

**Sex Education Camp for Autistic Adolescents:  
A Theoretical Design**

By: Sophie Kallenbach

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Tufts University

Eileen Crehan, PhD, Martha Pott, PhD, & Simone Dufresne, MA

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## **Abstract**

Time and again, research has shown that sex education is crucial for autistic teens and their wellbeing. However, there is a wide gap in the sex education that autistic adolescents need, and the sex education they are receiving. Research has also repeatedly shown that camp is an effective environment for autistic adolescents to foster learning, build self-esteem, and gain independence. With these important research conclusions in mind, this thesis introduces a theoretical sex education curriculum and camp for autistic adolescents. This theoretical design examines the best possible circumstances and curricula for autistic teens to receive accessible sex education.

*Keywords: sex education, neurodiversity, therapeutic camp, autism*

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## **Introduction**

### ***What is Autism Spectrum Disorder (ASD)?***

Autism Spectrum Disorder (ASD) is a developmental condition characterized by social communication differences and restricted, repetitive patterns of behavior (American Psychiatric Association [APA], 2013). According to the Diagnostic and Statistical Manual for Mental Disorders (5th ed.; DSM-5; APA, 2013), differences relating to autism can manifest as difficulty in verbal and non-verbal interactions or a difficulty maintaining relationships. Repetitive patterns of behavior usually manifest as a strong insistence on sameness, inflexibility in daily and other routines, and fixated interests (APA, 2013). While this is typically how ASD presents, behaviors and traits can vary significantly from person to person (National Institute of Mental Health, 2022).

### ***ASD & Sex Education***

Difficulties forming and maintaining relationships can be particularly challenging for autistic adolescents when it comes to navigating puberty, dating, and sexuality. While a comprehensive sex education is vital for all young adults, research suggests that sex education is even more important for autistic teens (Greiart, 2016). Unfortunately, mainstream sex education in the United States is often insufficient for autistic adolescents (Solomon et al., 2019). Research has shown that comprehensive and accessible sex education for autistic individuals is crucial for their emotional and sexual wellbeing (Greiart, 2016; Hannah & Stagg, 2016; Ohlsson et al., 2018). Social communication deficits, a struggle to maintain adolescent friendships, and a lack of sufficient sex education puts teens on the spectrum at a higher risk of sexual abuse and assault

than their neurotypical peers (Ohlsson et al., 2018). Researchers speculate that since autistic individuals struggle more than their neurotypical counterparts to receive social cues, it can be more difficult to recognize a dangerous situation (Ohlsson et al., 2018). The vulnerability of these individuals demonstrates the importance of accessible sex education for autistic adolescents .<sup>1</sup>

Research reveals that it is critical for autistic individuals to receive thorough, accessible, and comprehensive sex education due to a common anxiety surrounding sex and dating (Hannah & Stagg, 2016). People often assume that folks on the spectrum are asexual, or have no interest in sexual encounters. In reality autistic individuals have the same amount of interest in sex and relationships as neurotypical folks (Barnett & Maticka-Tyndale, 2015; Hannah & Stagg, 2016). However, because it can be difficult for autistic individuals to assess the complex socioemotional cues that can emerge in a romantic setting (Hannah & Stagg, 2016), it is crucial for them to have a safe space to discuss the nuances involved in intimacy and strategize approaches to navigate this realm of the world.

There is an astonishing lack of research looking at autistic individuals and their firsthand experiences with sex education. Research regarding autistic individuals and sexuality has primarily focused on their “problem behaviors” (Barnett & Maticka-Tyndale, 2015). This focus is driven by outdated myths that people with disabilities are sexually aggressive. Too often, this means that sex education is not provided (Barnett & Maticka-Tyndale, 2015). Parents can be concerned that teaching their autistic child about sex education will introduce or increase interest in sex, when in reality, we know that providing sex education to adolescents generally does not

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<sup>1</sup> Although autistic individuals are at a higher risk for sexual assault and thus sex education is crucial to their wellbeing, no one is ever to be blamed for sexual victimization.

increase interest in sex, but does improve outcomes related to health, safety, and later age of sexual behaviors (Braeken & Cardinal, 2008).

In Barnett & Maticka-Tyndale's (2015) study, researchers interviewed 24 adults on the spectrum. They found that participants were more likely than the general population to be gender-nonconforming and queer, and they were more likely to have their first romantic experience after age 18. Most commonly, the researchers in this study found that sensitivities to sensory experiences and understanding nonverbal cues made their sexual experiences harder to navigate. The participants often cited their lack of adequate sex education as the primary reason behind their sex and relationship-related struggles. Barnett & Maticka-Tyndale concluded that individuals on the spectrum will benefit highly from "disability-inclusive" sex education, which normalizes differences in identities and experiences of sexuality, is offered throughout young adulthood, addresses disability-relevant sensory and communication needs, and includes practicing sociosexual norms.

This research has extremely important implications. Autistic individuals cite their lack of proper sex education as one of the primary reasons behind their difficulties in sexual contexts, making accessible sex education that much more important. Also, because autistic individuals are more likely to be queer than in a neurotypical population (Dewinter et al., 2017; George & Stokes, 2018; Strang et al., 2014), their experiences with sex and dating may be even more difficult to navigate, considering the heteronormative and cisnormative nature of the media/society they exist in. This research is crucial because it provides a perspective from autistic folks themselves--a rare occurrence in this research realm. Thus, because autistic individuals themselves have informed researchers about the importance of sex education, this emphasizes the deep importance of accessible sex education for autistic individuals.

In another study done by Hannah & Stagg (2016), researchers examined autistic individuals' feelings towards sex education and sexual awareness. The study aimed to look at the experiences of autistic individuals with sex education, and their reflections on those experiences. They also aimed to investigate levels of sexual awareness for autistic people. In order to understand these concepts, Hannah & Stagg recruited 20 autistic adults to fill out the sexual knowledge, experiences, feelings, and needs questionnaire, the sexual awareness questionnaire, and to speak with the researchers in semi-structured interviews.

Hannah & Stagg's (2016) study found that in reflecting upon experiences with sex education, autistic individuals cited that sex education had generally been insufficient and oftentimes, unclear. Additionally, these researchers discovered that autistic individuals possess less sexual knowledge/awareness than their typically developing (TD) peers. According to Hannah & Stagg (2016), a lack of sufficient sex education and less sexual knowledge for autistic individuals can lead to depression, loneliness, and isolation from a wider community. This study reiterates the gravity of sex education for autistic individuals: if we know that a lack of sexual knowledge can lead to severe mental health issues, and sex education has been shown to be generally inefficient, it is critical that we make sex education accessible for autistic individuals.

### ***Camp as an Alternate Learning Space: Developmental Benefits of Camp***

Since current models of delivering sex education have not been effective, it may be time to explore alternative modalities of information delivery. In a meta-analysis, Henderson et al. (2007) looked at the general trends of camp research over the years. In this study, the researchers defined "camp" as a space in the outdoors where campers live in groups with each other, in which there are organized activities, and in which there are intentions/goals for the end of the summer camp. The researchers in this study discovered that the trends in camp research identify

a range of positive outcomes for campers, including, but not limited to: improvement in self-esteem and overall confidence; better social skills; an ability to make friends with a new sense of ease; confident leadership skills; greater independence; and a more “adventurous” and open outlook on life. They also found that camps whose administrations consistently evaluated themselves and their campers, and implemented changes according to those evaluations, had even stronger developmental outcomes.

A multitude of studies have also revealed the positive outcomes that outdoor, residential summer camp can have on a youth’s development. In a study looking at the emotional and social benefits of summer camp, researchers found that residential (or overnight/sleepaway) camps generally aid many realms of development (Carruthers, 2013). Upon examining a plethora of overnight camps, Carruthers found that living with others in a summer camp setting requires effective interactions with peers: because campers have to actively be with one another all of the time and navigate constant social engagement, their emotional intelligence (meaning, their ability to manage/understand their own emotions and the emotions of their peers) and social capital<sup>2</sup> improved. Further, Carruthers found that camp provides children and adolescents with supportive friendships and relationships, and that the continuous activity and interaction at camp means continuous improvement in social skills.

In a study conducted by Henderson et al. (2007), researchers examined parental perception of change in their children attending residential camps which lasted one-week or longer. In pre-and post-evaluations, parents were asked to rate their child’s initial state and growth on the grounds of ten constructs: positive identity, independence, leadership abilities, friendship-making skills, social comfort, peer relationships, adventure/exploration,

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<sup>2</sup>Carruthers (2013) refers to Glover, Shiner, & Parry’s (2005) definition of social capital: “the consequence of investment in and cultivation of social relationships allowing an individual access to resources that will otherwise be unavailable to him or her” (p. 87).

environmental awareness, positive values/decision-making, and, for those whose children attended camp with a spiritual aspect, spirituality. Parents' surveys indicated statistically significant improvement in each of the ten constructs examined (Henderson et al., 2007), once again, revealing the developmental benefits of summer camp.

### ***Camp and Neurodiversity***

In Henderson et al.'s (2007) overview of camp research, they discuss the benefits of summer camp specifically for children and adolescents with disabilities. They refer to a three-year study which looks at inclusionary camps (meaning, a camp with typically-developing campers and neurodivergent campers). The study found that campers with and without disabilities improved their outdoor skills, became more independent, and had generally positive personal development (improved communication skills and self-confidence).

Many other studies support the developmental advantages of summer camp for children with neurodiversities. Koegel et al. (2019) looked at whether IEP<sup>3</sup> social goals for autistic adolescents could be addressed by supervised paraprofessional counselors during a two-week-long summer camp. Four children participated in this study, each of them attending an inclusive summer camp for two weeks at a time. All four of the children who participated in this study reached their year-long IEP goals in two weeks at summer camp. Not only did they reach these goals at camp, but the goals of these participants lasted for a full year in a natural academic setting. This literature suggests the effectiveness of a summer camp setting, which may be an ideal platform to meet an autistic individual's educational goals. In just two weeks, these students were able to accomplish goals that were predicted to take a year to meet, thus implying the potential significance of summer camp.

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<sup>3</sup> Individualized Education Programs (IEPs) are state-mandated, educational plans for students with diagnosed disabilities.

In a study conducted by Guest et al. (2017), researchers examine the effects of a multi-sport camp for autistic girls. Guest et al. note that while there is a “spike” of new research about autism, it rarely focuses on the experiences of autistic girls. Typically, autistic girls have less-developed motor skills than autistic boys and TD peers. Because of this, they participate less in sports, which not only deprives them of physical skills, but also the social skills and friendships that adolescents often gain from recreational activities (Guest et al., 2017).

The purpose of Guest et al. (2017)’s study was to look closely at the effects of a multi-sport camp intervention for 13 autistic girls. The findings of this study indicate that motor skills, physical self-perceptions, and social skills improved significantly at this multi-sport camp. Autistic children (especially autistic girls) can have considerable motor delays, which can affect their participation in sports and other recreational activities. Therefore, this camp had a significant, multi-dimensional impact on the 13 autistic participants in the study, revealing that camp can be an extremely effective outlet for autistic individuals to develop in many positive ways.

In another study, Kaboski et al. (2014), investigated an intervention program in the form of a summer robotics camp. This study looked at how, for autistic and typically developing (TD) adolescents ages 12-17, common interest in robotics in a summer camp environment might encourage organic interactions between autistic and TD individuals. The robotics camp, which was one week long, proved to be effective in facilitating social interactions between neurotypical and autistic individuals. The camp investigated by Kaboski et al. (2014) was designed so that TD individuals were partnered with autistic individuals for all non-social robotics aspects of the camp, and so that TD individuals were unaware of their partners’ diagnosis. This choice was to negate any sort of power dynamic that might have arisen between neurodivergent and TD

partners had diagnoses been shared. Although there were no consequential changes found in social skills for the autistic campers, social anxiety for the eight autistic participants decreased significantly. For both groups, knowledge about robotics increased significantly as well. This study reveals important implications about autistic adolescents and summer camp: (1) autistic adolescents can experience significant social benefits at summer camp, (2) summer camps that do not disclose information about diagnoses of campers seem to be effective in eliminating power dynamics driven by neurotypical supremacy, (3) common interest/a common activity could be an effective way to facilitate friendships, and (4) autistic adolescents seem to learn well and effectively at educational summer camps.

In a study conducted by Walker, Barry, & Bader (2010), researchers looked at therapist and parental ratings of “changes in adaptive social skills” after attending a summer treatment camp for children with ASD. The 12 participants attended a four-week-long summer camp designed to help autistic children with social skills and interactions with peers. Therapists and parents alike perceived immense improvement in social interaction and verbal communication skills, and therapists also perceived improvement in attention to tasks and the ability to transition. This study concluded that therapeutic treatment camps for autistic adolescents can be life-altering for these individuals, once again implicating the effectiveness of camps for autistic youth.

While other studies demonstrate the effectiveness of camp on individual autistic adolescents, Wallace (2016) shows how the family unit is impacted by therapeutic camp. Wallace’s study evaluated the effectiveness of family camp for families with at least one autistic child. According to Wallace, many conferences and other organized events which seek to support parents of autistic children do not provide childcare while the event is taking place, and very few

opportunities exist for autistic children and their families to attend summer camp together. Thus, Wallace examined Dakota Black Goose Family Autism Camp, a camp designed to connect parents of autistic adolescents and autistic adolescents themselves. For data, Wallace conducted in-depth pre and post-camp interviews with 17 families who attended the camp. The study found that for parents who attended this camp, they felt significantly less stressed and a sense of freedom in the ability to let their child roam about the property without having to worry about their safety. Parents also noted that their child gained important independent skills from the freedom that camp granted them (Wallace, 2016). Thus, like other studies involving autistic adolescents and camp, this study suggests the benefits that camp can have for autistic children and their families.

In addition to formal studies citing the benefits of camp for autistic adolescents, there are many observed benefits of these camps. Counselors with applied experience working at a summer camp for autistic adolescents have noted that camp provides a new environment for autistic adolescents which expands beyond the systems they are used to, which for many autistic teens may only consist of school, family, and therapy settings (M. Edelstein, Personal Communication, November 12, 2021). Noah Britton, a former counselor at the Spotlight Program, shared his views on the summer camp environmental benefits for autistic youth:

I think summer camp can give young people the chance to make friends, as well as have fun in a structured environment that forces them to get out of the pattern of boredom that makes them just use the internet all day (N. Britton, P.C., October 7, 2021).

Thus, summer camp is a unique space for autistic adolescents to break the typical routines of their home life and explore an alternative lifestyle.

Counselors cite additional anecdotal evidence for why having a summer camp strictly for adolescents with an autism diagnosis can be beneficial to the general well-being of campers. For children who have maybe never interacted with other autistic individuals, meeting campers with a similar neurodiversity can feel validating and can spark an instant connection (M. Edelstein, P.C., November 12, 2021). According to this anecdotal evidence, being surrounded by individuals who have similar developmental differences is crucial in making autistic adolescents at camp feel completely comfortable with who they are (N. Britton, P.C., October 7, 2021). Specifically, Britton notes that, “it was often the first time any of the campers had met anyone else they felt was ‘normal’ like they are,” which “was a rare chance to feel comfortable [for example] stimming and bouncing on a yoga ball while having a conversation about data on niche topics” (N. Britton, P.C., October 7, 2021). He also notes that “it was often the first time any of the campers had met anyone else they felt was ‘normal’ like they are,” (N. Britton, P.C., October 7, 2021). This applied work reveals that hosting an entire community of only autistic individuals can be monumental in making campers feel entirely accepted and valued for their differences and may help to normalize their autistic experience, yet another positive outcome of summer camp for a neurodiverse population.

### **Sex Education Camp Intervention**

A plethora of research has shown that sex education is critical for autistic teens and their wellbeing. However, there is a wide gap in the sex education that autistic adolescents need and the sex education they are receiving. Research has also repeatedly shown that camp is an extremely effective environment for autistic adolescents to foster learning, build self-esteem, and gain independence. With these important research conclusions in mind, the present intervention will design a theoretical sex education camp for autistic teens. We will start by teaching campers

about consent in order to introduce them to boundaries, which will hopefully shape their thinking and interactions for the rest of camp. We will then continue with gender identity and sexual orientation so campers are introduced to ideas about identity and attraction before we dive into teaching about healthy relationships. Education surrounding healthy relationships will strive to ease potential anxiety about navigating the dating world. Finally, we will teach about the biology, pleasure, and safety of sex for campers to understand the physical expressions of love or intimacy which may occur within a healthy relationship.

### **Why Camp: A Personal and Empirical Perspective**

As previously discussed, research has shown summer camp to be a place where immense growth takes place in adolescence (Carruthers, 2013; Henderson et al., 2007). As someone who attended summer camp myself, I have personally experienced the independence, meaningful friendships, and growth that can occur at overnight camp. Thinking back to my childhood, overnight camp is the place where I received the most information about sex and puberty. While this information from my peers was informal, camp was the only place during my childhood where I felt comfortable talking with my peers about sex and puberty. Our conversations about these topics began when I was 11-years-old, and continued until I stopped attending camp at 14-years-old.

I believe that this comfort talking about sex and puberty came from the innate bonds which formed between the campers. When adolescents live with a small group of same-sex peers for over a month, there is almost always bound to be a closeness between campers that most likely does not exist in a school setting. Sharing a bathroom meant that when someone got their period, everybody knew. Changing clothes in front of one another for seven consecutive years meant several conversations about anatomical changes during puberty. My personal experience

with camp as a prime environment in which to discuss sex, sexuality, and puberty was the original basis for the idea of this project.

In addition to my personal experiences with the bonds one creates at summer camp, there are several studies which demonstrate the closeness of adolescents in camp settings (Browne et al., 2019; Dawson, 2018; Devine et al., 2015; Henderson et al., 2007). In one study conducted by Devine et al. (2015), researchers looked at a disability-specific camp for adolescents with hearing impairments and found that camp promoted close friendships and social acceptance. Other studies have also shown camp to be extremely effective in bonding adolescents to one another (Browne et al., 2019; Dawson, 2018), demonstrating the meaningful relationships that camp can bring to all children. This unique closeness amongst peers that occurs in camp environments may make it an especially effective platform to teach sex education.

## **Logistics**

### *Neurotype*

This camp will be composed only of adolescents with an autism diagnosis. This decision is for a number of reasons. First, as previously mentioned, counselors with applied experience cite anecdotal evidence that a space designated specifically for autistic adolescents can be a validating experience in which campers meet (some for the first time) others with similar developmental differences. It is truly important that campers have this opportunity, as being surrounded by other autistic individuals may not be something these adolescents typically experience. Thus, our camp will only accept autistic youth in order for campers to feel completely accepted in their autism.

Additionally, many studies cite evidence that autistic individuals may actually feel more connected to other autistic individuals than their neurotypical peers. The “double empathy

problem” is an emerging concept which describes that when two individuals with completely different experiences interact, they have trouble finding empathy for one another (Crompton et al., 2020). For neurotypical individuals and autistic individuals, the double empathy problem explains that communication struggles between individuals in these populations is not the fault of an autistic person’s communication deficits (which, one might assume), but rather, it may be a “bidirectional difficulty” (Crompton et al., 2020). Crompton et al. (2020) conducted a study to investigate the experiences of autistic individuals in their interactions with autistic versus neurotypical individuals. Through semi-structured interviews, the researchers identified three themes which emerged as these participants described their experiences: (1) cross-neurotype understanding, meaning that autistic individuals feel more comfortable with others on the spectrum because they know that they will understand their behaviors, (2) minority status, meaning that in a room of neurotypical people, autistic folks can feel like a minority, which can be alienating, and (3) belonging, meaning autistic individuals generally feel more accepted among others with similar developmental differences.

Other recent studies about autistic friendships corroborate the findings of Crompton et al.’s (2020) research. In a study conducted by Granieri et al. (2020), researchers found that autistic individuals seem to prefer interacting with others when they identify similar atypical mannerisms, and thus call for interventions in which autistic individuals are encouraged to build community with each other. In a thematic analysis by Rosqvist et al. (2015), researchers reveal the value of autistic friendships forming in a safe, autistic-only space without “the surveillance of a [neurotypical] world.”

Thus, all of these studies reveal that there is a certain level of comfort between autistic individuals that may not exist between autistic and TD individuals. Although Kaboski et al.

(2014) discuss the benefits of an inclusive camp setting, this camp will focus strictly on teaching sex education to an autistic population in order designate a safe space for autistic adolescents to be their most authentic selves.

### ***Age Range***

The target age range of campers will be 12 to 17-years-old. Because adolescents often begin to think about sex regularly during early puberty (around 11 to 12 years of age) (Fortenberry, 2013), the camp will welcome teenagers beginning at this age.<sup>4</sup> Although it is commonly thought that autistic adolescents have no sexual interest, we know that autistic adolescents have reported thinking about sex at the same developmental stage as neurotypical individuals (Koegel et al., 2014). Additionally, if their bodies change at the same pace as neurotypical adolescents, they might be viewed by society at sexual beings. Thus, it is crucial they receive a comprehensive sex education at that age to prepare for their own curiosity and peer conversations and interactions about sex and sexuality. Because sex education is often inadequate for folks on the spectrum as they go through school, the camp will also welcome teens older than 12-years-old in order to supplement any previous sex education and/or continue their sex education more extensively. Campers will be broken up into cabins with members of their age group.

### ***Gender Makeup***

In order to be inclusive of genderqueer individuals, to encourage conversation about topics covered in sex education with all genders, and to teach individuals about all kinds of anatomy, the camp will be co-educational and inclusive of campers of all genders. First, a large

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<sup>4</sup> Some adolescents start to think about romance, sex, and puberty earlier than 12, beginning to express romantic interest at around eight to 10 years of age (*Relationships and romance: Pre-teens and teenagers*, n.d.). This camp will start at 12, however, because I do not believe parents would feel ready to send their child to sex education camp at an age before 12-years-old.

part of the camp's learning goals is to understand that gender is a spectrum. If the camp is limited to being only for girls or boys, this instills and reinforces the exclusive, cisnormative gender binary that exists widely across American society. Especially since research has shown that autistic individuals are more likely to identify as transgender (Warrier et al., 2020), it is crucial that we do not reinforce the gender binary or cisnormativity. Additionally, for individuals who identify as "straight," or for any individuals who are attracted to those outside of their gender, it is critical that they are able to speak with their partners openly about all of the topics we will cover at camp. Finally, it is important for campers to know how other body parts work that are not their own-- especially for campers who are attracted to individuals outside their gender.

### ***Size of Camp***

The total number of campers will be in the range of 80-100. Not only is it important for campers to learn about sex education, but it will also be important that camp feels like a community. Ideally, everybody at camp will know or at least recognize most other campers in some way by the end of the summer or session. Also, the staff-to-camper ratio will likely be one staff to two campers. According to Osbourn & Scott (2004), for best learning outcomes, the ratio of adults to autistic adolescents will be one adult to two or three adolescents. Therefore, to maximize learning outcomes for campers, we will hire as many staff as needed to meet this ratio.

### ***Structure of Camp***

In order to work towards the four content goals (see "Content Goals of Camp" section), the camp will last for just a little over four weeks. Each content goal will be taught for one week at a time. We will start with consent for one week, then move to gender identity and sexual orientation for the next, then healthy relationships/dating, and finally, the biology and pleasure of sex. The immersive nature of having one week dedicated to each topic allows campers to focus

on one task at a time, and will hopefully allow them to absorb as much information about the respective topic as possible.

Campers will only be allowed to come to camp if they attend for all four weeks of the program. This requirement will be implemented for a couple of reasons. First, if campers are present for all four weeks, this fosters a sense of community and closeness which might prove difficult to find in only one or two weeks. Second, the content goals build on each other, so starting from anywhere but consent week will not be optimal for learning outcomes. Third, the campers will be in the same learning group throughout the camp, and will likely become comfortable with that group over the four weeks. If campers were allowed to arrive after the first week, they might join a group which already has a level of comfortability, and their arrival may disrupt the group dynamics and/or feel alienating for the new camper. Finally, we will want campers to have the fullest experience possible, and four weeks feels like the minimum amount of time for campers to grow into a better version of themselves.

### ***Location of Camp***

The camp will be located in a traditional camp, woody setting. A vast amount of literature has found the positive outcomes of nature on human beings, such as lower rates of depression, improved social relationship skills, improved self-confidence, improved sensory-awareness, and a generally positive impact on psychological well-being (Davis, 2004; Franco et al., 2017; Keniger et al., 2013; Russell et al., 2013; Shanahan et al., 2016). Because autistic individuals often have comorbid diagnoses like ADHD and depression, hosting camp in a natural environment could help to relieve uncomfortable symptoms. Finally, the attending campers are still developing, and can therefore experience the aforementioned developmental

benefits that nature can provide. For all of these reasons, hosting camp somewhere in a woody, remote, natural location will be beneficial to campers' wellbeing and learning.

### ***Lesson Considerations***

In an effort to make learning as comfortable and effective as possible, there are a couple of considerations to make when thinking about lesson planning. Before we begin lessons with students, we will make sure to have extensive conversations with parents and direct conversations with the adolescents themselves to better understand their learning and behavioral needs. In the parent-staff meeting before camp, staff will ask about any previous trauma that might impact a camper's learning or behavior, tendencies in the classroom, learning strengths, sensory sensitivities, special interests, self-regulation techniques, and anything else that parents believe are important for staff to know about their child. Additionally, parents will complete a "Teen Transition Inventory," an empirically-backed questionnaire to understand learning needs specifically in preparation for learning sex education (Dekker et al, 2017). Finally, parents will be asked to send in their child's IEP, if available, in order to have formal documentation of their learning needs. This way, counselors will be able to read about their incoming campers and prepare more specifically for their arrival.

Counselors will take other precautions to make the learning environment as comfortable as possible for campers. Different topics in the realm of sex education can be difficult and embarrassing to talk about for teens. Thus, a common sex education practice that staff will be sure to implement is an anonymous question box. At the end of each lesson, students will write down questions on a sheet of paper and put their paper into a box. At the beginning of the next lesson, the counselor will open the box and answer all of the questions, ensuring that even individuals who might be uncomfortable asking questions out loud have a chance to ask anything

they feel curious about. Right before the campers have the chance to put their questions in the question box, there will be 10-20 minutes of time dedicated to speaking with a same-gender adult and/or with peers. This time will encourage students to speak about the topic in a more informal, conversational setting, which will hopefully spark connections between campers and between campers and counselors. If students have any lingering questions, they can then spend the last three to five minutes of class writing those questions to be shared anonymously.

### ***Counselors***

Counselors at camp will receive two weeks of extensive training before the campers arrive. Counselors will not have to be professionals in the sex health field (although individuals with a sex health or sex education background will be preferred in the hiring process). The training will be led by a professional who specializes in the intersection of sex education and autism. Counselors will learn extensively about all aspects of the curriculum, and will learn other skills associated with being a camp counselor (staff will become Red Cross certified in CPR and first aid, and staff who are already lifeguards will go through a quick recertification training).

### ***Cognitive Functioning Examination***

In order to assess cognitive functioning, campers will take a Wechsler Abbreviated Scale of Intelligence (WASI, 2003) test before arriving at camp, and there will be no cut-off for individuals to be eligible to attend camp. In conjunction with parental interviews, adolescent interviews, a “Teen Transition Inventory,” and IEPs, a WASI will help the staff understand how to form small groups of campers with similar ages and learning profiles.

### **Content Goals of Camp**

The ideas for the content goals of this theoretical camp were inspired by the “Sex Ed for Self-Advocates” curriculum (*Sex Ed Organization for Autism Research*, n.d.), Planned

Parenthood's Sex Education curriculum (*Sex Education Tools for Educators, Sex Education Resources*, n.d.), GLAAD (LGBTQ Resource List, 2012), Trans Student Educational Resources (TSER, n.d.), and the Tackling Teenage Training curriculum (Dekker et al., 2015; Visser et al., 2017).

### ***Consent***

By the end of camp, students will be able to comprehensively talk about and understand the concept of consent. We will begin with this topic due to its high level of importance, particularly for individuals in the autism community. Because we know that autistic folks, and autistic women in particular, are more likely to get sexually abused/coerced compared to neurotypical peers, it is critical that we cover consent extensively, since consent education has been shown to lower risk for sexual abuse (Santelli et al., 2018). Also, it is generally crucial for adolescents to understand consent to keep themselves and their partners safe. In order for campers to understand why we are learning about consent, it will be helpful to talk about the significance of consent. We might have open discussions about why campers think it is important to discuss consent with their partners. In addition to these open discussions, we will make sure that at the end of this unit, campers understand that it is important to respect everybody's boundaries and for their own boundaries to be respected. In addition, we might explain that a lack of consent is not only disrespectful, but can lead to dangerous sexual encounters, long-term trauma, and criminal consequences.

In order to properly understand consent, students will first learn about boundaries. They will learn that there are many different kinds of boundaries one can draw for themselves, including emotional boundaries, boundaries regarding communication, physical boundaries, and sexual boundaries. The curriculum defines emotional boundaries as the choices that affect

someone's inner values and feelings. When a camper enters a romantic relationship, we want them to assess their emotional boundaries with questions such as, "Do you want to be in a relationship with this person?" and "Do you want to go on a date with this person?"

Communication boundaries will be defined as choices that determine the depth that one wants to discuss personal matters. For campers to assess their communication boundaries, we could ask questions like "do you feel comfortable talking with your mom about your relationship with your partner?" and "do you feel comfortable talking to your friends about your sexuality?" The curriculum will make it clear that communication regarding a personal topic is always optional. To further explain these concepts, some materials may be used from "Tackling Teenage Training" (Dekker et al., 2015; Visser et al., 2017), an evidence-based sex education program for autistic adolescents.

Physical boundaries will be defined as choices that dictate who is allowed into one's physical space or personal bubble. When a camper encounters someone who may break a physical boundary, we want them to be prepared to ask themselves questions such as, "do you want to be hugged by this person?" and "do you feel comfortable giving this person a handshake?" Sexual boundaries will be defined as choices related to one's sexual expression. For campers to explore their sexual boundaries, we could ask the questions, "do you feel comfortable expressing my feelings towards this person with a kiss?" and "do you and your partner feel comfortable having sexual intercourse?"

In order to explain consent, we will use the vocabulary they learned about boundaries. We will define consent as the "enthusiastic permission" for something to happen. We will then provide examples in the context of camp: if a camper wants to kiss another camper, they will need to gain consent in order to do so, because kissing might cross a sexual boundary. The

consent curriculum will be sure to specify that consent is ongoing, meaning partners should continuously check in with one another to make sure they are both still comfortable throughout any emotional, physical, or sexual experience. We will also make sure campers understand the idea that consent is always reversible, meaning it is not a contract. In that sense, if two consenting partners decide to kiss, they can change that decision and it is not binding. We will make it clear that campers can consent to something in one moment and take back their permission if they desire.

It is important that campers understand “informed consent,” which means that the person giving consent understands the extent of their permission. For example, we could explain that if a partner consents to having sex with a condom, and the person claiming to use a condom removes it, the context of consent has changed, and thus consent is not present. Additionally, we will explain that consent should be freely given: if someone feels pressure to consent to something, and they give consent because of that pressure, then consent is once again not present. Finally, we will explain that consent should be enthusiastic: the person consenting should be actively excited about what they have permitted. We will explain that if consent is given nervously or hesitantly, this could mean that the person giving consent is feeling pressured, which will in turn mean their consent is not freely given.

To further discuss the concept of freely given consent, the curriculum will cover power dynamics and being underage. To start, we will explain that power dynamics refer to the interaction of people when one person has more power than the other, which can include factors such as job rank, gender, race, and able-bodiedness. For example, we may discuss the following scenario: The head of a company has more power than an employee in that same company. If the boss starts dating that employee, there will be power dynamics at play shaping their relationship

due to their boss's ability to fire that employee at any point. We will explain that consent might be negligible in this situation, because if a boss asks their employee out on a date, the employee might feel pressure to say yes to avoid losing their job. This means the employee has not freely given consent to their boss's request. This example scenario will help campers to understand the connection between power dynamics and consent.

To explain why being underage might complicate consent, we will explain the legal age of consent: if someone is under a certain age, federal law can declare them unfit to consent to a legal adult. We will explain that each state has different laws about the age of consent, but, for example, if Massachusetts state law says that the legal age of consent is 16, any age under 16 is considered a minor. Thus, if someone over eighteen engages in sexual activity with a minor, this is considered illegal, and the adult may be at risk of incrimination. This will teach that consent is not only a personal issue, but can also be a legal issue.

Within the greater topic of consent, we will also include a section about sexual harassment and sexual assault. Because these issues occur when consent is not present, these topics will be covered within the consent portion of the curriculum. First, we will define the terms. Sexual harassment will be defined as any unwelcome sexual overtones in a situation, whether those be implicit or explicit. We will define sexual assault as a form of sexual violence in which one forces someone to engage in a sexual act with them through physical force or coercion. Campers will learn the serious implications of sexual assault and harassment. After we define the terms, we will talk about different ways to recognize a dangerous situation which could lead to assault, how one can stay safe in sexual situations, what to do if one experiences sexual abuse in the future, and what to do if a camper believes they have been assaulted in the

past. The curriculum will emphasize that no matter how many safety precautions one takes, sexual assault is never the fault of the victim.

The curriculum will also discuss what to do if someone wants to say “no” to something, or if their partner says “no” to something they suggest. We will start by telling campers that they always have the option to say “no,” and that it is always a reasonable answer, no matter the circumstance. We will explain that questions about consent might be phrased to make saying “no” feel more viable and comfortable for a partner, and all responses should always be respected. For example, if a partner asks to take off the other person’s clothes, they might say “is it okay for me to take your clothes off? Either way is completely fine with me.” We will also discuss what not giving consent looks like beyond an explicit “no:” physically removing oneself from a situation, visible signs of discomfort, or responses like “not today,” or “maybe later.” We will talk about the different ways that campers can say “no” to a situation in order to feel the most comfortable. Finally, we will discuss the different ways that campers can accept “no” as an answer in a way to make their partner feel comfortable in their response.<sup>5</sup>

### ***Sexual Orientation and Gender Identity***

An extremely important part of this sex education curriculum is talking about sexuality and gender identity. It is widely known that autistic individuals are more likely to identify as lesbian, gay, bisexual, transgender, and queer (LGBTQ) (George & Stokes, 2018). Additionally, there can be misconceptions about autistic folks and their sexuality. There is a common belief that this demographic does not have a sexuality or a meaningful gender identity, but both of these conceptions are false. As previously stated, individuals on the spectrum tend to find the world of sex and dating to be overwhelming. Thus, to support autistic adolescents and their emotional,

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<sup>5</sup> In order to supplement the discussions from this section, we will use worksheets from Jed Baker’s *Preparing for Life*, a book with comprehensive resources about consent.

physical, and sexual well-being, it is crucial that these individuals receive a thorough education on sexuality, gender identity, and beyond.

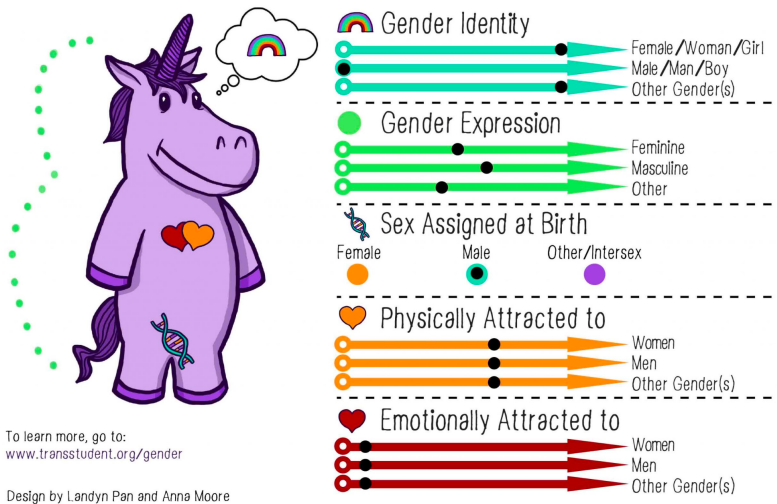
To begin, the curriculum will discuss the differences between sex, sexual orientation, gender identity, and gender expression. In order to describe these differences, counselors will refer to the “Gender Unicorn” (“Trans Student Educational Resources,” 2014). The “Gender Unicorn” outlines the body of a unicorn to describe the different aspects of one’s gender and sexual identity. Gender identity will be defined as one’s internal sense of whether they are male, female, neither, or both, whereas gender expression will refer to how one presents themselves. Typically, someone’s gender expression manifests in masculine, feminine, or gender-neutral clothing, hairstyle, voice, body shape, and more. The unicorn also includes one’s “sex assigned at birth,” which we will describe as the classification of someone as male, female, or intersex based on hormones, chromosomes, and anatomy. The next part of the “Gender Unicorn” looks at sexual orientation preferences. They break down sexuality preferences into two different categories: physical attraction and emotional attraction. Physical attraction refers to one’s sexual orientation, whereas emotional attraction refers to one’s emotional orientation.

**Figure 1**

*The Gender Unicorn*

# The Gender Unicorn

Graphic by:  
**TSER**  
Trans Student Educational Resources



*Note.* From “Trans Student Educational Resources” (2014).

An important aspect of the “Gender Unicorn” that we will be sure to talk about is that every aspect of one’s sexual and gender identity (besides sex assigned at birth) can be a spectrum, and none of these aspects influence one another. We will begin by discussing what it means to be on a spectrum. In order to properly explain the concept of a spectrum, we might first talk about the spectrum of colors. This could be a grounding visual image for campers to grasp onto, and could be helpful in subsequently thinking of sexuality and gender as a spectrum. To explain how gender identity is a spectrum, we might talk about how someone can identify with aspects of masculinity and femininity, but not all aspects of these gender norms. Gender expression follows similar logic. Perhaps somebody enjoys dressing as masculine most of the time, but sometimes, they might feel inclined to dress in a more feminine fashion. In order to explain how gender identity and gender expression do not have to overlap, we might talk about how someone can self-identify as feminine, but tend to present themselves to the world in a more masculine manner.

The same logic will follow regarding emotional attraction and physical attraction. Both sexual orientation and emotional orientation exist on a spectrum. For example, a man might be physically attracted to both men and women, but they might only be emotionally attracted to men. A woman might be emotionally attracted to people of all genders, but she might only be physically attracted to men. Another woman might be mostly emotionally and physically oriented towards men, but she might be physically and emotionally attracted to a couple women throughout her lifetime. All combinations of emotional and physical attraction can exist, and counselors will discuss that gender identity and sexual orientation have no correlation to one another.

To go on to explain what it means to be “transgender,” and “cisgender,” we could use terms the campers learned from the gender unicorn. For example, cisgender means that one’s internal idea of gender (or one’s gender identity) matches their sex assigned at birth. Whereas transgender describes multiple gender identities where one’s sex assigned at birth does not exclusively correspond to one’s gender identity or expression. We will also describe terms like “agender,” “genderqueer,” “gender fluidity,” “non-binary,” and more. These terms describe other non-cisgender gender identities.

For example, we could define agender as an overarching term used to describe many individuals who do not have a gender or have a neutral gender identity. Because agender is an evolving-term, it is important to ask someone who identifies as agender what the term means to them. Genderqueer will be defined as a term used for individuals who do not identify or express their gender identity within the gender binary. Genderqueer people might see themselves as existing outside of or between the gender binaries, or they may generally feel hindered by gender labels. Gender fluidity will be defined as the changing nature of one’s gender identity or

expression. Nonbinary will be defined as an umbrella term for individuals who do not identify with the female/male genders. For all of these terms, we will be sure to have in-depth discussions about what they mean beyond their surface-level definitions. Additionally, we will make sure to discuss pronouns and pronoun choice at length.<sup>6</sup>

We will also discuss some important terminology regarding sexual and emotional orientations. Some crucial terms beyond more well-known terms like “lesbian” and “gay” we will describe will be “queer,” “bisexual,” “pansexual,” “asexual,” “aromantic,” and more. We will define the term queer as an umbrella term for all non-cisgender, non-heterosexual gender and sexual identities (we will also be sure to discuss the history of the term, since it is a reclaimed slur). We will describe that bisexuality is another overarching term used for sexual orientations that are physically and/or emotionally attracted to more than one gender. Pansexual will be defined as individuals who are sexually and/or emotionally attracted to many/any gender. This term is often used instead of bisexuality to acknowledge the existence of multiple gender identities. Finally, we will define asexual as someone who identifies with a lack of sexual attraction, and aromantic as someone who identifies with a lack of romantic attraction.

We will also talk about what it means to be a part of the LGBTQ+ community, and what it means to “come out.” First, we can discuss concepts like heteronormativity and cisnormativity. Both of these concepts refer to the exclusive normalization of heterosexual and cisgender identities. We will discuss how this normalization contributes to the marginalization of queer people. Then, we will talk about the harsh realities of coming out in a society that normalizes heterosexual and cisgender people. We will discuss what to do if someone comes out and their family is not supportive, and resources to aid anyone whose family, friends, and peers are not accepting of queer identities. In particular, specific examples of scripts will be shared, which

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<sup>6</sup> We will use additional resources from GLAAD to elaborate on these concepts (LGBTQ Resource List, 2012).

may be useful as a teaching tool with autistic youth. We will also talk about the benefits of coming out, such as connecting to other LGBTQ+ folks, expressing one's truest self to the world, being open about one's relationships, and setting a brave path for other members of the LGBTQ+ community to follow.

We will finish the lesson by talking about LGBTQ+ allyship. First, we will discuss what it means to be an ally, and describe allyship as the complete support and advocacy for queer people from the perspective of someone outside of the queer community. One can be an ally to the queer community in many different ways, depending on context. We could discuss that a simple way to be an ally to the queer community will be to welcome friends with marginalized gender and sexual identities, and stick up for those friends in any and all homophobic, transphobic, or queerphobic situations. Additionally, non-LGBTQ+ folks can support queer communities in taking part of social justice movements meant to advocate for the LGBTQ+ community (we could talk about different forms of queer rights movements and how an ally can take action within them). Finally, we could discuss the importance of educating oneself and others on LGBTQ+ laws and history.

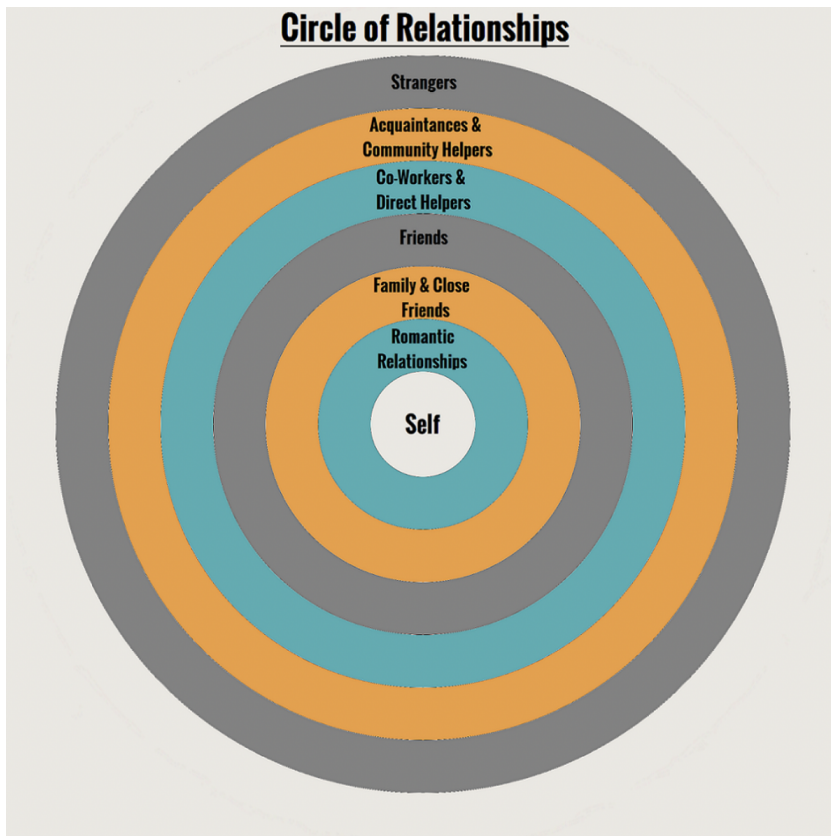
### ***Healthy Relationships***

After establishing the consent portion of the curriculum, another important goal for the program will be that campers know and can talk about what it means to be in a healthy relationship. To approach the topic of healthy romantic relationships, we will start by talking about all different types of relationships. The "Circle of Relationships" chart (Figure 2) will help facilitate that conversation. We will ask campers to describe what they see on the chart, and to try and explain why the circles are set up in this order. After a discussion period, counselors will clarify that as the circles get bigger, the relationships get less intimate. We might also have a

discussion about the different nature of these relationships and the most appropriate way to communicate within these relationships. For example, we may ask questions like “With which of these groups will you feel comfortable sharing your sexuality?” or “With which of these groups will it be appropriate to talk about your sexual encounters?”

**Figure 2**

*Circle of Relationships*



*Note.* This chart was created for “Sex Ed for Self-Advocates,” a comprehensive sex education curriculum designed for autistic youth.

We will also be sure to talk about how relationships can change over time. For example, we might discuss that relationships with family members will always stay the same: your parents will always be your parents, your siblings will always be your siblings. However, there can be emotional shifts in those relationships: you might not feel close to your brothers or sisters growing up, but eventually you might feel closer to them. We will also talk about how

friendships can turn into romantic relationships, and romantic relationships can transform into friendships. We will discuss strategies for how people can change the nature of a friendship if they want it to be a romantic relationship and vice versa. To better understand and navigate romantic relationships, it is important to first understand platonic and familial relationships. By first understanding non-romantic relationships, campers will see how all relationships are guided by consent, communication, and change.

It will also be important to discuss the kinds of relationships that cannot overlap. For example, we will make it clear that a relationship with a family member, teacher, therapist, or helper should never become sexual. To explain why these relationships should never become sexual or romantic, we will discuss the nature of power dynamics in relationships. We will create theoretical scenarios to explain the problems with power dynamics in relationships. For example, we could talk about what happens if a student's relationship to a teacher becomes sexual. First, we could refer back to the consent section of the curriculum, and explain that if a teacher has sexual or romantic relations with their student, it is illegal due to their age gap. Even if it is not illegal (for example, if a student is eighteen and considered a legal adult, but their teacher is forty), we will talk about why this is still an inappropriate relationship. We will explain that a relationship like this inherently lacks consent, and a power dynamic exists skewed toward the teacher.

Next, we will make sure campers know about characteristics of a healthy relationship versus characteristics of an unhealthy relationship. We might start with an open discussion about this topic, and then counselors will ensure that campers know a couple of crucial distinctions between healthy and unhealthy relationships: trust vs. no trust, communication vs. no communication, emotional respect vs. controlling a situation, honesty vs. dishonesty, and

equality vs. inequality. To explain these concepts, we will first define these qualities, and then provide examples for how they function within relationships. To talk about trust vs. no trust, we will first explain that in a healthy relationship, partners should be able to trust each other wholeheartedly, even if there is not always explicit evidence that their partner is telling the truth. For example, if someone in a monogamous relationship decides to go to a party and their ex-partner is going to be present, their current partner can trust that they will not have any sexual encounters with their previous partner. In an unhealthy relationship, the current partner might not be able to trust them without explicit evidence that they are telling the truth. We will discuss the trouble with not having trust for one's partner. This same teaching pattern could work to explain the other characteristics of relationships.

We also will explain that oftentimes relationships are not as black and white as entirely healthy or entirely unhealthy. We will discuss what to do in scenarios where relationships feel healthy in some ways and unhealthy in others, and how to decide if a relationship is worth staying in if it is a mixed experience. For example, we might talk about what happens if trust, emotional respect, or communication breaks down. We will have discussions about how it can be normal for positive aspects of a relationship to break sometimes, how to evaluate the relationship when things are going awry, and how one can use these core tenets of a relationship to rebuild.

We will then talk about what it means to be in an abusive relationship, which is often more black and white than being in an unhealthy relationship. We will first explain that an abusive relationship means that one partner is actively hurting or controlling their partner in some way, whether that be emotionally or physically. We will talk about the different kinds of abuse, and what those sorts of abuse may look like. For example, physical abuse implies that harm is being inflicted on someone's body, and can look like hitting, pushing, or grabbing,

whereas verbal abuse is inflicted on someone's emotional state, and might look like extreme yelling and/or insults, guilt-tripping or judgment for someone's inherent being. We will also make sure to explain what abuse specific to autistic folks can look like. For example, it might look like telling autistic individuals that they are abnormal or weird because of their autism, ignoring sensory sensitivities related to someone's autism, or telling them that they are not actually autistic and that their autism-related needs are made up for attention. To ensure the safety of our campers, we will discuss what to do if campers realize that they have already experienced a relationship that was illegal, abusive, or contained inappropriate power dynamics. We will be sure to provide them with resources like various help hotlines and therapeutic sites, and will also tell them how to seek support from a trusted adult, therapist, family member, friend, or teacher.

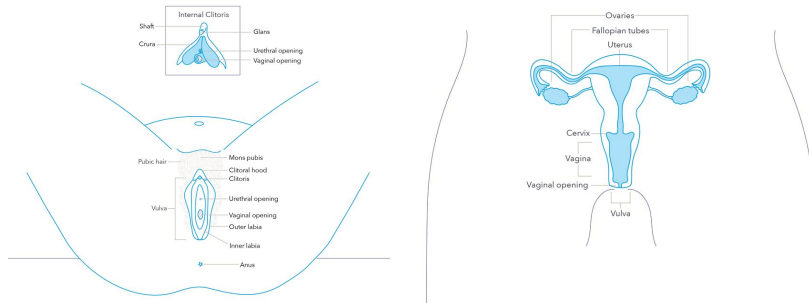
Because the world of sex and dating can be difficult to navigate for autistic individuals, having informative, open, and explicit conversations about dating in addition to conversations about sexuality is essential to their sexual and romantic wellbeing. We want to teach campers how to evaluate current, past, and future relationships with a critical eye.

### ***Puberty, Sex, & Safety***

Before we discuss anything revolving around sexual intercourse, we will first talk about puberty. To begin a lesson on puberty, we will begin with talking about human anatomy. Because puberty involves the changing of the reproductive system in all genders, we will provide diagrams of male and female genitalia, in addition to inclusive diagrams looking at intersex genitalia and trans genitalia after a gender-conforming surgery.

**Figure 3**

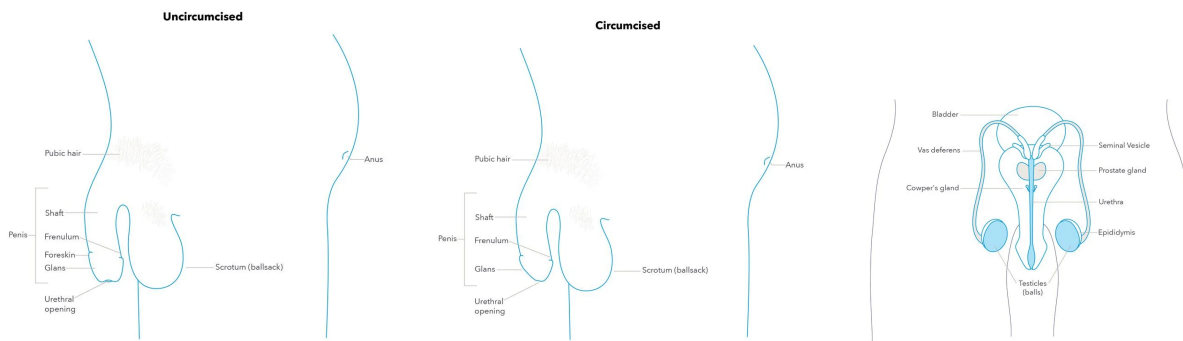
*Female Genitalia*



*Note.* This figure is a Planned Parenthood female reproductive anatomy diagram (*Female Sexual Anatomy, Vulva, Vagina and Breasts, n.d.*).

**Figure 4**

*Male Genitalia*



*Note.* This figure is a Planned Parenthood male reproductive anatomy diagram (*Male Sexual Anatomy | Penis, Scrotum and Testicles, n.d.*).

After we have established that campers are comfortable and knowledgeable about anatomy, we will discuss the nature of the physical changes that take place during puberty. First we will discuss gender-neutral changes that occur during puberty, followed by sex-specific changes. Gender-neutral changes that we might discuss are the growing presence of hair in all

sections of the body, the appearance of acne, body odor, and the general growth that may occur in one's body. For all of these changes, we will provide different strategies for how to handle them. To begin, we might have a discussion about the societal expectation that women remove all forms of hair that are not located on one's head, eyebrows, or eyelashes. We will talk about whether or not these expectations are realistic, cultural differences in societal standards for hair-removal, and safe forms of hair removal if that is the route someone would like to choose. Regarding acne, we will talk about the social stigma regarding acne, different ways to manage it, and how to find a dermatologist. Body odor will be a convenient place to have an in-depth discussion on hygiene. We will also discuss the concept of "growing pains," and explain that it is normal to experience pain or discomfort during rapid growth spurts.

Next, we will talk about the changes that occur specifically in bodies with female sex organs. First, we will explain the changing nature of breasts and the option to wear a bra to support one's breast development. We will be sure to explain that everyone with female sex organs experiences these physical changes at different times, and just because one person grows breasts faster or slower than another, does not mean that there is something abnormal about their pubertal journey. Additionally, we will mention that breasts can exist in all different shapes and sizes, and there is no "normal" way for breasts to look. We will also have a comprehensive discussion about menstruation: what it means to menstruate, how often women menstruate, common language used to describe menstruation (like having a period, "that time of the month," etc.), and menstrual hygiene options. Finally, we will discuss the changes in how bodies with female sex organs look over time. For some vagina-owners, their buttox and hips might become larger, and their stomach might grow as well. Because there is a lot of societal stigma that can

occur surrounding a vagina-owner's changing body during puberty, we will be sure to discuss how that might affect one's emotions, and strategies for self-care/love during these changes.<sup>7</sup>

We will also discuss pubertal changes that occur specifically in bodies with male anatomy. First, we will talk about voice changes that can occur during puberty. Because voice shifts can be jarring for individuals in male bodies, we will discuss different ways to take care of vocal chords, and will normalize this change to minimize any embarrassment campers might feel. Next, we will discuss changes that penis-owners might notice in their penis and testicles. We will provide a diagram of the different stages a developing penis might go through, normalize all penises of all different shapes and sizes, and discuss options for different kinds of underwear that might feel most comfortable to support changing genitals. We will also explain that erections and ejaculation might begin to happen for penis-owners during puberty. We will be sure to discuss what an erection actually is (when a penis becomes stiff or hard), that erections can happen because of sexual feelings or, especially during puberty, at unexpected times, what to do if an erection occurs in public, and how to manage an erection if it occurs in public. We will also discuss ejaculation (when muscles in the penis contract and push semen through the end of a penis), when and why ejaculation happens, and appropriate times for ejaculation to occur (we might have conversations about masturbation, and the importance of masturbating in private).

In addition to discussing physical changes, we will also talk about emotional changes during puberty. During puberty, adolescents might experience intense emotional mood swings and might feel sexual feelings for the first time. We will have frank discussions about the kinds of mood swings one might have, how these mood swings can affect relationships, and coping strategies for managing one's visceral emotions. Additionally, we will discuss the different kinds

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<sup>7</sup> This also may be a good moment to include a brief section about eating disorder education.

of sexual feelings that can exist, managing these feelings, that everyone has a different timeline and some people may never feel sexual feelings (we will probably refer to asexual vocabulary).

Sex has many different definitions. We will give several different definitions of sex, and even ask campers what the concept of “sex” means to them. One definition we might provide for “sex” will be “any physical act performed in an effort to pleasure one’s partner.” We also might talk about common types of sex like vaginal intercourse, oral sex, and anal sex. We will have extensive discussions about sexual activity, and how it can look different between different genders. We will have a conversation about what actually happens when individuals decide they are ready to have sex (kissing, sexual touching, foreplay, what is physically happening during the different kinds of sex we defined earlier, orgasms, etc.).

Because sexual scripts and innuendos can be difficult for autistic individuals to decode, we will teach about common sexual innuendos and language that might be used “slangly” to describe sex and genitals. For example, we might explain that while we are using scientific words to describe “breasts,” in casual conversation, adolescents might use words like boobs, tits, tatas, etc. all intending to describe breasts. We will look at the various terms campers might here for terms like penis, vagina, sex, oral sex, penetrative sex, and more.

Next, we will discuss safe sex. We will begin by talking about basic forms of contraception. We will have an extensive lesson to discuss different forms of birth control like the pill, condoms, intrauterine devices (IUDs), nuva rings, and more. For each one of these contraceptives, we will first describe how to use the contraceptive, the effectiveness of the contraceptive, and the benefits and risks of that kind of contraceptive. For example, if we were to talk about the birth control pill, we will explain that it is a pill that women have to take every day to avoid pregnancy. It is only effective if taken every day within a similar timespan (it is different

for each birth control), and at its full effectiveness, it is usually around 91% effective (Planned Parenthood, 2021). We will talk about the potential side effects of the pill including headaches, nausea, spotting, and more, and will also provide resources for how to gain access to the pill. Because the camp will have a pro-choice stance, we will also talk about options for accidental pregnancy, including keeping the baby and options for an abortion. We will also be sure to cover Sexually Transmitted Infections (STIs). We will talk about how they spread, which of them are life-threatening and which are not, the symptoms of all STIs, which forms of contraception prevent them and which do not, and how to get tested for them.

Not only does safe sex mean talking about STIs and pregnancy prevention, but it also means talking about feeling safe and happy during sex. Although sex can be about reproduction, sexual activity is often about pleasure. It will be crucial to speak with campers about how to enjoy sex, how to know if one is enjoying sex, and different resources to bolster one's sex life. We might have conversations about sex toys, communicating with a partner about what feels good during sex, well-researched forms of media which discuss tips on how to have a happy and healthy sex life, the female orgasm, masturbation, and more. In this section, we want to be open and honest about pleasurable sex, considering pleasure is not a topic typically covered in sex education.

Another important topic in this section making sure campers know when they are ready to have sex. The checklist below will be introduced to help campers decide if they are ready (Dekker et al., 2015; Visser et al., 2017). If they select yes for all of the boxes, we could discuss the possibility that they might be ready to have sex, whereas if they select no for any of these questions, we will discuss that they are most-likely not ready to become sexually active with a partner yet. We will be sure to normalize all feelings of readiness or unreadiness.

**Figure 5**

*'Am I ready for sex?' Checklist*

**Additional exercise 2: Checklist 'Am I ready for sex?'**

1. Read the statements in the checklist and answer each question for yourself, by checking yes or no.
2. Discuss the results with your trainer (you can find them in appendix 6).

Checklist	YES	NO
1. You know your own body and the way that it works. You have accurately looked at yourself naked; you have also looked at your genitals.		
2. You recognize your sexual feelings: you know what it feels like to be in love or to want to have sex.		
3. You do not feel uncomfortable or scared when you think of sex.		
4. You consider the feelings of the person whom you are having sexual contact with and you will not do anything against his/her will.		
5. You recognize feelings of arousal and wanting to have sex or intercourse in yourself.		
6. You have the courage to tell the person you are having sexual contact with what you want or do not want.		
7. You know you can have sex and that you can always say "no" and you would dare say no.		
8. You want sexual contact because you are in the mood or you are curious about it and not because you have to or because others are doing it and they expect you to do it as well.		

In order to specify the curriculum about sex to fit the needs of autistic adolescents, we will be sure to discuss how sexual activity can look different for autistic individuals. For example, because autistic folks might have enhanced sensory sensitivities, different aspects of sex might feel uncomfortable or painful. We will explain that in these situations, it is important to communicate with your partner that something does not feel good. Additionally, autistic folks have communication differences. We will discuss different strategies to communicate comfortably with one's partner during sex. Some of these strategies might include having a notepad or writing device nearby to write down needs or desires, communicating beforehand about what feels good and what does not feel good (these may be related or unrelated to one's sensory needs), and telling one's partner signs how to know if you are feeling overwhelmed or uncomfortable. Lastly, we will talk about disclosing an autism diagnosis. We will discuss the benefits of disclosing that information to one's partner, what it would look like to disclose that

information during sex, and communicating needs without disclosing a diagnosis. We will ensure that campers know a disclosure of a diagnosis is completely up to them.

At the end of this section, we will want campers to feel knowledgeable and comfortable talking about puberty sex, sexual pleasure, contraception, readiness for sex, and how sex can look different for autistic individuals. Often, sex education programs are insufficient for autistic adolescents. In this curriculum, we will be sure to use clear, honest, and comprehensive language about sex, and will do everything to tailor discussions about sex to the autistic community.

### **Schedule Design**

The following schedule outlines what one of the weeks at camp will look like (consent week). As one can see in the schedule, each day of camp will look relatively similar. The day will begin at 8:00, and after breakfast, every other day will have morning programming immediately after breakfast. In an effort to mix up the routine, but not stray too far from the previous day's routine, Tuesdays and Thursdays will begin with a camp activity rather than programming. On the days where there is no early-morning programming, there will be programming after the camp activity and in the afternoon. After lunch there will always be a rest hour, and after dinner there will be evening activities.

**Figure 6**

*Example of a Weekly Schedule for ‘Consent Week’*

Consent Week	Monday	Tuesday	Wednesday	Thursday	Friday
Daily Topic:	Boundaries	Consent 101	Gray Areas	Safety	Reflection
8:00-8:45	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9:00-12:00	Morning programming: Drawing Boundaries	Camp activity (9:00-9:45) What is consent? (10:00-12:00)	Morning programming : Power Dynamics	Camp activity (9:00-9:45) Assault and Harassment (10:00-12:00)	Morning programming: Why is consent important?
12:00-1:00	Lunch	Lunch	Lunch	Lunch	Lunch
1:00-2:00	Rest hour	Rest hour	Rest hour	Rest hour	Rest hour
2:15-3:15	Camp activity	What is consent: continued	Camp activity	Safety protocols and emotional support resources	Camp activity
3:30-4:00	Break	Break	Break	Break	Break
4:15-5:15	Applied Learning	Applied Learning	Applied Learning	Applied Learning	Applied Learning
5:15-6:30	Shower Hour	Shower Hour	Shower Hour	Shower Hour	Shower Hour
6:30-7:30	Dinner	Dinner	Dinner	Dinner	Dinner
7:30-8:45	Evening Activity	Evening Activity	Evening Activity	Evening Activity	Evening Activity
9:15-10:00	Nighttime Routines	Nighttime Routines	Nighttime Routines	Nighttime Routines	Nighttime Routines
10:00	Lights out	Lights out	Lights out	Lights out	Lights out

### ***Programming and Applied Learning***

Each day of camp will follow a particular theme. The example above shows what the first week of camp, “Consent Week,” will look like as a more detailed schedule. Each day will cover a different area of consent until Friday, which will always be a “reflection day” for campers to reflect upon what information they have learned that week.

At this camp, we will use an evidence-based teaching method for autistic students to effectively learn about the four main content goals of camp (see above for detailed descriptions of content goals). Although the literature is lacking when it comes to how to effectively teach autistic teens sex education, and is generally lacking about how to teach autistic teens social skills, Laugeson et al. (2012) found that their method of teaching autistic teens was effective in improving social skills. Because of the proven efficacy of this model, we will also use this teaching format to teach sex education to students. This means that instruction will occur in small groups, so as to promote comfort and closeness among peers. The instruction will begin with “didactic instruction,” meaning a more typical, lecture-format explaining what the topic is and why it is important. Then, we will have a more discussion-based format so students can become comfortable speaking with each other about what they just learned and what it means to them.<sup>8</sup> We will continue to follow the PEERS model of instruction and follow didactic teaching and peer discussion with a counselor demonstration, student role-play, and counselor feedback on the role-play performed by the students. This way, students get to put the didactic teaching into practice and gain a deeper understanding of the material.

At the end of the day, students will be prompted to write down anonymous questions to put in a question box. Because the topics surrounding sex education can be sensitive and can

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<sup>8</sup> Although discussion-based learning is not part of the PEERS program, we will include this to promote conversation between peers about the material they are learning and to get them comfortable with each other.

make people feel vulnerable, we will be sure to have an anonymous portion of teaching so students can ask any and all questions they might have. At the start of each day, counselors will take out and answer all questions from the question box.

### ***Rest Hour and Break***

In order for the adolescents attending camp to feel well-rested and ready to soak up information during the teaching sessions, we will make sure students have a rest hour. ASD is a social communication condition which can make social interactions even more exhausting than for neurotypical counterparts (Mantzas et al., 2022). Thus, it is crucial that campers have time to themselves to help break up what might feel like an overwhelmingly-long day. During rest hour, campers will return to their cabins and can engage in quiet activities to give their minds and bodies a rest. There will also be a break between 3:30 and 4:00 in order to split up the long afternoon of activities. Because autistic individuals can either experience sensory overload or can seek out sensory experiences, the breaks will have options to tailor to these needs. For example, the camp will have sensory spaces where items like weighted blankets, sandboxes, stress balls, bean bags, etc. will be available for use. Anecdotal evidence suggests that having a designated space with sensory toys can be useful to autistic individuals if they need breaks from activities which might feel over-stimulating (N. Britton, Personal Communication, October 7, 2021). Campers will be able to access this room throughout the day if they need breaks, and will have autonomy over their designated and spontaneous breaks.

### ***Camp Activities***

Because the camp will be located in a space surrounded by nature and a body of water (preferably a lake), there will be camp activity periods for campers. Activities might include canoeing, swimming, kayaking, paddleboarding, ropes courses, soccer, volleyball, hiking, and

other options that will be enjoyable in an outdoor space. In order to break up the day from only having instructional periods, campers will enjoy at least one hour a day participating in a more “typical” camp activity. This will allow them to recharge and gain comfort/skills in the outdoors.

### ***Evening Activities***

After dinner, campers will wind down from a day of learning by participating in an evening activity planned by the counselors. Evening activities will most-likely be different every night, but may include activities like watching movies, playing board games, playing more active games, playing instruments, singing around a campfire, and other activities which may encourage campers to get to know each other and enjoy themselves. We will also host autism-specific evening activities. For example, we may have a weekly special-interest night, in which campers are given time to discuss their interests with peers. We might even break campers into groups if their special interests intersect. Evening activities will be a safe space for campers to bond with each other and relax.

### **Measuring Impact**

In order to measure the psychological, social, and emotional impact the summer has had on campers, we will use multiple devices, a structure based off of Michalski et al. 's (2003) multiple-method impact evaluation they used to evaluate therapeutic summer camps for children with learning disabilities and psychosocial differences. We will use standardized pre-test and post-test instruments, pre-camp and post-camp interviews, and a series of post-camp questionnaires. Because we want to have the most comprehensive evaluation for camp, multiple methods to measure impact will be employed. All measurement formats will evaluate if the campers reached the aforementioned four main goals at the summer camp: a comprehensive understanding of consent, gender identity and sexual orientation, healthy relationships, and the

biology, safety, and pleasure of sex. Additionally, we will look at social skills in children and how they may have changed since attending camp.

### ***Before Camp***

The pre-test will occur 30 days before camp. If we tested them in a time span closer to camp, we might not get accurate results, because thinking about attending sex education camp may inspire campers to learn more or do quick research directly before coming to camp. We will want to know a student's innate/previously-acquired knowledge about these topics before they enter the camp setting. In the pre-test, we will ask questions about the four main goals of the camp. Each test will have four sections (one for each content goal) and will be cognitively appropriate and age-specific. For example, not all twelve-year-olds will take the same test because one camper's autism/learning needs may not closely resemble that of another camper. In regards to age-specificity, we might ask a twelve-year-old to label the diagram of reproductive organs, whereas we might ask a seventeen-year-old to give a definition of sexual intercourse.

Due to a wide range of ages and cognitions, we will make sure students have access to a variety of different exams. Thus, there will be approximately five versions of each pre-test and each will be assigned to a camper based on their age and cognitive ability (which we will discover from a combination of their birthday and the WASI test). Students will also be able to switch exams if the exam feels too easy or too difficult.

Because standardized tests can feel impersonal, stressful, and may not be the best way for all campers to showcase their knowledge, there will also be an in-depth interview with parents before the beginning of camp. As previously mentioned, in these interviews we will ask parents about their child's needs, history, and any other relevant information. Additionally, we will ask parents what kind of knowledge they believe their child already has in the field of sex education.

### *After Camp*

On the last day of camp, campers will take an end-of-the-summer test to demonstrate the knowledge they will have acquired at camp. The post-test will be identical to the pre-test in order to set up a clear comparison of campers' knowledge before and after camp. Once again, campers will receive a developmentally-appropriate test.

One month after camp, parents will be interviewed again. In order to set up a direct juxtaposition between before and after camp, parents will be asked the same questions regarding the knowledge they feel their child has about the four main content goals of camp. Additionally, parents will be asked about changes they might begin to see in the general behavior of their child. The qualitative interviews with parents will be compared to each other and analyzed separately by trained research assistants using standardized coding methods.

Campers and parents will also be asked to fill out a questionnaire about the program one month after camp ends. There will be questions about the format and effectiveness of the programming (including questions about likes and dislikes of various activities, suggestions for activities campers/parents wished had been offered, suggestions about the scheduling format at camp, the most helpful aspect of the camp's activities etc.) and more open-ended questions about what campers and parents feel that the child had learned (questions like: What was the most useful piece of information that you or your child learned at camp this summer? How have you changed since the beginning of the summer? Do you feel more confident talking about topics like consent, sex, and puberty? Which topic do you feel the most confident speaking about? Which topic do you wish you learned more about? What are some of your remaining questions about these topics? etc.).

Finally, we will also examine the changes in social skills of campers using the Social Skills Rating System (SSRS). The SSRS helps to determine an individual's tendency toward prosocial behavior (Michalski et al., 2003). Because of the immense amounts of data suggesting the social improvements which can occur in individuals with ASD after a week or more in a camp setting, we will look at SSRS scores before and after camp in order to assess and see if this particular camp setting was helpful for social skills. We will also ask questions in both parent interview sessions to assess this question in a more qualitative format.

### ***Testing Considerations***

In order to receive the most accurate results for the pre and post tests, we will be sure to make testing environments as comfortable as possible for campers. Because autism can often coincide with ADHD and anxiety, we will be sure to properly accommodate any and all testing needs for campers (Gillot et al., 2001; Mayes et al., 2012). For example, we will allow campers to take tests orally if preferred, and we will also have access to assistive technologies. In order to reduce testing anxiety as much as possible, we will also make sure campers know that both tests have no effect on a camper's summer, do not determine their cognitive abilities, and will simply allow us to understand what campers know, what they know after camp, and how those two measuring points compare to one another.

### **Conclusion**

For my Tufts Summer Scholars project, the project which subsequently became my senior thesis, I examined the IEPs of autistic students for aspects of sex education. From the data my project teammates and I collected, it appeared as though IEPs for autistic students did not include any form of sex education or cite any best practices for teaching sex education. These

findings were disappointing, as my independent research and the research conducted in the Crehan Lab has indicated the deep importance of sex education for autistic youth.

As I began to dive deeper into research about the intersection of sex education, autism, and IEPs, I stumbled upon the aforementioned study by Koegel et al. (2019), which looked at four autistic individuals who attended a two-week-long summer camp. At this camp, all four participants completed their year-long IEP social goals in the two weeks they attended the camp. Not only did they reach these goals, but they continued to meet these goals for an entire year in a natural academic setting.

I found Koegel et al.'s (2019) study to be monumental. When I finished reading the study, I felt as if I had just discovered something revolutionary: summer camp seems to be an extremely effective setting for autistic youth. Why had this study not been a bigger deal? Why had I not heard about it sooner? I began to look further into this topic, and came upon study after study looking at the effects of camp on autistic youth. I found that every study came to the same conclusion: autistic youth benefit from a summer camp setting. As I had been thinking specifically about sex education and autism, I immediately thought: is there a sex education summer camp for autistic youth? Through my internet searches, I discovered a few sex education camps, but these were targeted at teens more generally and did not specifically address the needs of autistic youth. Also, these programs did not occur in a traditional camp setting. While I felt disappointed to see that a space like this was not available for autistic youth, I was also energized by this gap in the literature, and knew quickly that I wanted to spend a long time building this place that was unraveling itself in my brain.

Although I have no concrete plans to execute this camp, I do hope that one day I will create a space like this for autistic youth. Not only is sex education for autistic youth important

for their overall well-being, but I believe that a camp which talks about topics as intimate as sex, sexuality, dating, puberty, consent, and gender identity is bound to bring together a close-knit community. As someone who attended summer camp myself, I know just how magical the experience can be. I hope that this thesis makes some kind of impact on the lives of autistic youth, whether it inspires researchers to look more into summer camp as an alternative modality of learning for autistic individuals, or inspires parents to look into sex education for their autistic children, or just brings general awareness to the importance of sex education.

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