



Attitudes of a multi-disciplinary team regarding sexual education among students with Developmental Cognitive Disabilities (DCD)

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This quantitative study examines the attitudes of multidisciplinary staff regarding sex education among students with developmental intellectual disabilities and compares the attitudes of teachers working in regular education and those working in special education, and attitudes of religious versus non-religious teachers.

One hundred and twenty teachers from various schools in the State of Israel participated in the study. The vast majority were women (91.7%), and the rest were men (8.3%). The prevailing level of religiosity in the study was secular (47.5%), and religious (43.3%). Most teachers had no experience working with children with special needs (60%).

The study participants completed a demographic survey. The questionnaire used to examine the research questions was The Sexual Attitude Scale (SAS) (Hudson, Murphy, & Nurius, 1983) – a 25-item summated category partition scale that was designed to measure the extent to which an individual adheres to a liberal or a conservative orientation concerning sexual expression. One question was removed from the original questionnaire (statement 18: heavy sexual petting should be discouraged) and 5 statements were added, focusing on attitudes toward sex education for students with developmental intellectual disabilities.

The study findings show that the level of conservatism among special education teachers was lower than the level of conservatism among regular education teachers, i.e., special education teachers expressed more positive attitudes. The study find-

ings show that the level of conservatism among religious teachers was higher than the level of conservatism among non-religious teachers, i.e., non-religious teachers expressed more positive attitudes. It was also found that there is a positive and significant relation between the seniority of teachers and their degree of conservatism: the more years of experience teachers had, the more negative were their attitudes regarding the sexual education of students with Developmental Cognitive Disabilities (DCD). In contrast, there was no significant connection between age and level of conservatism. The study also examined the relationship between the role of the teacher and his attitudes. The study reveals surprising findings that show that the highest degree of conservatism was found among teachers and counselors, then, among professional teachers, and finally, school therapists who demonstrated the lowest level of conservatism. This means that the most positive attitudes were among the paramedical caregivers and the more negative among the educators and counselors. These findings suggest that training is needed for teachers in regular education, and among religious teachers, who are more conservative concerning sex education for people with special needs. It was also found that there is a connection between the teacher's role and his attitudes, and that the teacher's discipline should be addressed in the training. Veteran teachers have shown more negative attitudes, which is why training, for both teaching students and young teachers, and especially to veteran teachers, has an impact on their attitudes towards sex education among people with special needs. This training, beyond the knowledge provided, will facilitate changes of social attitudes to another, more positive view, towards people with special needs.

KEY WORDS: sexual education, Developmental Cognitive Disabilities (DCD), attitudes, multi-disciplinary team members, sector

Introduction

Sexual behavior is a normative part of human behavior. All humans have sexual needs, from birth to death. It is the inalienable and legal right of every human being, including people with special needs. Every person is a social-sexual creature and is therefore entitled to express and fulfill these social needs, as well as the sexual needs. Sexuality is a very complex issue for anyone, and specifically concerning people with Developmental Cognitive Disabilities, in which case addressing the issue is particularly problematic and sensitive. The bio-physical development of many people in special

education is congruent with their chronological age, while their cognitive development and emotional maturity are incongruent with physical development. This situation creates a real gap – increasingly growing over the years – between them and their peers in the general population. Without guidance and attention, this gap complicates the addressing of an issue which is, in itself, a difficult and complex challenge. This shows that even nowadays when awareness of the subject has greatly increased, many schools are still not adequately coping with social-sexual education. A significant part of the gap between the sexual education policy in Israel and its implementation in state schools stems from a lack of the following factors: appropriate training, acquisition of research-based and up-to-date knowledge, professional tools, skills, and competencies among those who are required to teach sexual education in the classrooms – the educators and the educational consultants. sexual education is a difficult task in regular education, and all the more so in special education. Sexual education is even more necessary for special education pupils. However, this need is often not addressed. In the proposed study, we examined the attitudes of multidisciplinary staff members regarding sexual education for pupils with Developmental Cognitive Disabilities. We compared the attitudes of teachers working in regular education to those working in special education and compared between religious and non-religious teachers.

Literature review

The Israeli mainstream education system

The complexity of Israeli society and its human diversity is reflected in the country's educational system. The educational system's heterogeneity is manifested in various facets of the structure and budgeting of the system, and the existence of many types of educational institutions tailored to the needs of different sectors. The structure of the educational system in Israel is usually described according to four main divisions: age, the legal status of the educa-

tional institution, type of supervision, and sector¹. The current study involved multidisciplinary teams from state, state religious, and special education schools.

Special education in Israel

Pupils with special needs in Israel study in two main tracks: 58% (about 115,000) are integrated into the regular education system; the rest (42%) study in special education frameworks for pupils with various disabilities. The professional body through which the Special Education Act is implemented is called the Regional Education Support Center (*MATYA*). Every such center coordinates the support of children with special needs who attend institutions under its responsibility, in both regular and special education institutions. It provides various services – eg support of instruction and learning processes, pedagogic diagnosis, lending of equipment and aids, and para-medical treatments for special education pupils. The centers also develop additional services for the pupils. In addition, every center coordinates between the entities that provide services to children with special needs and works with ministries and municipalities as well. The center is a hub of professional knowledge for teachers, regarding a variety of disabilities².

As mentioned, 42% of the pupils (about 80,000) attend special education institutions. These are special frameworks for special education pupils – special education kindergartens, special education schools, and special education classes in regular schools. Special education frameworks are designated frameworks for pupils with various disabilities.

¹ E. Weissblei, *The Education System in Israel*. Knesset Research and Information Center, 2013. [Hebrew]. https://fs.knesset.gov.il/globaldocs/MMM/21556b58-e9f7-e411-80c8-00155d010977/2_21556b58-e9f7-e411-80c8-00155d010977_11_7137.pdf

² E. Weissblei, *Education for Children with Special Needs in Israel – Data and Key Issues*, The Knesset Research and Information Center, 2015. [Hebrew]

The present study examined the attitudes of multidisciplinary staff concerning sex education. We will now review the term “sexual education.”

Sexual education

All sexual beings share the basis of one principle called ‘sexuality’. This concept includes the person’s personality – his identity, sexual function, and behavior, his feelings, and the way he communicates with others. Therefore, sexuality is an essential trait that we have; it is an essential part of being humans. As such, one can claim that almost every human behavior includes a sexual aspect. Hence, sexuality is present in almost every human domain, and certainly in education (Harpaz, 2010).

Over the years, there have been many debates regarding the issue of sexuality in the Israeli educational system³, being a topic laden with values and moral issues⁴. For years, many sub-groups in Israeli society debated whether sex education should be taught and how. Disagreements arose due to the differences between those groups as well as temporal trends⁵. Part of the opposition stemmed from concern that exposing students to information about sex might arouse their curiosity and may even encourage them to realize their sexuality early in their lives⁶. Naturally, parents are expected to mediate sexual education issues for their children, as part of their role as educators⁷ but studies have shown that only a hand-

³ K. Arnan, *Life Skills for 5th-6th Grades: Skills, developmental and preventive issues for the state and state religious primary schools*, Maa’lot, 1995. [Hebrew]

⁴ E. Firstater, Y. Lapidot-Berman, Sex education – why bother? The contribution of a course in human sexuality to teaching students, *Rav Gvanim: Mekhkar va’Siach*, 16, 81-53, 2018. [Hebrew]

⁵ N. Guvrin, Flowers, butterflies and bees: Sex education for children and youth in the Land of Israel, *Olam Katan*, 3, 82-66, 2007.

⁶ K. Arnan, *Life Skills for 5th-6th Grades: Skills, developmental and preventive issues for the state and state religious primary schools*, Maa’lot, 1995. [Hebrew]

⁷ S. L. Finan, Promoting healthy sexuality: guidelines for infancy through pre-school, *The Nurse Practitioner*, 22(10), 79-80, 1997.

ful of parents talk to their children about it; moreover, it is found that parents' disregard of sexual education and the educational system's reluctance, may lead to violent sexual behavior among students. Therefore, it is all the more important to address education to sexuality in this current era, in which there are far-reaching changes in the traditional family structure, in accepted sexual identity and gender roles, and increased exposure to information and content through the media⁸. Since sexuality is a significant component in human identity, educational processes have an impact on its evolvement and hence the importance of sexual education. In most of the Western world, there is a consensus that sex education should be part of the curriculum, addressing a wide range of topics such as anatomy, physiology, gender identity, sexual orientation, STD prevention, and contraception. Addressing those aspects may impart knowledge and shape attitudes among young people⁹. For sex education to be optimal and productive, and reduce dangerous sexual behaviors such as disease transmission, unwanted pregnancies, and abusive sexual cases, it must be delivered to students by a team of professionally trained teachers. Lack of training, lack of knowledge, or incorrect knowledge can lead to erroneous programs and even to disturbances in sexual image and functioning. Alternatively, competent educational staff can bring about a real change in students' perceptions¹⁰.

Sex education should include more than sexuality information and Q&A. Learning sex education should be held in a safe and enabling environment that will have the best impact in the long run as well. Children will thrive when teachers and parents support their sexual development, and when adults they will provide knowledge-

⁸ E. Weissblei, *Sex education in the education system*. Knesset Research and Information Center, 2010, <https://www.knesset.gov.il/mmm/data/pdf/m02462.pdf>

⁹ E. Firstater & Y. Lapidot-Berman, Sex education - why bother? The contribution of a course in human sexuality to teaching students, *Rav Gvanim: Mekhkar va'Siach*, 16, 81-53, 2018. [Hebrew]

¹⁰ K. Kukulcu, Gürsoy, E., & Sözer, G. A. Turkish university students' beliefs in sexual myths, *Sexuality and Disability*, 27(1), 49-59, 2009.

able responses to their questions and behaviors. By creating a reality where appropriate responses are provided, children are more likely to develop a healthy sense of sexuality¹¹.

Sexual education in Israel

The Israeli Ministry of Education is currently the entity in charge of sexual education in schools through the unit for education for sexuality, relationships, and family life in the counseling psychological service. The program is taught in elementary and middle schools as part of the "Life Skills" classes. The programs' implementation in schools is partial and the unit does not have supervisory or enforcement powers. In addition, there is no compulsory program in high schools and kindergartens. The sex education classes are delivered by the educators under the guidance of the educational counselors; however, some teachers feel uncomfortable addressing those contents and therefore the educational counselor takes over the task. If there is no counselor, the teachers are responsible for delivering the subject. The program is adapted in various ways to both the state-religious sector and the state sector, while the discourse on sexuality in Ultra-Orthodox institutions is completely absent. In addition to the Ministry of Education, the Ministry of Health also takes part in school sexual education through public health nurses. However, the subject is discussed within a single session, in the 6th grade. Studies have shown that most students did not receive sex education at all, or engaged in the subject at school for a limited number of hours. Moreover, it was found that sex education usually provides an ad-hoc response to a specific event, views it as threatening, and does not address questions that concern teens¹².

¹¹ M. Sciaraffa & T. Randolph, "You want me to talk to children about what?": Responding to the subject of sexuality development in young children, *YC Young Children*, 66(4), 32.

¹² E. Weissblei, (2010), *Sex education in the education system*, Knesset Research and Information Center, 2011. <https://www.knesset.gov.il/mmm/data/pdf/m02462.pdf>

Sexual education for students with Developmental Cognitive Disabilities (DCD)

For years, people with cognitive-developmental developmental disabilities were considered asexual – people who do not need satisfying sexual relations with others. Individual rights to sexuality, which is essential to human health and quality of life, were denied. Moreover, the public had old-fashioned views on the sexuality of people with developmental disabilities and retardation.

In 2002, the American Association on Mental Retardation determined that people with intellectual disabilities and developmental disabilities have rights regarding their sexuality: they have the right to sexual expression according to their age; they must be provided with information that enables informed decisions, including sexual social education on topics such as safe sex, sexual orientation, sexual exploitation, and STDs. They are entitled to protection against sexual abuse, as well as against physical, sexual, and emotional exploitation.

In the State of Israel, the Unit for Sexuality, Relationships and Family is responsible for sexual education in special education. National and district instructors who are responsible for the social and sexual education in special education, help to integrate the topic into the core curriculum of special education. The core curriculum binds all special education frameworks. The studies included in the core curriculum encompass preparation for life as well. This field includes social life in the community, the labor market, recreation culture, use of community services, health, and personal hygiene, social-sexual education, family life, living and housing in the community, being careful, and road safety.

In 2007, the department of educational programs and the department of special education in the Ministry of Education issued a guide to special education staff members: "Towards sexual maturity – aspects of sexual education in social outlook"¹³. The goals

¹³ Y. Lachover, & R. Argaman, *Towards Sexual Maturity – Aspects of Sex Education from a Social Perspective, A Guide for Special Education Teams*, Maa'lot, 2007. [Hebrew]

of the guide are to increase awareness regarding the importance of sexual education; to expand general knowledge; to present the need for systemic intervention in teaching the subject; to help plan the instruction for adolescents and young adults, and to propose a work plan for developing sexual awareness and assertiveness.

In the past ten years, there is evidence that many special education schools have been addressing this important issue, and have been writing curricula for the social education system that are adapted to the characterization of the pupil population and their level of development and chronological age. Studies indicate a great willingness of teacher trainees to teach social-sexual education and relate to sexual and gender diversity. At the same time, most of them report that they have not received adequate training to address all aspects of sexual education and provide a professional response that is tailored to the needs of the pupils^{14, 15, 16, 17}

Attitudes regarding sexual education among people with Developmental Cognitive Disabilities (DCD)

Sexuality and disability are two taboo issues in Western societies. Combining them challenges myths of areas considered “natural”¹⁸. Over the years, social attitudes regarding the sexuality of people with developmental disabilities have been extreme, including avoidance

¹⁴ K. Zamir, *Education is stepping out of the closet: teachers' attitudes in Israel towards homosexuality and their willingness to address the subject in the classrooms*, [Unpublished M.A Thesis], Tel Aviv University, 2003. [Hebrew]

¹⁵ A. Brosh, *Awareness, knowledge and willingness to deal with sex education in school among teaching students*, Research report, Mofet Institute, 2007, [Hebrew]

¹⁶ M. Assoulin and H. Barnea, *Survey on Operating Programs in Sex Education and Family Life Education*, Ministry of Education, Pedagogical Administration, 2002, [Hebrew]

¹⁷ A. Forer-Eilam, “And I did not know if I had the tools at all to help her deal with it or to share this big secret”: attitudes of educational counselors in Israel towards gay and lesbian students, [Unpublished M.A. Thesis], The Hebrew University of Jerusalem, 2012, [Hebrew]

¹⁸ T. Sanders, T, The politics of sexual citizenship: commercial sex and disability, *Disability & Society*, 22(5), 439-455, 2007.

attitudes that see a person with developmental disabilities as a child in an adult body with no interest and needs in the sexual-social area; approaches that view them as people who do not understand their sexuality and as potential victims of exploitation and abuse; perceiving of their sexuality as disturbed, uncontrollable and dangerous. These perceptions led to sexual repression, restrictions, and legislation that prevented opportunities for adapted education and respectful conditions for the fulfillment of sexual-social needs^{19, 20, 21}.

Attitudes regarding sexuality have been a decisive factor in excluding people with CDD from the community. Furthermore, in various countries, they have led to the enactment of laws that allow massive coerced sterilization of people with CDD as well as the prevention of expression and sexual contacts between people with CDD, and between people with no disabilities and those with CDD^{22,23}. These actions were taken to:

- A. Prevent the possibility of pregnancy and the birth of other children with CDD.
- B. Suppress the expression of sexual needs, for fear of child sexual abuse.
- C. Protect them from sexual exploitation and abuse situations.^{24,25}

¹⁹ R. Wright, Young people with learning disabilities and the development of sexual relationships, *Mental Health and Learning Disabilities Research and Practice*, 8(1), 2011.

²⁰ W. Kempton & E. Kahn, Sexuality and people with intellectual disabilities: A historical perspective, *Sexuality and Disability*, 9(2), 93-111, 1991.

²¹ M. Box & J. Shawe, The experiences of adults with learning disabilities attending a sexuality and relationship group: "I want to get married and have kids", *Journal of Family Planning and Reproductive Health Care*, 40(2), 82-88, 2014.

²² R. King & D. Richards, Sterilization and birth control. In D. Griffiths, D. Richards, P. Fedoroff, & S. L. Watson (Eds.), *Ethical dilemmas: Sexuality and developmental disability*, NADD Press. 227-254, 2002.

²³ I. Grenon & J. Merrick, Intellectual and developmental disabilities: eugenics, *Frontiers in Public Health*, 2, 201, 2014

²⁴ M. G. Gunn. Sexual rights of mentally handicapped, Division of Legal and Criminological Psychology of BPS, 1986.

²⁵ A. F. Tredgold K. Soddy R.F. Tredgold & E.W. Dunkley, *Textbook of Mental Deficiency (subnormality): By RF Tredgold and K. Soddy, with the Assistance of EW Dunkley [et Al.]*, Baillière, Tindall, and Cox, 1963

In the late 1960s, with the development of genetics and rehabilitation, and the shift from the medical model to social models and the development of the normalization philosophy and community approach, there was a gradual recognition of the rights of people with disabilities. In the 1970s, the social attitude toward the sexuality of people with disabilities gradually changed, and the philosophy of normalization led to the development of a "sexual normalization" approach – i.e. recognition of the basic right to sexual expression. In the 1980s, the self-advocacy movement argued that legitimacy for sexuality was insufficient and that assistance in meeting these needs should be provided. Since then, consistently and gradually, we have witnessed a development in the sexual-social field. Although historical attitudes and approaches are now more enabling, there is still a complexity of attitudes regarding the relationship between sexuality and CDD, and a great deal of influence on the creation of responses and conditions that will allow the realization of sexuality in an appropriate manner²⁶. This area, unlike others, evokes various feelings among family members and staff: anxiety, caution, responsibility, rejection, threat, fear of abuse, unwanted pregnancies, inappropriate sexual behavior, unrealistic expectations, disappointment, frustration, and uncertainty about the future²⁷. There are still many myths about the connection between sexuality and CDD, and perceptions of the sexuality of people with CDD are more conservative compared to people with no disabilities. Nissim²⁸ mentions nine main myths that nurture these attitudes: people with disabilities are asexual (lacking sexuality); people with disabilities are children inside an adult body and therefore need protection from contact with others; people

²⁶ G. di Giulio, Sexuality and People Living with Physical or Developmental Disabilities: A Review of Key Issues, *Canadian Journal of Human Sexuality*, 12(1), 2003.

²⁷ R. Aloni, Sexual therapy of people with mental retardation, In A. Duvdevani et al., (Eds.), *Parenting and Developmental Disabilities in Israel*, pp. 151-163, Magnes, 1998. [Hebrew]

²⁸ D. Nissim, Social attitudes towards the sexuality of the mentally retarded person. *Issues in Special Education and Rehabilitation*, 13(1), 44-49, 1997, [Hebrew]

with disability have increased, uncontrollable sexual urges; people with disabilities cannot reach sexual satisfaction; sexual problems of people with disabilities are a result of their disability; people with disabilities give birth to children with disabilities, so any possibility of sexual contact should be avoided, using birth control; disabled people should maintain social and marital relationships only with other disabled people; people without disabilities who contact people with disabilities have problems; parents of children with disabilities are not interested in providing sexual education to their children. Developments in the field reinforce the importance of a systemic approach and the connection between environmental attitudes to the development of responses and the sexual behavior of people with CDD. For example: believing that people with CDD do not control their sexual urges may be strengthened if the individual does not have privacy moments or does not learn the concept of privacy and therefore he will manifest sexual behavior in socially inappropriate ways. His sexual behavior will reinforce the belief that he or she does not control sexual urges and therefore s/he should be restricted and prevented from expressing his or her sexuality²⁹. Public discourse often ignores the sexuality of people with disabilities. They are subject to infantilization, especially those perceived as “dependent,” and are considered emotionless and sexually incapable, similar to children^{30,31} (; Brown, 1994; Rogers, 2010; Shakespeare et al., 1996; Shildrick, 2007; Tepper, 2000).

The sexuality of people with disabilities has two levels of social discourses: The first is the discourse on the relative vulnerability of people with disabilities, especially women and children, to sexual abuse (Schaaf, 2011; Shildrick, 2007; Tepper, 2000).

²⁹ W. Kempton & E. Kahn, Sexuality and people with intellectual disabilities: A historical perspective, *Sexuality and Disability*, 9(2), 93-111, 1991.

³⁰ H. Brown, 'An ordinary sexual life?': A review of the normalization principle as it applies to the sexual options of people with learning disabilities, *Disability & Society*, 9(2), 123-144, 1994.

³¹ S. Bonnie, Disabled people, disability and sexuality, *Disabling barriers-Enabling Environments*, 19, 124-132, 2004.

The second is the perception of sexual expressions of people with disabilities as aggressive, abnormal, or disgusting (Brown, 1994; Bonnie, 2004; Lyden, 2007; Shakespeare et al., 1996; Shildrick, 2007).

It is evident that all over the world, sex education programs for people with disabilities deal primarily with the negative aspects of human sexuality rather than sexual pleasure and sexuality as part of relationships. The social context that silences, distorts or downgrades the value of sexuality of people with CDD causes many of them to internalize these attitudes, negatively affecting their self-worth (di Giulio, 2003; Shildrick, 2007; Tepper, 2000), sometimes causing them to avoid intimacy (Yoshida, 2004).

Methodology

Participants

The current study involved 120 teachers from various schools in Israel. The vast majority were women ($N = 110, 91.7\%$) and the rest were men ($N = 10, 8.3\%$). The mean age of participants was 38.06 ($SD = 9.04$). The youngest teacher was 23 years old and the oldest was 68 years old. The mean years of seniority were 11.01 ($SD = 8.36$). The teacher with the longest seniority has been working in the education system for 38 years and the youngest has been working there for only one year. "classroom educator" was the most prevalent role ($N = 41, 34.2\%$) followed by "subject teacher" ($N = 30, 25\%$) and "therapist" ($N = 30, 25\%$). Almost all female participants were married ($N = 101, 84.2\%$). The more common levels of religiosity in the study were "secular" ($N = 57, 47.5\%$) and "religious" ($N = 52, 43.3$). In addition, the majority of teachers had no experience in working with children with special needs ($N = 72, 60\%$) compared with those who did ($N = 48, 40\%$).

Data collection methods

The present study combines quantitative research with qualitative research. In the quantitative part, participants completed a ques-

tionnaire, and the qualitative part included interviews. This article presents the findings of the quantitative study.

Research tools

In this study, I used the Sexual Attitude Scale (SAS) (Hudson, Murphy, & Nurius, 1983), a 25-item summated category partition scale that was designed to measure the extent to which an individual adheres to a liberal or a conservative orientation concerning sexual expression. Each item is scored on a 5-point "agree-disagree" continuum, and all but two items are worded and scored so that a higher score represents a more conservative orientation. The SAS is scored as a bipolar agree-disagree continuum, and the total score ranges from 0 to 100 with a midpoint score of 50. A score below 50 indicates a more liberal sexual attitude, and a score above 50 indicates a more conservative sexual attitude. Concerning reliability, the scale has been investigated to have an alpha coefficient of .90 or larger. Concerning validity, the scale has been investigated to have validity coefficients of .60 or greater (Hudson, Murphy, & Nurius, 1983). The following are examples of the items on the scale: "sex education should be restricted to the home;" "I think sex should be reserved for marriage;" and "there is too much sex on television. For the present study, I omitted one statement (no. 18: heavy sexual petting should be discouraged) and added 5 statements that focus on attitudes towards sexual education for people with Developmental Cognitive Disabilities (no. 25-29)

Descriptive statistics

The independent variables in the study were the level of religiosity and the educational setting in which the teacher worked (regular or special education). The dependent variable in the study was "attitudes toward sexual education among children with special needs". The mean of attitudes in the study (degree of conservatism) was 2.44 (SD = 0.61). An examination of the questionnaire's

internal reliability shows that the statements were consistent with one other, with a Cronbach α of 0.92, indicating high internal reliability.

Findings

To compare the attitudes of teachers working in special education with those of teachers working in regular education, a t-test was performed for independent samples. A significant difference was found between the groups: $t(117) = 3.46, p < .01$. Results indicate that the level of conservatism among special education teachers (mean=2.30) was lower than the level of conservatism among regular education teachers (mean=2.68), as shown in Figure 1.

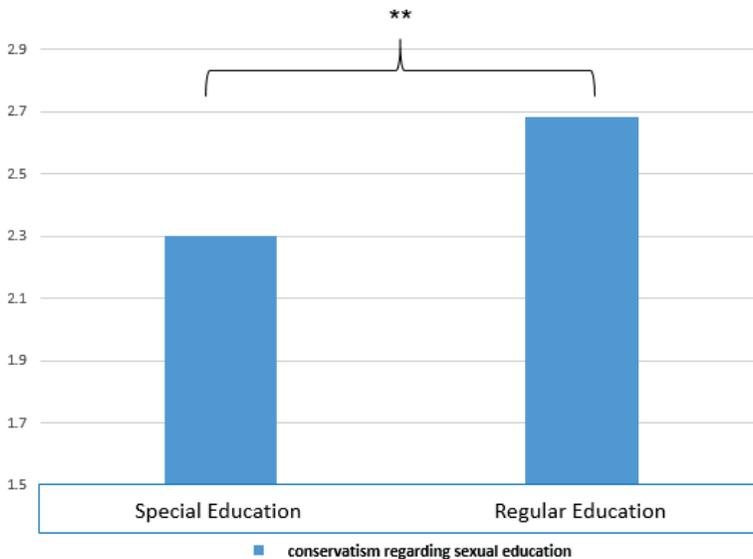


Figure 1. Differences in the level of conservatism between regular education teachers and special education teachers.

To compare the attitudes of religious versus non-religious teachers, a t-test was performed for independent samples. A significant difference was found between the groups: $t(118) = 10.66, p < .01$. Results indicate that the level of conservatism among religious teachers (mean=2.85) was lower than the level of conservatism among non-religious teachers (mean=1.99), as shown in Figure 2.

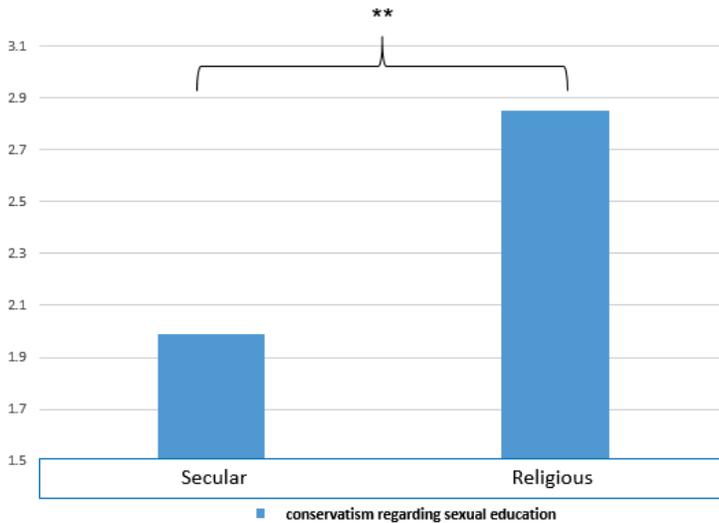


Figure 2. Differences in the level of conservatism between religious and non-religious teachers.

I examined the correlation between teachers' attitudes and levels of conservatism in relation to their seniority and age. The results indicate a positive and significant correlation between the teachers' seniority and their degree of conservatism, $r = .32, p < .01$, as shown in figure 3. This association suggests that teachers with greater seniority were more conservative regarding the sexual education of pupils with intellectual disabilities, meaning that the senior teachers' attitudes were more negative. However, there was no significant relation between the teachers' age and their level of conservatism, $r = -.10, p = .28$.

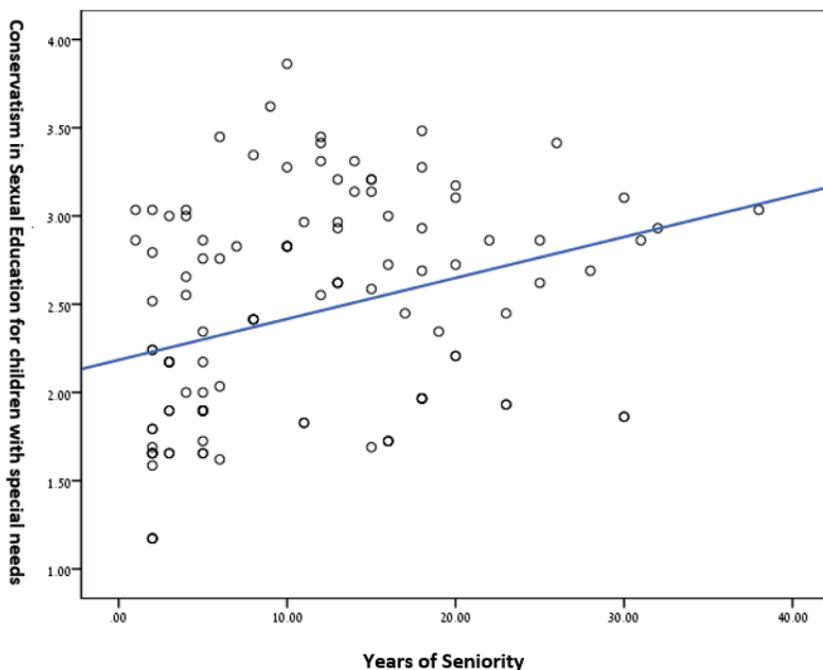


Figure 3. Diagram of the distribution of the relationship between teachers' seniority and the degree of conservatism regarding sexual education.

The study also examined whether the teacher's role at school was related to her attitudes toward sexual education and how conservative she was regarding sexual education for children with special needs. The roles of the study's participants were those of educator, subject teacher, therapist, and counselor. I performed a one-way analysis of variance (One Way ANOVA) to examine whether there was a difference in attitudes - i.e. the degree of conservatism - between the different role groups. As shown in Figure 4, there was a significant difference in the degree of conservatism $F(3,109) = 5.32$, $p < .01$. The highest degree of conservatism was found among educators (mean=2.66) and counselors (mean= 2.61). They were followed by subject teachers (mean=2.36). The school therapists displayed the lowest level of conservatism (mean=2.12).

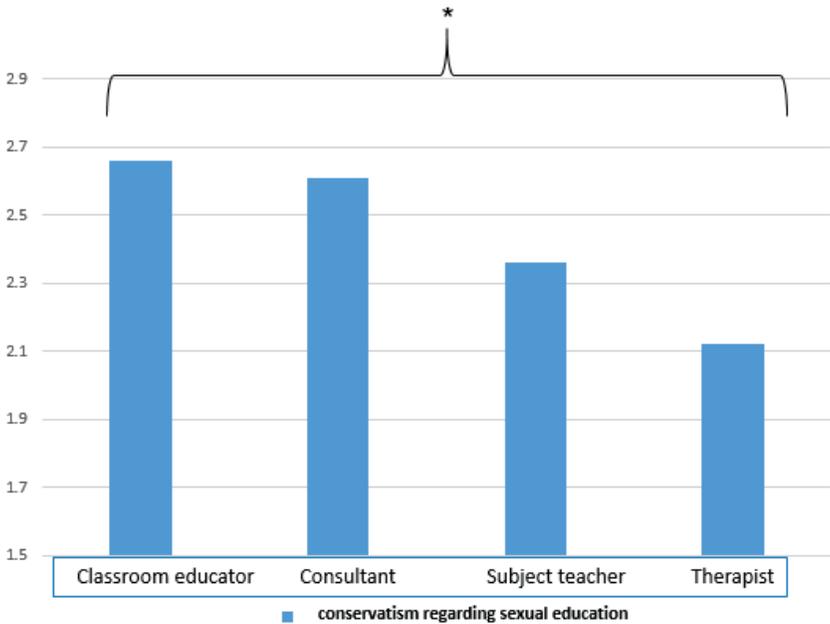


Figure 4 Differences in the average degree of conservatism by role at school.

Discussion

In recent years, there is evidence of more sex education activities – in both the mainstream population and in special education in particular.

Studies also indicate that people with intellectual disabilities face challenges related to their sexuality differently from their non-disabled peers³². People with CDD have difficulty making decisions, they are inexperienced, and do not have the appropriate

³² D. Schaafsma, J. M. Stoffelen, G. Kok & L.M. Curfs (2013), Exploring the development of existing sex education programmes for people with intellectual disabilities: an intervention mapping approach, *Journal of Applied Research in Intellectual Disabilities*, 26(2), 157-166.

skills needed to form healthy relationships. They have difficulty setting clear sexual boundaries, potentially entering into sexual exploitation situations³³

In the past, sex education for students with intellectual disabilities was characterized by reluctance and confusion³⁴, and teachers reported a lack of materials adapted to the students' special needs³⁵. Currently, however, special education schools are engaged in this important field, writing sexual education school curricula that are tailored to the students' level of development and chronological age. Nevertheless, most professional staff report not having received appropriate training in their institution to fully address all aspects of sexual education and to provide a professional and adapted response to the students^{36,37,38,39}.

It was therefore important for us to explore the attitudes of the multidisciplinary team in this field. This quantitative study examined the attitudes of multidisciplinary staff regarding sex education among students with developmental intellectual disabilities. We

³³ A. Swango-Wilson (2009), Perception of sex education for individuals with developmental and cognitive disability: A four cohort study, *Sexuality and Disability*, 27(4), 223

³⁴ M. P. McCabe(1993), Sex education programs for people with mental retardation, *Mental Retardation*, 31(6), 377.

³⁵ W. J. Blanchett & P. S. Wolfe, A review of sexuality education curricula: Meeting the sexuality education needs of individuals with moderate and severe intellectual disabilities, *Research and Practice for Persons with Severe Disabilities*, 27(1), 43-57, 2002.

³⁶ M. Assoulin & H. Barnea (2002), *Survey on Operating Programs in Sex Education and Family Life Education*, Ministry of Education, Pedagogical Administration, [Hebrew]

³⁷ A. Brosh, *Awareness, knowledge and willingness to deal with sex education in school among teaching students*, Research report. Mofet Institute, 2007. [Hebrew]

³⁸ A. Forer-Eilam, "And I did not know if I had the tools at all to help her deal with it or to share this big secret": attitudes of educational counselors in Israel towards gay and lesbian students, [Unpublished M.A. Thesis], The Hebrew University of Jerusalem, 2012. [Hebrew]

³⁹ K. Zamir, *Education is stepping out of the closet: teachers' attitudes in Israel towards homosexuality and their willingness to address the subject in the classrooms*, [Unpublished M.A Thesis]. Tel Aviv University, 2003. [Hebrew]

were interested to learn whether there are differences in attitudes between religious and secular teachers; between regular education and special education teachers, and between educators in different roles at schools.

The study findings show that the level of conservatism among special education teachers was lower than the level of conservatism among regular education teachers, i.e., special education teachers expressed more positive attitudes toward sexual education. Presumably, the training that special education teachers receive, and their actual work with this population, contribute to their positive attitude. This finding is consistent with Pebdani's study⁴⁰, which examined the attitudes of people working in care homes for people with intellectual disabilities, and found that training and mentoring have a positive effect on their attitudes towards the sexual rights of people with intellectual disabilities.

The findings also indicated that the level of conservatism among religious teachers was higher than the level of conservatism among non-religious teachers, i.e., non-religious teachers expressed more positive attitudes. This finding is consistent with the findings of Berger et al. (2004), who found that teachers with a high level of faith in God disagree with gender equality, homosexuality rights, abortion or contraceptive methods, as well as with the teaching of the social component of sexual education before the age of 15.

The findings are also congruent with those of Ionescu and colleagues⁴¹, who found that participants who rated their religious level as high presented a conservative approach to teaching sex education, while those rating their level of religiosity as lower tended to

⁴⁰ R. N. Pebdani, Attitudes of group home employees towards the sexuality of individuals with intellectual disabilities, *Sexuality and Disability*, 34(3), 329-339, 2016.

⁴¹ C. E. Ionescu, A. S. Rusu & C. Costea-Bărluțiu, Attitudes of Special Education teachers towards sexual education of students with intellectual disabilities: Effects of religiosity and professional experiences, *Educatia* 21 (17), 102-111, 2019.

talk about sex education, and their general attitude towards sexuality was more positive.

It was also found that there is a positive and significant relation between the seniority of teachers and their degree of conservatism: the more years of experience teachers had, the more negative were their attitudes regarding the sexual education of students with Developmental Cognitive Disabilities (DCD).

This finding is consistent with the study of Ionescu and colleagues⁴² who investigated the relationship between teachers' age and teachers' attitudes toward teaching sex education in special education schools. They found that the older the teacher, the more negative his attitudes. Although we did not find a connection between attitudes and age, it is likely to assume that teachers with more years of experience/greater seniority are mostly older. Hence, teachers with more seniority and greater teaching experience do not necessarily have more open-minded and less conservative attitudes. Veteran teachers also need training in sex education, for their attitudes to be more positive.

The study also examined the relationship between the role of the teacher and that teacher's attitudes. The study reveals surprising findings – the highest degree of conservatism was found among teachers and counselors, followed by professional teachers and then school therapists – who demonstrated the lowest level of conservatism. This means that the most positive attitudes were found among the paramedical therapists and the more negative – among the educators and counselors.

The fact that therapists presented the most positive attitudes is not surprising: the results of this study are consistent with other studies discussing caregivers' perceptions of sexuality among people with special needs. Studies indicate that, in general, therapists

⁴² C. E. Ionescu, A. S. Rusu & C. Costea-Bărluțiu, Attitudes of Special Education teachers towards sexual education of students with intellectual disabilities: Effects of religiosity and professional experiences, *Educatia* 21 (17), 102-111, 2019.

have positive perceptions about sexuality and intimate relationships of adults with CDD^{43, 44, 45, 46, 47, 48}.

The surprising finding is the attitudes of the educators, who manifested a high degree of conservatism, and more negative attitudes, towards sex education. One would expect that educators, who are in daily and intensive contact with students, would be aware of the need for sex education, and that their attitudes would be positive, and less conservative. This finding can be explained by the ambivalence that educators feel: on the one hand, they are aware of the need, while on the other hand, they are also aware of the disability. Other studies show that people can have contradicting perceptions, as for example, in the results of Wilkinson's⁴⁹ study. These findings showed that while therapists related to people with intellectual disabilities as "normal" and "as having the same rights of others", they also referred to their functional impairments, and viewed their sexuality as problematic.

⁴³ M. Aunos & M. A. Feldman, Attitudes towards sexuality, sterilization and parenting rights of persons with intellectual disabilities, *Journal of Applied Research in Intellectual Disabilities*, 15(4), 285-296, 2002.

⁴⁴ G. Bazzo, L. Nota, S. Soresi, L. Ferrari, & P. Minnes, Attitudes of social service providers towards the sexuality of individuals with intellectual disability, *Journal of Applied Research in Intellectual Disabilities*, 20(2), 110-115, 2007.

⁴⁵ M. Cuskelly, & R. Bryde, Attitudes towards the sexuality of adults with an intellectual disability: parents, support staff, and a community sample, *Journal of Intellectual and Developmental Disability*, 29(3), 255-264, 2004.

⁴⁶ L. Gilmore, L & B. Chambers, Intellectual disability and sexuality: Attitudes of disability support staff and leisure industry employees, *Journal of Intellectual and Developmental Disability*, 35(1), 22-28, 2010.

⁴⁷ V. J. Wilkinson, K. Theodore & R. Raczka, 'As normal as possible': Sexual identity development in people with intellectual disabilities transitioning to adulthood, *Sexuality and Disability*, 33(1), 93-105, 2015

⁴⁸ K. Ćwirynkało, S. Byra & A. Żyta, Sexuality of adults with intellectual disabilities as described by support staff workers, *Hrvatska Revija za Rehabilitacijska Istraživanja*, 53, 77-87, 2017.

⁴⁹ V. J. Wilkinson, K. Theodore & R. Raczka, 'As normal as possible': Sexual identity development in people with intellectual disabilities transitioning to adulthood, *Sexuality and Disability*, 33(1), 93-105, 2015

The results of the present study are consistent with previous studies^{50, 51, 52, 53, 54}. Similar to the results found by Wilkinson and colleagues⁵⁵, the therapists in the present study seemed caught between different perceptions. On the one hand, they presented people with CDD as 'normal' and having the same rights as others; and on the other hand, they subscribed to societal ideas about their functional deficits, perceiving their sexuality as a problem.

Practical implications

Studies indicate that most adolescents with intellectual disabilities have only limited knowledge about sexuality and fewer opportunities to learn about it^{56, 57}. Hence, discussing sexual education with students with CDD is the role of the multidisciplinary staff members.

⁵⁰ M. Aunos & M. A. Feldman, Attitudes towards sexuality, sterilization and parenting rights of persons with intellectual disabilities, *Journal of Applied Research in Intellectual Disabilities*, 15(4), 285-296, 2002.

⁵¹ G. Bazzo, L. Nota, S. Soresi, L. Ferrari & P. Minnes, Attitudes of social service providers towards the sexuality of individuals with intellectual disability, *Journal of Applied Research in Intellectual Disabilities*, 20(2), 110-115, 2007.

⁵² M. Cuskelly & R. Bryde, Attitudes towards the sexuality of adults with an intellectual disability: parents, support staff, and a community sample, *Journal of Intellectual and Developmental Disability*, 29(3), 255-264, 2004.

⁵³ L. Gilmore & B. Chambers, Intellectual disability and sexuality: Attitudes of disability support staff and leisure industry employees, *Journal of Intellectual and Developmental Disability*, 35(1), 22-28, 2010.

⁵⁴ V. J. Wilkinson, K. Theodore & R. Raczka, 'As normal as possible': Sexual identity development in people with intellectual disabilities transitioning to adulthood, *Sexuality and Disability*, 33(1), 93-105, 2015.

⁵⁵ V. J. Wilkinson, K. Theodore R. Raczka, 'As normal as possible': Sexual identity development in people with intellectual disabilities transitioning to adulthood, *Sexuality and Disability*, 33(1), 93-105, 2015.

⁵⁶ M. M. Cheng J. R. Udry, Sexual behaviors of physically disabled adolescents in the United States, *Journal of Adolescent Health*, 31(1), 48-58, 2002.

⁵⁷ G. H. Murphy & A. O'callaghan, Capacity of adults with intellectual disabilities to consent to sexual relationships, *Psychological Medicine*, 34(7), 1347, 2004.

These findings suggest that training is needed for teachers in regular education, and among religious teachers, who are more conservative concerning sex education for people with special needs. Findings also suggest that there is a connection between the teacher's role and her attitudes, and that teachers' training should take into account their respective disciplines. Veteran teachers have shown more negative attitudes, which is why training, not only among teaching students and young teachers but also among veteran teachers has an impact on their attitudes towards sex education among people with special needs. This training, beyond the knowledge provided, will facilitate changes in social attitudes and promote a more positive view towards people with special needs.

This study adds to the body of knowledge on sex education among special education students, as well as the attitudes of members of the multidisciplinary staff. The study has responded to the call to turn the spotlight on the training of teaching students, the training of veteran teachers, and the training of religious teachers – given the potential and value of such training to the changing of attitudes, and promoting a less conservative standpoint. It is hoped that such training will result in an effective sexual education among special education students, thus promoting maximal quality of life in the sexual domain as well.

Study limitations and Future Research

The current study involved mainly women, both religious and secular, with very few male teachers and Ultra-Orthodox teachers. It is recommended to conduct a similar study and examine the relationship between gender and attitudes toward sex education. In light of the significant changes taking place in Ultra-Orthodox society regarding sexual education, I would recommend conducting research examining the attitudes of Ultra-Orthodox staff, of both genders, towards sexual education among people with CDD.

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