personal networks than through courses. We have clarified that our program is not categorized as "specialized" but rather as "mixed" or "inclusive." Students take courses alongside any other university student. The seminars offered by the program are 1hr week seminars and are supplemental to—rather than in lieu of—standard course offerings.

REVIEWER #2

1. The reviewer recommended that we address more fully the importance of friendships in achieving other significant PSE outcome.

We agree this is a point worth emphasizing and have revised our introduction (page 2) to make sure such findings come across more clearly.

2. The reviewer suggested we give more attention to prior conceptual work related to friendship in the introduction.

The history of work in the area of friendship formation and conceptualization is quite long and large. We have incorporated on page 3 a few seminal citations to point readers to this work and highlights some of the key themes within these prior conceptualizations of friendship. We cite these again on page 17.

3. The reviewer asked that we put more emphasis on the skills and knowledge students should develop that might help foster friendship formation.

We have made this addition to pages 21-22.

Minor Points:

4. The reviewer suggested revising the abstract, noting that the paper does not focus heavily on the ways in which friendships were maintained after graduation.

We have edited the abstract (page 1) to keep our focus primarily on friendship formation during college.

5. The reviewer identified a sentence that was awkwardly worded.

We improved this sentence on page 6 and clarified the timing of these meetings.

6. The reviewer wondered whether we could say more about how conceptualizations of friendships related to the students' college experiences.

As the reviewer assumes, there is not much more we can say here beyond the data we have already reported.