Opinions of special education teachers on inappropriate sexual behaviors in adolescents with intellectual disabilities

Bora Akdemir

Special Education, Turkiye Cumhuriyeti Milli Egitim Bakanligi, İstanbul, Turkey

Inappropriate sexual behaviors may be observed in individuals with intellectual disabilities (ID), especially during adolescence. There are several undesired consequences of exhibiting such behaviors in public spaces, such as schools. The competencies and attitudes of special education teachers, who are responsible for the education of individuals with ID, are of significant influence. This study was conducted to investigate the views of special education teachers working with adolescents with ID on inappropriate sexual behaviors exhibited in educational settings. Accordingly, semi-structured interviews were conducted with 12 special education teachers. The phenomenological research design, one of the qualitative research methods, and thematic analysis were used in this study. Five themes were identified after the analysis of the findings of the study, namely, common behaviors, teacher attitudes, teacher competencies, teacher interventions, and educational content. The findings were discussed on the basis of the relevant studies in the literature and a number of conclusions were reached. Accordingly, the inappropriate sexual behaviors that special education teachers encounter the most frequently are masturbation, undressing, and touching, and when these behaviors are exhibited aggressively, teachers have difficulty in intervening. Participants regard themselves to be incompetent in terms of sexual education and consider relevant educational content inadequate.

KEYWORDS: Individuals with intellectual disabilities; adolescence; sexual education; inappropriate sexual behaviors; teacher competencies

Introduction

According to the World Health Organization (WHO 2006), sexuality is a fundamental composite of human development, encompassing gender, gender identities, gender roles, sexual orientation, eroticism, intimacy, and reproduction. All individuals are entitled to sexual rights, which are among the basic human rights. However, many people tend to exclude, either overtly or implicitly, individuals with intellectual disabilities (ID) from this topic (Frawley and O'Shea 2020). As a result of this situation, access to sexual education and learning opportunities can be much more difficult than their typically developing peers. Although this difference emerges in early childhood, it intensifies during adolescence (Davis *et al.* 2016).

In the most generic sense, adolescence is the period in which individuals transition from childhood to adulthood. According to the extant literature, the average age of adolescence is 10–11 for girls and 11–12 for boys (Doula Nicolson and Ayers 2004, Hénault 2006, Wurtele and Kenny 2011). Adolescence brings about major changes in physical, cognitive, and social aspects (Murphy and Elias 2006, Thompson and Morris 2016). This major transition is known to cause great anxiety and stress in adolescents (Gordon *et al.* 2004).

Individuals with ID often experience the same stages of adolescence as typically evolving individuals (Rashikj 2009). Individuals with ID, who are known for their limitations in cognitive competencies and adaptive behaviors (American Association on Intellectual and Developmental Disabilities [AAIDD] 2010), may lack in terms of social adaptation skills (Kürtüncü and Kurt 2020). Individuals with ID may experience the impact of the social changes and stress associated with adolescence more severely (Gordon *et al.* 2004). Difficulty in perceiving the change owing to this period, inability to adapt to the new situation and fully perceive privacy, and behaving contrary to social norms are among the challenges associated with adolescence (Blasingame 2018).

Inappropriate sexual behaviors (ISB) may be observed in adolescents with ID. ISB comprises socially unacceptable behaviors, such as undressing, masturbating, touching one's genitalia, touching others without permission, and making sexually explicit speeches in

Correspondence to: Bora Akdemir, Special Education, Turkiye Cumhuriyeti Milli Egitim Bakanligi, İstanbul, Turkey. Email: boraakdemir@outlook.com

DOI 10.1080/20473869.2022.2129127

inappropriate environments (Carlson *et al.* 2008, Davis *et al.* 2016, McLay *et al.* 2015). Exhibiting such behaviors leads to several negative outcomes. Individuals with ID may be alienated owing to such behaviors, subject to violent reactions, vulnerable to abuse, abusive toward others, and prone to harm themselves (Early *et al.* 2012, Singh and Coffey 2012, Ward *et al.* 2001). It is also known that especially male individuals with ID exhibit ISB more intensely and are more involved in sexual crimes (Latvala *et al.* 2022).

If certain behaviors of adolescents to get to know and experience their own bodies and sexual instincts are exhibited in public, they can be qualified as ISB. Masturbation in public and flashing are examples of such behaviors. Individuals with ID may have insufficient knowledge on issues, such as social norms and proper satisfaction of their sexual desires (Kürtüncü and Kurt 2020, Volkmar and Wolf 2013). When these deficiencies are combined with possible problems in social skills, the situation may become even worse. Social adaptation skills, social skills, and basic safety skills, such as privacy and protection from abuse should be included in the curricula of individuals with ID and taught starting from an early age (Er *et al.* 2016, SIECUS 2004). It is possible to say that the lack of these skills exacerbates the exhibition of ISB by individuals with ID. In addition, the social perception of sexuality can expand or narrow the limits of acceptable behavior.

Sexual education and effective guidance of individuals with ID are often neglected (Kijak 2011). Taboos and misconceptions about sexuality, as well as limited educational opportunities, make the situation more problematic (Isler *et al.* 2009). Most information resources utilized by typically evolving individuals, such as peer interaction, printed materials, and the Internet are unavailable for individuals with ID (Ademi *et al.* 2013, Jahoda and Pownall 2014). Misconceptions regarding the sexual education play a negative role as well (Hill 2018). Most individuals believe that sexual education is purely biological, limited to sexual intercourse, sexual health, and adult life (Byers *et al.* 2013). However, sexuality encompasses physical, psychological, social, and cultural aspects and is a fundamental part of identity formation (Çalışandemir *et al*. 2008, Haktanır 2005).

Many people think that it is not suitable to provide sexual education to individuals with ID (Ferrante and Oak 2020, Shandra and Chowdhury 2012; Yıldız and Cavkaytar 2017). There is a strong tendency to regard individuals with ID as asexual (Murphy and Elias 2006), and for those who believe so, sexual development is not an issue that needs to be addressed. Several families and teachers are not sufficiently knowledgeable in terms of sexual education, either (Aderemi 2014, Gougeon 2009, Kammes *et al.* 2020, Opdenakker and van Damme 2006). For these reasons, the sexual identities of individuals with ID are being overlooked.

Sexual education is an extensive education covering various topics, primarily basics, such as gaining privacy awareness, having a safe sexual life, and sexual health (Breuner et al. 2016, Murphy and Elias 2006). When the content of the sexual education programs provided to adolescents is examined, it can be seen that sexual health, self-care, protection from abuse, and safe sexual life are among frequently covered topics (Santrock 2016). It is usually recommended that sexual education of individuals with ID should be conducted with the strong cooperation of families and teachers (Gursimsek 2010, Schaafsma 2015). Misconceptions, negative attitudes, and insufficient knowledge regarding sexual education of individuals with ID deprive them of the support they need to cope with sexuality-related issues. Sex education is not an established practice in special education schools in Turkey (Gümüş and Altınsoy 2015). Since the similar situation holds true for general education school settings, families need to be informed about the sexual development and education of individuals with ID (Gökgöz *et al.* 2021, Gürol *et al.* 2014). In their study carried out with the mothers of children with Down Syndrome, Gökgöz *et al.* (2021) reported that the participants do not consider themselves sufficient in terms of sexual education, and that they either pressure or ignore their children when it comes to topics related to sexuality. Similarly, Kürtüncü and Kurt (2020) emphasized that mothers of children with ID are not knowledgeable enough about sexual education and that they need training on the subject. Especially in a country such as Turkey, where sexual education is insufficient even in the educational curricula of typically developing individuals, families need to be informed about the sexual development and education of individuals with ID (Gökgöz *et al.* 2021, Gürol *et al.* 2014). This magnifies the importance of the role of special education teachers as a source of information on sexuality-related issues for individuals with ID and their families.

ISB that intensify during adolescence have a negative impact on the social acceptance of individuals with ID and cause them to be isolated from social life (Isler *et al.* 2009). For individuals with ID, educational settings refer to the spaces where they can socialize, build friendships and romantic relationships, and prepare for social life, in addition to receiving education. The first steps for the transition to adult life are taken at school by acquiring social adaptation skills. At this stage of development, the negative effects of ISBs may manifest themselves, which is a challenging factor for educators. It is thought that the lack of appropriate educational and behavioral interventions plays an important role in the exacerbation of İSBs. It is known that numerous teachers are not sufficiently knowledgeable in terms of

Table 1. Participant characteristics.

Participant	Area of education	Professional experience (years)	Gender	Groups taught	Interview time (min)
T1	HI	26	F	ID-ASD	35
T2	ID	12	F	ID	41
T3	ID	9	M	ID-ASD	19
T4	HI	19	F	ID-HI	27
T5	ID	30	F	ID-ASD	34
T6	HI	30	M	ID-HI	21
T7	HI	30	F	ID-HI	39
T8	HI	24	F	ID-HI	31
T9	ID	8	M	HI-ASD	55
T10	ID	6	F	ID	26
T11	ID	7	M	ID-ASD	23
T12	ID	10	F	ID-ASD	33

ID: Intellectual disability; HI: Hearing impairment; ASD: Autism spectrum disorders.

sexual development and sexuality-related topics (Foley and Dudzinski 1995, Howard-Barr *et al.* 2005). However, teachers are expected to guide families, intervene in ISB, and eliminate such behaviors at school. Referring to the literature, there are some studies examining the sexual development of individuals with ID and their parents' views on adolescence. In the study conducted by Gökgöz *et al.* (2021) with the mothers of children diagnosed with Down Syndrome, they reported that mothers do not consider themselves sufficient in sexual education, and that they have an approach of applying pressure or ignoring sexuality. Similarly, Kürtüncü and Kurt (2020) emphasize that mothers of children with ID do not have enough information about sexual education and they need education. However, there are few studies in literature examining teachers' views on these issues. It is thought that determining the opinions of special education teachers on ISB and reporting problems experienced in this regard is important both in terms of contributing to the literature and providing guidance for future regulations. The study mainly aims to examine the ISBs exhibited by adolescents with ID in educational environments in the light of the opinions of special education teachers. In light of the information above, this study sought answers to the following questions:

- What are the ISBs commonly seen among adolescents with ID?
- What are teacher attitudes toward ISBs?
- What are the educational and behavioral interventions preferred by teachers against ISBs?
- How competent are teachers in sex education?
- What are the teachers' views on the content of sex education?

Method

The phenomenological research design, one of the qualitative research methods, was employed in this study. Phenomenology refers to making inferences about the essence and structure of a given phenomenon by considering the opinions of individuals who have experienced the phenomenon, related documents, and other elements (Creswell 2013). Phenomenology, which focuses on how individuals make sense of a subject and their perceptions, interpretations, and expressions, is a convenient method for in-depth analysis (Mayring 2011; Smith and Osborn 2015). The phenomenon addressed in this study is ISB.

Participants

The purposive sampling method was employed in selecting the participants of the study. The study group comprised 12 special education teachers selected on the basis of certain criteria. The criteria for selection to the study group were having graduated from the special education teaching departments of universities and having worked with adolescents with ID for at least one year (Table 1).

All 12 participants graduated from special education teaching departments of education faculties. Among the participants, seven received undergraduate education in teaching children with intellectual disabilities and five in teaching children with hearing impairment. All participants had worked with adolescents with ID in public schools. As can be inferred from the table, some students have multiple disabilities. Only one participant stated that they took a course on sexual education in their undergraduate education, whereas two participants stated that they were taught sexual education as a part of their courses. The number of teachers who participated in a one-day seminar on sexual education was six.

Ethical considerations

Necessary permissions were obtained from the Ethics Committee of Istanbul Sabahattin Zaim University (Document Date and Number: 09.02.2021-E.1741) before the study was conducted. Furthermore, all participants were informed about the purpose of the study in writing, and their written consent was obtained. The identities of the participants were concealed, and each participant was assigned a code (T1, T2, T3, … ,T12).

Data collection tools

Data were collected through a personal information form and semi-structured interview questions. With the

Table 2. Themes and sub-themes.

Common behaviors	Teacher attitudes	Teacher interventions	Teacher competencies	Educational content
• Touching one's own genitals • Masturbating in public • Nudity • Touching others • Kissing others without permission	• Seen as taboo • Traditional perspective • Conservatism • Avoid responsibility • Avoiding backlash	• Distraction • Changing environment • Changing activity • Directing the student to the restroom	• Self-perception of inadequacy • Perception of inadequacy towards other teachers	• Non-existent content • Limited content

personal information form, data on the participants' age, gender, professional experience, graduated university, and the type of disability of the taught student group were collected. This form was filled out by the researcher in accordance with the participants' answers to the questions asked before the interviews.

The semi-structured interview questions were created by the researcher based on the literature. Five experts who had experience in special education and qualitative research methods were consulted, and the interview questions were revised considering their remarks. Afterward, a pilot interview was held with a special education teacher, and the semi-structured interview questions were finalized. This pilot interview was conducted online that lasted 26 min. It was seen after the interview that the questions were generally understood, though some changes were made in terms of word choice. The pilot interview was not included in the analysis.

Collection of data

After the prospective participants were identified, each of them was contacted and informed about the study. At this stage, communication mostly occurred via telephone. Meeting appointments were made with those who volunteered to participate in the study. However, owing to the COVID-19 pandemic, only three participants who lived near the researcher were interviewed face-to-face; the interviews of the rest of the participants were held via online video calls.

Face-to-face interviews were held at the schools where the participants worked, in a calm and quiet environment. The interviews were audio-recorded. Online interviews, however, were held outside of working hours and in line with the availability of the participants. These interviews were recorded with audio and video using the recording feature of the online meeting software. The longest interview lasted 55 min, whereas the shortest was 19 min. The average interview duration was 32 min.

At the beginning of the interviews, questions regarding topics, such as professional experience and educational background, were asked. Subsequently, a total of 10 basic questions were asked to each participant. These questions were related to behavioral changes in adolescence, family attitudes, ISB experiences, intervention methods, teacher competencies, sexual education, and solution recommendations. In cases where the questions were not well-perceived or the answers remained superficial, additional questions were asked. Especially after example cases were described, follow-up questions were asked to see how well the topic was perceived.

Analysis of data

All interview recordings were transcribed word to word. The data were analyzed using the inductive analysis approach. Transcribed interview recordings were read several times. Afterward, encodings were made on the texts. The codes were classified according to their common features, and themes were identified. The identified themes were reviewed and named, and reporting was made in line with these themes.

Credibility and conformability

The total duration of the interview recordings is approximately 384 min. Four interview recordings were randomly selected and the accuracy of their transcriptions was checked by a volunteer expert. The total duration of these interviews was 118 min, which corresponds to approximately 30% of the total data. Moreover, the transcriptions of the selected recordings were sent to the respective participant, and their re-approval was obtained before the analysis.

A second expert provided assistance in the inductive analysis, and the analysis process was conducted by two different experts independently of each other. The intercoder reliability was 85%. The non-overlapping points in the analysis were discussed and a consensus was reached for each point. The expert who participated in the reliability analysis had a master's degree in the field of special education as well as qualitative research experience.

Findings

This section discusses the themes identified based on the analysis of the data. The opinions of special education teachers on ISB observed in adolescents with ID were examined under five themes, namely common behaviors, teacher attitudes, teacher interventions, teacher competencies, and educational content (Table 2).

Common behaviors

This section presents teachers' opinions on the frequently-observed ISB of students with ID and the basis of their difference. Among these behaviors, touching one's own genitals, masturbating in public, nudity and touching others without their consent were prominent Although rarer, it was claimed that behaviors such as kissing others without permission, undressing, showing genitals were also observed. Furthermore, it was stated that female students experience behavioral problems more intensely before the menstruation cycle. Although ISB were observed in both male and female students, some participants emphasized that it may be more difficult to manage such behavior when exhibited by male students. Lastly, it was mentioned that it becomes more challenging to deal with ISB as the level of disability increases.

> I wouldn't say that behavioral problems vary by gender. But when it comes to eliminating behavioral problems, it seems to be more difficult to do so in boys. It may be because the majority of teachers are female. (T7)

> Problems exacerbate around girls' menstrual cycle. Emotional and behavioral problems intensify around that time. (T12)

> I have observed a lot of inappropriate sexual behaviors, such as masturbation, nudity, and touching in students with severe disability. It is because they have fewer opportunities to interact with others. In students with moderate disabilities, interactive behaviors, such as flirting, uncontrolled sexual contact, and kissing are prevalent. (T2)

Teachers' attitudes

All participants are critical of the attitudes of other teachers. Among the prominent reasons for participants' negative attitudes toward other teachers are that other teachers see sexuality as taboo, think traditionally, are conservative, and refrain from taking responsibility. Other less prominent reasons are the negligence of the school administration, misunderstanding by the families, teachers feeling uncomfortable if the student is of the opposite sex, and teachers' fear of isolation in case of a negative situation.

> Societal values and the traditional perspective are very conservative in this regard. Even back at university, most of our classmates were embarrassed, afraid, or uncomfortable when these topics were discussed in classes, as if they were not going to encounter such situations. However, we all encounter such situations at our schools. Even the most well educated still view these issues as taboo. (T10)

> Most of my teacher friends don't want to indulge these topics. They choose to ignore such behaviors unless something really significant happens. In a way, I understand that. They do not want to confront the parents about a religiously and traditionally controversial issue that is considered a taboo by society. (T9)

> It is believed that this is a subject interest of a psychologist or the family. Or rather, it's in everyone's interest to think that way. Precautions are taken to protect the children at school but nobody cares what happens to them at home or outside. I'm afraid that's how we look at it… (T7)

Teacher interventions

This theme discusses the interventions of teachers in ISB as well as the relevant educational interventions. It was found that the most difficult behavior for special education teachers to manage was masturbation. When participants encountered ISB, they often did not directly intervene but they distracted the student in question and expected these behaviors to be interrupted. Here, participants expressed that managing such behaviors was more difficult in group education settings as they had to show extra effort to keep the rest of the students unaffected by the situation. It is seen from the interview data that changing the environment, changing the activity, and directing the student to the restroom are the most frequently used intervention methods.

> I go through the same thing even in online classes. The student's hands are under the table, doing something 'pleasurable.' I get what is going on from their face but I do not warn them. I say, 'Let's start writing.' Let's do that. It is. It is what it is. (T5)

> I once noticed that a student of mine was touching their genitals under the desk during class. I walked up to the student and quietly asked, 'Do you need to use the restroom?' I did not let the other students understand what was going on. I do not think the student thought I would notice what was going on. After my question, the student got uncomfortable and stopped. (T12)

> After I saw two of my male students kissing in the restroom, I had no idea what to do. I could not think of what to say, how to approach the situation. They stopped after they saw me. I had a hard time explaining the issue to the families. (T3)

Among the prominent actions taken by teachers in cases where a student exhibited ISB are having interviews with family, receiving help from the school guidance service, and referring the relevant student to a psychiatrist, apart from immediately taking action after the incident. Only one teacher reported that they talked to families before problems arose, provided them with training, and tried to intervene before problems arose. Four participants reported that exhibiting intense ISB is a problem that needs to be addressed by psychiatrists or psychologists, and the use of drugs in such cases is justified. Three participants, conversely, stated that this is a problem that needs to be addressed by families, not by teachers. Two participants expressed that special education teachers should cooperate with families on this issue and try to solve this problem together. Both of these participants believed that the guidance service should solve this problem by cooperating with the families.

> Sometimes I come to a deadlock. No matter what I do, I cannot figure out what to do. I punish, I reward… Does not work either way. The motives are very strong. I think it is necessary to make use of drugs in such cases (T2)

> I suggest they visit a psychologist. Sexual desire is just too intense in some students. They may need to use medication. (T3)

> My job is not to teach how to masturbate properly or how to change pads. It is the family's job. It is not right for me to help students work on these and no one would be okay with it anyway. (T1)

Teacher competencies

Opinions of participating special education teachers on teacher competencies on sexuality education are divided into two groups. The first group comprises opinions of teachers about their own competencies. Two participants stated that they took courses on sexual education in their undergraduate education, and three stated that this subject was mentioned in the content of various courses. Eight teachers reported that they took a one-day seminar on the topic. Most participants did not feel competent in terms of the sexual education of students with ID; they believed that they are not knowledgeable enough on issues, such as informing families regularly, intervening in the inappropriate behaviors of students, and making long-term plans in this regard. In some participants, the feeling of inadequacy was accompanied by the anxiety of making mistakes or being subject to criticism.

> I do not discuss this subject much in meetings with families because I do not think that I am sufficiently knowledgeable in this regard. Thus, I am afraid of misleading the families. And the families, other teachers … What if a problem arises … Unfortunately, I choose to stay away. (T4)

> Something has happened to me before. One of my students with both mental and hearing disabilities took inappropriate images of another student with a similar condition. Someone who noticed the situation informed me … When I found out, I spoke to the student who uploaded the images and asked them to remove the photos. I pressured the student. I could not take any official action. How would families take it? Having those images on my computer … (T6)

62All the participants consider other teachers inadequate in this regard. Among the prominent reasons why participants hold this opinion are the negative attitudes, indifference, insensibility, conservatism, ignorance, and insensitivity of other teachers. Participants emphasized that teachers do not differ from the rest of society in this regard.

> I think teachers are incompetent in this respect. Very few of them are curious, make an effort to learn. They usually panic and try to get away when something unusual happens. It is difficult to address such issues when the event escalates and turns into a crisis. (T10)

> After all, teachers are a part of society. When we were young, the TV channel would be switched when there was a kissing scene. When there was a woman on screen wearing a swimsuit or ice skating, we were asked to turn our heads away. This is the culture we are a part of. We did not receive enough sexual education, and the administrators at our schools are not exactly encouraging it, either. It is regarded as a matter of safety. How can teachers who are products of such an approach be competent in this respect? (T8)

Educational content

The theme of educational content has two dimensions. The first dimension is participants' opinions on the effectiveness of the current educational content, namely the school curriculum and the individualized education programs (IEP), in terms of sexuality education and ISB. Participating special education teachers stated that the current educational content does not offer any gains to students in terms of sexual education.

> There are no gains in terms of sexual knowledge, no relevant course topic. It is like we have buried our heads in the sand. (T5)

> I would say there is almost no sexual education. I have never seen a teacher who is working on a gain related to sexual development, anyway. (T7)

> Now that I think about it … I have not included any sexual development-related gains in my IEPs, either. We act as if sex does not exist. I am no different than the families … (T4)

Participants who stated that there are few sexuality-related gains in the educational content, however, generally point to self-care-based gains. It was emphasized that subjects, such as changing pads and removing body hair, are included in the educational content and that these gains are usually not practiced.

Discussion

In this study, the opinions of special education teachers on the ISB of adolescents with ID were presented and a number of findings were obtained after the views of the participants were examined under various themes. First, it is understood that the participants mostly do not possess the understanding of sexuality and sexual rights outlined by the WHO. Factors affecting teachers' attitudes on the topic may be related to the deficiencies of related content in teacher-training programs, traditional social structures, religious perspectives, and conservative approaches. Hence, knowledge, attitudes, and approaches on the topic may be affected accordingly. It was seen that there is no established definition of ISB among participants. Behaviors such as flirting, kissing, and snuggling may be considered ISB by some teachers. Therefore, it can be concluded that there is no systematic approach to sex education and ISBs in special education schools in Turkey. Findings related to the sub-themes of the study and some conclusions are discussed below.

Common behaviors

The commonly encountered ISB in the literature are behaviors, such as masturbation and touching the genitals in public, touching other people's genitals, and undressing (Carlson *et al.* 2008, Davis *et al.* 2016, McLay *et al.* 2015). Moreover, the findings of this study point to these behaviors. Participant remarks show that ISB observed in educational settings do not vary.

However, it was expressed that such behaviors are mostly exhibited by adolescents with moderate and severe IDs. It is understood that adolescents with moderate and severe IDs have difficulty in managing their

sexual urges. Furthermore, owing to the limitation in their adaptive skills, these individuals may exhibit such behaviors in public places. It is known that the limitation of adaptive skills plays a role in the exhibition of such negative behaviors in public spaces (Walsh 2000). This affects educational settings as well and may harm the social acceptance of these individuals. Adolescents with ID usually need guidance and education on the appropriate places to perform sexual actions that require privacy (in their room, in the bathroom, etc.), but they are deprived of such support (Tarnai 2006). It is inferred that sexual urges that are not properly satisfied manifest themselves in inappropriate settings.

The opinion that ISBs are more common in male adolescents with ID is prevalent. This may be owing to the fact that female students are subjected to social and family pressure more frequently. As a participant stated, '*Girls somehow learn that they have to suppress these urges…*' It is known that families can be more protective and oppressive of women with disabilities (Morales *et al.* 2016). It was reported that female students with ID exhibit some behavioral problems, especially before their menstrual cycle. Premenstrual syndrome (PMS) brings about some physical and psychological changes with the menstrual cycle and is expressed to be a subjective process (Ibralic *et al.* 2010). According to Erbaş and Altunbaş (2021), of typically developing female adolescents, 78.3% experience abdominal or inguinal pain before menstruation, 65.2% lower back pain, 44.9% skin problems, 51.7% fatigue, 51.2% emotional problems, and 50.2% irritability before menstruation period. Kyrkou (2005), however, reported that female adolescents with ID experience PMS symptoms more severely. The findings of this study correspond to the relevant studies in the literature in this regard.

Teacher attitudes

Sexuality-related issues are considered taboo in many societies, and misconceptions about the topic are still prevalent (Arousell and Carlbom 2016, Torun *et al.* 2011). Special education teachers, who can both educate students with ID on sexual development and sexuality and guide families on the topic, are expected to have a more positive attitude in this regard than the general public (Akdemir and Sarı 2019). However, participants' remarks indicate the opposite. Attitudes have a relatively robust structure that emerges depending on the experiences, cultural structures, and educational processes (Özyürek 2009). Education on sexual development and sexuality is not systematically provided in the Turkish education system. Moreover, it is known that these topics are not comprehensively addressed in teacher-training programs at universities, either. Therefore, the number of factors that can positively differentiate the attitudes of special education teachers from the rest of society in this respect is very few. The traditional and religious viewpoint that regards sexuality as a phenomenon limited to marriage and exclusive to adults is prevalent in Turkey (Cakırlar and Delice 2012). Another point that needs to be emphasized in terms of teacher attitudes concerning this is the predominance of a conservative approach that discourages teachers from teaching sexual health and sexual rights. Sexual education cannot be reduced to protection from abuse and privacy. The fact that some of the participants suggested visiting a psychologist or using medication over sexual education may be the product of such an approach. Such approaches can be adopted in cases where sexuality-related issues are considered taboo; traditional religious approaches are prevalent; and teachers, families, and other stakeholders are not sufficiently knowledgeable on the topic (Ramawati and Block 2020).

Teacher interventions

In the literature, there are no clearly identified evidence-based practices that are effective in sexual education (Schaafsma *et al.* 2015). However, there are studies recommending methods, such as interventions based on applied behavior analysis, behavioral rehearsal and role playing, and social stories (Chan and John 2012, Holland-Hall and Quint 2017; Tullis and Zangrillo 2013). When participating teachers encounter IBS in educational settings, they usually resort to methods, such as redirecting to another activity, warning, or changing the environment. Here, they have difficulties in relatively insistent behaviors and situations where students' genitals are clearly visible, and it is challenging for them to intervene in these cases. When we examine the nature of the interventions, it is understood that the priority in such cases is to immediately eliminate the behavior in question rather than making comprehensive interventions. Traditional behavior modification methods are generally based on applied behavior analysis and used in cases where the stimulus is relatively clear (Ballan and Freyer 2017). However, when sexual urges are awakened, it becomes difficult to break the bond between the stimulus and behavior, which prevents the regression of ISB. The failure to provide adolescents with ID with comprehensive and long-term education with the cooperation of the family and the teachers on privacy and satisfying sexual urges appropriately in appropriate environments is perceived as the reason of the problems mentioned in this study. Confusing sexual drives with ISB can create a problematic understanding of the sexual rights of individuals with ID. Addressing sexuality-related issues only when problematic behaviors arise may be the product of this approach.

Teacher competencies

Undergraduate programs in Turkey in the field of special education have started to undergo a radical change as of 2016 (Filiz *et al.* 2018). Consequently, a course on intellectual disability named 'Adolescence and Sexual Development' was added to the curricula of the special education departments of universities (Yüksek Öğretim Kurumu 2018). This course, which is an elective one, is not offered in some universities. In previous years, except for a few examples, there was no course on the sexual development and education of adolescents with ID in the mentioned programs. One of the dire outcomes of this large gap in the field of special education teacher training is that even teachers with positive attitudes toward sexual education experience problems concerning the professional competencies mentioned in this study. The participating teachers mentioned an overall inadequacy in terms of teacher competencies. It is possible to say that this limitation negatively impacts teachers' ability to develop positive attitudes. It is understood that teachers generally obtain information on sexual development and sexuality-related issues from personal experiences, colleague sharing, and seminars that do not last more than eight hours. Further, relying only on these unsystematic sources may explain why comprehensive educational and behavioral interventions cannot be made. In addition, the findings of the study are consistent with the opinion of Donovan (1998) that teachers have reservations about sexual education and consider it a professionally risky subject.

Educational content

Sexual education is included in compulsory education programs in some countries, whereas in others, it is commonly provided although it is not compulsory (Çalışandemir et al. 2008, Cole-Hamilton 1998, Donovan 1998). However, this is not the case in Turkey (Çalişandemir *et al*. 2008). According to the opinions of special education teachers, it is understood that comprehensive sexual education is not provided to adolescents with ID. The steps taken in this regard are generally about critically problematic behaviors and self-care needs that emerge during adolescence. Other relevant subjects are largely absent in the education modules prepared by the Ministry of National Education for special education schools and individual education plans developed by IEP teams.

Perceiving sexual development and sexuality-related topics as taboo and talking about them in implicit ways is a common issue (Arousell and Carlbom 2016). It is possible to infer from the findings of this study that the types of situations that occur when sexual education is not systematic, the scope of the sexual education provided is very narrow, and the topic is neglected in teacher training. It is understandable that individuals whose sexual development is not supported, who do not have access to reliable information sources, and who have difficulty in managing their urges exhibit ISB (Davis *et al.* 2016, McLay *et al.* 2015). In a period, such as adolescence, when levels of anxiety and stress are high and physical, cognitive, and social development accelerate in an intertwined fashion, individuals with ID need more support than many of their typically developing peers. In systematically providing the much-needed support, it can be helpful for schools and teachers to take responsibility, inform the families, and make the plans that may be needed in different educational settings.

In some aspects, the exhibition of ISB in education settings may be regarded as normal. However, keeping these behaviors under control and performing sexual behaviors in acceptable ways and places are important for both the healthy development of adolescents with ID and the educational settings to be more productive for all individuals (Cambridge *et al.* 2003, Morales *et al.* 2016, Tarnai 2006). Accordingly, some recommendations are in order. Firstly, it would be beneficial to include a comprehensive and compulsory course on sexual development and sexuality in the curricula of the special education teaching programs. In-service training sessions with the same content can be organized for existing teachers. It is thought that it would be beneficial to include content in the education programs of individuals with ID that supports sexual development and is suitable to the current developmental stage, starting from early education. Various activities, training sessions, and printed materials can be provided to families in order to raise their awareness of the topic.

Limitations

This study includes the views of 12 special education teachers working in public special education schools in Istanbul, Turkey. The opinions of special education teachers on the ISB exhibited by adolescents with ID were examined. Teachers' level of knowledge on the study topic was not measured. Factors, such as the participants' previous experiences, marital status, and affinity with an individual with ID, were not included in the study. It is possible that different results could be obtained from different sample groups and that the personal differences excluded from the study may also affect the results.

Conclusion

As a result of this study, it has been concluded that special education teachers are not sufficiently knowledgeable about ISB intervention and sexual education in general. The findings reveal that special education teachers resort to temporary solutions instead of systematic interventions, are reluctant to engage in sexuality-related issues unless it is necessary, and feel

incompetent in terms of the mentioned topics. Furthermore, it is understood that the curricula and school administrators do not play a supportive role at the point of providing sexual education to adolescents with ID. Among the behaviors that special education teachers have the most difficulty in managing are masturbation, undressing, and touching others. Organizing in-service training seminars to increase the knowledge level of teachers about sexual education, offering educational materials on this subject, and including relevant gains in students' IEP can both reduce ISB and foster positive attitudes toward sexual education of individuals with ID.

Disclosure statement

No potential conflict of interest was reported by the author.

ORCID

Bora Akdemir http://orcid.org/0000-0002-1017-9062

References

Ademi, T. J., Pillay, B. J. and Esterhuizen, T. M. 2013. Differences in HIV knowledge and sexual practices of learners with intellectual disabilities and non-disabled learners in Nigeria. *Journal of the International AIDS Society*, 16, 1–9.

Aderemi, T. J. 2014. Teachers' perspectives on sexuality and sexuality education of learners with intellectual disabilities in Nigeria. *Sexuality and Disability*, 32, 247–258.

Akdemir, B. and Sarı, O. T. 2019. Zihinsel yetersizliği olan bireylerle çalışan öğretmenlerin cinsel eğitime yönelik tutumları ve etik durumlarının karşılaştırılması. *Eğitimde Kuram ve Uygulama*, 15, 267–282.

American Association on Intellectual and Developmental Disabilities (AAIDD). 2010. FAQ on the AAIDD Definition of Intellectual Disability. http://www.aaidd.org/intellectualdisabilitybook/content_7473cfm?navID=366 [Accessed 15 April 2021].

Arousell, J. and Carlbom, A. 2016. Culture and religious beliefs in relation to reproductive health. *Best Practice & Research. Clinical Obstetrics & Gynaecology*, 32, 77–87.

Ballan, M. S. and Freyer, M. B. 2017. Autism spectrum disorder, adolescence, and sexuality education: Suggested interventions for mental health professionals. *Sexuality and Disability*, 35, 261–273.

Blasingame, G. D. 2018. Risk assessment of adolescents with intellectual disabilities who exhibit sexual behavior problems or sexual offending behavior. *Journal of Child Sexual Abuse*, 27, 955–971.

Breuner, C. C., Mattson, G., Breuner, C. C., Adelman, W. P., Alderman, E. M., Garofalo, R., Marcell, A. V., Powers, M. E., Mph, M. D., Upadhya, K. K., Yogman, M. W., Bauer, N. S., Gambon, T. B., Lavin, A., Lemmon, K. M., Mattson, G., Rafferty, J. R., Wissow, L. S. and Committee on Psychosocial Aspects of Child and Family Health. 2016. Sexuality education for children and adolescents. *Pediatrics*, 138, e20161348.

Byers, E. S., Nichols, S. and Voyer, S. D. 2013. Challenging stereotypes: Sexual functioning of single adults with high functioning autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 43, 2617–2627.

Cakırlar, C. and Delice, S. 2012. *Cinsellik Muamması: Türkiye'de Queer Kültür ve Muhalefet*. İstanbul: Metis Yayınları.

Çalışandemir, F., Bencik, S. and Artan, I. 2008. Sexual education of children: An overview from the past to present. *Egitim ve Bilim*, 33, 14.

Cambridge, P., Carnaby, S. and McCarthy, M. 2003. Responding to masturbation in supporting sexuality and challenging behaviour in services for people with learning disabilities: A practice and research overview. *Journal of Learning Disabilities*, 7, 251–266.

Carlson, J. I., Luiselli, J. K., Slyman, A. and Markowski, A. 2008. Choice-making as intervention for public disrobing in children with developmental disabilities. *Journal of Positive Behavior Interventions*, 10, 86–90.

Chan, J. and John, R. M. 2012. Sexuality and sexual health in children and adolescents with autism. *The Journal for Nurse Practitioners*, 8, 306–315.

Cole-Hamilton, I. 1998. *Sex Education in Scotland*. Edinburg: Scottish Sensory Centre.

Creswell, J. W. 2013. *Qualitative inquiry and research design: Choosing among five approaches*. 3rd ed. New York: Sage.

Davis, T. N., Machalicek, W., Scalzo, R., Kobylecky, A., Campbell, V., Pinkelman, S., Chan, J. M. and Sigafoos, J. 2016. A review and treatment selection model for individuals with developmental disabilities who engage in inappropriate sexual behavior. *Behavior Analysis in Practice*, 9, 389–402.

Donovan, P. 1998. *Sex education in America's schools: Progress and obstacles*. USA: Today Magazine, Vol. 121

Doula Nicolson, D. and Ayers, H. 2004. *Adolescent problems: A practical guide for parents, teachers and counsellors*. London: David Fulton Publishers

Early, M. C., Erickson, C. A., Wink, L. K., McDougle, C. J. and Scott, E. L. 2012. Case report: 16-year-old male with autistic disorder with preoccupation with female feet. *Journal of Autism and Developmental Disorders*, 42, 1133–1137.

Er, R. K., Büyükbayraktar, Ç. G. and Kesici, Ş. 2016. Özel eğitime ihtiyacı olan öğrencilere yönelik cinsel eğitim programının geliştirilmesi. *Turkish Journal of Education*, 5, 224–234.

Erbaş, N. and Altunbaş, N. 2021. Bazı Değişkenlere Göre Bir Lisedeki Kız Öğrencilerde Premenstrual Sendrom Şiddetinin Ve Algılanan Stres Düzeyinin Belirlenmesi. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*, 12, 479–486.

Ferrante, C. A. and Oak, E. 2020. 'No sex please!' We have been labelled intellectually disabled. *Sex Education*, 20, 383–397.

Foley, R. M. and Dudzinski, M. 1995. Human sexuality education: Are special educators prepared to meet the educational needs of disabled youth? *Journal of Sex Education and Therapy*, 21, 182–191.

Frawley, P. and O'Shea, A. 2020. 'Nothing about us without us': sex education by and for people with intellectual disability in Australia. *Sex Education*, 20, 413–424.

Filiz, S. B., Şahin, A. Ç., Tufan, S. and Karamehmetoğlu, B. 2018. Özel Eğitim Öğretmenliği Lisans Programlarının Birleştirilmesine İlişkin Öğretim Üyelerinin Görüşleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33, 763–775.

Gökgöz, C., Demirci, A. D. and Kabukcuoglu, K. 2021. Sexual behaviours and education in adolescents and young adults with Down syndrome: A grounded theory study of experiences and opinions of their mothers in Turkey. *Research in Developmental Disabilities*, 112, 103907.

Gordon, P. A., Tschopp, M. K. and Feldman, D. 2004. Addressing issues of sexuality with adolescents with disabilities. *Child and Adolescent Social Work Journal*, 21, 513–527.

Gougeon, N. A. 2009. Sexuality education for students with intellectual disabilities, a critical pedagogical approach: Outing the ignored curriculum. *Sex Education*, 9, 277–291.

Gursimsek, I. 2010. Sexual education and teacher candidates' attitudes towards sexuality. *Journal of Psychologists and Counsellors in Schools*, 20, 81–90.

Gümüş, S. S. and Altınsoy, M. 2015. A case analysis of sex education in Hatay Schools. *Adnan Menderes University Faculty of Education Journal of Educational Sciences*, 6, 63–72.

Gürol, A., Polat, S. and Oran, T. 2014. Views of mothers having children with intellectual disability regarding sexual education: A qualitative study. *Sexuality and Disability*, 32, 123–133.

Haktanır, G. 2005. Çocuk Cinselliği. Oktay ve Unutkan (Edt). *Okul Öncesi Eğitimde Güncel Konular*. İstanbul: Morpa Yayınları.

Hénault, I. 2006. *Asperger's syndrome and sexuality: From adolescence through adulthood*. London: Jessica Kingsley Publishers.

Hill, C. 2018. Evaluation of the sexuality and relationships psychoeducation program for adolecents with intellectual and/or developmental disabilities an parents. Unpublished PhD Thesis. North Caroline: University of North Caroline.

Holland-Hall, C. and Quint, E. H. 2017. Sexuality and disability in adolescents. *Pediatric Clinics of North America*, 64, 435–449.

Howard-Barr, E.M., Rienzo, B.A., Morgan Pigg, R. and James, D. 2005. Teacher beliefs, professional preparation, and practices regarding exceptional students and sexuality education. *The Journal of School Health*, 75, 99–104.

Ibralic, I., Sinanovic, O. and Memisevic, H. 2010. Age at menarche and premenstrual syndrome in adolescent girls with intellectual

disability in Bosnia and Herzegovina. *Research in Developmental Disabilities*, 31, 800–803.
Isler, A., Tas, F., Beytut, D. and Conk, Z. 2009. Sexuality in adolescents with intellectual disabilities. *Sexuality and Disability*, 27, 27–34.
Jahoda, A. and Pownall, J. 2014. Sexual understanding, source of information and social networks; the reports of young people with intellectual disabilities and their non-disabled peers. *Journal of Intellectual Disability Research*, 58, 430–441.
Kammes, R. R., Douglas, S. N., Maas, M. K. and Black, R. S. 2020. Parental support for sexuality education and expression among adults with an intellectual disability. *Sexuality and Disability*, 38, 669–686.
Kijak, R. 2011. A desire for love: considerations on sexuality and sexual education of people with intellectual disability in Poland. *Sexuality and Disability*, 29, 65–74.
Kürtüncü, M. and Kurt, A. 2020. Sexual education and development in children with intellectual disability: Mothers' opinions. *Sexuality and Disability*, 38, 455–468.
Kyrkou, M. 2005. Health issues and quality of life in women with intellectual disability. *Journal of Intellectual Disability Research: JIDR*, 49, 770–772.
Latvala, A., Tideman, M., Søndenaa, E., Larsson, H., Butwicka, A., Fazel, S. and Lichtenstein, P. 2022. Association of intellectual disability with violent and sexual crime and victimization: A population-based cohort study. *Psychological Medicine*, 1–9. https://doi.org/10.1017/S0033291722000460.
Mayring, P., 2011. *Nitel Sosyal Araştırmaya Giriş: Nitel Düşünce İçin Bir Rehber*, A. Gümüş and M. Sezai Durgun (Çev.). Ankara: BilgeSu.
McLay, L., Carnett, A., Tyler-Merrick, G. and van der Meer, L. 2015. A systematic review of interventions for inappropriate sexual behavior of children and adolescents with developmental disabilities. *Review Journal of Autism and Developmental Disorders*, 2, 357–373.
Morales, E., Gauthier, V., Edwards, G. and Courtois, F. 2016. Women with disabilities' perceptions of sexuality, sexual abuse and masturbation. *Sexuality and Disability*, 34, 303–314.
Murphy, N. A. and Elias, E. R. 2006. Sexuality of children and adolescents with developmental disabilities. *Pediatrics*, 118, 398–403.
Opdenakker, M. and van Damme, J. 2006. Teacher characteristics and teaching styles as effectiveness enhancing factors of classroom practice. *Teaching and Teacher Education*, 22, 1–21.
Özyürek, M. 2009. *Engellilere yönelik tutumların değiştirilmesi*. Ankara: Kök Yayıncılık.
Ramawati, D. and Block, P. 2020. Sexuality and sexual rights of young adults with intellectual disability in Central Java, Indonesia. In *The Routledge Handbook of Disability and Sexuality*. Routledge, pp. 208–221.
Rashikj, O. 2009. Sexual development, education and sexual abuse of persons with disabilities in the Republic of Macedonia. *Journal of Special Education and Rehabiltation*, 10, 135–138.
Santrock, J. W. 2016. *Adolescence*. 6th ed. NY: McGraw-Hill Education.
Schaafsma, D., Kok, G., Stoffelen, J. M. and Curfs, L. M. 2015. Identifying effective methods for teaching sex education to individuals with intellectual disabilities: A systematic review. *Journal of Sex Research*, 52, 412–432.
Shandra, C. L. and Chowdhury, A. R. 2012. The first sexual experience among adolescent girls with and without disabilities. *Journal of Youth and Adolescence*, 41, 515–532.
SIECUS, 2004. *Guidelines for comprehensive sexuality education*. NY: National Guidelines Task Force.
Singh, P. G. and Coffey, D. B. J. 2012. Sexual obsessions, compulsions, suicidality and homicidality in an adolescent diagnosed with bipolar disorder not otherwise specified, obsessive-compulsive disorder, pervasive developmental disorder not otherwise specified, and mild mental retardation. *Journal of Child and Adolescent Psychopharmacology*, 22, 250–253.
Smith, J. A. and Osborn, M. 2015. Interpretative phenomenological analysis as a useful methodology for research on the lived experience of pain. *British Journal of Pain*, 9, 41–42. https://doi.org/10.1177/2049463714541642.
Tarnai, B. 2006. Review of effective interventions for socially inappropriate masturbation in persons with cognitive disabilities. *Sexuality and Disability*, 24, 151–168.
Thompson, K. C. and Morris, R. J. 2016. Juvenile delinquency and disability. In *Juvenile delinquency and disability*. Springer, Cham, pp. 31–39.
Torun, F., Torun, S. D. and Özaydın, A. N. 2011. Erkeklerde Cinsel Mitlere İnanma Oranları ve Mitlere İnanmayı Etkileyen Faktörler. *Dusunen Adam: The Journal of Psychiatry and Neurological Sciences*, 24, 24–31.
Tullis, C. A. and Zangrillo, A. N. 2013. Sexuality education for adolescents and adults with autism spectrum disorders. *Psychology in the Schools*, 50, 866–875.
Volkmar, F. R. and Wolf, J. M. 2013. When children with autism become adults. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 12, 79–80.
Walsh, A. 2000. Improve and care: Responding to inappropriate masturbation in people with severe intellectual disabilities. *Sexuality and Disability*, 18, 27–39.
Ward, K.M., Trigler, J. S. and Pfeiffer, K. T. 2001. Community services, issues, and service gaps for individuals with developmental disabilities who exhibit inappropriate sexual behaviors. *Mental Retardation*, 39, 11–19.
World Health Organization, 2006. *Defining sexual health: report of a technical consultation on sexual health, 28–31 January 2002*. Geneva. World Health Organization.
Wurtele, S. K. and Kenny, M. C. 2011. Normative sexuality development in childhood: Implications for developmental guidance and prevention of childhood sexual abuse. *Counseling and Human Development*, 43, 1–24.
Yıldız, G. and Cavkaytar, A. 2017. Effectiveness of a sexual education program for mothers of young adults with intellectual disabilities on mothers' attitudes toward sexual education and the perception of social support. *Sexuality and Disability*, 35, 3–19.
Yüksek Öğretim Kurumu (YÖK), 2018. *Özel Eğitim Öğretmenliği Programı*. https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Yeni-Ogretmen-Yetistirme-Lisans-Programlari/Ozel_Egitim_Ogretmenligi_Lisans_Programi.pdf [Accessed 1 April 2021].