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ACCEPTANCE

This dissertation, PERCEPTIONS, ROLES, AND TRAINING OF SCHOOL PSYCHOLOGISTS IN SEXUAL HEALTH EDUCATION FOR STUDENTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES (I/DD), by ANNE C. STAIR, was prepared under the direction of the candidate’s Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education & Human Development, Georgia State University.

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PERCEPTIONS, ROLES, AND TRAINING OF SCHOOL PSYCHOLOGISTS IN SEXUAL
HEALTH EDUCATION FOR STUDENTS WITH INTELLECTUAL AND
DEVELOPMENTAL DISABILITIES (I/DD)

by

Anne C. Stair

Under the Direction of Andrew Roach, Ph.D.

ABSTRACT

Despite the evidence indicating that sexual health education for students results in positive outcomes for students by reducing risks, students with intellectual and developmental disabilities (I/DD) do not typically receive sexual health education. While school psychologists possess numerous skills that could contribute to sexual health education for students with I/DD, there is no existing research on this topic. This dissertation reports the results of a survey of Georgia school psychologists regarding their attitude, perception of social norms, perception of behavioral control/self-efficacy, and training/familiarity in regards to implementation of and advocacy for sexual health education for students with I/DD. The survey's focus and design was guided by the Reasoned Action Approach. Data collection and analyses addressed a) the

underlying factor structure of the survey; b) school psychologists' beliefs regarding the importance of sexual health education for students with I/DD, support from employers and colleagues for implementation of sexual health education for students with I/DD, training received in this area, and potential barriers to implementation of sexual health education for students with I/DD; and c) the relationship between school psychologists' attitude, perceived social norms, perceived behavioral control/self-efficacy, and training/familiarity and their implementation/advocacy of sexual health education for students with I/DD. Descriptive statistics, principal component analyses, and multiple regression were used to summarize the data and answer the research questions. Data from the multiple regression analysis indicated that 33.4% of the variance in Implementation/Advocacy was explained by Attitude, Social Norms, Behavioral Control/Self-Efficacy, and Training/Familiarity. The overall regression model was significant. Further, the Training/Familiarity and Behavioral Control/Self-Efficacy scales, as individual predictors, were also statistically significant. This is consistent with the researchers' hypothesis that school psychologists' engagement in implementation of and advocacy for sexual health education for students with I/DD can be influenced by level of training and knowledge and perceived capability and behavioral control.

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Chapter 1

Sexual Health Education and Intellectual and Developmental Disabilities

People with disabilities and their families have experienced a long history of discrimination, mistreatment, and exploitation. The fight for social justice and civil rights for individuals with disabilities has resulted in legislation providing protection of their rights, especially with regards to education and employment (e.g., Americans with Disabilities Act [ADA], 1990; Individuals with Disabilities Education Act [IDEA], 2004; The Rehabilitation Act, 1973). These legislative acts have promoted significant and positive changes to the way people with disabilities are treated, receive healthcare, and are provided education. To date, progress for individuals with disabilities has mostly occurred in the areas of civil and educational rights. However, there remain notable opportunities for improvement in many areas. This is especially true with regard to sexual health education because people with disabilities continue to experience significantly higher rates of sexual abuse, assault, and victimization compared to the general population (Smith et al., 2018; Swango-Wilson, 2011; Treacy, Taylor, & Abernathy, 2018).

The Diagnostic Manual of Mental Disorders (DSM-5, APA 2013) defines intellectual disabilities (ID) as a disorder that includes deficits in intellectual and adaptive functioning that have been observed since early childhood. Similarly, IDEA defines ID as “significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period” (IDEA, 2004). However, a key difference between IDEA and DSM-5 criteria is that ID (or any other disability) must also “adversely affect a child’s educational performance” (IDEA, 2004). In the state of Georgia, the Department of Education provides more specific details regarding the definition of ID, including

an intelligence quotient (IQ) score of 70 or below on a standardized measure of cognitive ability with accompanying adaptive behavior deficits. These criteria are used to determine if a student meets classification for ID, which can result in special education services to support the student.

Intellectual functioning encompasses mental abilities such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and experiential learning. Adaptive functioning skills are considered to be the skills needed for daily living such as communication, social skills, self-care in home and community settings, and application of school and/or work skills. Developmental disabilities are a larger group of conditions typically identified in early childhood that persist throughout the lifespan; ID is one common form of developmental disability. Developmental disabilities often include impairments in physical, learning, language, or behavioral functioning. These impairments may adversely affect day-to-day functioning and typically require supportive services and intervention (Zablotsky et al., 2019). It is estimated that one in six children in the United States has been diagnosed with a developmental disability and approximately 1.48% of male children and 0.90% of female children are diagnosed with an ID (McPartland, Law, & Dawson, 2016; Zablotsky, Black, & Blumberg, 2017).

Due to the noted cognitive and adaptive functioning concerns experienced by people with intellectual and developmental disabilities (I/DD), they often struggle to develop and maintain intimate relationships requiring complex social skills despite experiencing the same needs for intimacy and romantic desires of typically developing peers (Sala, Hooley, Attwood, Mesibov, & Stokes, 2019). People with I/DD have historically been considered asexual, or as being disinterested in meaningful interpersonal and sexual relationships despite the right to express sexuality being a significant part of human development and well-being (Treacy et al., 2018). Despite this perception, individuals with I/DD frequently express a desire to be engaged

in meaningful relationships and not wanting to be alone, while also confirming that they experience difficulty finding romantic partners, and establishing and maintaining relationships (Schaafsma, Kok, Stoffelen, & Curfs, 2017). However, Shaafsma et al. (2017) found that people with I/DD often reported a lack of knowledge, supports, and skills needed to engage in successful romantic relationships.

In light of this, the American Association on Intellectual and Developmental Disabilities (AAIDD) released a position statement indicating that people with I/DD have “inherent sexual rights that must be affirmed, defended, and respected” (American Association on Intellectual and Developmental Disabilities [AAIDD], n.d.). Individuals with I/DD have the right to engage in safe, fulfilling interpersonal relationships (VanDyke, McBrien, & Sherbondy, 1995). However, most middle and high school students with I/DD do not receive adequate education regarding sexual health and relationships. In fact, the sexuality of young people with I/DD has often been perceived as troublesome behavior that must be modified or extinguished, instead of being view as typical expression of the human need for intimacy (Sala et al, 2019). Further, parents of youth and young adults with I/DD generally report they want to provide this education to their children, but often avoid the topic due being unsure about what to talk about, when it is appropriate to talk about it, and how to modify information about relationships and sexuality so that their children will understand the concepts (Frank & Sandman, 2019).

Intimate partner violence includes behaviors that would cause physical, psychological, or sexual harm in significant interpersonal relationships. These behaviors can occur in combination and can include threats or acts of physical aggression, sexual aggression, emotional abuse, financial abuse, or other controlling behaviors (Taft et al., 2009). Relationship and sexual education is essential due to increased risks for the I/DD population, including sexual assault,

interpersonal violence, and victimization (Ward, Atkinson, Smith, & Windsor, 2013). As highlighted by Joseph Shapiro in an interview with NPR, the United States Department of Justice reported that people with I/DD are sexually assaulted at a rate seven times that of people without disabilities (Inskeep, 2018). The U.S. Justice Department also disclosed that it is estimated between 68% and 83% of women with I/DD have been sexually assaulted (Murphy & Elias, 2006). Furthermore, researchers have consistently indicated that children with I/DD are at increased risk for sexual abuse as compared to typically developing peers. For example, Sullivan and Knutson (2000) reported that children with ID were four times more likely to be sexually abused than children without ID. Similarly, Skarbek et al. (2009) reported that children with disabilities are 3.4 times more likely to be sexually abused than children without disabilities. An increased risk for being victims of sexual violence also has been documented for adolescent girls with physical disabilities or persisting health problems (Treacy et al., 2018). Taken together, these data demonstrate that students with disabilities (including those with I/DD) are significantly more likely to experience sexual abuse or assault (Alriksson-Schmidt et al., 2010). Education regarding healthy relationships, biological functions of their bodies, and sexuality is imperative in order for people with I/DD to not only understand themselves but also to protect themselves (Treacy et al., 2018).

Social Connections and Support

Research also demonstrates that people with I/DD have smaller social networks that often consist of mostly family members and support staff. People with I/DD report that social relationships and feelings of connectedness are missing from their lives, resulting in feelings of social isolation and loneliness (Emerson & McVilly, 2004; Knox & Hickson, 2001). However, people with disabilities often crave intimate relationships. Froese, Richardson, Romer, & Swank

(1999) reported that 81% of participants with ID in their study expressed a desire to have more friends and 65% of these participants reported wanting a chance to develop a best friend relationship. In terms of intimate relationships, Blum et al. (1991) reported that over 70% of their study's participants with developmental disabilities endorsed a hope to get married, although only 7% of respondents reported having the opportunity to maintain a consistent relationship with a close friend. In accordance with these findings, participants in a study completed by Robertson et al. (2001) indicated that their friendship networks consisted of approximately two people, excluding staff members. Similarly, Ward et al. (2013) found that participants had a social network consisting of approximately four people, and that number often included staff members. These studies reflect the critical need for people with disabilities to have the opportunities and the skills to develop and maintain close interpersonal relationships.

Holt-Lunstad, Robles, & Sbarra (2017) define social connection as a multifaceted construct, consisting of:

the extent to which an individual is socially connected takes a multifactorial approach including (1) connections to others via the existence of relationships and their roles; (2) a sense of connection that results from actual or perceived support or inclusion; and (3) the sense of connection to others that is based on positive and negative qualities (p. 521).

Examples of relationships and roles includes marital status, number of social contacts, engagement in social activities, a sense of belonging, and living alone or living with others.

Feelings of support can refer to perceived support or actual received support including "receipt of emotional, informational, tangible, or belonging support" (Holt-Lunstad et al., 2017, p.521).

Qualities of support are related to perceptions of positive and negative aspects of social relationships such as endorsement of satisfaction, adjustment, and cohesion in relationships and

reported feelings of tension such as conflict, distress, or ambivalence (Holt-Lunstad et al., 2017). Cohen (2004) defined social support as a “social network’s provision of psychological and material resources intended to benefit an individual’s ability to cope with stress” (p. 676).

Social inclusion is a broad construct that may be more easily defined by what it is not – the exclusion of others based on specific characteristics such as race, gender, socioeconomic status, or disability. Inclusion for children and youth people with I/DD requires removal of barriers and provision of supports to allow them to participate in all areas of life to their full capacity. School-age children and adolescents with disabilities often experience challenges with regard to social inclusion including making friends, engaging in community activities, participation in leisure and play activities, and quality social interactions in the classroom setting (Frazee, 2003; Koller et al., 2018). Snowdon (2012) reported that students with disabilities are more likely to be subject to social exclusion than typically developing peers. Specifically, Snowdon (2012) collected information from parents of children with disabilities aged 6 to 11 years old, as well as self-report information from this same group of children aged 10 and 11 years old. In this study, children with disabilities and their parents reported that they were less likely to get along well with other children, to feel that peers like them, and to have close friends. In addition, they were more likely to be bullied in school and on the way to school, and to have peers say mean things to them. Consistent with these findings, Pijl et al. (2008) reported that up to 25% of students with disabilities were rejected by their peers, did not have friends, and did not engage with a subgroup within their class as compared to only 8% of their typical peers. Children with disabilities are at increased risk for social isolation and bullying, both of which result in negative effects for all children and adolescents (Koster, et al., 2010). Social isolation and bullying can result in a diminished sense of belonging at school, obstacles to participation in

social experiences, poor motivation, low self-concept, and difficulties in academic performance (Asher & Coie, 1990). While these concerns are relevant for any student experiencing peer rejection, students with disabilities appear to be particularly vulnerable. Limited research has been conducted with children to determine their own perceptions of social inclusion (Koller et al., 2018). However, research regarding the attitudes of typically developing peers about students with disabilities provides some insight into factors that may be important for social inclusion. Siperstein, Parker, Bardon, and Widaman (2007) completed a national random sample of 5,837 middle school students to determine their attitudes about the inclusion of peers with I/DD. The results of this study indicated that students (a) have limited contact with students with I/DD in their classroom and other school settings, (b) view their peers with I/DD as having a more significant cognitive impairment than they actually do, (c) believe that classmates with I/DD can successfully participate in non-academic classes but not in academic classes, (d) perceive both negative and positive outcomes of inclusion of peers with I/DD, and (e) do not want to engage in social interactions with peers with I/DD in school and especially outside of school (Siperstein et al., 2007).

Numerous studies suggest that simply facilitating contact, or proximity in classes, between disabled and non-disabled students does not result in successful inclusion. Rather, successful inclusion occurs when students without disabilities are provided exposure to students with disabilities and also are able to observe their peers with disabilities demonstrating competency. An additional factor is the perception of students without disabilities regarding how inclusion of peers with disabilities will affect them personally. For example, students who recognize positive outcomes of inclusion (e.g., learning that differences in others are valuable), in contrast to students who perceive negative outcomes of inclusion (e.g., classroom disruptions

that cause difficulty in focusing on lessons), also believe that students with I/DD can successfully participate in academic classes (Siperstein et. al, 2007).

Although youth with disabilities experience challenges with regard to social inclusion, it also appears that adolescents with I/DD identify peers in their class or school as being their friends, regardless of the true nature of the relationship. Matheson et al. (2007) found that being in the same class or school was an important defining characteristic of a friendship. This becomes problematic for students with disabilities as they leave K-12 education and experience loneliness associated with this transition period (Foley et al., 2012). Snowdon (2012) reported that limited integration and social supports are in place for school-aged children with disabilities as they grow into adulthood. Transition-age youth, specifically young people with I/DD transitioning from secondary school into adulthood, receive little attention with regard to enhancing their quality of life. Services for this population have typically focused on outcomes related to employment, postsecondary education, and community inclusion, but have not typically addressed other aspects important to quality of life such as social supports and friendships (Carter et al. 2010; Haber et al. 2015). Biggs and Carter (2016) found that parents of transition-age youth with I/DD reported lower ratings in areas of physical well-being (i.e., levels of physical activity, energy, fitness, and the extent to which the child feels well), psychological well-being (i.e., feelings of positive emotions and satisfaction with life), and social support and peer relationships (i.e., quality of interaction and support between the child and peers) for their transition-age children as compared to typically developing peers. Among participants in Biggs and Carter's study, social support and peer relationships was the lowest area of rating overall. Similarly, in a study conducted with young adults aged 17 to 20 years, participants with ID reported that their most significant worries included being bullied, losing a caregiver, making

and keeping friends, and not being successful in life (i.e., in friendships, passing driving tests, etc.). In comparison, their peers without disabilities reported that their most significant worries included getting a job, lack of extra money, failing, and making decisions that would affect their future (Forte et al., 2011). These findings support previously outlined research indicating educational experiences, engagement in inclusive school settings, participation in extracurricular activities, and involvement in other school and community activities are important factors to consider to address needed social connections and supports for people with I/DD (Shattuck et al. 2011). Implementation of effective interventions to support the development of interpersonal skills and relationships is critical not only for school-age children with I/DD, but for transition-age youth as well. Thus, as they transition through the lifespan, development of the skills necessary to form and maintain friendships and intimate relationships is imperative for the overall mental and physical health of people with I/DD.

Social inclusion contributes to overall well-being and is vital to becoming a valued member of society. Therefore, the reported lack of social relationships for people with I/DD is troubling. Research indicates that social connectedness and quality and quantity of social relationships are related to enhanced physical, mental, psychological, and emotional health and overall well-being. Being socially connected has been linked to reduced rates of cancer and cardiovascular and infectious diseases (Balaji et al., 2007; Cohen et al., 1997; Eng et al., 2002). Social support was also noted to protect against the negative effects of stress (Holt-Lunstad, Smith, & Layton, 2010; Holt-Lunstad et al., 2017). Conversely, feelings of isolation and loneliness have been recognized as strong indicators of increased risk of mortality, poor physical health, and mental health problems (Cacioppo et al., 2002; Cohen et al., 2000; Holt-Lunstad et al., 2015; Holt-Lunstad et al., 2017; Kiecolt-Glaser & Newton, 2001; Repke, A.R. & Ipsen, C.,

2019). In fact, evidence for the relationships between these factors is so powerful that the negative impact of social isolation has been compared to smoking and alcohol abuse (Holt-Lunstad et al., 2015; Martire & Franks, 2014). Slavich and Irwin (2014) reported that social rejection results in detrimental effects on physical and psychological functioning. People engaged in meaningful, supportive relationships with both close and more distant ties to others live longer and experience fewer health problems.

Much of the research related to the aforementioned social factors and physical, mental, and emotional health has focused on older adults because they tend to more frequently report social isolation and loneliness as well as experience more frequent health problems than younger individuals (Cacioppo et al., 2011; McPherson et al., 2006; Repke & Ipsen, 2019). People with disabilities are not typically included in this research despite experiencing many of the same health and social issues (Repke & Ipsen, 2019), and individuals with I/DD may be particularly underrepresented because of the challenges of data collection with this population. However, available research indicates people with disabilities experience obstacles such as transportation challenges, difficulties with mobility, and discrimination that can limit their opportunities for social interaction (Bezyak et al., 2017; Kenyon et al., 2002). They also have reduced interactions in work settings as they are less likely to be employed. Specifically, people with disabilities were less likely to be in the labor force at a rate of 79.2% as compared to 31.3% of people without a disability (U.S. Bureau of Labor Statistics, 2019). With regard to health status, people with disabilities often experience increased health challenges as compared to nondisabled peers (Repke & Ipsen, 2019). These health conditions can constrain their ability to participate in recreational activities typically enjoyed by people without disabilities or chronic health conditions, thus further limiting opportunities to develop interpersonal relationships.

Sexual Health Education

Sexual health education in the United States has evolved into two different approaches: abstinence-based sexual health education and comprehensive-based sexual health education. These two approaches affect how sexual education looks in practice. For example, dependent upon the approach, the role and type of sexual education in schools can vary with regards to level of importance in the curriculum, how much time is devoted to the content, focus of topics, and content covered. The approach to sexual health education is also guided (and sometimes mandated) by funding. Specifically, if funding is provided through an abstinence-based approach, then the curriculum will be in line with this orientation. The history of abstinence-based education can be traced to beliefs about the need to reform sexual sin in the United States and England in 1724 with the publication of *Onania*, a written work referencing the Bible and “the sin of wasting man’s seed” (Treacy, et al., 2018, p. 67). This work has been attributed with influencing cultural views and laws prohibiting masturbation and oral sex, and viewing sex as a sin against God to be performed only for procreation (Cornog & Perper, 1996). These beliefs and policies became part of religious beliefs, political campaigns, educational practices, and public health efforts during the 1800s. Social reformers Sylvester Graham and John Kellogg viewed sexual activity as evil and separately authored anti-masturbation literature to be disseminated to the public during this time period (Carter 2001; Cornog & Perper, 1996). Consistent with this theme, the National Education Association (NEA) passed a resolution supporting moral education in schools in 1892 (Treacy et al., 2018). Negative views of sexuality persisted well into the twentieth century and continue to play a part in culture, laws, politics, values, and norms in the United States.

The first funding initiatives for sex education occurred in the 1980s, starting with the Adolescent Family Life Act under Title XX of the Public Health Service Act (Advocates for Youth, 2014). This legislation provided funding to educate adolescents about the dangers of premarital sex. Education efforts also focused on promoting adoption subsequent to an unplanned pregnancy rather than abortion (Cassell & Wilson, 1989; SIECUS, 2014, 2016). In 1996, \$50 million in annual funding was allocated to abstinence-based sexual health education programs through welfare reform policies and amendment to the Maternal and Child Health Block Grant (Advocates for Youth, 2014; Williams, 2006).

As noted above, efforts to provide comprehensive sexual health education can be traced to the 1800s. During this era, issues of contraception--including discussion of contraception, obtaining material related to contraception, or possession of contraception--were typical framed in terms of morality (Carter, 2001; Cornog & Perper, 1996; Planned Parenthood, 2014). During the same period, women's rights were basically nonexistent as they were not allowed to vote, sign contracts, hold bank accounts, leave abusive relationships by divorcing their husbands, have power over the number of children they had, or acquire information about birth control measures (Treacy et al., 2018). Margaret Sanger, the founder of Planned Parenthood, played a significant role in the early beginnings of comprehensive sexual education. She was influenced by the death of her mother, who experienced 18 pregnancies and had 11 children. Sanger, a nurse, opened the first birth control clinic in the United States in Brooklyn, New York in 1916. She published the first scientific journal about contraception, the *Birth Control Review*, and opened the Birth Control Clinical Research Bureau in Manhattan, the mission of which was to make contraception available to women and to collect data in order to improve the safety and effectiveness of the

contraceptive devices being provided (Treacy et al., 2018; Cornog & Perper, 1996; Planned Parenthood, 2014).

Following Sanger's work in the field of comprehensive sexual education and family planning, an abundance of sexual health information was published in the early 1900s including research articles, books, and pamphlets. Higher education courses in human sexuality were developed and taught in the 1940s and 1950s (Seruya, Losher, & Ellis, 1972; Cornog & Perper, 1996; SIECUS, 2014). Furthermore, two organizations were developed and tasked with ongoing improvement and growth of comprehensive sex education in public schools and higher education institutions. In 1964 and 1967 respectively, the Sexuality Information and Education Council of the United States (SIECUS) and the American Association of Sex Educators, Counselors, and Therapists (AASECT) were formed. The National Coalition to Support Sexuality Education was subsequently established by SIECUS and is currently comprised of over 120 organizations who have committed to work together for the following goals: (a) to promote awareness and acceptance of sexual health as an important component of overall health and well-being; (b) to encourage and normalize discussion about sexual health in varying levels of interpersonal relationships (e.g., sexual partners, parents and children, healthcare providers and patients, etc.); (c) to empower others to protect and enhance their personal sexual health and well-being while also respecting the sexual choices of others; (d) to encourage organizations to implement positive and effective approaches to sexual health and well-being based on research; and (e) to promote conversations between health care providers and clients about sexual health and encourage implementation of evidence-based practices (National Coalition for Sexual Health, 2019).

The shift for provision of sexual health education in public school systems was initiated in the early 1900s due to concerns regarding hygiene. The early focus of sexual health education

was deterrence of disease, as it was perceived that education about personal sanitation and hygiene in schools might assist in prevention of disease (Carter, 2001). Developments in the medical and science fields, including confirmation of the first effective treatment of syphilis (i.e., discovery of penicillin) and identification of the hormones involved in the human reproductive system, further increased the push for sexual education in schools (Treacy et al., 2018; Cassell & Wilson, 1989).

Currently, every state in the United States allocates public funds for public schools to implement sexual health programs. However, this provision of funds has resulted in ongoing and combative discourse between parties endorsing abstinence-based education and those favoring more comprehensive sexual education (Treacy et al., 2018). A significant amount of research exists examining the effectiveness of both comprehensive sex education and abstinence-based programs. For example, 56 studies evaluating the outcomes of abstinence-based sexual education and comprehensive sexual education were reviewed by Kirby (2008). Abstinence-based sexual education programs strongly encourage refraining from sexual behavior outside of marriage to avoid risks of pregnancy and sexually transmitted diseases (STDs). While comprehensive sexual education emphasizes that abstinence is the safest choice, topics of discussion include methods of contraception such as condoms and birth control pills, sexual anatomy, pregnancy, risk of STDs, and places to seek sexual health care (e.g., Planned Parenthood). It was reported that abstinence-based programs did not delay participants from engaging in sex nor were there any positive effects on sexual behavior (Kirby, 2008; Stanger-Hall & Hall, 2011; Trenholm et al., 2007). Conversely, research indicated comprehensive sexual health education programs resulted in a significant increase in participants' use of condoms and contraception and delayed participants' initiation of sexual relations (Kirby, 2008; Trenholm et

al., 2007). Furthermore, Kohler et al. (2008) demonstrated a 50% lower risk of teen pregnancy associated with comprehensive sexual education as compared to abstinence-based sexual education. Santelli and Kantor (2008) also made a strong argument that scientific evidence does not support abstinence-based sexual education to decrease unwanted outcomes of adolescents' sexual behavior and that the influence of politics and ideology have resulted in the undermining of best approaches to sexual education. There are significant ethical and human rights concerns with regard to provision of complete and accurate sexual health information. Governments have an obligation to provide that information and to prevent dissemination of inaccurate information to its citizens. Despite this, abstinence-based programs in schools are restricted in the information they can provide to students (e.g., limited or no information about condoms and contraception), but are expected to promote scientifically questionable ideas such as potential links between early sexual behavior and mental health issues. Placing limits on the approved topics that can be discussed through these programs increases risks for students by withholding accurate information they need to protect their own health. Further, it presents an ethical dilemma for program facilitators, forcing them to refrain from sharing potentially lifesaving information or risk losing funding by violating policy requirements (Santelli & Kantor, 2008).

Despite evidence indicating that comprehensive sexual health education results in more positive outcomes than abstinence-based programs, most funding for sex education is provided to public schools for abstinence-only programs. As previously mentioned, \$50 million is provided annually for abstinence-based sex education through the Maternal and Child Health (MCH) block grant (referred to as Title V) and individual states only receive funding if they follow the provisions of Title V. This legislation was reauthorized for another 5 years in 2010 with increased funding from \$50 million to \$75 million annually through the 2017 fiscal year.

The Healthy Relationships Act was passed in 2015, which provides additional funding for Sexual Risk Avoidance (SRA) programs. When the funding from these legislative acts is combined, \$85 million has been allocated to abstinence-based sexual health education, despite overwhelming scientific evidence not only contradicting its effectiveness, but supporting the effectiveness of comprehensive sex education (Advocates for Youth, 2014; Kirby 2008; Kohler et al., 2008; Santelli & Kantor, 2008; SIECUS, 2014, 2016; Treacy et al., 2018; Trenholm et al., 2007). In discussing the legislative mandate for abstinence-only programs, Treacy et al. (2018) stated:

The paradox here is that, funding does not support the evidence-based practice. At a time in education when all instructional practices must be identified as an evidence-based practice, funding follows the less effective practice; therefore, denying both students with and without disabilities access to evidence-based sexual health education. (p.71)

The National Conference of State Legislatures (2020) reported that as of March 2020, 29 states require public schools to teach sexual health education and 22 states dictate that if sex education is provided, it must be medically accurate. However, definitions of “medically accurate” vary significantly. Definitions are often vague and use terminology such as *age-appropriate, dissemination of factual information, respects community values, stress moral responsibility, technically accurate*, etc. Parent rights also come in to play in many instances, as 25 states require parent notification if sex education is provided, 5 states require parent consent for sex education to be provided, and 36 states allow parents to opt-out completely of sex education for their children. Shapiro and Brown (2018) found that in only 11 states were the concepts of healthy relationships, sexual assault, and consent were included in state laws and education standards. This suggests that the majority of public school students in the United

States are not receiving instruction through their schools' sex education program regarding healthy and unhealthy relationships, dating and relationship violence, or consent. In the state of Georgia specifically, SIECUS (2020) reported that public schools are required to provide sexual health and AIDS prevention education, but the curriculum is not required to be comprehensive. The primary focus of sexual health education must be abstinence until marriage. Age-appropriate instruction concerning awareness and prevention of sexual abuse and assault is required. However, sexual health curricula are not required to include information regarding sexual orientation, gender identity, or consent. Further, Georgia does not require the information presented in sex education curricula to be medically accurate. Consistent with most other states, Georgia does have a policy allowing parents to opt their child out of components of the sex education program or all of the sex education program.

Sexual Health Education for Students with I/DD

Based on reported research, students with disabilities have been excluded from education about sexual health throughout the twentieth century. Historically, many individuals with disabilities were placed in institutions where they did not receive instruction in reading, writing, or mathematics, much less sexual health (Barnard-Brak, Schmidt, Chestnut, Wei, & Richman, 2014; Cassell & Wilson, 1989; Murphy & Young, 2005; Preston, 2013). Eugenics beliefs and practices were a significant factor in American history and culture from the late 19th century until World War II. In fact, parallels between Nazi Germany ideology and American eugenics work have been recognized by historians and researchers. Eugenics was thought to be a way to protect the gene pool by preventing those considered genetically inferior from reproducing. By the early 1900s, many American universities, scientists, and professionals promoted eugenics ideology and also actively supported eugenic legislation. The American Eugenics Society and eugenicists

in the United States not only endorsed restriction of immigration to the United States for those viewed as inferior, but also endorsed the sterilization of American citizens considered to be “insane, retarded, and epileptic” (Bruinius, 2006, p. 7). In 1927, the U.S. Supreme Court ruled in favor of a statute for the “compulsory sterilization of the unfit for the protection and health of the state” (Bruinius, 2006, p. 7). This allowed for government and private agencies to sterilize people with disabilities (American Academic of Pediatrics, 1999). This ruling was reversed in 1942 when the U.S. Supreme Court declared procreation to be a human right. Despite this, 28 states still had sterilization laws two decades later (in 1963). Twenty-six of those states included compulsory sterilization in order to prevent reproduction by people with disabilities (Stein & Dillenburger, 2016). Further, it should be noted that guardians of people with disabilities *can still* choose to have their child sterilized if they prove “good reason” (American Academy of Pediatrics, 1999). Stern (2005) reported that thousands of people continued to be sterilized through the late 1960s and into the mid-1970s as many academic and medical professionals continued to promote eugenics as a public health issue. Specifically, those with mental illness, physical or medical disabilities, or behaviors viewed as immoral (e.g., pregnancy out of wedlock) were seen as a threat to American society and this ideology was promoted and accepted as it was supported by trusted medical and mental health professionals.

Political views and legislation at the federal and state levels have significant effect on policies and perceptions in both in school and community contexts. In many instances, funding is provided to promote only certain policies and to require only certain curricula. Hence, understanding the history of disability law is a critical piece in understanding perceptions of people with I/DD as competent, autonomous individuals. Disability law also has significant consequences for educational programming for people with I/DD, which includes access to

educational resources and services. The disability rights movement has an extensive history that can be traced to various disability groups dating back to the 1800s.

People with disabilities have a long history of being excluded from and ostracized in community settings. For example, in multiple cities of the United States there were laws in place to prevent people with disabilities from being out in public in order to prevent others from having to see them. While officially referred to as beggar ordinances, these pieces of legislation declared it illegal for “any person, who is diseased, maimed, mutilated, or deformed in any way, so as to be an unsightly or disgusting object, to expose himself or herself to the public view” (Albrecht, 2006, p. 2408; Chicago City Code, 1881). These “ugly laws” were in effect in various cities spanning from 1867 through (as recently as) 1974 and were typically driven by attitudes toward people with disabilities related to their mental and physical competence, repugnance to viewing their physical disabilities, and aversion to their circumstances (e.g., poverty due to difficulty finding employment).

Changes with regards to the treatment and perceptions of people with disabilities have occurred primarily due to the activism of people with disabilities and their families. In 1973, the Rehabilitation Act was passed and Sections 501, 503, and 504 of that legislation provided protection against discrimination in federal programs and services, as well as any program or service receiving federal funding. Specifically, Section 504 stated, “No otherwise qualified handicapped (sic) individual in the United States, shall, solely by reason of his handicap (sic), be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” The Americans with Disabilities Act (ADA), signed into law on July 26, 1990 by President George H.W. Bush, is a civil rights law that prohibits discrimination against people with disabilities and ensures that they

have the same rights and opportunities as others to participate in public life. These rights extend to employment, school, transportation, and all public and private places. The ADA defines a disability “as a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such as impairment” (ada.gov). The subsequent ADA Amendments Act of 2008 (ADAAA) maintained this definition, but broadened the protections for people with disabilities in several significant ways. First, the reauthorization overturned two previous Supreme Court decisions imposing high standards on claimants, suggesting that the scope of the ADA is broad and inclusive and should not place limits on how the provisions of the ADA is defined. Second, the ADAAA supports continued use of the terms “substantially limits” and “major life activities” in the original definition of “disability” but indicated that these terms should be interpreted broadly. Third, the ADAAA did not allow for consideration of mitigating measures including medication, assistive technology, accommodations, or modifications in determining whether a major life activity is substantially limited by an impairment.

Public Law 94-142 (P.L. 94-142) was passed in 1975, guaranteeing a free and appropriate education to all children with a disability (U.S. Department of Education). The purposes of P.L. 94-142 are as follows:

“to assure that all children with disabilities have available to them...a free appropriate public education which emphasizes special education and related services designed to meet their unique needs”; “to assure that the rights of children with disabilities and their parents...are protected”; “to assist States and localities to provide for the education of all children with disabilities”; and “to assess and assure the effectiveness of efforts to

education all children with disabilities” (Education for All Handicapped Children; EHA, 1975).

P.L. 94-142 provided protection and support for children and adolescents with disabilities who had been excluded completely from the public education system. Children who had only limited access to public schools and had been prevented from obtaining an adequate education now had to be included. Students with disabilities could no longer be excluded from the public school system. Rather, P.L. 94-142 stated that all schools receiving federal funding had to accommodate the needs of the students with disabilities, including providing appropriate instructional materials and curriculum.

The Individuals with Disabilities Education Act (IDEA), originally passed in 1990 and reauthorized in 2004, is considered to be landmark legislation ensuring that students with disabilities legally have the same rights as their peers without disabilities (IDEA, 2004). It expanded upon the mandates of EHA in the areas of research and technology, transition programs, and providing education for children in their assigned school versus bussing them elsewhere. The commitment to provide students with disabilities access to a free and appropriate public education (FAPE) through special education services was reaffirmed by IDEA 2004. These services are developed to meet their individual needs with the goal of further education, employment, and independent living. This law protects the rights of children with disabilities and their parents and assists local, state, and federal agencies with providing education to students with disabilities. It also assists states with the provision of comprehensive and multidisciplinary early intervention services for infants and toddlers with disabilities and ensures that parents and educators have needed resources to improve educational outcomes for students with disabilities (e.g., technological support, personnel preparation). Per IDEA 2004, the

effectiveness of education practices of children with disabilities must be assessed or evaluated. Finally, IDEA 2004 also mandates that evidence-based practices must be utilized in teaching students with disabilities (SIECUS, 2014). Given these legislative provisions, implementation of a comprehensive sexual education program to teach sexual and relationship health to students with disabilities is not only supported by research, but one could argue is also mandated by federal law.

A review of the literature indicated that there is not a consistent, evidence-based sexual health education program being implemented in U.S. schools for any students regardless of disability status. Wolfe and Blanchett (2002) found that while there were sexual education curricula recommended for use with people with disabilities, materials were designed to be used with a broad range of individuals and were not specific to the needs of specific subgroups of participants (i.e., deaf, I/DD, etc.). Sexual health education programs provided for students with disabilities often focus on the biological aspects of sexual health and behavior, while the emotional aspects of romantic relationships receive little, if any, attention (Knox & Hickson, 2001; Shakespeare et al., 1996). Given the previous discussion regarding the desire of people with disabilities to engage in intimate relationships, the lack of guidance regarding appropriate dating and romantic behaviors is concerning. Further, McDaniels and Fleming (2016) reported that many of the sex education programs recommended for implementation with people with I/DD were not comprehensive but focused on topics in isolation such as sexual abuse or STD prevention. A critical piece missing from many of these educational materials was ecological validity, or rather the practical application of these skills in the real world. While delivering sexual education content and increasing knowledge of participants is critical, teaching participants how to successfully apply learned skills requires an additional level of

implementation and skill on the part of educators/program facilitators (McDaniels & Fleming 2016).

The Community Advisory Group of the Sexual Health Equity for Individuals with Intellectual/Developmental Disabilities (SHEIDD) project conducted a review of seven curricula designed to address healthy relationships and sexuality education for people with disabilities. Of these, five programs were specifically designed to target the school-age population and to be delivered in school or community settings while two of the programs were designed to be delivered to adults in community or agency settings. Several, though not all, of these programs were found to have strengths including affirming that people with disabilities are sexual beings and use of a variety of teaching strategies and materials. However, many of these programs were lacking in regards to including information about transgender and non-binary people, adaptations to account for participants' cultures and their influence on relationships and sexual health, information about contraception and sexually transmitted diseases, and information about parenting rights and relationships. This review suggested that programs designed specifically for the I/DD population to teach sexual health and relationship education continue to be inadequate in several significant areas.

Conclusion

I/DD is a form of a developmental disability that encompasses impairments in cognitive abilities such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and experiential learning. Delays in adaptive functioning skills are considered to be a significant characteristic of an ID/D, which include the skills needed for daily living such as communication, social skills, self-care in home and community settings, and application of

school and/or work skills. Developmental disabilities often include impairments in physical, learning, language, or behavioral functioning.

People with disabilities have a long history of discrimination, mistreatment, and exploitation. Moreover, people with I/DD, including school-age children and adolescents with I/DD, are often excluded from activities and supports that comprise a well-rounded, socially connected life. While students with I/DD are enrolled in school settings with a general population of students, true inclusion continues to be absent in the majority of cases. Students with disabilities, including those with I/DD, experience rejection, exclusion, isolation, and bullying at higher rates than their peers without disabilities. They also experience barriers to activities that their peers without disabilities freely access (e.g., participation in extracurricular programs and recreational activities). Social connectedness is a vital component of the human experience and has been linked to both physical and mental health. Yet lack of friendships and intimate relationships is a primary concern reported by people with disabilities and their families. This becomes even more problematic once students with disabilities leave the school setting and transition into young adulthood, where the social support that is provided in the school setting is now completely absent.

A key component to the achieving and maintaining quality of life is engagement in healthy intimate and romantic relationships. People with I/DD have the right to engage in meaningful interpersonal relationships, despite often being excluded from this consideration. While the AAIDD provides a position statement indicating that people with I/DD have “inherent sexual rights that must be affirmed, defended, and respected” (American Association on Intellectual and Developmental Disabilities [AAIDD], n.d.), most middle and high school students with I/DD do not receive adequate education regarding sexual health and relationships.

Exclusion could be due to people with disabilities typically being thought of as asexual, as incapable of developing and maintaining romantic relationships, or as uninterested in romantic relationships. However, in previous research Blum et. al (1991), people with disabilities have expressed that they do indeed desire engagement in intimate relationships and think about marriage and having children as many of their peers without disabilities do.

The type of sexual education program delivered in schools is driven by competing ideologies: abstinence-based sexual health education and comprehensive-based sexual education. While overwhelming research indicates the positive outcomes of comprehensive-based sexual education (e.g., safe-sex practices, delayed initiation of sex), abstinence-based education is the most common form of sexual education being taught in school systems. The promotion of abstinence has deep roots in religious and “moral” beliefs, leading to significant political and financial support for implementation of these programs. Students with I/DD are often excluded from sexual health education altogether. When this education is provided, it tends to focus on the biological aspects of sexual health, while failing to address topics such as developing and maintaining intimate relationships, dating behavior, healthy versus unhealthy relationships, and consent. One could argue that because IDEA dictates evidence-based practices must be utilized in teaching students with disabilities, implementation of a comprehensive sexual education program to teach sexual and relationship health to students with disabilities is both supported by research and mandated by federal law. However, there is limited research overall regarding the efficacy of the sexual health programs being implemented, as well as some research indicating conflicting outcomes across varying sexual health education programs (Scher et. al, 2006). This could contribute to (and perhaps confuse) the decision-making of policymakers and practitioners regarding the appropriateness and utility of sexual health education for students.

Based on a review of the literature, there is not a consistent, evidence-based sexual health education program being implemented in U.S. schools for students with and without disabilities. While there are sexual education curricula recommended for use with people with disabilities, these materials are designed to be used with a broad range of individuals rather than specific subgroups of participants (i.e., deaf, I/DD, etc.) and focused on topics in isolation (e.g., sexual abuse or STD prevention). The aim of these programs is to increase sexual knowledge of participants, and while that is vitally important, a key component missing from these programs should be providing opportunity for participants to successfully apply learned skills in the real-world. Further, while sexual health education programs developed for people with disabilities were found to have strengths such as affirmation that people with disabilities are sexual beings and use of a variety of teaching strategies and materials, these programs often lack inclusion of information about transgender and non-binary people, adaptations to account for participants' cultures and their influence on relationships and sexual health, information about contraception and sexually transmitted diseases, and information about parenting rights and relationships. Overall, available educational materials and programs designed to address sexual health and education of people with I/DD are severely lacking in many critical ways. However, a greater concern is that sexual health education programs for students with I/DD are typically absent from most school settings.

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Chapter 2

Perceptions, Roles, and Training of School Psychologists in Sexual Health Education for Students with Intellectual and Developmental Disabilities (I/DD)

People with disabilities have historically experienced significant discrimination, mistreatment, exploitation, and physical abuse, including acts of sexual violence. The U.S. Justice Department reported that approximately 68% to 83% of women with intellectual and developmental disabilities (I/DD) have been sexually assaulted (Murphy & Elias, 2006). Of equal concern, children with I/DD are at increased risk for sexual abuse as compared to typically developing peers. Sullivan and Knutson (2000) reported that children identified as having intellectual disability (ID) were four times more likely to be sexually abused than children who were not identified as having ID. Further, Skarbek et al. (2009) found that children with disabilities are 3.4 times more likely to be sexually abused than children without disabilities. An increased risk for being victims of sexual violence also has been documented for adolescent girls with physical disabilities or persisting health problems (Treacy et al., 2018). Taken together, these data demonstrate that students with disabilities (including those with I/DD) are significantly more likely to experience sexual exploitation, abuse, or assault (Alriksson-Schmidt et al., 2010).

Sexual health education regarding healthy relationships, biological functions of their bodies, and sexuality is imperative in order for people with I/DD to not only understand themselves but also to protect themselves (Treacy et al., 2018). However, students with I/DD are often excluded from sexual health education altogether. When this education is provided, it tends to focus on the biological aspects of sexual health and does not address topics such as developing and maintaining intimate relationships, dating behavior, healthy versus unhealthy

relationships, and consent (Knox & Hickson, 2001; McDaniels & Fleming, 2016; Shakespeare et al., 1996). Treacy et al. (2018, p.72) identified the following seven barriers to the provision of sexual health education for students with disabilities:

- Sexuality of individuals with a disability described as deviant;
- Lack of teacher education programs;
- Lack of teacher knowledge and confidence resulting in concerns, anxiety, and fear;
- Parental anxiety and fear;
- The need for school/teacher and parent partnerships;
- The lack of valid and reliable sexual health education; and
- The lack of federal funding specifically designed for students with disabilities based on comprehensive sexual health education.

A review of the literature indicates that there is not a consistent, evidence-based sexual health education program being implemented in U.S. schools for any students regardless of disability status. Wolfe and Blanchett (2002) found that while some sexual education curricula were recommended for use with people with disabilities, these materials generally were designed to be used with a broad range of individuals and were not specific to the needs of specific subgroups of participants (e.g., deaf, I/DD, orthopedic impairment). McDaniels and Fleming (2016) reported that many of the sex education programs recommended for implementation with people with I/DD were not comprehensive but focused on topics in isolation such as sexual abuse or STD prevention. They also reported that when sexual health education was delivered to students with I/DD, the content was not taught in a manner that could be understood by participants. Language used for instruction was either vague and abstract, or overly technical

and beyond the comprehension level of students with I/DD. In addition, a critical piece missing from many of these educational materials was ecological validity; that is, curricula did not address practical application of skills and concepts in the real world. While delivering sexual education content and increasing knowledge of participants is critical, teaching students how to successfully apply learned skills requires an additional level of implementation and expertise on the part of educators and program facilitators (McDaniels & Fleming 2016).

The Community Advisory Group of the Sexual Health Equity for Individuals with Intellectual/Developmental Disabilities (SHEIDD) project conducted a review of seven curricula designed to address healthy relationships and sexuality education for people with disabilities. Of these, five programs were specifically designed to target the school-age population and to be delivered in school or community settings, while two of the programs were designed to be delivered to adults in community or agency settings. Several, though not all, of these programs were found to have strengths including affirmation that people with disabilities are sexual beings and use of a variety of teaching strategies and materials. However, many of these programs were lacking in regards to including (a) information about transgender and non-binary people, contraception and sexually transmitted diseases, and parenting rights and relationships; and (b) adaptations to account for participants' cultures and their influence on relationships and sexual health. Overall, the SHEIDD review suggested that programs designed to teach sexual health and relationships content specifically to the I/DD population continue to be inadequate in several significant areas.

An additional component to consider for implementation of sexual health education for students is the need to assess the efficacy of programs being implemented. Preston (2013) recognized that there are no universal, standardized methods at this time to evaluate the

effectiveness of sexual health programs. Several health organizations (e.g., Center for Disease Control [CDC], Future of Sexual Education Initiative [FoSE], and World Health Organization [WHO]) have also identified the need for standards and valid evaluation measures to ensure that students with and without disabilities are acquiring sexual health knowledge and skills (Treacy et al., 2018).

School Psychologists and Sexuality in Schools

There is not any known research or prominent discussions regarding sexual health and students with I/DD in the school psychology literature. Information about school psychologists' training and roles regarding this specific topic also were not found in research. To date, most research regarding school psychology and sexual health training and advocacy generally has focused on preparation to work with and support lesbian, gay, bisexual, transgender, queer/questioning, intersex, and asexual/aromatic/agender (LGBTQIA) students.

From at least the early 1990s, researchers began to recognize and write about the need for school psychologists to be actively engaged in addressing the needs of sexual minority youth. In 1993, a joint statement was released from the American Psychological Association (APA) and National Association of School Psychologists (NASP) condemning discrimination toward people identifying as lesbian, gay, and bisexual (Bahr et al., 2000). The same declaration made it clear that supporting and advocating for the rights and educational and psychological well-being of this diverse group was a responsibility for psychologists across settings. Despite this, minimal progress toward support and advocacy for sexual minority youth has been recognized in school psychology practice. Lack of attention to these concerns could be attributed to lack of understanding regarding sexual identity development and hesitancy to champion an issue made more complex due to societal stereotypes and stigmas. For example, graduate students in

education, school psychology, and counseling programs reported barriers to advocacy for lesbian, gay, bisexual, and transgender (LGBT) youth in school settings to include lack of support from school administrators, ignorance about LGBT issues (e.g., sexual orientation, identity development), and rejection from colleagues (McCabe & Rubinson, 2008). Lasser and Tharinger (1997) asserted that school psychologists have a significant role in providing social justice leadership in schools to create a climate in which students identifying as lesbian or gay feel safe and accepted. To fulfill this role, they argued that school psychologists' need to understand sexual identity development, issues important to students of varying sexual identities, and their own attitudes regarding sexual identity as these attitudes can interfere with effective support for students. Savage et al. (2004) found that school psychologists reported positive attitudes regarding lesbians and gay males, with more positive attitude towards lesbians than gay males. As part of this study, school psychologists also reported a low-to-moderate knowledge base about sexual minority youth and were generally uninformed about how these issues can present in the school setting. These findings reinforced that it is essential for school psychologists to recognize and reflect upon their own perceptions and biases and how these may interfere with development of respectful relationships and provision of effective services to students.

McCabe and Rubinson (2008) conducted focus groups with graduate students from education, school psychology, and counseling programs to determine how these future professionals were being trained to support students identifying as (LGBT) in school settings. Research questions specifically addressed participants' knowledge and behaviors about harassment and sexual expression for LGBT youth. While it was explicitly noted that participants' programs provided a strong foundation in social justice issues, participants

generally did not recognize harassment of LGBT youth as a social justice issue or as a barrier to student learning. Rather, they expressed difficulty reconciling personal attitudes and beliefs regarding free speech and sexual identity with their responsibility to intervene when witnessing mistreatment of students with diverse sexualities. These outcomes suggested a pressing need for additional training to ensure development of a professional identity that aligns with applying a social justice perspective in practice around issues of sexuality and gender identity (McCabe & Rubinson, 2008).

In the Savage et al. (2004) study, 85% of participants endorsed having received no training in their graduate programs related to sexual identity. Those who endorsed some level of training reported very minimal exposure to this topic in the form of a single class lecture or discussion, or through an isolated professional development opportunity. Bahr et al. (2000) also acknowledged that school psychologists received little training and had limited knowledge with regards to sexual and gender identity. Over a 15-year-time span (2000-2014), Graybill and Proctor (2015) found limited discussion of LGBT issues (between 0.3-3% of articles) in professional journals from the fields of school counseling, school psychology, school nursing, and school social work. This finding coupled with the lack of training reported in graduate programs is extremely disconcerting as it indicates that not only are school psychologists lacking structured learning experiences around these issues, they have limited access to information in professional journals to further their education. As previously discussed with regards to students with disabilities, LGBT youth experience higher rates of bullying, exclusion, and victimization in schools. Thus, the lack of available adult support to minimize negative effects of these issues is a critical gap in advocacy for students (Graybill & Proctor, 2016).

Bahr et al. (2000) proposed that school-based workshops would be one method for currently practicing school psychologists to gain the knowledge and skills needed to work with diverse populations, particularly with regards to sexual identity. Recommendations by researchers have also included integration of sexual and gender identity coursework into graduate training programs and practicum and internships experiences (Bahr et al., 2000; Savage et al., 2004). Inadequacies in the preparation of school-based professionals (including school psychologists) regarding sexual and gender identity development contribute to gaps in sexual health education of students with I/DD, leaving school-based mental health providers and educators ill-equipped to address issues related to sexual health for diverse students (e.g., sexual minority students, students with I/DD).

The aforementioned research consistently recognized that infusing graduate training programs with experiences and content is necessary to prepare future school psychologists to advocate for sexual health education of students for diverse groups is critical. Further, Kelly and Goldstein (2016) highlighted that the existence of gay-straight alliances (GSAs)—school-based, student-led organizations designed to provide support for students of diverse sexual identities and their allies—in schools was associated with a positive overall school climate. By extension, Kelly and Goldstein (2016) reported the presence of GSAs was also related to school psychologists having increased knowledge and feelings of preparedness when working with LGBT students. Creation of similar groups could be a promising step toward inclusion of students with I/DD in sexual health education discussions by providing a safe, supportive environment to discuss topics related to sexuality, intimate relationships, and dating.

Professional Ethics and Sexual Health Education

Bahr et al. (2000) recognized that the application of ethical codes and standards could be an effective method in addressing controversies and confusion regarding sexuality and professional practice. They specifically identified (1) *Professional Relationships and Responsibilities*, *Professional Competency*, and (3) *Professional Practices* as NASP Ethical Principles that could be applied to focus on the needs of sexual minority students. Familiarity with professional standards of practice should support school psychologists' advocacy for students with I/DD to receive sexual health education. In other words, providing effective sexual health education is a mandated and critical component of effective professional practice. With regard to the ethical principle *Professional Relationships and Responsibilities*, school psychologists have a responsibility to advocate for cultural diversity and must be thoughtful about individual differences, including sexual and gender identity. They are responsible for exercising their professional expertise to improve the quality of life of students and their families, understanding sexual health needs, ensuring safe learning environments for students, and demonstrating respect for culturally diverse groups such as sexual minorities (Bahr et al., 2000). *Professional Competency* is a critical component of the NASP Ethical Principles and directs school psychologists to honestly assess the strengths and limitations of their training and experience. School psychologists have a duty to seek further education and training to obtain competence in any area they lack the knowledge and skill needed to serve students, their families, and their communities. As student populations become more diverse, it should be expected that school psychologists will work with a wide range of diverse groups, including those of varying sexual identities (Bahr et al., 2000). The principle *Professional Practices* dictates that school psychologists are responsible for communicating concern for student rights

and well-being to school administrators and staff; must select assessment and intervention procedures that are mindful of diverse populations; and obtain current knowledge from allied disciplines in order to select and implement these procedures with students of varying sexual and gender identities (Bahr et al., 2000).

In May 2020, the National Association of School Psychologists (NASP) approved the NASP 2020 Professional Standards, which includes the *Model for Comprehensive and Integrated School Psychological Services* (i.e., the NASP Practice Model). This most recent revision to the NASP Practice Model provides a guide for the implementation of school psychological services within educational settings. The purpose of the NASP Practice Model is to promote consistent delivery of services nationwide, to provide information about services that might be expected from school psychologists, and to assist in defining the field of school psychology. A critical intention of the NASP Practice Model is to promote effective delivery of school psychological services by providing consistent and quality expectations. The NASP Practice Model is comprised of two major areas, Part I: Professional Practices and Part II: Organization Principles. Professional Practices describes the 10 Domains of Practice, which define the knowledge and skills expected of school psychologists. These Domains do not occur in isolation, but generally overlap or intersect when being implemented in the field. The 10 Domains of Practice for school psychologists are presented below (also see Appendix A).

The role of school psychologists in schools can be broadly described as helping students to succeed in the areas of academic, social, emotional, and behavioral functioning by providing direct and indirect services to students. School psychologists consult with families and school staff to create safe, healthy, and supportive learning environments for students (NASP, 2020).

Table 1

NASP 10 Domains of Practice

Domain
Domain 1: Data-Based Decision Making
Domain 2: Consultation and Collaboration
Domain 3: Academic Interventions and Instructional Supports
Domain 4: Mental and Behavioral Health Services and Interventions
Domain 5: School-Wide Practices to Promote Learning
Domain 6: Services to Promote Safe and Supportive Schools
Domain 7: Family, School, and Community Collaboration
Domain 8: Equitable Practices for Diverse Student Populations
Domain 9: Research and Evidence-Based Practice
Domain 10: Legal, Ethical, and Professional Practice

While the role of school psychologists in sexual health education has not been specifically outlined or extensively researched, the unique training and expertise of school psychologists indicate that they could be effective and valuable contributors in this much needed area. According to NASP, sexual health education should be taught in schools to assist youth with making sound decisions about sex and intimate relationships throughout their lives (NASP, 2020). Based on this stance, school psychologists have a responsibility to use their knowledge and training in facilitation of sexual health and education programs (McClung & Perfect, 2012). The NASP Practice Domains can be used to provide a framework for school psychologists to become engaged in sexual health and education of students with I/DD. While any of the 10 domains could be applied to school psychologists' potential contributions to planning, implementation, and evaluation of sexual health education, a subset of domains appears particularly salient.

The fourth NASP Practice domain, *Interventions and Mental Health Services to Develop Social and Life Skills*, targets school psychologists' knowledge of biological, cultural, developmental, and social influences on social, emotional, and behavioral functioning. School psychologists have training in the use of evidence-based strategies to support the emotional and mental health of students and understand the effects of behavioral and emotional functioning on learning and life skills (NASP, 2020). School psychologists can implement their professional skills in sexual health education of students with I/DD by assisting with development and delivery of curricula to ensure that students learn and apply important life skills (e.g., how to develop healthy friendships, appropriate behavior when dating, etc.). Moreover, school psychologists are able to evaluate the outcomes of these programs for students to determine areas of student growth and areas of further need for support.

Domain 6 of the NASP Practice model, *Preventive and Responsive Services*, states that school psychologists possess knowledge of principles and research regarding resilience and risk factors for academic, social, emotional, and behavioral health; and understanding of supports needed for multitiered prevention services (NASP, 2020). This domain encompasses using knowledge of risk and protective factors to address sexual health education of students with I/DD. Specifically, research tells us that students with disabilities are more likely to experience sexual assault and abuse and have fewer opportunities to develop skills needed to protect themselves and develop healthy relationships. A school psychologists' role in this capacity could include advocating for preventive and responsive practices (e.g., implementation of a sexual health curriculum) to address needed sexual health education of students with I/DD.

Domain 7 – *Family-School Collaboration Services* – is a critical piece of school psychology practice due to a variety of factors including the taboo nature of sexual health in

general, parent or guardian attitudes (e.g., belief that youth with I/DD are not interested in romantic relationships), and parenting self-efficacy (e.g., feeling ill-equipped to discuss sexual topics with their children). Domain 7 highlights school psychologists' expertise in family systems, strengths, needs, and culture; ways to support family influences on a student's academic, social, emotional, and behavioral functioning; and facilitation of effective family and school collaboration (NASP, 2020). School psychologists can engage parents and guardians in decisions about their children's sexual health and education, provide families with the tools needed to support conversations in the home setting about sexual health, and assist with strategies for students to generalize skills learned at school to the home environment (e.g., developing healthy friendships, planning recreational activities).

Practice Model Domain 8, *Diversity in Development and Learning*, involves knowledge of individual differences, abilities, and disabilities, research related to these factors, and evidence-based interventions to provide more effective services with consideration of issues related to diversity. Domain 8 encompasses advocacy for social justice in school policies and programs (NASP, 2020). Consideration of factors related to individual and cultural diversity would be part of the expectation of school psychologists as they design, implement, and evaluate sexual health education initiatives for students with I/DD. In this capacity, school psychologists would ensure consideration of students' gender/gender identity, sexual identity, race and ethnicity, and cultural values and how these are reflected and respected in specific sexual education health curricula.

Practice Model Domain 9, *Research and Program Evaluation*, posits that school psychologists are trained in research design, statistics, measurement, data collection and analysis, and program evaluation. These skills are utilized to evaluate and apply research to service

delivery and to support effective practices at the individual, group, and/or systems levels (NASP, 2020). School psychologists could use these skills to evaluate the fidelity and effectiveness of sexual health education programs for students with I/DD. School psychologists could consult with teachers in collecting meaningful student data to determine the effectiveness of sexual health education programs. This data could be used to advocate for the need for students with I/DD to receive effective sexual health instruction. Additionally, these skills provide school psychologists with the ability to critically review existing sexual health education programs (including the existing research evidence supporting their use) and determine which one(s) may result in the positive results for students.

Reasoned Action Approach

Given that school psychologists possess a unique, comprehensive, and student-centered skill-set, it is unclear why they are not more involved with sexual health education of students, particularly those with I/DD. The Reasoned Action Approach is a social cognitive theory that could be applied in answering this question. The Reasoned Action Approach (previously referred to as Theory of Planned Behavior) is a model that views beliefs, attitudes, and perceived norms as changeable cognitive factors that influence human behavior (Nardi-Rodriguez et al., 2019; Schaafsma et al., 2014). According to the Reasoned Action Approach, intention to perform a behavior is the most predictive factor regarding whether the behavior will be performed. However, intention is driven by “the attitude towards the behavior, the perceived social norms regarding the behavior, and the perceived self-efficacy” regarding the behavior (Schaafsma et al. 2014, p.158). Attitude refers to a person’s positive or negative opinion about performing the behavior. Perceived social norms includes a person’s beliefs about whether others, especially those they attribute importance to (e.g., colleagues), support or approve of the

behavior. Self-efficacy refers to a person's perceived behavioral control and competence in performing the behavior (Nardi-Rodriguez, 2019; Schaafsma et al, 2014).

Utilizing the Reasoned Action Approach, school psychologists would be expected to be more engaged in the sexual health education of students with I/DD if they (1) demonstrate positive attitudes about sexual health and education, (2) believe they have social support and approval from those they see as important figures in their profession or work context, and (3) feel confident and competent about provision of sexual health education services. This theory was previously utilized to understand the role of school psychologists in transition services for students with intellectual disabilities (ID) (Talapatra, 2014).

Potential barriers to school psychologists' involvement can include attitudes towards sexuality of students with I/DD. Research has reported parents, educators, and the general public often view people with disabilities as asexual and childlike; school psychologists and other educators may also believe that students with disabilities are not interested in sex or intimate relationships (Treacy et al., 2018). In addition, social norms may present as a significant barrier to promoting, implementing, and evaluating sexual health education programs in the school setting. Abstinence is typically the emphasis of many sexual health education programs delivered in the public school setting, as supported by legislation and funding (Treacy et al., 2018). Sexual behaviors of people with I/DD have typically been viewed as maladaptive and as needing to be extinguished, rather than as a normal expression of the human need for intimacy (Sala et al., 2019). An additional barrier for some school psychologists may be lack of knowledge and training in addressing sexuality in general, and more specifically with students with I/DD. While school psychologists possess extensive knowledge and expertise in the areas of human development and social, emotional, and behavioral functioning, sexual health of

students with I/DD is a relatively under-researched topic and is not a specific content area addressed in most school psychology graduate programs (NASP, 2020). Hence, lack of self-efficacy may limit school psychologists' engagement in sexual health education of students with I/DD. Finally, the dearth of evidence-based sexual health education curricula designed for implementation with students with I/DD is a significant barrier. Existing curricula recommended for use with people with disabilities are often: (a) designed for broad groups rather than designed to address the needs of specific subgroups (e.g., I/DD, deaf, blind/visually impaired); (b) centered on biological aspects of sexual behavior while avoiding emotional aspects of romantic relationships; (c) focused on isolated topics such as sexual abuse or STD prevention; and (d) lacking in ecological validity, including real-world application of skills (Blanchett & Wolfe, 2002; Knox & Hickson, 2001; McDaniels & Fleming, 2016; Shakespeare et al., 1996).

Current Study

The purpose of this study was to apply the Reasoned Action Approach (Nardi-Rodriguez, et. al, 2019; Schaafsma, et. al, 2014) to examine school psychologists' beliefs and behaviors regarding sexual health education for students with I/DD. Specifically, our study sought to determine whether school psychologists' attitudes, perceptions regarding social norms, perceived behavioral control/self-efficacy, and training and familiarity with sexual health education for students with I/DD influenced their current behaviors and intentions regarding advocacy for and implementation of sexual health education for this group of students. Within the context of our study, *attitudes* included beliefs about the need for students with I/DD to participate in sexual health education and the competencies and capabilities of students with I/DD to be involved in intimate romantic relationships. *Perceptions regarding social norms* referred to the perceived level of importance colleagues, parents, and community members accorded sexual health

education for students with I/DD as well as perceptions of how likely they were to support and/or encourage students with I/DD being involved in intimate romantic relationships. *Perceived behavioral control and self-efficacy* included whether school psychologists believed that they would be supported by their place of employment (e.g., school site, school district, special education department) if they were to provide sexual health education to students with I/DD. This area also addressed additional topics, including (a) whether school psychologists believed they would be supported by their employer, if they expressed interest in professional development on this topic; (b) whether they felt qualified to implement sexual health education to students with I/DD; and (c) if they believed their implementation of such a program would result in positive outcomes for students. *Training and/or familiarity with sexual health education* addressed school psychologists' knowledge about students with I/DD and their sexual health (e.g., interest in romantic relationships, risk of sexual abuse and exploitation as compared to non-disabled peers). Further, this category included training in delivery of interventions and supports for students with I/DD, and knowledge of strategies for making curricula accessible to students with I/DD.

In this study, the Reasoned Action Approach (Nardi-Rodriguez, et. al, 2019; Schaafsma, et. al, 2014) was utilized as a framework to determine whether school psychologists' attitudes, perception of social norms, and beliefs about self-efficacy would influence their behaviors and intentions regarding implementation of a sexual health education curriculum with students with I/DD. Specifically, this study attempted to answer the following questions:

- Research Question 1: Does the *School Psychologists' Role in Sexual Health Education for Students with I/DD* survey have a factor structure that permits the

exploration of the constructs Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity with Sexual Health Education?

- Hypothesis 1: It was expected that the survey structure would allow for exploration of the constructs proposed in the aforementioned research Question 1.
- Research Question 2: Do school psychologists believe: (a) that sexual health education for students with I/DD is important and do they believe that students with I/DD are capable of developing and maintaining romantic relationships? (b) sexual health education for students with I/DD is important to their place of employment and to stakeholders (e.g., administrators, families)? (c) they have the needed training and access to materials to implement sexual health education with students with disabilities? (d) they would be supported in implementation of a sexual health curriculum with students with I/DD and would those students demonstrate positive outcomes subsequent to the respondent's delivery of a sexual health education program?
 - Hypothesis 2: It was hypothesized that school psychologists would believe that sexual health education for students with I/DD is important and that students with I/DD are capable of developing and maintaining romantic relationships. Further, it was hypothesized that school psychologists would believe that sexual health education for students with I/DD was not important to their place of employment or stakeholders; would not believe that they had the needed training and access to materials to implement sexual health education for students with I/DD; and would not believe that they would be

supported in implementation of sexual health curriculum with students with I/DD.

- Research Question 3: Do school psychologists' attitudes/beliefs, perceived societal norms, perceived behavioral control/self-efficacy, and/or level of training affect their behaviors and intention regarding implementation and advocacy for sexual health education for students with I/DD?
 - Hypothesis 3: It was expected that school psychologists' level of preparedness (i.e., their knowledge and training regarding students with I/DD and more specifically sexual health education of students with I/DD) would be predictive of school psychologists' behaviors and intentions regarding advocacy for and/or implementation of sexual health education with students with I/DD. In addition, based on the Reasoned Action Approach, it was hypothesized that positive attitudes and beliefs (e.g., perceptions of the need for students with I/DD to receive sexual health education, beliefs about students' ability to engage in romantic relationships), perceived approval with regards to social norms (e.g., beliefs of colleagues, employers, and community stakeholders about students with I/DD receiving sexual health education), and perceived behavioral control/self-efficacy (e.g., expectations of institutional support; belief that students sexual health education would make an impact) would be moderately predictive of school psychologists' behavior and intentions regarding advocacy for and implementation of sexual health education with students with I/DD.

Results were expected to provide valuable information for the training and practice of school psychologists in addressing the need for sexual health education of students with disabilities in their schools.

Method

Participants and Procedure

The target participants of this study were practicing school psychologists in Georgia working in public schools serving PK-12 students. It is estimated that there are approximately 800 practicing school psychologists in the state of Georgia (GASP, 2017). Per Beavers et al. (2013), it was determined that responses of at least 150 survey respondents would be needed in order to conduct the multivariate data analysis methods discussed later in this paper. In addition to multivariate methods generally requiring a higher sample size, the factor structure of the instrument being used to collect data can dictate the sample size needed. Given that the survey utilized for the study was created for the purposes of this same study, the factor structure was not determined prior to its use. Hence, a sample size of 150 respondents was set as the goal in order to analyze findings.

An online survey (see Appendix B) was administered to a state-wide sample of practicing school psychologists from a variety of geographic settings (i.e., rural, suburban, and urban). Participants were recruited from a listserv through the state level branch of a professional school psychology association, Georgia Association of School Psychologists (GASP), and from a listserv of Georgia State University school psychology students and alumni, managed by GSU's Student Affiliates in School Psychology (SASP) organization. Participants also were recruited through direct emails available on public school district websites. The email sent to participants included a brief introduction to the study and a link to the online survey. The survey collected

demographic information from participants including year of birth, years of experience as a school psychologist, gender, race/ethnicity, full-time/part-time employment, highest level of education, grade levels served, and employment setting (i.e., rural, urban, suburban).

Information regarding school psychologists' involvement in implementation of and advocacy for sexual health education of students in general, as well as with students with I/DD, was collected.

The survey included questions regarding school psychologists' attitudes/beliefs, their perceptions regarding school and community social norms, their perceived behavioral control and self-efficacy, their training and familiarity with sexual health education of students with I/DD, and their current behavior and future intentions regarding advocacy for and/or implementation of sexual health education with students with I/DD.

Measure

There was no measure that had been currently developed to glean information about these variables. Therefore, the 68-item *School Psychologists' Role in Sexual Health Education for Students with I/DD Survey* was developed specifically for use in this research study. The first section of the survey, Demographic Information, consisted of 8 items requesting demographic information including participant year of birth, years of experience as a school psychologist, gender, race/ethnicity, full-time/part-time employment, highest level of education, grade levels served, and employment setting/community. The second section of the survey, Experience Questions, was comprised of two questions related to experience of school psychologists with regard to extent of respondents' training and level of experience with students with I/DD. The third section of the survey, the Implementation/Advocacy scale, consisted of 12 items that requested information regarding school psychologists' experience with and knowledge regarding sexual health education implementation in their own practice, available materials within their

school district or from their professional resources, experience in providing support to students with I/DD regarding intimate relationships; and desire and availability of time to teach and advocate for sexual health education to students with I/DD. The fourth section of the survey, Attitude, consisted of 20 items regarding respondents' attitudes and knowledge about sexual health education of students with I/DD. On the fifth section of the survey, Perceived Social Norms, respondents completed seven questions regarding perceptions of colleagues and students' families about sexual health education and involvement in romantic relationships for students with I/DD. The sixth section of the survey, Perceived Behavioral Control/Self-Efficacy, included four items regarding perceived behavioral control/self-efficacy related to sexual health education of students with I/DD. Specifically, respondents were asked if they would feel supported by their place of employment if they wanted to implement a program or expressed interest in professional development around this topic, did they feel qualified to implement such a program, and did they believe their implementation of a sexual health education program would result in positive outcomes for students. School psychologists' training with and knowledge of sexual health education was addressed in the seventh section of the survey, Training/Familiarity with Sexual Health and Education, which included 11 questions. This section addressed level of training school psychologists have received about the need for sexual health education of students with disabilities to be addressed, the importance of their advocacy for these students, and their understanding of their professional obligation to advocate for these students. The eighth and final section of the survey included four open-ended questions which as participating school psychologists' to provided compelling reasons and arguments for implementing sexual health education to students with I/DD as well as the amount and kind of

informational or professional development regarding students' with I/DD sexual health education they had received.

Data Analysis

Descriptive statistics, principal component analyses, and multiple regression were used to summarize the survey data and address the research questions. More specifically, descriptive statistics (e.g., means, frequencies) were calculated to determine the demographic characteristics and implementation/advocacy behaviors of the participating school psychologists such as school setting, years of experience, and education level. Our research team originally planned to examine the factor structure of other scales on the *School Psychologists' Role in Sexual Health Education for Students with I/DD Survey* using exploratory factor analysis. However, after cleaning the data (e.g., removing incomplete responses) the resulting sample was too small to meet the minimum sample size recommendations for factor analytic analyses. To address this limitation, we conducted unidimensional Principal Component Analyses (PCA) and calculated coefficient alpha to insure adequate item fit and internal consistency for the following scales: Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity. Other scales and items (e.g., implementation/advocacy, demographic information, and open-ended questions) were not included in this evaluation of scale structure. All statistical analyses were completed utilizing SPSS 28.0.

In order to compare the significance of differences in education level (i.e., graduate degree level such as Master's, Specialist, and Doctorate) with the variables of Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity, Analysis of Variance (ANOVA) was utilized. Further, an ANOVA was computed to determine the degree to which survey respondents' employment setting (i.e., rural, suburban, and urban)

might reveal differences in responses to the Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity scale items.

Multiple regression analysis was used to determine if participating school psychologists' behaviors and intentions regarding implementation of and advocacy for sexual health education of students with I/DD was predicted by their attitudes, level of preparation (training), self-efficacy, and/or perceived institutional support (social norms) concerning this topic. Multiple regression analyzes the relationship between one dependent variable and two or more independent variables (Creswell, 2002). For this study, the dependent variable was school psychologists' current engagement in and future intentions regarding implementation and/or advocacy for sexual health education of students with I/DD. The independent (or predictor) variables were school psychologists' attitudes, training, self-efficacy, and perceived social norms regarding sexual health education for students with I/DD. It was hypothesized that school psychologists' training/familiarity with sexual health and education would account for a significant proportion of the variance in their current behavior and intention to engage in advocacy and/or implementation of sexual health education of students with I/DD. It was also hypothesized that school psychologists' attitudes regarding people with I/DD, perceptions of social norms, and perceptions of their own capabilities and behavioral control would predict school psychologists' behavior and intentions regarding implementation of and advocacy for sexual health education of students with I/DD.

Results

Participants

Of the 141 respondents from a pool of practicing school psychologists in the state of Georgia, data from 122 respondents were utilized to glean demographic information for the

sample. Subsequent to “cleaning” of the data, information from 19 respondents was deemed unusable due to numerous missing item responses. The resulting demographic information included information on participant gender, race/ethnicity, year of birth, years of experience as a school psychologist, employment status (i.e., full time or part time), highest degree received, grade levels served, and employment setting (i.e., urban, suburban, rural).

Demographic Information. The survey respondents reported a median experience level of 14.5 years working in school settings. In terms of graduate education, 77.9% of respondents reported having a Specialist degree ($n = 95$), while 18.9% ($n = 23$) had a Doctorate degree, and 3.3% ($n = 4$) had a Master’s degree. The majority of respondents reported working full-time (95.9%; $n = 117$), in an elementary school setting (85.2%; $n = 104$), and in a suburban geographic location (49.2%; $n = 60$). In terms of gender, 82.8% of respondents ($n = 101$) identified as (Cisgender) Female and 14.8% ($n = 18$) identified as (Cisgender) Male. Less than 1% of respondents identified as Nonbinary (0.8%; $n = 1$) and less than 2% of respondents selected Other (1.6%; $n = 2$) to describe their gender. When asked about their race/ethnicity, the majority of respondents identified as White (77.9%; $n = 95$). 18.9% of respondents ($n = 23$) identified as Black or African American and 1.6% of respondents ($n = 2$) identified as Asian. Demographic information is reported in Table 2.

Table 2

Demographic Information for survey respondents ($n = 122$)

		<i>n</i>	<i>Percent (%)</i>
Degree	Master’s	4	3.3
	Specialist	95	77.9
	Doctoral	23	18.9
Employment Setting	Rural	39	32.0
	Urban	23	18.9

		<i>n</i>	<i>Percent (%)</i>
Grade Levels Served	Suburban	60	49.2
	Preschool	49	40.2
	Elementary	104	85.2
	Middle	79	64.8
	High	65	53.3
	Transition Program	3	2.5
	Other	11	9.0
Gender	(Cisgender) Male	18	14.8
	(Cisgender) Female	101	82.8
	Nonbinary	1	.8
	Other	2	1.6
Race/Ethnicity	White	95	77.9
	Black or African American	23	18.9
	Asian	2	1.6
	American Indian or Alaskan Native	1	.8
	Other	2	1.6
	Other Write-in: European American	1	.8
	Other Write-in: Nordic American	1	.8

Extent of Training. Respondents were asked to share information regarding the extent of their training with regards to students with I/DD. Nearly two-thirds (63.1%) of the survey respondents ($n = 77$) reported *moderate training and content* related to I/DD embedded in graduate coursework with some exposure in practice (i.e., evaluation for special education in practice). A smaller number ($n = 26$; 21.3%) of respondents endorsed *extensive training* inclusive of graduate coursework, professional development, and supervised practice (e.g.,

counseling, behavior support, etc.) with students with I/DD. Finally, 14.8% (n = 18) of respondents reported *limited training and content* related to I/DD embedded in coursework, while only one respondent (0.8%) reported *no training* specific to students with I/DD.

Level of Experience. In terms of previous experience working with students with I/DD, the majority of the survey respondents indicated they had at least a moderate degree of experience with this student subgroup. Specifically, 57.4% of respondents reported having *moderate experience* working with students with I/DD (n = 70). Further, 32.8% of respondents reported *extensive experience* working with students with I/DD (n = 40). In contrast, only a small number of respondents (9.8%) reported *limited experience* working with students with I/DD. It also should be noted that none of the respondents endorsed having *no previous experience* working with students with I/DD.

Research Question 1: Scale Structure

Unidimensional PCAs were conducted and coefficient alphas were calculated in order to answer the first research question: “Does the *School Psychologists’ Role in Sexual Health Education for Students with I/DD Survey* have a factor structure that permits the exploration of the constructs of Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity with sexual health education?”

While data from 122 of the 141 respondents from a pool of practicing school psychologists in the state of Georgia was utilized to glean demographic information for the sample, data from only 92 respondents was able to be used for analysis of the scale structure as information from an additional 30 respondents was deemed unusable in the PCA due to numerous missing item responses. Our final sample (n = 92) was insufficient for conducting a multivariate PCA. Hence, unidimensional PCAs were conducted to extract one factor that

measured the intended construct on four scales from the survey: Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity). For each PCA, scale items with loadings below .30 were suppressed and flagged for deletion from the final scale used in subsequent analyses (e.g., multiple regression). It was determined that all items on the Perceived Social Norms (7 items), Perceived Behavioral Control/Self-Efficacy (4 items), and Training/Familiarity (11 items) scales would be utilized for further data analysis. On the Attitude scale, four items did not meet the criteria for inclusion (i.e., item load < .30) and were eliminated from the scale. Hence, 16 (of the original 20) items on the Attitude scale were used in subsequent analyses.

Table 3

Unidimensional PCA for Survey Scales

Scale Variables	Variable Loading
<i>Attitude Scale Items</i>	
Attitude1	.537
Attitude3	.595
Attitude4R	.400
Attitude5R	.588
Attitude6	.577
Attitude7R	.450
Attitude8R	.734
Attitude10R	.527
Attitude11R	.592
Attitude12	.383
Attitude13	.310
Attitude14	.534
Attitude15R	.583
Attitude16	.630
Attitude19R	.428
Attitude20	.520
<i>Social Norms Scale Items</i>	
Social Norms1	.389
Social Norms2R	.651
Social Norms3R	.722

Scale Variables	Variable Loading
Social Norms4R	.683
Social Norms5	.391
Social Norms6R	.596
Social Norms7R	.638
<i>Behavioral Control/Self-Efficacy Scale Items</i>	
BehControl1	.780
BehControl2	.794
BehControl3	.507
BehControl4	.497
<i>Training Scale Items</i>	
Training1	.628
Training2	.662
Training3	.612
Training4	.667
Training5	.647
Training6	.604
Training7	.629
Training8	.542
Training9	.651
Training10	.737
Training11	.589

Note: Items coded with an R (e.g., Attitude19R) are reverse-coded items.

Cronbach's alpha was utilized as a measure of internal consistency, or to determine how closely the set of items within each scale were as a group. Cronbach's alpha were calculated for the Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity scales with a reliability coefficient of $\geq .70$ suggesting that items have a relatively high internal consistency. For the Attitude scale, when all items were included, Cronbach's alpha was .764 (20 items). This was improved when the four items from the Attitude scale found to load poorly on the Attitude scale were removed from the analysis, resulting in an coefficient alpha of .815 (16 items). The Training scale yielded an alpha of .847 (11 items) and the Social Norms scale yielded an coefficient alpha of .690 (7 items). The Behavioral Control/Self-Efficacy scale yielded an alpha of .550 (4 items). Although Cronbach's alpha for

this relatively brief scale was well below our desired threshold for internal consistency, it should be noted that scale length (i.e., number of items) can influence coefficient alpha, resulting in lower scores on this metric (Nunnally, 1994).

Research Question 2:

We used descriptive statistics and comparison of means (i.e., ANOVAs) to address the second research question, “Do school psychologists believe: (a) that sexual health education for students with I/DD is important and do they believe that students with I/DD are capable of developing and maintaining romantic relationships, (b) sexual health education for students with I/DD is important to their place of employment and to stakeholders (e.g., administrators, families), (c) they have the needed training and access to materials to implement sexual health education with students with disabilities, and (d) they would be supported in implementation of a sexual health curriculum with students with I/DD and would those students demonstrate positive outcomes subsequent to the respondent’s delivery of a sexual health education program?”

On the Attitude scale, the mean item rating was 3.53 (s.d. = 0.31) indicating that respondents “strongly agreed” that sexual health education for students with I/DD is important. The mean item rating on the Social Norms scale was 2.58 (s.d. = 0.41) and indicated that respondents “somewhat agreed” that sexual health education for students with I/DD would be viewed as important in their place of employment and by community stakeholders. The Behavioral Control/Self-Efficacy scale had a mean item rating of 2.39 (s.d. = 0.49). This suggested respondents “somewhat disagreed” that they would have support for implementation of a sexual health curriculum with students with I/DD and that, if they were to implement such a program, students would demonstrate positive outcomes. On the Training/Familiarity scale, the mean item rating was 2.23 (s.d. = 0.52), indicating that respondents overall indicated they

“somewhat disagreed” that they had received the needed training and skills to implement a sexual health education program with students with I/DD.

In looking at the item-level responses on each scale, respondents endorsed “strongly agree” on several specific items on the Attitude scale, including: “Masturbation should [not] be discouraged among students with I/DD,” (mean = 3.61; s.d. = .70); “Students with I/DD should be encouraged to practice safe dating practices,” (mean = 3.92; s.d. = .42); and “Sexual health education for students with I/DD has a valuable role in protecting them from sexual exploitation and abuse” (mean = 3.87; s.d. = .34). There were no items on this scale in which respondents endorsed “strongly disagree.” However, there were some items on which participants indicated the lower agreement in comparison to other scale items. Specifically, respondents mean item ratings were in the “somewhat agree” range on the following items: “Teaching sexual health education to students with I/DD is no more difficult than teaching it to other students” (mean = 2.55; s.d. = .90) and “I am comfortable having discussions with students with I/DD regarding sexual health” (mean = 2.60; s.d. = .95).

On the Perceived Social Norms scale, respondents did not endorse “strongly agree” or “strongly disagree” to any items overall. However, participants ratings were the highest on the following items, where their mean ratings were in the “somewhat agree” range: “I would [not] be ostracized by colleagues if I were to advocate for sexual health education of students with I/DD” (mean = 2.92; s.d. = .71) and “Most educators and families in my school [do not] discourage students with I/DD from thinking about marriage in the future” (mean = 2.81, s.d. = .70). Conversely, respondents reported that they “somewhat disagreed” with the item “Community/school stakeholders would [not] view sexual health education to students with

I/DD as taboo and too risky” (mean = 2.03; s.d. = .70). This was the lowest item rating on the Perceived Social Norms scale.

On the Perceived Behavioral Control/Self-Efficacy scale, respondents reported they “somewhat disagree(d)” with the item: “If I decided to implement a sexual health curriculum, I do not foresee any challenges or barriers that I could not work through” (mean = 1.81; s.d. = 0.80). This item was the lowest rated item on the Perceived Behavioral Control/Self-Efficacy scale. Conversely, the highest rated items on this scale was “If I were to implement a sexual health education curriculum for students with I/DD, the program would result in positive outcomes for students” (mean item rating 3.2; s.d. = 0.48), which was in the “somewhat agree” range.

Responses on the Training/Familiarity scale reflected that respondents recognized that advocacy for sexual health education for students and development of their skills in this area is an ethical and professional responsibility as dictated by the NASP Practice Model and school psychologists’ professional ethics codes to some degree. While respondents did not endorse “strongly agree” to any statements on this scale overall, they reported that they “somewhat agree(d)” to the following items: “Based on my understanding of the NASP Model of Practice, it is a school psychologist’s duty to advocate for sexual health education of all students, both those with disabilities and those without disabilities” (mean item rating 2.92; s.d. = 0.84); “Based on my understanding of our professional ethics codes, it is important for me to advocate for sexual health education of students with I/DD” (mean item rating 2.91; s.d. = 0.75); and “The NASP Domains of Practice are inclusive of development and implementation of skills related to sexual health education of students with I/DD” (mean item rating 2.90; s.d. = 0.65). In contrast, respondents did endorse “strongly disagree” in response to the item, “I have received

professional development in the area of sexual health education for students with I/DD” (mean item rating 1.40; s.d. = 0.70), and “somewhat disagree” in response to the item, “My graduate program provided training in the area of sexuality and development for students with I/DD” (mean item rating 1.52; s.d. = 0.67). These were the two lowest rated items for the Training/Familiarity scale. Please see Appendix B for overall scale and item means and standard deviations.

Further, ANOVAs were conducted to determine if there were differences in Attitude, Perceived Behavioral Control/Self-Efficacy, Perceived Social Norms, and Training/Familiarity related to respondents’ level of education (i.e., Master’s/Specialist and Doctorate) and geographic setting (i.e., Urban, Suburban, and Rural). Because of the small number of participants with only a Master’s degree, the data for that group was combined with the Specialist-level group’s data for the purposes of conducting the ANOVAs. The ANOVA results indicated there were not a statistically significant difference in mean item ratings on the Attitude Scale for either participant level of education ($F(2,106)=2.35$, $p=.101$) or participant employment setting ($F(2,106)=2.01$, $p=.140$). Similarly, the ANOVA results indicated there were not a statistically significant difference in the mean item ratings on the Perceived Social Norms Scale for participant level of education ($F(2,104)=1.65$; $p=.197$) or employment setting ($F(2,104)=1.36$; $p=.260$). When considering respondents’ Behavioral Control/Self-Efficacy scale ratings, there was no significant difference between the mean item rating level response level by education level ($F(2,107)=2.31$; $p=.104$) and employment setting ($F(2,107)=1.42$; $p=.247$). Finally, there were not a statistically significant difference in the mean item rating on the Training/Familiarity Scale for either level of education ($F(2,99)=1.83$; $p=.166$) or employment setting ($F(2,99)=1.95$; $p=.148$).

Table 4

Item Means and Standard Deviations for Participant Subgroups

	Item Mean	Std. Deviation
<i>Training/Familiarity Scale</i>		
Employment Setting		
Rural	2.17	.593
Urban	2.44	.531
Suburban	2.19	.450
Education Level		
Master's/Specialist Degree	2.18	.498
Doctoral Degree	2.42	.570
<i>Behavior Control Scale</i>		
Employment Setting		
Rural	2.41	.553
Urban	2.54	.481
Suburban	2.33	.452
Education Level		
Master's/Specialist Degree	2.35	.468
Doctoral Degree	2.60	.570
<i>Social Norms Scale</i>		
Employment Setting		
Rural	2.65	.456
Urban	2.63	.386
Suburban	2.52	.373
Education Level		
Master's/Specialist Degree	2.55	.404
Doctorate Degree	2.71	.421
<i>Attitude Scale</i>		
Employment Setting		
Rural	3.44	.340
Urban	3.55	.325
Suburban	3.58	.228
Education Level		
Master's/Specialist Degree	3.53	.317
Doctoral	3.60	.293

Research Question 3

A multiple regression analysis was conducted to answer the research question, “Do school psychologists’ attitudes/beliefs, perceived social norms, perceived behavioral control/self-efficacy, and level of training affect their behavior and intentions regarding implementation and advocacy for sexual health education for students with I/DD?” The Implementation/Advocacy scale, which was the dependent variable, administered to participants consisted of 12 dichotomous items. Respondents were asked to indicate “yes” (coded a “1”) or ‘no’ (coded as a “0”) in response to questions regarding their implementation of a sexual health education program, intention to teach/consult about sexual health education in the next 12 months, access to sexual health education curriculum materials, desire to teach sexual health education to students with I/DD, and advocacy for sexual health education for students with I/DD. The mean item rating for this scale was 0.27 (s.d. = .181), suggesting a low-to-moderate level of engagement (or intention to engage in) advocacy and implementation in this area.

A multiple regression analysis was completed using the scales for participant responses on the Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity scales as predictor variables. First correlations between the proposed independent (predictor) and dependent variables were calculated (see Table 5). It was hypothesized that school psychologists’ training, attitudes, and perceived social norms would account for a significant proportion of variance in school psychologists’ current behavior and future intention to engage in implementing and advocating for sexual health education of students with I/DD.

Table 5

Correlation between Predictor Variables and Implementation/Advocacy Scale

	<i>Imp/Adv</i>	<i>Attitude</i>	<i>Social Norms</i>	<i>Behavioral Control</i>	<i>Training</i>
<i>Implementation/Advocacy</i>	1.00				
<i>Attitude</i>	.237	1.00			
<i>Perceived Social Norms</i>	.028	.182	1.00		
<i>Perceived Behavioral Control/Self-Efficacy</i>	.459	.283	.409	1.00	
<i>Training/Familiarity</i>	.533	.267	.145	.627	1.00

The overall regression model was significant ($F(4,87)=4.55, p < .05, R^2 = .334$) (see Table 6). In other words, the results of the multiple regression indicated 33.4% of the variance in the dependent variable (i.e., School Psychologists' self-reported behaviors and intentions regarding implementation and advocacy) was explained by the predictor variables (i.e., responses on the Attitude, Social Norms, Behavioral Control/Self-Efficacy, and Training/Familiarity scales) in the tested model. Three of the regression coefficients for the predictor variable were positive, indicating that increases on school psychologists' self-reported attitude, behavior control/self-efficacy, and training/familiarity were associated increased behaviors and intentions regarding advocacy for and implementation of sexual health education. Further, two of the individual predictors reached significance: the Training/Familiarity scale ($p = .002$) and the Perceived Behavior Control/Self-Efficacy scale ($p = .034$). The finding that the ratings on the Training/Familiarity scale was a significant predictor supported our hypothesis that training and familiarity with sexual health education for students with I/DD would be associated with school

psychologists' increased engagement or willingness to engage in implementing and advocating for these practices. Although the Attitude Scale was hypothesized to be a significant predictor of psychologists' willingness to implement and advocate for sexual health education, this predictor variable did not reach statistical significance in our model. The finding regarding the Perceived Behavioral Control/Self-Efficacy scale aligns with the Reasoned Action Approach which suggests a person's perceptions of control and competence regarding a behavior can influence their actual performance of that behavior. In other words, if school psychologists perceived they were capable of and had control over implementation and advocacy of sexual health education, they were more likely to engage (or intend to engage) in these behaviors

Table 6

Regression Analysis for Variables Predicting School Psychologists' Implementation/Advocacy of Sexual Health Education for Students with I/DD

Predictor	<i>b</i>	SE	B	<i>p</i>
Attitude	.063	.063	.092	.323
Perceived Social Norms	-.073	.047	-.151	.125
Perceived Behavioral Control/Self-Efficacy	.104	.048	.267	.034
Training/Familiarity with Sexual Health and Education	.135	.043	.363	.002

Conversely, the regression coefficient for the Perceived Social Norms scale was negative suggesting that school psychologists' perceptions of community norms and fellow educators' attitudes did not appear to discourage or impede their engagement or willingness to engage in implementation of and advocacy for sexual health education for students with I/DD.

Discussion

The purpose of this study was to examine school psychologists' attitudes, perceptions, training and familiarity regarding sexual health education of students with I/DD as well as their willingness to advocate for and implement programs and practices in this area. Further, the study attempted to examine the relationships between school psychologists' attitudes, perceived social norms, perceived behavioral control and self-efficacy, and training/familiarity with sexual health education, and their behaviors and intentions regarding implementation of and advocacy for sexual health education for students with I/DD.

Demographic information collected indicated that survey respondents were relatively experienced (i.e., a median of 14.5 years as a school psychologist). Further, the majority of respondents (77.9%) reported having a Specialist degree. This is likely due to the study inclusion criteria targeting practicing school psychologists in Georgia schools for whom the Ed.S. degree or its equivalent being the entry-level requirement for practicing school psychologists. The majority of respondents in our sample reported working full-time (95.9%), in an elementary school setting (85.2%), and in a suburban geographic location (49.2%). This was generally expected as there are more elementary schools than middle or high schools, and school systems generally prefer to employ full-time staff. Further, the preponderance of respondents identified as (Cisgender) Female (82.8%) and White (77.9%); this is consistent with national data on the relatively lack of diversity among practicing school psychologists.

Our research team hypothesized that training and familiarity, attitudes, perceived social norms, and perceived behavioral control/self-efficacy regarding sexual health education for students with I/DD would be significant contributing factors to school psychologists' current and future implementation and advocacy for sexual health education for that population. Prior to our

study, there was no research available regarding school psychologists' roles and perceptions in sexual health education for students with I/DD, nor was there any measure that had been created to measure the hypothesized constructs. Thus, the *School Psychologists' Role in Sexual Health Education for Students with Intellectual and Developmental Disabilities (I/DD) Survey* was designed using the Reasoned Action Approach, a social cognitive theory model that analyzes the beliefs, attitudes, and perceived norms as changeable factors that influence behavior. Given there was no empirical evidence underlying the factor structure of this newly created survey, it was important to understand what constructs would be measured by this new tool. Unfortunately, the total number of usable responses to the survey ($N = 92$) prevented completion of a PCA to determine the overall factor structure of the survey. We were able to conduct unidimensional PCAs to examine the extent to which survey items loaded on their assigned scales: Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity scales. Based on these analyses, all scale items (with the exception of four items on the Attitude scale) were retained and used in subsequent analyses. Further, Cronbach's alpha indicated that the individual scales generally demonstrated acceptable internal consistency, although the Behavior Control/Self-Efficacy Scale had a lower coefficient alpha (.55)—most likely due to its relative brevity (4 items).

Based on mean item ratings on the Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity scales, it appeared most respondents strongly agreed that sexual health education for students with I/DD is important and that these students were capable of developing and maintaining romantic relationships. However, respondents indicated more moderate support for the idea that providing sexual health education for students with I/DD was viewed as important in their place of employment or by community

stakeholders (e.g., administrators, families). Further, many respondents indicated they did not have the needed training and materials to implement a sexual health education curriculum with students with disabilities and were uncertain of whether they would be supported in implementation of a sexual health curriculum with students with I/DD in their employment setting. Based on these responses, it is possible that additional training and support through professional development activities, graduate coursework, and consultation with colleagues and supervisors could further school psychologists' engagement in sexual health education for students with I/DD. However, to be effective, this training might need to be combined with systems-level advocacy and education to build acceptance and support for sexual health education for students with I/DD among other educators, policymakers, and families.

Our analyses indicated that neither level of education (i.e., Master's/Specialist, Doctorate degree) nor employment setting (i.e., urban, rural, suburban) resulted in significant differences in participants' responses on the Attitude, Perceived Social Norms, Perceived Behavioral Control, or Training/Familiarity scale. Although urban residents and individuals with higher education are often believed to be more liberal, this trend did not appear to have a significant impact on the responses of participating school psychologists in our study. It is possible that results were skewed because our survey respondents were uniformly well-educated (i.e., almost all reported having a Specialist degree or higher) and mostly worked in suburban settings. In other words, while our sample of respondents reflected the demographics of school psychologists in general, school psychologists have a number of demographic characteristics (e.g., graduate education, living in suburban areas, predominantly female) that may lead them to be more supportive of sexual health education for students with and without disabilities.

Based on the Reasoned Action Approach (Nardi-Rodriguez, et. al, 2019; Schaafsma, et. al, 2014), we examined whether school psychologists' attitudes, perceived behavioral control and self-efficacy, and perception of community social norms accounted for a significant proportion of variance in their current behavior and intentions regarding implementation and advocacy for sexual health education of students with I/DD. Our research team also hypothesized that training would account for a significant proportion of variance in school psychologists' behaviors and intentions with regards to implementation and advocacy of sexual health education for this population. Our analysis indicated that approximately one-third of the variance (33.34%) in respondents' implementation and advocacy behaviors or intentions was explained by these factors. We hypothesized that school psychologists' level of preparedness (i.e., their knowledge and training regarding students with I/DD and more specifically sexual health education of students with I/DD) would account for a significant proportion of variance in school psychologists' beliefs regarding the need for students with I/DD to receive sexual health education. Based on our results, it does appear that school psychologists' training and preparation are an important factor in their professional engagement in sexual health education activities in the school setting. As school psychologists' self-reported level of training increased, their self-reported implementation and advocacy behaviors increased. Conversely, when self-reported training yielded lower ratings, respondents also reported a lower rate of engagement (or intention to engage in) implementation and advocacy behaviors. Further, consistent with our hypothesis, Perceived Behavioral Control/Self-Efficacy also appears to influence school psychologists' engagement in professional tasks related to sexual health education for students with I/DD. This finding is consistent with the Reasoned Action Approach theory, which suggests that engagement in a behavior is influenced by the degree to which a person feels they

are capable and in control of performing a specific behavior. While the Reasoned Action Approach also posits that engagement in a behavior can be influenced by perceived social norms surrounding the behavior, we did not observe a significant association between participants' responses on the Social Norms and Implementation/Advocacy scales.

On open-ended questions included at the end of our survey, participating school psychologists were asked to provide potential reasons for engaging in sexual health education to students with I/DD. In general, participant responses centered on concerns regarding preventing possible sexual abuse, sexually transmitted diseases, and pregnancy. Further, respondents acknowledged the normalcy of engagement in intimate relationships for individuals with and without disabilities. One respondent shared that sexual health education “teaches (students with I/DD) the social norms for their sexual behavior.” Another respondent stated that “sexual feelings (are) a natural part of the maturing process”; and a third respondent shared, “it is human nature, biologically driven, to engage in sexual behavior.” A second open-ended question invited participants to provide potential arguments against implementing sexual health education with students with I/DD. Participant responses included some community members' beliefs that learning about the behavior may lead to the behavior, parent preference regarding sexual health education for their children, and material being too complex for students with I/DD to understand. Finally, when asked about the professional development they may have received about sexual health education for students with I/DD, a large majority (21 of 27) respondents reported they had received “none.” One respondent shared, “As it has come up in the job, I look for social stories online.” In discussing their access to training and resources for sexual health education for students with I/DD, another respondent shared: “Unfortunately, not much. We rely on products we make in-house.” These narrative comments were consistent with respondents'

ratings on the survey indicating a lack of training and materials for providing sexual health education for students. Participants also were provided an open-ended item that ask them to share their reason(s) for not completing the survey should they choose to decline consent. This question presented as an optional item, which appeared on the web-based survey if potential participants declined to consent. It was noted that there were no respondents who declined to participate in the survey, thus none of the respondents were prompted for a response to that item.

Limitations and Future Research

There are several limitations in the current study. The study consisted of a very small sample collected from one southern state. It is likely that a national sample would have resulted in a larger sample size, which would have provided additional geographic variability and representativeness. Collecting survey data from a larger national sample also would provide an opportunity to refine the survey factor structure, informing any subscale and survey revisions that need to take place. The small sample size in this study prevented the planned multidimensional PCA from being conducted, which may have influenced the outcome of subsequent analyses of the resulting survey data. Finally, survey data was collected specifically from school psychologists regarding their roles and perceptions about sexual health education for students with I/DD. However, this approach also limited the generalizability of the study results. It would be beneficial to include additional school personnel such as special education teachers and school counselors in collection of the survey data to glean additional understanding of school psychologists' (and other educators') attitudes and roles in sexual health education for students with I/DD.

Conclusion

Research in the area of sexual health education for students, particularly those with disabilities, is limited. Further, to date, no research has examined the role of school psychologists in sexual health education for students with I/DD. Hence, this study contributes to school psychology literature regarding the importance and the need for implementation of sexual health education for students with I/DD.

Our data analyses suggested that school psychologists' training, attitudes, and perception behavior control and self-efficacy positively influenced their behaviors and intentions regarding implementation and advocacy for sexual health education of students with I/DD. In particular, our results reinforce the potential value of training and professional development in facilitating practitioners' familiarity and sense of efficacy regarding these practices, which can impact their willingness to engage and advocate for sexual health education for students with I/DD. Further, while respondents did strongly agree that sexual health education for students with I/DD was important, they reported less conviction that it was important to their school system and community stakeholders. Respondents also indicated they had limited access to curricular resources and intervention materials in this area.

Our study's findings align with previous research indicating additional training via professional development, graduate coursework, and field-based supervision are needed to further mental health and education professionals' engagement in sexual health education for students with I/DD (Bahr et al., 2000; Savage et al., 2004). However, for significant and meaningful change in this area, it is likely that any training initiative would need to be combined with systems-level advocacy and education to build acceptance and support for sexual health education for students with I/DD among other educators, policymakers, and families. The

unique training and expertise of school psychologists suggests that they could be effective and valuable contributors in this much needed area. According to NASP, sexual health education should be taught in schools to assist youth with making sound decisions about sex and intimate relationships throughout their lives (NASP, 2020). School psychologists have a responsibility to use their knowledge and training in facilitation of sexual health and education programs (McClung & Perfect, 2012). Moreover, the school psychologists' professional and ethical standards can be viewed as providing both a framework and a mandate for school psychologists to become engaged in sexual health and education of students with I/DD.

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APPENDICES

Appendix A

NASP 10 Domains of Practice

<i>NASP 10 Domains of Practice</i>	
Domain	Descriptor
Domain 1: Data-Based Decision Making	Understand and utilize assessment methods for identifying strengths and needs; develop effective interventions, services, and programs; measure progress and outcomes within a multitiered systems of supports. Use a problem-solving framework for all professional activities. Collect data from multiple sources for decision-making.
Domain 2: Consultation and Collaboration	Understand varied models and strategies of consultation and collaboration applicable to individuals, families, groups, and systems and demonstrate skills to consult, collaborate, and communicate effectively with others.
Domain 3: Academic Interventions and Instructional Supports	Understand the biological, cultural, and social influences on academic skills; human learning, cognitive, and developmental processes; and evidence-based curricula and instructional strategies.
Domain 4: Mental and Behavioral Health Services and Interventions	Understand the biological, cultural, developmental, and social influences on mental and behavioral health, behavioral and emotional impacts on learning, and evidence-based strategies to promote social-emotional functioning. In collaboration with others, design, implement, and evaluate services that promote resilience

NASP 10 Domains of Practice

Domain	Descriptor
Domain 5: School-Wide Practices to Promote Learning	and positive behavior, support socialization and adaptive skills, and enhance mental and behavioral health.
Domain 5: School-Wide Practices to Promote Learning	Understand systems, structures, organization, and theory; general and special education programming; implementation science; and evidence-based, school-wide practices that promote learning, positive behavior, and mental health. Collaborate with others to develop and implement practices to create and maintain safe, effective, and supportive learning environments for students and school staff.
Domain 6: Services to Promote Safe and Supportive Schools	Understand principles and research related to social-emotional well-being, resilience, and risk factors in learning, mental, and behavioral health, services in schools and communities to support multitiered prevention and health promotion, and evidence-based strategies for creating safe and supportive schools. Collaborate with others to promote preventive and responsive services that enhance learning, mental and behavioral health, and psychological and physical safety and implement effective crisis prevention, protection, mitigation, response, and recovery.
Domain 7: Family, School, and Community Collaboration	Understand principles and research related to family systems, strengths, needs, and cultures; evidence-based strategies to support positive family influences on children's learning and mental health; and strategies to develop collaboration between families and schools. Collaborate with others to design, implement, and evaluate services that

NASP 10 Domains of Practice

Domain	Descriptor
Domain 8: Equitable Practices for Diverse Student Populations	<p data-bbox="646 296 1409 489">respond to culture and context. Facilitate family and school partnerships and interactions with community agencies to enhance academic and social-behavioral outcomes for children.</p> <p data-bbox="646 585 1409 999">Have knowledge of individual differences, abilities, disabilities, and other diverse characteristics and the impact they have on development and learning. Understand principles and research related to diversity in children, families, schools, and communities, including child development, religion, culture and cultural identify, race, sexual orientation, gender identify and expression, socioeconomic status, etc.</p>
Domain 9: Research and Evidence-Based Practice	<p data-bbox="646 1081 1321 1331">Have knowledge of research design, statistics, measurement, and varied data collection and analysis techniques sufficient for understanding research, interpreting data, and evaluating programs in applied settings.</p>
Domain 10: Legal, Ethical, and Professional Practice	<p data-bbox="646 1413 1393 1879">Have knowledge of the history and foundations of school psychology; multiple service models and methods; ethical, legal, and professional standards; and other factors related to professional identity and effective practice as school psychologists. Provide services with ethical, legal, and professional standards; and other factors related to profession identity and effective practice. Demonstrate effective interpersonal skills, responsibility, adaptability, initiative, dependability, technological competence,</p>

NASP 10 Domains of Practice

Domain

Descriptor

advocacy skills, respect for human diversity, and a
commitment to social justice and equity.

5. Students with I/DD are taught a sexual health curriculum in my school district/employment setting.
6. I have access to sexual health curriculum materials at my place of employment/in my school district.
7. I have access to sexual health curriculum materials that I have obtained independent of my place of employment/school district.
8. I do not have time to teach sexual health education.
9. I do not have access to the right environment (e.g., private office, etc.) to teach sexual health education.
10. I do not have the desire to teach sexual health education to students with I/DD.
11. I actively advocate for sexual health education of students with I/DD.
12. I have recommended sexual health education for students with I/DD during consultations and/or evaluations.

Likert Scale Questions:

1 = strongly disagree 2 = somewhat disagree 3 = somewhat agree 4 = strongly agree

Attitude

1. Teaching sexual health to students with I/DD is important.
2. Teaching sexual health education to students with I/DD is no more difficult than teaching it to other students.
3. Students with I/DD should be taught how to use contraception.
4. Students with I/DD should be taught abstinence only.
5. Teaching sexual health information to people with I/DD leads to behavioral problems in the area of sexuality.
6. Consenting young adults with I/DD should be allowed to engage in intimate, sexual relationships.
7. It is best to wait for the individual with an I/DD to raise questions about sexuality before discussing the topic with him/her.
8. Young adults with I/DD should be allowed to engage in romantic relationships, but should not be allowed to have sex.
9. Sterilization should be used as a means to ensure that people with I/DD do not have children.
10. Masturbation should be discouraged among students with I/DD.
11. In general, sexual behavior is a significant maladaptive behavior for students with I/DD.
12. Adults with I/DD should be permitted to marry should they choose to do so.
13. Adults with I/DD can successfully parent their own children should they choose to have children.
14. Sexual health education for students with I/DD should be compulsory.
15. Students with I/DD should be discouraged from dating.
16. Students with I/DD should be encouraged to practice safe dating practices (e.g., tell a trusted person where you are going, meet a new dating partner in a public place, etc.).
17. I am comfortable having discussions with students regarding sexual health.

18. I am comfortable having discussions with students with I/DD regarding sexual health.
19. Students with I/DD are not interested in sexual health education.
20. Sexual health education for students with I/DD has a valuable role in protecting them from sexual exploitation and abuse.

Perceived Social Norms

1. Most of my colleagues think it is important to teach/provide consultation services about sexual health and education to students with I/DD.
2. Many people in my community would view marriage between adults with I/DD as leading to significant social problems (e.g., poor ability to manage a household, inability to parent children appropriately).
3. Most educators and families in my school discourage students with I/DD from thinking about having children in the future.
4. Most educators and families in my school discourage students with I/DD from thinking about marriage in the future.
5. Most parents of students with I/DD view sexual health education as important for their children.
6. Community/school stakeholders would view sexual health education to students with I/DD as taboo and as too risky.
7. I would be ostracized by colleagues if I were to advocate for sexual health education of students with I/DD.

Perceived Behavioral Control/Self-Efficacy

1. If I decided to implement a sexual health curriculum, I do not foresee any challenges or barriers that I could not work through.
2. If I expressed interest in professional development with regards to sexual health education of students with I/DD, my school district/place of employment would support this request.
3. I have sufficient qualifications and experience to provide sexual health and education to students with I/DD (in a psychoeducation format).
4. If I were to implement a sexual health and education program for students with I/DD, the program would result in positive outcomes for students.

Training/Familiarity with Sexual Health and Education

1. The training I received in my graduate program has made it clear that it is my duty to advocate for sexual health and education of all students, both those with disabilities and those without disabilities.
2. Based on my understanding of the NASP Model of Practice, it is a school psychologist's duty to advocate for sexual health and education of all students, both those with disabilities and those without disabilities.
3. My graduate program provided training in the area of sexuality and development.
4. My graduate program provided training in the area of sexuality and development for students with I/DD.

5. Based on my understanding of our professional ethics codes, it is important for me to advocate for sexual health education of students with I/DD.
6. I have knowledge of strategies for making educational materials accessible for students with I/DD.
7. The NASP Domains of Practice are inclusive of development and implementation of skills related to sexual health education of students with I/DD.
8. I know where/how to obtain sexual health education materials and resources for students.
9. I am prepared to address questions regarding sexual health and education from youth themselves, parents/families, and school staff.
10. Advocating for and/or implementing a sexual health education program for students with I/DD is within my skill set.
11. I have received professional development in the area of sexual health education and students with I/DD.

Open-ended questions:

1. In your opinion, what are some compelling reasons for providing sexual health education to students with I/DD?
2. In your opinion, what are some compelling arguments against providing sexual health education to students with I/DD?
3. What kind of informational or professional development support regarding sexual health education of students with disabilities have you received?
4. Is there anything else about school psychologists and sexual health education for students with I/DD that you would like to share?

Appendix C

Summary of Item Mean Scores and Standard Deviations Attitude, Perceived Social Norms, Perceived Behavioral Control/Self-Efficacy, and Training/Familiarity Scales

Variable	Mean	Std. Deviation
AttitudeScale	3.54	0.31
Attitude1	3.65	0.66
Attitude2	2.54	0.90
Attitude3	3.56	0.69
Attitude4R	3.61	0.67
Attitude5R	3.58	0.59
Attitude6	3.26	0.76
Attitude7R	3.33	0.64
Attitude8R	3.45	0.65
Attitude9R	3.75	0.52
Attitude10R	3.61	0.70
Attitude11R	3.53	0.67
Attitude12	3.67	0.55
Attitude13	2.80	0.77
Attitude14	3.11	0.83
Attitude15R	3.72	0.49
Attitude16	3.92	0.42
Attitude17	2.63	0.93
Attitude18	2.59	0.95
Attitude19R	3.50	0.52
Attitude20	3.87	0.34
SocialNormsScale	2.58	0.41
SocialNorms1	2.73	0.67
SocialNorms2R	2.32	0.76
SocialNorms3R	2.59	0.71
SocialNorms4R	2.81	0.69
SocialNorms5	2.69	0.61
SocialNorms6R	2.03	0.69
SocialNorms7R	2.92	0.71
BehControlScale	2.39	0.49
BehControl1	1.80	0.79
BehControl2	2.45	0.81
BehControl3	2.11	0.85
BehControl4	3.20	0.48
TrainingScale	2.23	0.52
Training1	2.03	0.84

Training2	2.92	0.84
Training3	1.97	0.84
Training4	1.52	0.67
Training5	2.90	0.75
Training6	2.27	0.93
Training7	2.90	0.65
Training8	2.15	0.92
Training9	2.24	0.83
Training10	2.11	0.87
Training11	1.40	0.70

Appendix D**Summary of Item Mean Scores and Standard Deviations
Implementation Advocacy Scale**

Variable	Mean	Std. Deviation
ImpAdvScale	0.27	0.18
ImpAdv1	0.15	0.36
ImpAdv2	0.06	0.23
ImpAdv3	0.31	0.47
ImpAdv4	0.29	0.45
ImpAdv5	0.41	0.23
ImpAdv6	0.30	0.29
ImpAdv7	0.20	0.40
ImpAdv8R	0.16	0.37
ImpAdv9R	0.53	0.50
ImpAdv10R	0.38	0.49
ImpAdv11	0.16	0.37
ImpAdv12	0.26	0.44