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EDITORIAL ARTICLE

A General Review on Sexual Awareness in Children and Adolescents with Special Needs

Kok-Hwee, CHIA 

Editor-in-Chief, *The Asian Educational Therapist*

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Author's email: dr.chia@aet.sg

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ABSTRACT

Sexual awareness in children and adolescents with special needs is a critical yet often overlooked aspect of their development. This paper explores the concept of sexual awareness, delineating it from sexuality and/or sexuality awareness. While sexuality encompasses a broad range of physical, emotional, and social aspects related to sex, sexual awareness pertains to recognizing one's own and others' sexual feelings and behaviors. Sexuality awareness extends this understanding to include societal norms and personal values about sexuality. The developmental trajectory of sexual awareness is outlined from birth through late adolescence, emphasizing unique milestones and challenges faced by typically developed children and adolescents as well as those with special needs. Understanding these developmental phases is essential for parents, educators, and healthcare professionals to provide appropriate guidance and support. This paper highlights the necessity for an informed and sensitive approach to sexual education and communication about sexuality, tailored to the individual needs and capacities of each typically developed child or adolescent as well as those with special needs. Practical recommendations include fostering an open dialogue, implementing age-appropriate and disability-sensitive sexual education, and ensuring a supportive environment that respects the dignity and autonomy of children and adolescents with special needs. By enhancing awareness and knowledge among caregivers and professionals, the ultimate goal is to promote healthier sexual development and well-being for this vulnerable population.

Keywords: *Developmental phases, Sexual Awareness, Sexuality, Sexuality Awareness, Special needs*

1. INTRODUCTION

The concept of sexuality of children and adolescents is broad and it encompasses a range of human experiences and behaviors related to sexual feelings, attractions, preferences, and practices (Duncan et al., 2003). It includes aspects such as sexual orientation (who one is attracted to), sexual identity (how one identifies in terms of gender and sexuality), and sexual behavior (the activities one engages

in). Sexuality is influenced by biological, psychological, social, cultural, and ethical factors, and it plays a significant role in personal identity and interpersonal relationships (Mayer & McHugh, 2016).

Sexual awareness, on the other hand, refers to an individual's understanding and recognition of their own sexual feelings, desires, attractions, and preferences (Blake, 2014). It involves being conscious of one's sexual orientation, sexual interests, and the way one experiences and expresses sexual attraction and behavior (Dillon et al., 2011). Sexual awareness includes knowledge of one's body, consent, boundaries, and the emotional aspects of sexuality. It is an ongoing process of self-discovery and understanding.

The key difference between sexuality and sexual awareness is that sexuality encompasses the overall framework of sexual identity, orientation, and behavior, while sexual awareness specifically focuses on an individual's conscious recognition and understanding of their own sexual experiences and feelings. Sexuality is the broader concept that includes sexual awareness as a component (Kormanik, 2009).

It is equally important to differentiate between sexuality awareness and sexual awareness, though both terms seem similar. **Sexuality awareness** generally refers to the understanding and recognition of one's own sexual orientation, preferences, identity, and the diversity of sexual orientations and identities in others (Babu, 2018; Lee et al., 2007). It encompasses a broad spectrum of aspects including emotional, social, and cultural factors that influence one's sexual identity (Kormanik, 2009). **Sexual awareness**, on the other hand, often relates to having knowledge about sexual development, reproductive health, consent, safe sex practices, and the physical aspects of sex (McCarthy & McCarthy, 2012; Ruble & Dalrymple, 1993; Snell & Wooldridge, 1998). Both are important for comprehensive sexual education but focus on different elements of understanding sex and sexuality. For this paper, the author's main focus is on sexual awareness of children with special needs within the age range between 7 and 19 years old.

Sexual awareness in children (aged 7-12 years old) and adolescents (aged 13-19 years old) with special needs is a critical yet often overlooked aspect of their overall development. The author has reiterated and iterated that understanding and addressing the sexual education of these children and adolescents is essential for fostering their well-being, safety, and social integration. Children and adolescents with special needs, including those with intellectual disabilities, autism spectrum disorders, and physical impairments, experience the same developmental milestones and curiosity about sexuality as their typically developing peers. However, they often face unique challenges in accessing appropriate sexual education due to communication barriers, cognitive limitations, and societal misconceptions about their sexuality.

Effective sexual education for children and adolescents with special needs is not only about imparting knowledge but also about empowering them to make informed decisions, recognize and report abuse, and develop healthy relationships (Michielsen & Brockschmidt, 2021). Traditional sexual education programs are frequently inadequate for these children and adolescents, as argued by Akdemir (2022), Hui (2024), and Rousso (2003), to name just three here, necessitating tailored approaches that consider their specific cognitive and emotional needs. This includes using clear, concrete language, visual aids, and repetitive, consistent instruction to ensure comprehension and retention.

Parents, educators, and healthcare professionals (including educational therapists, counsellors and psychologists) play pivotal roles in this process. They must collaborate to create supportive environments where open discussions about sexuality are encouraged and where children and adolescents feel safe to express their thoughts and questions. Additionally, training and resources for these adults are crucial, as they often feel ill-equipped to handle the sexual education of children and adolescents with special needs.

Moreover, fostering sexual awareness in children and adolescents with special needs is also a matter of protecting their rights (Goli, Rahimi, & Goli, 2022; Mthembu & Holness, 2022). These children and adolescents are particularly vulnerable to sexual abuse and exploitation, and comprehensive sexual education can serve as a powerful tool in prevention. It equips them with the knowledge to understand their bodies, recognize inappropriate behavior, and seek help.

This author wants to reiterate that addressing the sexual awareness of children and adolescents with special needs is an urgent and necessary step towards promoting their autonomy, dignity, and overall quality of life (Houtrow et al., 2021). This paper explores the multifaceted aspects of this issue, highlighting the need for specialized education strategies, the roles of caregivers, and the broader societal implications.

2. DEVELOPMENT OF SEXUAL AWARENESS FROM BIRTH TO ADOLESCENCE

Understanding the developmental phases of sexual awareness in children and adolescents is crucial for parents, educators, and healthcare professionals to provide appropriate guidance and support. It enables them to foster a healthy and positive attitude towards sexuality, ensuring children and adolescents receive accurate information and can develop safe, respectful relationships. Awareness of these phases also aids in identifying and addressing any potential issues early on, promoting overall well-being and preventing negative outcomes such as misinformation, unhealthy behaviors, or exploitation. This knowledge equips adults to create an environment where young people feel comfortable discussing their questions and concerns about sexuality.

The author has proposed his typical developmental trajectory of sexual awareness (see Figure 1 on the following page) from birth through childhood to adolescence generally follow a predictable pattern, reflecting the interplay of biological, psychological, and social factors, characterized by increasing complexity and understanding of sexual concepts and identity.

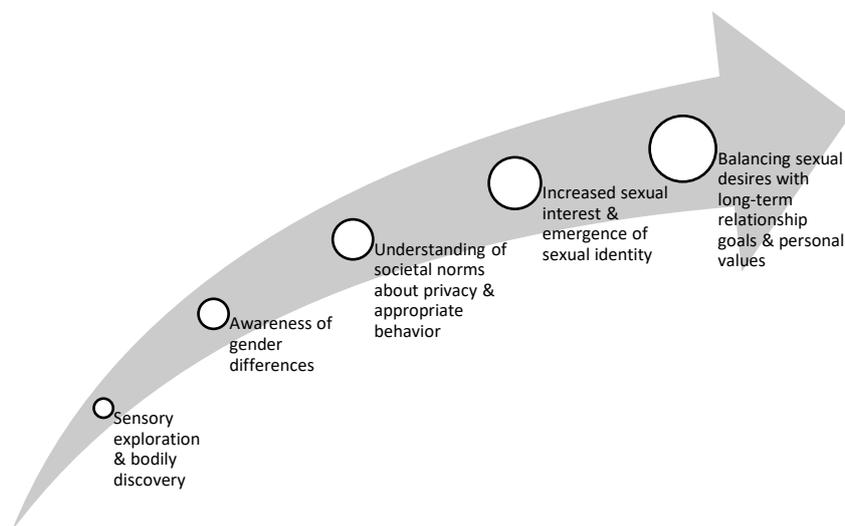


Figure 1. Developmental Trajectory of Sexual Awareness

Below is a brief description of the developmental trajectory of sexual awareness:

- **Infancy (0-2 years):** During infancy, sexual awareness is primarily about sensory exploration and bodily discovery. Infants may touch their genitals because it feels pleasurable, a behavior driven by curiosity and comfort rather than sexual desire.
- **Early Childhood (2-6 years):** In early childhood, children become more aware of gender differences. They often show curiosity about their own and others' bodies, sometimes engaging in 'playing

doctor' games. This period includes learning basic gender roles and norms from caregivers and media.

- Middle Childhood (7-9 years) through Late Childhood/Pre-Adolescence (10-12 years): Sexual awareness grows more nuanced in middle childhood. Children begin to understand societal norms about privacy and appropriate behavior. They may develop crushes and experience early forms of romantic interest, often characterized by a desire for closeness rather than physical intimacy.
- Early Adolescence (13-15 years): Puberty marks significant changes, with physical developments like breast growth and the onset of menstruation in girls, and voice deepening and testicular enlargement in boys. Hormonal changes trigger increased sexual interest and the emergence of sexual identity. Adolescents start to explore these feelings, often through media, conversations with peers, and initial romantic relationships.
- Middle to Late Adolescence (16-19 years): During middle adolescence, sexual awareness and behaviors become more focused on personal values and beliefs. As the development matures into late adolescence, teenagers experience stronger romantic and sexual attractions and may engage in sexual activities. This period is marked by efforts to understand consent, boundaries, and the emotional aspects of relationships.

In addition, the author has provided more detail in his outline on the typical developmental phases of sexual awareness (birth to adolescence) in order to elaborate further in terms of awareness and its related behaviors with brief explanation for each phase as follows:

Phase 1: Infancy (0-2 years)

- *Awareness*: Infants discover their bodies, including their genitalia, through touch. This is a natural part of self-exploration and not sexual in a mature sense.
- *Behaviors*: Touching or rubbing their genital area can be soothing and is driven by curiosity and comfort.
- *Explanation*: From birth, children explore their bodies, including their genitals, as part of normal sensory development. This self-exploration is not sexual in the adult sense but rather a way to understand their own body. Infants might also experience reflex erections or vaginal lubrication, which are normal physiological responses.

Phase 2: Early Childhood (2-6 years)

- *Awareness*: Children become more aware of the differences between boys and girls. They may show interest in body parts and functions.
- *Behaviors*: Common behaviors include touching their own genitals, looking at or touching the genitals of peers or siblings, and showing curiosity about where babies come from. This behavior is typically innocent and exploratory.
- *Explanation*: During these years, curiosity about their own and others' bodies increases. Children may engage in 'playing doctor' to learn about anatomical differences. They may also start to understand gender identity and develop a sense of being male or female. These behaviors are generally driven by curiosity rather than sexual desire.

Phase 3: Middle Childhood (7-9 years)

- *Awareness*: Children's understanding of gender roles and norms deepens. They become more aware of societal attitudes toward sex and privacy.
- *Behaviors*: They might play games that involve showing or touching private parts (e.g., 'doctor' games), but these behaviors usually wane as they grow older and learn about privacy and appropriateness.
- *Explanation*: In this stage, children's understanding of gender roles becomes more pronounced, influenced by family, peers, and media. They become more modest about their bodies and private about bodily functions. Peer interactions often involve gender-segregated play, and there might be early forms of crushes or infatuations, though they are typically non-sexual.

Phase 4: Late Childhood/Pre-Adolescence (10-12 years)

- *Awareness:* Puberty may begin, bringing hormonal changes and an increased focus on body image and sexual feelings. Understanding of reproduction and more mature sexual concepts develops.
- *Behaviors:* Increased curiosity about sexuality, seeking information from peers, media, or other sources. Some might start experimenting with masturbation as a natural part of development.
- *Explanation:* Hormonal changes signal the onset of puberty. Girls typically begin to develop breasts and start menstruating, while boys experience testicular and penile growth. Both genders may notice increased body odor and start growing pubic hair. Alongside physical changes, there is an increased interest in sexuality and relationships, often accompanied by seeking information from peers or media.

Phase 5: Adolescence (13-19 years)

- *Awareness:* Full onset of puberty leads to significant physical and emotional changes. Sexual attraction and romantic interests intensify. There is a greater understanding of sexual identity and orientation.
- *Behaviors:* Sexual experimentation becomes more common, ranging from kissing and touching to sexual intercourse. Masturbation is also common though it is often a taboo for open discussion (Kraus, 2017; Lidster & Horsburgh, 1994) for both genders. It is also during this phase that adolescents often seek to establish romantic relationships.
- *Explanation:* Puberty progresses with further development of secondary sexual characteristics. Girls fully develop breasts and undergo regular menstrual cycles, while boys experience voice deepening and facial hair growth. Sexual interest and activity may begin or increase, and adolescents form more complex relationships. Cognitive development allows for understanding of abstract concepts like love and intimacy, leading to more mature emotional connections.

For typically developing children and adolescents, following the established developmental phases of sexual awareness as mentioned above provides a clear guideline for parents, educators and healthcare professional. However, for those with special needs, an individualized approach should be prioritized, starting with their current level of understanding and gradually building on it (Houtrow et al., 2021; Michielsen & Brockschmidt, 2021; Murphy & Young, 2005). This may involve beginning with basic concepts at an older age than typically expected or progressing through the phases more slowly. In both cases, the ultimate goal is to ensure that those managing or working with children and adolescents with and/or without special needs have a clear, accurate, and age-appropriate understanding of sexual awareness, tailored to their individual needs and capabilities. This comprehensive approach helps in promoting healthy development, safety, and well-being.

3. CHALLENGING ISSUES IN SEXUAL AWARENESS FACED BY CHILDREN AND ADOLESCENTS WITH SPECIAL NEEDS

Children and adolescents with special needs face numerous challenges in sexual awareness, primarily due to cognitive, social, and communicative differences (Nichols & Blakeley-Smith, 2009; Murphy & Young, 2005; Schmidt et al., 2022) as well as encountering barriers to have access to sexuality education (Michielsen & Brockschmidt, 2021). The author has identified and listed several key issues (see Figure 2) as follows:

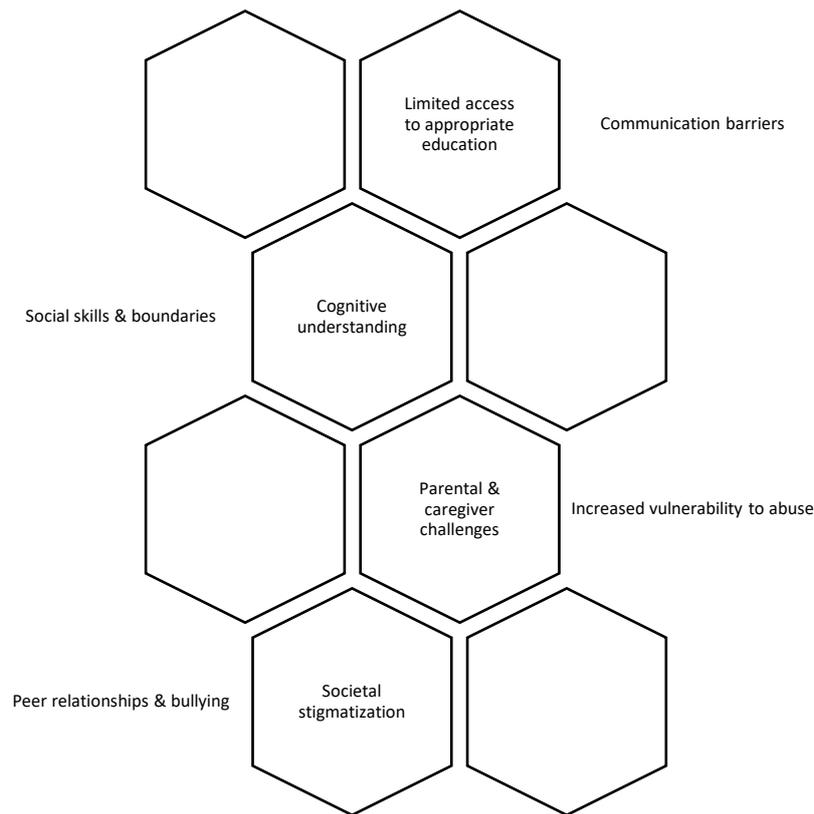


Figure 2. Challenging Issues in Sexual Awareness

1. Limited access to appropriate education: Many special education programs lack comprehensive sex education tailored to the needs of students with disabilities. This omission can lead to gaps in understanding their bodies, relationships, and boundaries.

2. Communication barriers: Children with communication disorders or non-verbal autism may struggle to express their feelings, ask questions, or report inappropriate behavior. This barrier can lead to misunderstandings and increase vulnerability to exploitation or abuse.

3. Cognitive understanding: Intellectual disabilities can affect comprehension of abstract concepts related to sexuality, consent, and personal safety. These children may need simplified, repetitive, and concrete instructions to grasp these critical concepts.

4. Social skills and boundaries: Many special needs children have difficulties with social cues and understanding appropriate behaviors in different contexts. This can lead to inappropriate behavior, misunderstandings with peers, and increased risk of exploitation.

5. Parental and caregiver challenges: Parents and caregivers often feel ill-equipped to address sexual development and education. They may avoid the topic due to discomfort or a belief that their child does not need such information, leading to a lack of guidance at home.

6. Increased vulnerability to abuse: Children with disabilities are at a higher risk of sexual abuse and exploitation due to their dependency on caregivers, difficulty in understanding and asserting personal boundaries, and challenges in reporting abuse.

7. Societal stigmatization: Societal attitudes often desexualize individuals with disabilities, denying their sexual agency and needs. This stigma can result in a lack of resources, support, and education tailored to their sexual development.

8. Peer relationships and bullying: Special needs children might struggle with forming healthy peer relationships and are often targets of bullying. This social isolation can complicate their understanding of healthy versus unhealthy relationships.

The author firmly believes that addressing these abovementioned eight challenges requires a multifaceted approach involving tailored education programs, supportive communication methods, parental involvement, and societal awareness to foster a safe and informed environment for sexual development among children and adolescents with special needs.

4. EXAMPLES OF CHALLENGES ENCOUNTERED BY

Children and adolescents with special needs face unique challenges related to sexual awareness as they grow from early childhood to late adolescence (Nichols & Blakeley-Smith, 2009; Murphy & Young, 2005; Schmidt et al., 2022). These challenges often stem from cognitive, physical, and emotional differences, requiring tailored approaches to education and support. Each of these challenges requires a proactive, compassionate approach to ensure children with special needs receive the appropriate education and support to navigate their sexual development healthily and safely.

Below are six examples of such challenges for the purpose of illustration:

(1) Understanding physical changes

Example: A child with Down syndrome may struggle to comprehend physical changes during puberty, such as menstruation or voice changes, leading to confusion or fear.

Explanation: Limited cognitive abilities can hinder their understanding of these natural processes, making it essential to provide clear, simple explanations and consistent support.

(2) Personal boundaries and consent:

Example: A child with autism may not easily grasp social cues or personal boundaries, resulting in inappropriate touching or difficulty recognizing when someone else is uncomfortable.

Explanation: Teaching consent and personal space is crucial, using repetitive and clear instruction, as well as visual aids or social stories to reinforce these concepts.

(3) Recognizing and reporting abuse:

Example: A non-verbal child with cerebral palsy may be unable to communicate experiences of inappropriate behavior or abuse.

Explanation: This makes them vulnerable to exploitation. Regular check-ins, using alternative communication methods (like picture boards), and fostering trusted relationships are vital for safeguarding.

(4) Social relationships and peer interactions:

Example: An adolescent with ADHD may misinterpret social interactions, leading to difficulties in forming appropriate romantic relationships.

Explanation: These individuals may need structured guidance and role-playing scenarios to understand the nuances of romantic and platonic relationships.

(5) Sexual health education:

Example: A teenager with intellectual disabilities might not grasp the importance of contraceptives and safe sex practices.

Explanation: Tailored sexual health education that is repetitive and uses simple, clear language, possibly supplemented with visual aids, can help them understand and apply these practices.

(6) Self-identity and expression:

Example: A child with autism spectrum disorder may struggle with gender identity or sexual orientation, particularly if their environment lacks acceptance or understanding.

Explanation: Providing a supportive and non-judgmental space for exploration and expression is essential, along with professional guidance when needed.

5. GUIDANCE AND SUPPORT FOR PARENTS, EDUCATORS AND HEALTHCARE PROFESSIONALS

Parents, educators, and healthcare professionals must have a comprehensive understanding of sexual development (as in sexual education, for example) in children and adolescents with special needs to provide appropriate support and guidance (Breuner et al., 2016). This author has listed the key points to guide and support parents, educators and healthcare professionals in managing the charges under their care:

1. Individualized developmental pace: Recognize that sexual development varies widely among children and adolescents with special needs. Some may develop earlier or later than their peers.
2. Communication challenges: Be aware that children and adolescents with special needs might have difficulty expressing their feelings and questions about sexuality. Use clear, simple language and visual aids if necessary to facilitate understanding.
3. Education and awareness: Provide tailored sexual education that accounts for cognitive and emotional development levels. This education should cover anatomy, consent, personal boundaries, and safe practices.
4. Respect and privacy: Respect the child's or adolescent's need for privacy and dignity. Teach them about their right to privacy and how to protect it, as well as respecting others' privacy.
5. Boundaries and consent: Emphasize the importance of personal boundaries and consent. Ensure they understand their rights to refuse unwanted touch and how to express their boundaries clearly.
6. Safety and protection: Educate about the risks of exploitation and abuse, and ensure they know how to seek help. Establish a supportive environment where they feel safe to report concerns.
7. Behavioral concerns: Understand that sexual behaviors in children and adolescents with special needs may sometimes be misunderstood as problematic. Assess these behaviors in the context of their developmental level and provide appropriate guidance.
8. Parental involvement: Encourage active parental involvement in sexual education. Parents should be equipped with strategies and resources to discuss sexuality comfortably and effectively.
9. Professional support: Healthcare professionals should be proactive in addressing sexual health during consultations. They should provide resources and referrals to specialists if needed.

10. Cultural sensitivity: Be mindful of cultural and religious factors that influence perceptions and education about sexuality. Tailor approaches to respect these perspectives while ensuring the child's or adolescent's comprehensive understanding.

11. Interdisciplinary collaboration: Foster collaboration between educators, healthcare professionals, and families to create a cohesive support system that addresses the child's or adolescent's holistic needs, including their sexual development.

6. CONCLUSION

Sexual awareness and education for children and adolescents, aged 7 to 19 years old, with special needs is a crucial aspect of their overall development and well-being. Addressing this topic requires a nuanced approach that takes into account their unique cognitive, emotional, and social challenges. Effective sexual education programs should be tailored to meet the diverse needs of these individuals, ensuring that the content is accessible, comprehensible, and relevant to their experiences.

One of the primary goals of sexual awareness education is to empower young people with special needs to understand their own bodies, recognize appropriate and inappropriate behavior, and develop healthy relationships. Providing accurate and age-appropriate information helps mitigate the risks of exploitation and abuse, which individuals with special needs are disproportionately vulnerable to. Moreover, fostering an environment where they can ask questions and express concerns without fear or shame is vital in promoting their self-esteem and confidence.

Educators and caregivers as well as healthcare professionals play a pivotal role in this process. They must receive proper training to address sexual health topics sensitively and effectively, employing strategies that are inclusive and respectful of each individual's capabilities and boundaries. Collaboration with parents and guardians is also essential, as they are integral in reinforcing these lessons and providing consistent support.

Additionally, the use of visual aids, social stories, and other adaptive teaching tools can enhance understanding and retention of information for children and adolescents with special needs. Programs should be flexible, continuously evaluated, and adapted based on feedback from both the participants and their support networks.

In conclusion, providing comprehensive sexual awareness education to children and adolescents with special needs is not only a matter of equity but also a fundamental right. By ensuring they have access to the knowledge and resources needed to navigate their sexual development safely and confidently, we lay the foundation for healthier, more autonomous lives. It is imperative that society recognizes and supports this endeavor, acknowledging the profound impact it has on the dignity, autonomy, and overall quality of life of individuals with special needs.

7. ACKNOWLEDGEMENT

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8. COMPETING INTERESTS

The author has declared that no competing interests exist.

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10. ARTIFICIAL INTELLIGENCE DISCLOSURE

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REFERENCES

- Akdemir, B. (2022). Opinions of special education teachers on inappropriate sexual behaviors in adolescents with intellectual disabilities. *International Journal of Developmental Disabilities*, 1-10. <https://doi.org/10.1080/20473869.2022.2129127>
- Babu, J. (2018). An analysis on the factors contributing to the sexuality awareness among adolescent boys. *Educenter the BCM Journal of Social Work*, 14(2), 115-125. https://www.researchgate.net/publication/340998805_An_Analysis_on_the_Factors_Contributing_to_the_Sexuality_Awareness_among_Adolescent_Boys
- Blake, J. D. (2014). An alternate theory of sexuality: Exploring the relationship between sexual experience, sexual awareness and sexual attitudes (Publication No. 149616345). (Masters dissertation, University of Alberta). University of Alberta Education and Research Archive (ERA). <https://era.library.ualberta.ca/items/48de7971-459f-42c5-9cde-0c588da60381>. <https://doi.org/10.7939/R3WD5Z>
- Breuner, C. C., Mattson, G., Adelman, W. P., Alderman, E. M., Garofalo, R., Marcell, A. V., ... & Committee on Psychological Aspects of Child & Family Health (2016). Sexuality education for children and adolescents. *Pediatrics*, 138(2). Article ID: e20161348. <https://doi.org/10.1542/peds.2016-1348>
- Dillon, F. R., Worthington, R. L., & Moradi, B. (2011). Sexual identity as a universal process. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 649-670). New York, NY: Springer Science & Business Media. https://doi.org/10.1007/978-1-4419-7988-9_27
- Duncan, P., Dixon, R. R., & Carlson, J. (2003). Childhood and adolescent sexuality. *Pediatric Clinics*, 50(4), 765-780. [https://doi.org/10.1016/s0031-3955\(03\)00068-3](https://doi.org/10.1016/s0031-3955(03)00068-3)
- Goli, S., Rahimi, F., & Goli, M. (2022). Experiences of teachers, educators, and school counselors about the sexual and reproductive health of educable intellectually disabled adolescent girls: A qualitative study. *Reproductive Health*, 19(1). Article No. 96. <https://doi.org/10.1186/s12978-022-01397-8>
- Houtrow, A., Elias, E. R., Davis, B. E., Kuo, D. Z., Agrawal, R., Davidson, L. F., ... & Kuznetsov, A. (2021). Promoting healthy sexuality for children and adolescents with disabilities. *Pediatrics*, 148(1). Article ID: e2021052043. <https://doi.org/10.1542/peds.2021-052043>
- Hui, S. F. E. I. (2024). Sexual Education for Adolescents and Adults with Intellectual Disabilities: Systematic Review. *Sexuality and Disability*, 42(1), 119-147. <https://doi.org/10.1007/s11195-023-09813-y>
- Kormanik, M. B. (2009). Sexuality as a diversity factor: An examination of awareness. *Advances in Developing Human Resources*, 11(1), 24-36. <https://doi.org/10.1177/1523422308329369>
- Kraus, F. (2017). The practice of masturbation for women: The end of a taboo? *Sexologies*, 26(4), e35-e41. <https://doi.org/10.1016/j.sexol.2017.09.009>
- Lee, I. S., Kim, H. S., & Cho, J. Y. (2007). Viewing internet obscenity and sexuality awareness of elementary school students. *Journal of the Korean Society of School Health*, 20(2), 35-46. <https://koreascience.kr/article/JAKO200710103456963.page>
- Lidster, C. A., & Horsburgh, M. E. (1994). Masturbation-beyond myth and taboo. *Nursing Forum*, 29(3), 18-27. <https://doi.org/10.1111/j.1744-6198.1994.tb00162.x>
- Mayer, L. S., & McHugh, P. R. (2016). Sexuality and gender: Findings from the biological, psychological, and social sciences. *The New Atlantis: A Journal of Technology & Society*, 50, 10-143. <https://www.jstor.org/stable/43893424>

- McCarthy, B., & McCarthy, E. (2012). *Sexual awareness: Your guide to healthy couple sexuality*. New York, NY: Routledge. <https://www.routledge.com/Sexual-Awareness-Your-Guide-to-Healthy-Couple-Sexuality/McCarthy-McCarthy/p/book/9780415896436>
- Michielsen, K., & Brockschmidt, L. (2021). Barriers to sexuality education for children and young people with disabilities in the WHO European region: A scoping review. *Sex Education, 21*(6), 674-692.: <https://doi.org/10.1080/14681811.2020.1851181>
- Mthembu, T., & Holness, W. (2022). Criteria for law reform on comprehensive sexuality education for children with disabilities in South Africa. In *10 African Disability Rights Year Book*, (pp. 78-109). Retrieved from: https://www.adry.up.ac.za/images/adry/volume10_2022/Chapter%20Holness%202022.pdf [accessed: 18 May, 2024]. <https://doi.org/10.29053/2413-7138/2022/v10a5>
- Murphy, N., & Young, P. C. (2005). Sexuality in children and adolescents with disabilities. *Developmental Medicine and Child Neurology, 47*(9), 640-644. <https://doi.org/10.1111/j.1469-8749.2005.tb01220.x>
- Nichols, S., & Blakeley-Smith, A. (2009). "I'm not sure we're ready for this...": Working with families toward facilitating healthy sexuality for individuals with autism spectrum disorders. *Social Work in Mental Health, 8*(1), 72-91. <https://doi.org/10.1080/15332980902932383>
- Padgug, R. A. (2002). Sexual matters: On conceptualizing sexuality in history. In R. Parker & P. Aggleton (Eds.), *Culture, society and sexuality* (pp. 15-28). London, UK: Routledge. <https://doi.org/10.4324/9780203966105>
- Rousso, H. (2003). Education for all: A gender and disability perspective (Document Code: 2004/ED/EFA/MRT/PI/66). UNESCO Digital Library. Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000146931> [accessed: 18 May, 2024].
- Ruble, L. A., & Dalrymple, N. J. (1993). Social/sexual awareness of persons with autism: A parental perspective. *Archives of Sexual Behavior, 22*(3), 229-240. <https://doi.org/10.1007/BF01541768>
- Schmidt, E. K., Beining, A., Hand, B. N., Haverkamp, S., & Darragh, A. (2022). Healthcare providers' role in providing sexual and reproductive health information to people with intellectual and developmental disabilities: A qualitative study. *Journal of Applied Research in Intellectual Disabilities, 35*(4), 1019-1027. <https://doi.org/10.1111/jar.12861>
- Snell Jr, W. E., & Wooldridge, D. G. (1998). Sexual awareness: Contraception, sexual behaviors and sexual attitudes. *Sexual and Marital Therapy, 13*(2), 191-199. <https://doi.org/10.1080/02674659808406559>