Students With and Without Disabilities Using Social Media: Relationship Benefits and Implications for Education

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ABSTRACT

A pandemic in 2020 resulted in economic and social disruption of unprecedented scale. Social distancing — or physical distancing while in public spaces — was required, and social media usage spiked globally as people turned to these online spaces for information and connection. Today's postsecondary students, in

particular, are frequently immersed in social media; it can offer them social supports, such as a greater sense of belonging during times of transition and crisis, but also inherent risks, including cyberbullying and online harassment. Although many studies have examined the social connections or supports for learning that college students *without* disabilities experience by using social media, few studies have explored these phenomena among college students *with* disabilities, including neurodevelopmental disabilities such as autism, attention deficit hyperactivity disorder or anxiety disorders (e.g., social anxiety) that make socialization difficult for these young adults. It is important that educational research advances understanding of the socialization experiences of these students with disabilities because students' sense of belonging and peer support is critical to their engagement and success in K-12 and postsecondary schooling.

Introduction

In the spring of 2020, the COVID-19 global health emergency resulted in economic, social, and educational disruption of unprecedented scale (Greenhow, Lewin et al., 2020). The requirement of social distancing — or physical distancing — while in public spaces resulted in a spike in social media usage globally as people turned to these online spaces for information and connection (Koeze & Popper, 2020). *Social media* have been defined as Web 2.0 Internet-based applications that feature user-generated content, profiles for the site or app created by users, and the facilitation and development of online social networks by connecting a user's profile with those of other individuals or groups within the system (Obar & Wildman, 2015). Today's young people in particular are frequently immersed in social media (Perrin & Anderson, 2019; Auxier & Anderson, 2021); it can offer them social supports, such as a greater sense of belonging during times of transition and crisis (Greenhow & Burton, 2011; Ellison et al., 2007; Williams, 2019), but also inherent risks, including cyberbullying and online harassment (Kraut et al., 2002; Whittaker & Kowalski, 2015).

Youth (ages 13-17) and young adults (ages 18-25) with disabilities may be especially vulnerable to the effects of social media. A small but growing research base has reported that youth with disabilities experience high rates of cyberbullying. A recent study of over 20,000 high school students with and without

disabilities found that almost one third of students with disabilities (30%) had experienced cyberbullying within the past year, compared with 20% of those without disabilities (Fuxman et al., 2019). Students with disabilities were 1.8 times more likely than peers without disabilities to be victims of cyberbullying, when controlling for grade, gender, and race (Fuxman et al., 2019). Moreover, 45% of cyberbullying victims with disabilities experienced depression, 38% reporting suicidality, whereas 31% of victims without disabilities experienced depression, 23% reporting suicidality (Fuxman et al., 2019).

Despite these negative effects, young adults with disabilities are also more likely to report that they receive social support via social media (38% versus 28% of those without disabilities; Fuxman et al., 2019). These young adults might reap extensive benefits from the social support they can gain by connecting with others online and overcoming the social isolation they often experience in community settings (Petrina et al., 2014). Young adults with disabilities that have co-occurring social challenges (e.g., autism spectrum disorder (ASD), social anxiety, attention deficit hyperactivity disorder [ADHD]) may find social media particularly beneficial; they may perceive online interactions less threatening, as it allows them to hide their anxiety symptoms and social deficits and to regulate the frequency, duration, and time lag of communication (Andersson et al., 2015; Caplan, 2007; Carruthers et al., 2019; Gillespie-Lynch et al., 2014; Roth & Gillis, 2015). Unfortunately, the majority of the research on social media use and young adults with disabilities has focused on the negative effects of social media, largely ignoring the potential benefits it may provide. It is also not known whether there are important *differences* between the experiences of young adults with and without disabilities in how they use social media and how they perceive its impact on their social relationships.

Just as social media has been associated with social benefits (e.g., social capital benefits, or the sense of belonging and/or supportive information resources derived from one's social networks) (Liu et al., 2016; Simons et al., 2021; Williams, 2019) among typically developing high school students (Greenhow & Burton, 2011) and college-age students (Ellison et al., 2007), it may have similar benefits for young adults with disabilities. While current research on social media and social capital has focused on young adults *without* disabilities, it is not clear whether the benefits

of social media identified in the literature are evidenced among young adults with disabilities. It is also not known whether there are important *differences* between the experiences of young adults with and without disabilities in how they use social media and how they perceive its impacts on their social relationships. This exploratory study seeks to address these gaps in the literature.

In-depth understanding of the differences in social media use and its impact for young adults with and without disabilities could help us not only improve services as teachers, counselors, and other professionals who help young adults leverage their everyday technologies-in use, but also, it could help us improve digital equity, a condition in which all individuals and communities have the information technology capacity needed for full participation in society (Infrastructure Investment and Jobs Act, 2021). For instance, understanding different learners' experiences with social media could help college faculty, special education professionals, and counselors not only consider using social media to create more welcoming and supportive learning environments but also how they might play a role in building individual learner's capacity for positive digital participation. Moreover, given the rapid shift to social distancing and remote education during the 2020-2021 COVID-19 pandemic (Greenhow, Lewin et al., 2020; Greenhow & Chapman, 2020; Greenhow & Galvin, 2020), and the growth in online learning that preceded it (Greenhow et al., 2022), it will be important for us as educators moving forward to determine whether social media could benefit young adults with disabilities in their social relationships. Thus, in this qualitative case study, we sought to explore two questions: (1) What is the nature of social media use among college undergraduates with and without disabilities? and (2) How do these young adult undergraduates with and without disabilities perceive their use of social media impacting their relationships? The ubiquity of social media in society has expanded education foundation scholars' notions of how, when, where and with whom people learn, including the formal and informal learning catalyzed in peer-to-peer (Greenhow, Galvin et al., 2020; Trust et al., 2020; Trust et al., 2017) and learner-educator networked connections within social media spaces (Greenhow & Lewin, 2016; Lewin & McNicol, 2014; Siemens, 2005); answers to the research questions above will help us as scholars and teachers critically evaluate the possibilities and challenges to integrating social media in educational contexts.

Next, we present theoretical perspectives and relevant literature that helped inform this research.

Theoretical Framework

Social capital refers to *resources* or *benefits* available to people through their social interactions (Lin, 1999). Social capital can be construed as: resources embedded in the social structure; accessibility to such resources; and use or mobilization of such social resources by individuals in purposive actions (Lin, 1999). This notion of social capital emphasizes the importance of developing a network (Lin, 1999). Research has typically focused on two broad types of social capital: *bridging* capital derived from weak ties ("friends of friends") that afford us diverse perspectives and new information and *bonding* capital derived from strong ties ("the shoulder to cry on") that comes from our close friends and family (Putnam, 2000). The social, informational, or material resources a pair exchanges characterizes their *tie* (Granovetter, 1973). Researchers have found a strong association between various forms of social capital and measures of psychological well-being, such as satisfaction with life (Bargh et al., 2002; Helliwell & Putnam, 2004; Morrow, 1999); however, Dika and Singh (2002) cautioned that the complex nature and directionality of these relationships are difficult to discern from the limited research.

Related Literature on Social Capital and Social Media

Valenzuela et al. (2009) and others (Liu et al., 2016; Williams, 2019) have argued that social media such as Facebook promote the accumulation of social capital through: 1) interpersonal feedback channels and peer acceptance; 2) status update features (e.g., "News Feed") which reinforce existing ties and communities by fulfilling users' need-to-know about their contacts; and 3) prominently featured personal profiling which help to increase individuals' knowledge of other members, fostering norms of reciprocity and trust. Ellison and colleagues (2007) investigated this proposition among college undergraduates (*n* = 286) and found that intensive use of Facebook was associated with higher levels of *bridging* capital, and to a lesser extent, *bonding* capital. Greenhow & Burton (2011) replicated Ellison et al.'s study

with high school students (n=607) and similarly found that intensity of online social networking was associated with higher levels of both types of social capital, well-being, and life satisfaction.

Several studies have confirmed that interpersonal interaction on social media, time spent, and frequency of social media use are positively associated with bridging and bonding social capital (Jang & Dworkin, 2014; Lin, 2015; Zhong, 2014). For example, Valkenburg et al. (2006) showed that positive responses or feedback from others through social media made adolescents (ages 10-19) feel happier and have a sense of self-esteem; social media users tended to optimize their profiles to show better images and to interact with diverse people. Ellison et al. (2007) indicated that college students with lower levels of life satisfaction were likely to pursue involvement in interpersonal networks via social media in an effort to improve their psychological status. Communication or interaction with various people on social media was found to improve individuals' emotional status, which can be directly linked to their quality of life (Liu et al., 2015). Mao (2014), in studying high school students, emphasized the potential for more active learning through social media communications, where students "can interact with information, people, and their environment" (p. 219; Greenhow et al., 2019; 2015) rather than only passively absorbing information. Furthermore, students' social capital benefits derived through social media may also benefit them with respect to educational outcomes. In their literature review, Dika and Singh (2002) reported that students who have a greater sense of social belonging (i.e., social capital) tended to persist more in schooling and graduate at higher rates.

Social Media Use Among College Students

According to national surveys of typical adults, college-aged young people (ages 18-29) are among the heaviest users of social media with 84% using at least one social media platform (Auxier & Anderson, 2021). Social media have been widely adopted for personal, social, and professional purposes (Rauniar et al., 2014). Today's university students especially have grown up in a digital environment (Adams et al., 2018). Social media has been extremely popular among this demographic, becoming embedded in everyday activities and influencing aspects of

their personal and professional lives in the myriad ways that they use it (Sanderson et al., 2015). For instance, personal relationship building is a primary use of social media among typical college students, and this engagement with platforms can shape students' social well-being and adjustment to college life. Various studies by Yang et al. have identified three main communicative purposes and influences on social well-being among college students using social media: (1) *directed interaction,* which is communication with specific people; (2) *information broadcasting*, which involves sharing content to a general audience; and (3) *content consumption*, or passively browsing social media pages (Yang, 2016; Yang & Lee, 2018; Yang & Robinson, 2018; Yang, 2022). These activities range from strengthening personal bonds with fellow students on platforms like Facebook and Instagram to forming professional connections on LinkedIn (Tess, 2013; Vorderer et al., 2016).

In addition to these forms of communication with peers and online communities, social media has become an important communication platform for student learning, a trend that has developed both apart from and in response to student social media use (Greenhow, Galvin et al., 2020; Liao et al., 2015; Tess, 2013). Holotescu & Grosseck (2011) identified potential uses and benefits for social media in education such as personalized learning, collaboration, peer-to-peer support, and portfolio development. A study by Liao et al. (2015), for instance, found that teams of college-age learners (ages 20-29 years old) who used social media for a collaborative learning activity had more interactions with peers and increased learning intention and perceived playfulness from the competitive nature of the activity. Through these interactions students (ages 18 and older) learn public writing and digital literacy skills through practical application (Greenhow et al., 2009; Greenhow & Robelia, 2009a; 2009b; Greenhow et al., 2015; 2021; Greenhow, Galvin et al, 2020). Eijkman (2008) similarly described social media as "non-foundational network-centric learning spaces" (p. 93) that afford collective knowledge construction across diverse global networks.

The use of social media in education can also create a community of practice among students in the same classroom or other learning context, creating opportunities for situated learning (Hung & Yuen, 2010; Tess, 2013). For example, social media

can facilitate creating and sharing knowledge among people with similar goals and attitudes (Panahi et al., 2012; Wahlroos, 2010) and can generate alternative views and new ideas in online communities (Eteläpelto et al., 2008), as social interactions are important for transferring knowledge among individuals (Polanyi, 1967). Informal learning opportunities (i.e., learning with social media outside of a formal course or classroom environment), increased engagement, and integration of learning content with real-world applications are additional ways that social media can supplement traditional learning experiences (Greenhow & Lewin, 2016; Tess, 2013).

Some studies have demonstrated how social media platforms can improve student academic achievement and outcomes both in and out of the classroom (Sulaiman et al., 2015; Eid & Al-Jabri, 2016). Social connections through social media appear to be positively associated with academic performance in many instances. For instance, Sulaiman et al. (2015) found a significant positive correlation between students' general Facebook usage and their academic success, and higher Facebook usage was tied to higher measures of social acceptance from peers. Social media can increase interaction, knowledge-sharing, and enjoyment surrounding learning content, and can be an indicator of increased classroom engagement and performance (Eid & Al-Jabri, 2016). There is also evidence that social media is most impactful when students perceive the related activity they are participating in as useful to their academic success (Chang et al., 2015; Orús et al., 2016). For example, Chang et al. (2015) found that students' perceptions of how well Facebook helped their academic achievement was a significant factor in their enthusiasm and motivation to continue using the platform. In Orus et al. (2016), students who participated in creating and sharing YouTube videos demonstrated "higher levels of cross-curricular competencies and a better academic performance" (p. 265) than those who did not use social media for the assignment. The social relationships that students form through social media assignments also have significance for academic success. Junco et al. (2011) documented Twitter as a facilitator of richer discourse and increased engagement that allowed for deeper insights on class discussion topics than if discussions had been limited to class time only. Students who participated in the Twitter discussions also reported forging stronger bonds with their peers through the platform.

The significance of social media for relationship building and a source of social capital is documented in several studies. The public and private-facing natures of social media create space for scenarios that "can complicate or enhance relationships in both work and personal life" (Abril et al., 2012; Cistulli & Snyder, 2022, p. 35). These dynamics are influenced by the easy access of networking technologies like social media at all hours, resulting in the experience of being constantly connected.

Given the social capital-enhancing and educational potential of social media use, it is important for educators and researchers to understand how *all* students — including college students without disabilities and those with disabilities that have co-occurring social challenges (ASD, social anxiety, ADHD) — are using social media and what benefits, if any, they experience from such use. The complexities of social media interaction warrant more attention to how students situated in different life experiences use these platforms. Therefore, this qualitative case study explored: (1) the nature of social media use among young adults with and without disabilities? and (2) How young adults with and without disabilities perceive their use of social media impacting their relationships.

Methods

The qualitative findings reported here are part of a larger effort to describe and explore the relationship between social media use, social capital, and psychological well-being among college undergraduates with and without disabilities. In the fall of 2021, we conducted a survey of the social media use, social capital, and psychological well-being of college undergraduate students at U.S. institutions. Following approval by our institution's human subjects review board, invitations were sent to organizations to request assistance in disseminating the survey via email, listserv, and social media postings to recruit potential participants. Examples of organizations included: Association on Higher Education and Disability, American Association of Blacks in Higher Education, American Association of Community Colleges, and disability offices on college campuses. Potential participants were then directed to an online survey via Qualtrics and asked to read an informed consent, followed by completing a demographic questionnaire and the set of measures. The survey took approximately 20−30

minutes. The survey asked students about the nature of their social media use and its relationship to social capital and psychological well-being. 147 students responded to our survey, the results of which are being reported elsewhere. Participants were between 18 and 25 years old, of all genders and ethnic backgrounds, and either with or without disabilities. For participants with disabilities, survey questions focused on those who experience social challenges (e.g., ASD, social anxiety, ADHD).

Next, we were interested in conducting case studies of a smaller sample drawn from this larger survey effort (Yin, 2014). From the survey results, we identified a purposeful sample of college undergraduates from each of the groups in which we were interested: students without disabilities and students with disabilities. For instance, from the survey results we identified a purposeful sample of five undergraduates with disabilities. We first emailed survey respondents who had provided their email, indicating their interest in participating in a follow-up interview. Because we were interested in adults who may experience communication differences, we focused on those participants who reported autism, anxiety, attention-deficit and/or hyperactivity disorder (ADHD). We also sought variation in participants' year in college and the degree to which they used social media (e.g., heavy: 5−7+ hours per day; moderate: 2−4 hours per day). Of the 15 eligible survey respondents who had provided their email, eight responded with interest. From these we selected five individuals with disabilities who represented a range of ages and social media uses and seemed most likely to generate data in answer to our research questions. Similarly, from the survey results we identified a purposeful sample of five undergraduates without disabilities. Of the 28 eligible survey respondents who had provided their email, seven responded with interest. From these we again sought variation in their year in college and the degree to which they used social media (e.g., heavy: 5−7+ hours per day; moderate: 2−4 hours per day; light: 1 hour or less per day); we also tried to match people with and without disabilities who have similar characteristics (e.g., similarities in social media use intensity, gender, etc.). After piloting the interview protocols in the summer of 2021, we conducted semi-structured interviews with five students with disabilities and five students without disabilities in the winter of 2021. Interviews lasted 45−60 minutes, were conducted via Zoom videoconferencing and recorded.

In accordance with our research questions, we sought to learn more about young adults' purposes and practices in using social media and how, if at all, they perceived their primary social media use as impacting their relationships. As mentioned in our theoretical framework, studies of college students without disabilities have shown that interpersonal interaction on social media, time spent, and frequency of social media use are positively associated with various forms of social capital, or the resources or benefits available to people through their social relationships (Jang & Dworkin, 2014; Lin, 2015; Zhong, 2014). Research has typically focused on two broad types of social capital: *bridging* capital derived from weak ties ("friends of friends") that afford us diverse perspectives and new information and *bonding* capital derived from strong ties ("the shoulder to cry on") that comes from our close friends and family (Putnam, 2000). Therefore, we asked students interview questions such as: thinking about the past week, what social media platforms did you use, if any? What did you use [name of platform] for? What would you say is your main or dominant social media to use? Can you tell me about your interactions with people on [your dominant] social media? Whom do you mainly interact with? Why? Do you think these interactions help your relationships in any ways? Do you think these interactions hurt your relationships in any ways? Interviews were recorded, transcribed verbatim, and analyzed using inductive and deductive coding by the first author and a graduate student.

Descriptive coding, or "topic coding" (Saldana, 2016, p. 102) was used to assign meaning to what was being talked about in the transcripts (e.g., "resources" was a code assigned when students talked about using social media to find resources for curricular or professional purposes). We also used *process coding,* or "action coding" (Saldana, 2016, p. 111) to capture conceptual action (e.g., "coping," "staying updated," "learning new things" were some of the codes used to capture students' social media processes). We attended especially to our participants' descriptions of socializing and relational uses of social media and their characterizations of its impact on their relationships. We sought to identify themes within our two focal area (i.e., nature of use, perceptions of relationship impact) to develop an understanding of the participants' experiences. To help ensure trustworthiness, peer review was conducted to ensure that the analysis was not confined to one perspective (Saldana, 2016; Tracy, 2016; Yardley, 2015).

Findings

We first introduce each of our ten cases before turning to cross-case analysis of within-group themes and cross-case comparison. An overview of our participants *without* disabilities can be found in Table 1. An overview of our participants *with* disabilities can be found in Table 2. Due to space constraints, we do not provide a write-up of each individual case, but rather use the table displays to present a snapshot of each individual student, their age, year in school, frequency of social media use and the platforms they use.

TABLE 1. PARTICIPANTS WITHOUT DISABILITIES

Name *pseudonym	Age	School Year	Social Media Use	Hours/Day of Social Media Use	Platforms
Henna *they/them (non-binary)*	18	First year	Heavy	5–7	TikTok Snapchat Instagram Twitter Facebook Pinterest
Ellen *she/her (female)*	21	Fourth year	Moderate	2–3	SnapChat Instagram Pinterest
Malorie *she/her (female)*	20	Third year	Heavy	5–7	Instagram YouTube Snapchat Facebook

Sam she/her (female)	23	Fifth year	Light	30–60 minutes/day	Instagram Snapchat
Jude she/her (female)	21	Second year	Heavy	5–7	Twitter Snapchat Instagram

TABLE 2. PARTICIPANTS WITH DISABILITIES

Name *pseudonym	Age	School Year	Disability	Social Media Use	Hours/ Day of Social Media Use	Platforms
Shawn they/them (non-binary)	19	Second year	Generalized Anxiety Disorder and Dyslexia	Heavy	5–7	TikTok Discord Instagram YouTube Snapchat Facebook
Clara she/her (female)	21	Fourth year	Generalized Anxiety Disorder and Dyslexia	Moderate	2–3	TikTok Instagram Pinterest LinkedIn
Joan she/her (female)	19	Second year	Generalized Anxiety Disorder	Heavy	7–10	TikTok Instagram Pinterest

			and Major Depressive Disorder			YouTube
Viola *they/them* (non-binary)	25	Fourth year	Generalized Anxiety Disorder and ADHD	Moderate	1−2	Instagram Twitter Facebook Tumblr
Denise *she/her* (female)	19	Second year	Anxiety Disorder and ADHD	Heavy	5−7	Instagram TikTok YouTube

Nature of Social Media Use Among Undergraduates Without and With Disabilities

College undergraduates from both groups were similar in their multidimensional usage of various types of social media, expressing different purposes for using different platforms. However, their preferred platforms and aims varied by group.

Students without disabilities

Young people *without* disabilities mentioned using multiple platforms in their everyday lives (e.g., 3.6 platforms on average were utilized in this group, range 2−6). Students frequented a variety of social media but mainly Snapchat (five users) and Instagram (five users); YouTube, Twitter, TikTok, Pinterest, and Facebook were also mentioned by at least one person. When asked their purposes for using social media, these undergraduates remarked on having different purposes depending on the platform. For example, Snapchat, tied with Instagram for the most adopted platform, and was used mainly to communicate and interact with friends and others. Students reported communicating through text, videos, pictures and emojis on Snapchat (e.g., to friends, family, acquaintances) to "keep in

touch" with people they knew. The following quote from Henna is particularly representative:

> [Snapchat] it's kind of an in-between; it's not quite like a phone call, where I feel like a lot of people in this generation, they're taken aback by getting a random phone call. So, it's kind of like a nice in-between where you can send a picture to someone of what you're doing or a video, instead of calling them on the phone. And it's a little more than a text… (Henna)

Instagram, also adopted by everyone in this group, was used for scrolling people's stories and pictures to "stay up to date" on their lives. Most users emphasized that they did not actively post to Instagram, but passively scrolled others' content. The following comment from Sam was particularly representative in explaining students' purposes on Instagram:

> I mainly interact [on Instagram] with people that I know personally…I have a lot of family members all over in different states, so I like to interact with them via social media…And also…friends that I've met. But really, my interactions are with people that I've met in the last five years. So not necessarily high school, but more post high school friends. I'll look at people's pictures from high school, but I won't really message them or anything. (Sam)

Twitter, used by two students, facilitated keeping up with popular culture, as Henna explained: "I really like [singer-songwriter-actor] Harry Styles, so any updates on him is what I use it for." Twitter also assisted with community building. For instance, Jude's preferred social media was Twitter; she belonged to a group chat whose norms helped grow her online social network —e.g., members agreed to follow all other members and to like, retweet, comment or share their tweets. When she had school-related deadlines, Jude posted her struggles or goals in the Twitter group and got support: …on [Twitter]…I might say class today was tough. I just had a 10-page final, and I easily sent out five tweets about this 10-page final alone. I was just like, oh my goodness, I'm going to do two pages per day. It's hard

but I'm going to do it...it'll [the tweet] probably get anywhere from...30 to 40 likes...And if I'm talking about school or something, they're also in school. So then they might like my tweet, and they might comment "hang in there" or something. (Jude)

She also layered her communication across platforms (e.g., "some of the people [in the Twitter group chat] are cool and I'll add them on Snapchat").

To summarize, these college undergraduates used social media for communicating with friends, family, and others they knew, for scrolling content created by people in their social network, or for staying up on popular culture or topics that interested them. In the case of one student, Jude, the public Twitter stream was used for active community building, strengthening connections with high school friends or strangers she had met online, and layering communication with people across platforms (e.g., Twitter and Snapchat).

Students with disabilities

Among young people *with* disabilities, each undergraduate mentioned using multiple platforms in their everyday lives (e.g., 4.2 platforms on average, range: 3– 6). Students *with* disabilities used a variety of social media, the most used were Instagram (five users), TikTok (four users) and YouTube (three users). In addition, Facebook, Discord, Twitter, Pinterest, LinkedIn, Tumblr, and Snapchat were used by at least one person. When asked their purposes for using social media, students remarked on having different aims depending on the platform. First, Instagram, was frequented by all students with disabilities and the preferred platform for two students (Viola and Denise). Undergraduates with disabilities used Instagram to communicate and interact with friends, family, friends of friends, including over geographic distances, and as Denise put it, with: "content creators, or pages that I like to see." The following quotes were particularly representative:

I'm pretty active on Instagram...I post my own stories...my own pictures, look at people I follow. I watch their lives...people can join the live and see them in that current moment, what they're doing...I mainly interact with

my friends on Instagram, mostly because we just share a lot of the same interests. Like if it's hair videos or memes or anything, I can send it to them or they'll send me stuff, knowing like, "Oh yeah, she'll like this." (Denise)

[On Instagram] I mainly interact with my friends in the music scene. I enjoy liking their posts, commenting on their posts to get the engagement for the algorithm for them…[and] also going through stories, and interacting with people that way, too… it's like an easy way to just start a conversation, let someone know that you're thinking of them, and that you miss them. (Viola)

Instagram is…more personal, because I follow people I actually know. I don't let people who I don't know follow me…So just catching up with family because I live away from home at college…I see what my family's up to and my friends from high school. (Joan)

Second, all but one student with disabilities was active on TikTok; it was the dominant social media preferred by three students (Shawn, Clara, Joan). Students used TikTok for scrolling and watching videos, to share humour or uplifting videos with friends and family, to cultivate a professional learning network (e.g., getting ideas for lesson plans for one teacher-in-training), to watch promotional videos from a group or organization related to their interests, or to post videos as part of a "cosplay" community. These quotes demonstrate the range of purposes:

I have an account that I post on… regularly. I'm a cosplayer [costume play] so I dress up as fictional characters and make videos…there's a whole community. It's mainly anime characters, and the idea is you make videos in character just to the audios. Other times, I'll… film silly videos that are…me in makeup…jamming along to songs…I get a ring light and I film. It's a three-to-three-and-a-half-hour process. Sometimes I go to… anime conventions, where…a lot of people are [dressed up] and you can all take pictures together. It's not everything I watch but that's obviously my main base of people I follow…. we're all pretty friendly with each other. (Shawn)

Every day, I'm...going through TikTok. My "For You" page is so curated. I'm on mid-size teacher fashion TikTok. I'm on special education teacher TikTok...it's [the] most accessible way to get information...I was on TikTok looking at lesson plan ideas and ideas for fine motor skills... I guess literally if I'm stumped on anything, I know I can go on TikTok, and someone will have some kind of answer. (Clara)

...I have a couple people I follow... A couple body positive influencers, or people I think are funny. So sometimes I'll see if they posted anything. I have a friend who I was really good friends with in high school...who lives in my neighborhood, but we go to different colleges. We don't see each other. So, we'll send each other videos we think are funny. Or I'll show the videos I find to my siblings, or my parents. (Joan)

Interestingly, Clara also discussed the accessibility of TikTok for persons with disabilities:

You don't think about how much social media really is just curated for a specific able-bodied audience and TikTok has a bunch of different speak-to-texts.... They add subtitles; you can even edit your subtitles. [TikTok] has content for a wide variety of people... It definitely has connected a lot of people in a lot of different ways. (Clara)

Third, YouTube was used by three students mainly to watch movies, listen to music, learn from tutorials or watch "YouTube influencers" and content creators, as Denise expressed: "[On YouTube] I use it to watch content creators, just to keep up with them, their lifestyle and what they're doing, or I watch tutorials or movies." One student, Shawn, also mentioned actively posting "little videos when I want to show my friends things [I'm] recording."

In looking across the two groups, all students used social media daily, were multi-platform users, and varied their social media use depending on their purposes and audience. However, students with disabilities used more social media on a regular basis (10 platforms) compared to students without disabilities (7 platforms) and for

a wider range of activities (e.g., communicating with people they knew and did not know, passive scrolling and active contribution, sharing humour, collaborative play, professional learning, finding accessible content, informal learning, and more). Students without disabilities mainly used Snapchat and Instagram as their dominant platforms compared to students with disabilities who mainly used Instagram and TikTok.

Impact of Social Media on Relationships

Students without disabilities

Students *without* disabilities were divided in their perceptions of how their social media use impacted their relationships. For instance, two students, Malorie and Ellen, did not think using social media helped or hindered their relationships. As Ellen put it: "Because the interactions weren't formed initially on Snapchat [her dominant social media] ... if I were to delete Snapchat, I think most of these people...would still be in my life."

On the other hand, three students felt that using social media helped their relationships in various ways by: (1) making it easier to communicate; (2) seeding relationships that would not form otherwise; or (3) helping maintain relationships. First, two students commented that social media made it "easier to communicate when you don't have to do something face to face, especially ...something negative or potentially uncomfortable." Henna elaborated further that the visual aspects of social media facilitated experience-sharing: "I can share my experiences through social media with people on...campus...if there weren't pictures, it would be a lot harder to show what you're doing." Similarly, Sam explained that it was easier to communicate via social media with others you do not typically see in person or with whom you are not especially close:

> It's the easiest way. And I don't see them in person...it's the family that I'm not super close to... I don't really want to call them...I know that they're doing okay but I don't have to worry about actually having that conversation with them. (Sam)

Second, two students emphasized that social media helped seed relationships that would not have formed otherwise:

> We didn't have a relationship before. She had a bunch of videos, and I kept commenting on them, and she would like my comment and reply to it. Then, I DMed [direct messaged] her, and then we talked back and forth and kept sending each other TikToks. It helped me form that relationship that I wouldn't have otherwise formed if [Tik Tok] didn't exist. (Henna)

Jude also recounted meeting someone through her public Twitter group chat, which was generally people she did not know in-person, and added this person to her Snapchat, which she typically reserved for friends she knows, like high school friends. Third, all three students mentioned that social media helped them to maintain relationships (e.g., reconnecting with people they had not seen in a while, staying connected to the life experiences of on-campus peers if they were off campus, or bonding over shared content like something funny). The excerpts below illustrate these themes:

> ...there are people that I have been able to either reconnect with, that I haven't seen in years, and we have been able to...see each other through Instagram again and then come back into each other's lives. Or other people...like my friends that are on campus and I'm here [not on campus], we do stay up to date with each other on [Instagram]...so I feel like we maintain our friendship through that. (Sam)

> Usually it's just we send pictures back and forth to each other that have text on them. We talk about stuff that's just going on in our college lives because we haven't seen each other in so long. (Henna)

> We might bond over the same tweet...So we might laugh together or there's this one thing that just went viral...And everybody's making parodies... So, I made a group chat... it was me and then two of my friends from high school...and I was like, y'all have to look at these...I'm about to send y'all 20 tweets. Just please watch all of them. (Jude)

However, one undergraduate, Henna, pointed out that whether or not social media helps or hurts relationships can depend on the social media content and whether it is understood, or the meaning of the post is "misconstrued:"

> If the message [on Snapchat] seems aggressive and they don't mean it to be aggressive, a lot of things can get misconstrued. I think it's just something that you have to be careful about and fully explain your intent with your words (Henna).

Students with disabilities

Among students *with* disabilities, all five undergraduates felt that using social media helped their relationships in three main ways: (1) connecting through entertainment, humour or memes; (2) expanding their community; (3) helping manage their disability through connecting with others with that disability or learning from experts (psychiatrists, medical professionals) about coping strategies.

First, undergraduates with disabilities discussed using social media for social entertainment, shared humour or memes, which helped them connect with people. For instance, Shawn explained that the social media, Discord, was "really helpful" in facilitating membership in their college's anime club:

> I think [Discord is] really helpful in college... because Discord has these fun things called bots, you can do a bunch of fun stuff with them. Like in the [Discord group for] anime club, there's one where you can roll and pretend you're playing Pokémon or there's a game where you try to guess the screenshot from the anime or they have something that's called like the character roulette where 10 times an hour, you can get characters. (Shawn)

Other undergraduates with disabilities discussed using social media for connecting with others through sharing humour or memes:

Laughing together is always fun...there are certain trends or funny things that are happening that are kind of an inside joke for everyone using the app. So, I can mention something to my friend who I've never shown the video to and she knows what I'm talking about because she's also on TikTok. So I think it can help with kind of having this universal inside joke. (Joan)

I will send funny things, funny TikToks or interesting things to my friends or my sister... just entertainment...we send really cute things of cats or hamsters, or funny things or tattoos that we like. (Clara)

Yes, [practices on Instagram] do [help relationships] because we can share like memes with each other. And when we see each other in person, we'll talk about it in class...my sister and I, we always send each other memes. And just yesterday we were just talking about a meme that we saw, and we were just laughing about it for like a long time. So yeah, it just helps us to stay connected. (Denise)

...I think with sharing a funny picture on my [Instagram] story...helps, especially going through a pandemic, and being so isolated...it was very difficult to adjust. Now that the world may or may not be getting back open soon, who knows, it's just a nice way do to just stay in contact with friends, and especially just because I know that the past couple of years have been so difficult on so many of us, that it's just like a, hey, I miss you. I'm thinking of you. I want to hang out, let's plan something, type of thing... just a way to stay engaged with everyone. (Viola)

Second, undergraduates with disabilities discussed using social media for expanding their community. As Clara put it: "On TikTok...when people address important things, I feel like I'm learning and like I'm a part of a community because you are following like-minded people." Similarly, Joan, who described herself as "reserved" discussed how social media help expand her social connections:

Socially, I would say it probably connects me to more people because typically I'm more reserved. I just have my couple of friends, my boyfriend, and then my family, just a few family members that I talk to on a daily basis. So, it helps me to talk more so and connect more so to people safely. (Joan)

Denise also felt that social media like Instagram helped expand her community "because I've been able to connect with a lot of people, people that I wouldn't normally talk to." She further explained that "the friends that I've made so far this semester have been through Instagram. So, if it wasn't for Instagram, I probably wouldn't be talking to those people." She gave an example of getting to know someone through mutual sharing of songs they liked, which progressed to direct messaging, conversations about other things, and hanging out. Similarly, Shawn commented that Discord allowed them "to be able to connect with people, so many people" as they explained:

It's wonderful to be able to meet people with similar experiences to mine because some of the illnesses I have are rare...So it's really hard to connect with people who have these illnesses, but it's wonderful to be able to do that online (Shawn).

Viola talked about using Instagram to expand her network. She started a music business and used Instagram to connect "up-and-coming artists with whatever they need" (e.g., make connections to audio engineers, videographers, photographers, doing recordings, marketing and promoting):

I look through artist stories that we follow, musicians, videographers, photographers, seeing if there is anything up-and-coming in the local scene, and things that I should know about, events that I could help with sponsoring...with my personal, I like to follow meme accounts, therapy accounts...with really insightful information on self-help...self-care...I also follow a lot of social advocacy groups...(Viola)..

Third, all five undergraduates with disabilities discussed using social media for social support around their disability. Viola, for instance, talked about sharing

"funny counseling memes" on Instagram: "[Instagram] just helps further staying engaged, and especially with all the stress that we're all in...we're able to share funny counseling memes to each other and everything, just to lighten the mood and everything." Clara talked about connecting to medical professionals via TikTok: "I was diagnosed with ADHD before it was cool when I was in elementary school and I'm now learning things from psychiatrists on TikTok and getting accompanied with the medical professionals I'm already seeing to help with that." Similarly, Joan, Shawn and Denise discussed using social media for social support around their disability:

> Like on Instagram, I was able to see some of my...friends who also struggle with anxiety, depression, post about it, and uplifting quotes. And so now... If I find a quote I like on Instagram about mental illness, I'll post about it. Because I think it helps me be able to break that stigma within my circle and feel comfortable telling people, "Yes, I struggle with this." And it's not embarrassing. In fact, I think it's helped me overcome that personal stigma of having mental illnesses. Because we are getting better at not having as much stigma, but it still is hard to admit that you struggle with that. (Joan)

> I'm part of some support groups for some of the illnesses I have...There's channels discussing things like medication, where people can ask questions, where people talk about their experiences, people share resources. Part of it is just to be able to socialize with people who can understand. A part of it is to get specific advice on the issues we're having. (Shawn)

> ...with me having this learning disability, to be able to connect with her [someone with the same learning disability], because I did reach out to her, I was telling her like, "I really liked your article. It was well written. I liked the steps that you gave." (Denise)

In looking across the two groups, all students with disabilities, and the majority of students without disabilities, felt that social media helped seed or maintain relationships. However, perceptions of *how* exactly social media facilitated relationships varied between groups. Students without disabilities mainly

emphasized that social media allowed them to "reconnect" or "maintain" or help manage conflict in *existing* relationships in situations. Students *with* disabilities talked more about using social media to *start* and *grow* relationships (e.g., having fun or engaging in play with others online, expanding their community, building relationships through shared humour or memes). They also perceived social media as media through which they could manage, or learn to cope with, or find others struggling with the same disability. In short, students with disabilities were more unequivocal in their beliefs that social media positively impacted their relationships whereas students without disabilities had mixed views.

Discussion and Implications

In this qualitative study, we found that students with disabilities used more platforms, for a wider range of purposes and their perceptions that social media benefited their relationships were unequivocal compared to students without disabilities. Considering social capital theory in light of these qualitative findings, it appears that for both student groups, social media seemed to facilitate students' accumulation of social capital, including bonding social capital (i.e., close ties with family and friends), as well as bridging social capital (i.e., those weak ties that can afford diverse perspectives and new information) (Lin, 1999). Moreover, both groups of college students mentioned keeping in touch with people they already knew via social media, including siblings or high school friends who may be living in other states. Ellison et al. (2007) referred to this "keeping in touch" as *maintained social capital*, that is social capital created when individuals maintain connections to social networks through life changes (e.g., like going off to college).

On the other hand, a difference between the student groups was that students with disabilities talked more about using social media to initiate and grow relationships than did students without disabilities. Steinfield et al. (2008) argued that interactions through social media platforms may help students to crystallize relationships that "might otherwise remain ephemeral" (p. 25), or as one student with anxiety disorder and ADHD put it: "if it wasn't for Instagram, I probably wouldn't be talking to those people." Initiating, developing, and sustaining weaker relationships (e.g., like turning strangers into friends or new contacts into social supports) via social media may be particularly important to these students with

disabilities for whom in-person socialization is challenging. Ellison et al. (2007) and Greenhow & Burton (2011) found that social media affordances may help reduce obstacles college students without disabilities experience in forming the kinds of large, varied networks that are sources of bridging capital (e.g., new information, diverse perspectives, advice in times of crisis or transition). These findings align with our results regarding students with disabilities; students with disabilities were active posters on social media and used it to gather diverse perspectives on their disability (e.g., from others with that disability) or new information (e.g., from medical professionals or support groups).

One limitation of this research is the potential social desirability bias in reporting social media use and social capital, or the tendency of respondents to answer questions in a manner that will be viewed favourably by the researchers (Krumpal, 2013). Thus, participants may have under-reported undesirable behaviours and over-reported perceived desirable behaviours. In addition, our sample of five participants included only females and non-binary people, which is a limitation. Moreover, with such a small sample and an exploratory qualitative approach we can only strive for petite generalization (Stake, 1995), or generalization about the activities or processes of a few individuals studied in-depth to similar individuals in similar contexts.

This in-depth, qualitative report provides insights to educators considering how social media might advance connectedness and relationships among similar college undergraduates – including those with disabilities and co-occurring social challenges. We know that students who have social capital tend to persist and do better in education than their less connected peers (Dika & Singh, 2002) and that social connections through social media have been positively associated with academic performance (Eid & Al-Jabri, 2016; Sulaiman et al., 2015). Social media can play an effective role in the college learning environment, as both an important space for socializing and social support as well as an effective tool for *inclusive* learning — that values and supports students of all backgrounds and identities — across formal and informal learning contexts (Greenhow & Lewin, 2016; Greenhow & Robelia, 2009b). For instance, an estimated 8–14% of students with disabilities have enrolled in higher education in the United States and United Kingdom (Sachs

& Schreuer, 2011), and that number has been rising (Kent, 2015). Today, higher education typically involves some type of *online learning*, or learning that involves interactions that are mediated through the use of digital technology (Greenhow et al., 2022). In 2018, a quarter of surveyed higher education institutions reported that more than half their courses were online, either partially or fully online (Garrett et al., 2019). For college students with disabilities, learning that involves an online component can increase self-determination and a sense of agency (Dobransky and Hargittai, 2006) as well as more control over the self-disclosure of their disability (Kent, 2015). However, a problem for institutions that strive for inclusive learning with an online component is that college students with disabilities report that commonly used teaching tools for formal online learning (e.g., the Blackboard learning management system) are less accessible than are social media platforms they frequent, like Facebook, Twitter, and YouTube (Kent, 2018). Furthermore, social capital, which helps students develop a sense of belonging to the course community (Dika & Singh, 2002), has been shown as especially important but harder to achieve in formal online learning environments, like Blackboard learning management systems, compared to more informal social media platforms (Greenhow et al., 2022; Kent, 2015).

Therefore, as educators who strive for more inclusive education, we ought to consider the online learning environment beyond the structure of the individual course to include a broader digital campus that includes social media (e.g., Facebook, Instagram, YouTube, Tik Tok, and X/formerly Twitter), where students and staff could expand the learning and socializing environment in higher education (Kent, 2015). As our findings suggest, social media can broaden educational possibilities for college students with and without disabilities; social media can add a new dimension to the learning and knowledge process by blurring the boundaries of formal and informal learning and by facilitating varied types of social connections, which are key to students' sense of belonging online (Greennow et al., 2022). For the college students with disabilities in this study, using social media to initiate and grow relationships was particularly important (e.g., expanding community, crystallizing relationships that may not have developed otherwise, building connections through shared interests). However, students without disabilities can also benefit from personal and professional network

building. Thus, we as educators might consider how to facilitate some of these connections for all students, either in or around our courses. For instance, social media can help facilitate personalized learning environments (PLEs) (Dabbagh et al., 2012). PLEs can "integrate formal and informal learning in higher education contexts" (p. 4), as well as allowing for more collaboration and coordination of resources across the full spectrum of technologies used in the learning process. Therefore, we might model and discuss with our students how to use social media for PLEs, connecting them to experts and peers beyond their college classrooms.

Moreover, we might set up collaborative learning environments on social media where students can have a personal profile and create and interact with the content of their classmates. Studies have shown that university students can have positive attitudes toward collaborative learning on social media because it gives them a more involved experience and motivates them to participate in learning activities (Manca & Ranieri., 2016). Contrary to some speculation, more social media use is not a predictor of lower academic performance, as student GPAs do not have a linear relationship with frequency of use (Alwagait et al., 2015). In another example of collaborative learning with social media, Fernandez (2021) argued that instructors who strive to be more inclusive should take a more critical look at their students' overall experiences and facilitate "digital collaborative making" (p. 1376) to make space for disabled and non-disabled students to "dwell [together] with disability" (p. 1386). In digital collaborative making, students collaborate on multimedia video projects, involving social media to critique the social and cultural impact of digital media on their lives. For instance, in one project involving the image-sharing platform, Instagram, Irene, a student with an undisclosed disability, and two non-disabled female classmates examined the ways digital representation of people's lives on social media might differ from their actual life in reality (Fernandez, 2021). The researcher writes of the collaboration:

> ...through Irene's eyes [in the video] we come to visualize and experience the possibility of hacking a digital social media profile with the construction of a physical Instagram profile. But despite the visibility of her editorial role in the project, Irene's undisclosed disability remains invisible throughout the video, as is the case in real life. This tension between visibility and

invisibility is significant, as persons with non-apparent disabilities often have to contend with public skepticism towards their experience and their calls for greater access to resources that can support their learning needs. By "dwelling" with disability and the presence of different identities and lived experiences among the group members, the group's video foregrounds the tension surrounding the digital representations of disability on social media... the collaborative process of making a performance video presents Irene and her group members, Vivian and Margot, with an opportunity to "dwell with disability" while learning about their experiences with social media (Fernandez, 2021, p. 1386).

In addition, general social media use by instructors, even for personal reasons, may create better learning environments. Students see social influence and social relations as the primary value of social media (Sánchez et al., 2014); instructors can leverage the social dimension of these media to enhance the learning experience. For instance, research on instructor self-disclosure—revealing information about themselves—via social media has been found to make students feel more motivated and improve affective learning and class climate in one study, indicating that social media platforms can be a means of building rapport (Mazer et al., 2007).

That said, we as educators must maintain a critical stance when integrating social media into instructional strategies. For instance, instructors should consider and navigate the ethical and legal issues surrounding self-disclosure. Safe and effective use of social media in education requires that educators maintain awareness of concerns for their own privacy, as they are "facing increased scrutiny of their private lives as a result of social media, which may blur the lines between their public and private lives" (Eckes, 2013, p. 8). Furthermore, professors who reveal an excessive amount of personal information in online platforms risk crossing professional boundaries and facing ethical and legal issues regarding sharing personal content with students (Greenhow et al., 2021). Warnick et al. (2016) documented several types of social media sharing that can result in negative consequences for educators and students. Examples include posts that "reflect badly on their professional judgment" (p. 772), reveal that they are "doing

something illegal or egregiously reckless" (p. 773), or "give uncomfortable or unwelcome attention to students" (p. 773).

On the other hand, critically reflective teachers can leverage the social dimension of social media in ways that make the learning and socializing environment more inclusive for students. Taking into account their individual student's experiences and needs, instructors can model how to use social media for participation in society. Educators have modelled productive interactions on X (formerly Twitter) with local policy makers (e.g., Chapman & Greenhow, 2021) or published authors (e.g., Greenhow et al., 2023) and demonstrated writing strategies (e.g., Marich et al., 2021). Educators have also shared their own professional learning with students during the pandemic (e.g., Greenhow et al., 2023), a form of productive self-disclosure that models the use of social media for self-directed learning purposes. In addition, scholars have recently generated more research-informed guidance to help educators consider the pedagogical possibilities of integrating social media while navigating the ethical and legal concerns (e.g., Krutka et al., 2019; Akgun & Greenhow, 2022).

Most importantly, it is time to include more research on young adults with disabilities in the scholarly and practical discourse surrounding social media in education. By doing so, we have the potential to increase social connectedness and better ensure academic success for more students. While the negative effects of social media, such as cyberbullying, are well documented (e.g., Fuxman et al., 2019), future research should focus on the potential benefits that social media can offer to students with disabilities. This includes how social media platforms can be systematically utilized to enhance both academic and social integration, foster a sense of belonging to the course- or campus community, and facilitate peer support (Caton & Chapman, 2016). Studies could investigate the role of specific social media features (e.g., groups, messaging, live sessions) in providing academic support, fostering peer-to-peer learning, building inclusive online communities that support both academic and personal development (Gao et al., 2023). Understanding the potential effects could provide valuable insights for educators and policymakers.

Future research may also focus on designing, implementing, and evaluating social media-based interventions aimed at improving social connections and support for students with disabilities. These interventions could include peer mentoring programs, online support groups, and digital storytelling projects (Moreno & D'Angelo, 2019). Studies should evaluate the effectiveness of these interventions in enhancing social capital, reducing feelings of isolation, and improving academic outcomes. Understanding these can inform the development of interventions and support mechanisms that leverage social media to enhance social inclusion and academic success for students with disabilities.

More comparative studies are needed to explore the differences in social media use patterns and their impact on social connections between students with and without disabilities (Alfredsson Ågren et al., 2020). Additionally, comparative studies that examine social media students with different types of disabilities (e.g., physical disabilities, neurodevelopmental disabilities, psychosocial disabilities) compared to their non-disabled peers are essential. Such research can help identify unique challenges and opportunities that social media presents for students with disabilities as well as specific needs, preferences, and challenges faced by various groups of students with disabilities. The findings can inform the development of more accessible and inclusive social media platforms and educational technologies that cater to diverse student populations.

In addition to comparative studies, longitudinal research is also warranted to assess the long-term effects of social media use on the mental health and psychological well-being of students with disabilities (Akhmedova et al., 2024). This line of research could focus on both the positive and negative impacts, such as how sustained social media use plays a role in anxiety, depression, self-esteem, and overall psychological well-being over time (Thorisdottir et al., 2020). Understanding these dynamics can help in creating a more inclusive and supportive environment, better support systems and guidelines for healthy social media use, leveraging the power of social media to help mitigate social isolation, enhance social connections and academic experiences, and support psychological well-being for students with disabilities (Alon-Tirosh & Meir, 2023).

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