

EMPOWERING MOTHERS: A SOCIAL SKILLS TRAINING PROGRAM TO ALLEVIATE POST-PUBERTY SEXUAL BEHAVIOR PROBLEMS IN GIRLS WITH AUTISM SPECTRUM DISORDER

ABRAR YOUSEF ABUANZEH

DEPARTMENT OF BASIC AND APPLIED SCIENCES, ZARQA UNIVERSITY COLLEGE, AL-BALQA APPLIED UNIVERSITY, EMAIL: ABRAR.ANZEH@BAU.EDU.JO, ORCID: 0009-0004-2761-9644.

FAISAL KLAIF NASER AL SHRAA

DEPARTMENT OF BASIC AND APPLIED SCIENCES, ZARQA UNIVERSITY COLLEGE, AL-BALQA APPLIED UNIVERSITY, FAISAL, EMAIL: SHR@BAU.EDU.JO, ORCID: 0000-0001-5152-6983

SHERIN MOHAMMAD MAHMOUD HAMDAN

FACULTY OF EDUCATIONAL SCIENCES, THE UNIVERSITY OF JORDAN, EMAIL: SYR9240109@JU.EDU.JO

Abstract: This study intended to estimate an intervention for mothers with girls analyzed with an autism spectrum disorder (ASD) who were showing the symptoms of sexual behavior problems subsequent the onset of puberty. The sample involved 30 mothers with adolescents girls with ASD and had sexual behavior problems in Zarqa Governorate. The themes were randomly divided into two groups: an experimental group ($n = 15$) and a control group ($n=15$), the previous had to participate in the exercise program industrialized for this study, while there was no such intervention done with the latter one. The Sexual Aspects Scale helped as a pretest and posttest of the intervention. The training was planned for mothers to improve their awareness and skills on managing daughters' sexual behavior, and it continued for 2 months. Consequences showed significant differences between the experimental and control groups in posttest scores on the Sexual Aspects Scale ($\alpha = 0.05$). These score variances favored the intervention group and show the beneficial effects of II training program in decreasing sexual behavior problems among adolescent girls with ASD. Moreover, the effect size results showed that the action had a moderate impact on the dependent variable, sexual behaviour dimensions.

Keywords: autism spectrum disorder, adolescent girls, sexual behavior problems, mothers' knowledge, social skills training, puberty.

INTRODUCTION

Adolescence is a transitional phase, and it represents an accelerated period of biological, psychological and social growth in which the psychosexual maturation becomes heightened (Edelson, 2010; Hamdan, 2022). The COVID-19 pandemic can be particularly challenging for individuals with autism spectrum disorder (ASD), given that they often present with lifelong symptoms of social communication and interaction deficits, as well as restrictive/repetitive patterns of behaviors (American Psychiatric Association, 2013). For far too long people with ASD have been misunderstood as disinterested in sex and romance, or worse still, sexually anesthetic (Hellemans et al. However, recent evidence indicates that many adolescents and young adults with ASD are so in that they are seeking social and sexual relationships, and have psychosexual needs similar to those of their counterparts who do not have an ASD (Byers & Nichols, 2014; Fernandes et al., 2016; Akrami et al., 2023).

Despite such shared interests, people with ASD sometimes find difficulty interpreting social microsignals and emotional cues, and respecting personal space (Mehzabin & Stokes, 2011; Visser et al., 2015). These difficulties may have some possible implications such as having limited sexual experience, unmet relationship need and proliferation of sexual frustration (Murrie et al., 2002; Coskun et al., 2009). Furthermore they can be predisposed to problematic sexual behaviors such as public masturbation, inappropriate touching of others and sexuo-obsessive behaviors among these adolescents due to poor social cognition and stereotypes concerning repetitive behavior (Chan and Saluja 2011).

Teenagers with ASD are at increased risk for sexual exploitation and abuse, due to their social inexperience and challenges in understanding the intentions of others (Visser et al., 2015; Maggio et al., 2022). This stresses the urgent need for psychosexual education programs and targeted training interventions that would increase awareness among adolescents and their caretakers on healthy sexual development (Koller, 2000; Ragaglia et al., 2023).

In contrast, women with ASD have their own obstacles to overcome when they reach adolescence. Although it has been reported that girls with ASD will still experience puberty at the same age as non-ASD friends, they seem to be slow on social and emotional skills due to their chronological ages (Corbett et al., 2020; Rimmington, 2025). Lack of ability to communicate effectively to young girls about menstruation in a way that is age-appropriate; instruct self-care menstrual management and offer follow-up hygiene care (Jackie 2005Holmes et al.2019; Mohammed Ali Alghamdi & Bakr Ahmed Mursi, 2025). Additionally, mothers fear over how their daughters appear physically and socially, as well as the potential threat of sexual abuse frail privacy and boundary comprehension around puberty aspects (Kalyva, 2010; Assaf & Al-Hayeh, 2024).

These data highlight the importance of mothers in promoting their daughters with ASD's sexual development. Mothers are typically their daughters' main educator and care provider to help them cope with puberty-related changes, emotional adjustment, and social adaptation (Elsaid, 2024; Barnameh et al., 2023). Yet, most of the mothers have insufficient information or low self-confidence to face sexual issues because they feel ashamed and uninformed as well as unable to access professional guidance easily (Suhanto & Dwihadiah, 2023; Shakuri & Alzahrani, 2023). Importantly, there is parental deficiency in knowledge; and preparedness to address sex-linked issues for adolescent girls with ASD, particularly in the Arab world where open discourse on sexuality continues to be restricted (Anza et al., 2024).

Intervention packages that integrate psychosexual education with social skills training have been shown to be effective at increasing parents' knowledge and decreasing inappropriate sexual behaviors in children/adolescents with ASD (Akrami et al., 2023; Fauziyah et al., 2023). Programmes of this kind, allowing mothers to improve their knowledge and communication practices enhance the mother's opportunity for promoting social interactions and emotional support in a positive way to be beneficial to their daughters. As indicated by Anza et al. (2024), organised parent education can be an effective tool for intervention to reduce the symptoms of sexual problems among adolescent girls with ASD; moreover, it can also increase adaptive functioning and life quality as a whole.

Therefore, the purpose of this study is to examine the effectiveness of a social-skills-based training program to be provided to mothers aimed at reducing sexual problems among their daughters with ASD asper adolescence. The proposed study aims to address a serious gap in the literature on parental education of psychosexual awareness in Arab societies, at a local level (Jordan specifically). Through examining how structured training impacts mother's awareness, attitudes and behaviors, the current study added valuable knowledge to the creating culturally-sensitive, research-based interventions that benefit healthy psychosexual adjustment in adolescent girls with ASD.

LITERATURE REVIEW

Sexual Awareness and Parental Education

One consistent finding in research is how important a role mothers play in the sexual maturation of children with developmental disabilities. Elsaid (2024), for example, examined sexual knowledge of mothers to 9-14 years old children with ID and whose IQ levels ranged from 55-79. The results of the study indicated that rational-emotive behavioral interventions had significant effects on maternal awareness therefore, structured programs aimed at parents with mentally retarded children gained importance. Similarly, Akrami et al. (2023) and Anza et al. (2024) showed that structured training programmes for adolescents with high function ing autism (HFA) had a positive impact on sexual knowledge and social skills, demonstrating the effectiveness of parent - included educational interventions.

Finally, these results are consistent with previous studies suggesting the importance of parent-focused programs for the prevention of sexual behavior problems in adolescents with ASD (Holmes et al., 2019; Hamdan, 2022; Anza et al., 2024). Together, these studies highlight the importance of parent involvement in active educational efforts and sex education being essential for sexual awareness as well as healthy sexuality development among individuals with ASD.

Problems in Sex Education for Teens on the Autism Spectrum

Sexual education is difficult in ASD adolescents, especially when they reach puberty. Indeed, studies have found that girls and women with ASD tend to experience age of onset of puberty earlier than their neurotypical counterparts (Corbett et al., 2020; Hamdan, 2022; Rimmington, 2025). This early developmental transition is associated with behavioral change, including decreases in stereotypic behaviors, social withdrawal and changes in sexual behavior; as such there is a need for interventions that support families to prepare them for this stage of development.

Further, it is difficult for parents to teach their children about sexuality and reproductive health. Shakuri and Alzahrani (2023) found precipitating causes to include inadequate parenting, lack of adjustable training, and concerns about sexually inappropriate social behaviors. Also, in the view of Mohammed Ali Alghamdi and Bakr Ahmed Mursi (2025), cultural and family background has an impact on how parents approach sexual education which indicates that there is need for programs to be culturally related so as to enable mothers gain practical strategy.

Sexual Behaviours and Knowledge in Young Children with ASD

A fuller account of sexual behaviors among adolescents and adults with ASD has been provided in extensive reviews.^{3,6} These reviews demonstrate that individuals with ASD engage in a variety of the same types of

sexual behaviors as their neurotypical peers. Maggio et al. (2022) and Fernandes et al. (2016) reported greater gender dysphoria, non-heteronormative sexual orientation, and diminished sexuality knowledge in individuals with ASD. Schöttle et al. (2017) is that males with high-functioning ASD are more involved in hypersexual and paraphilic behaviors during childhood, with implications on how sex education should be tailored to the behavioral and cognitive profile of these patients.

There have also been reports of inappropriate sexual behavior, including public nudity, excessive interest in the bodies of others and use of objects inappropriately for sexual activity, by adolescents with ASD (Jalal 2020; Mehzabin & Stokes 2011; Hellemans et al. These results imply that youths with ASD may be more vulnerable to misuse of their access if they are not taught appropriate use.

Psychosexual Training Programs

Structured psychosexual education programs have been demonstrated to be highly effective in increasing sexual knowledge, social competence, and behavioral outcomes among adolescents with ASD. For example, Visser et al. (2015) that addressed a total of 330 adolescents and tests, after the completion of 18 individual sessions, however, improvement in sexual knowledge and reduction in inappropriate behaviours was observed. Similarly, Fauziyah et al. (2023) concluded that sexual health state enhances after applying the sex education in effect on special schools and Akrami et al. (2023) has confirmed that selective procedures related to puberty ages are responsible for such a great improvement in the dimension of sexual knowledge, and on the area: social skills, among adolescents with HFA. Taken together, these results have relevance for early systemically oriented and parent-involved preventive work to support healthy sexual development.

Summary and Implications

Taken together, they also highlight that prevention-focused sexual education interventions for adolescents with ASD and their parents are needed sooner rather than later. There are reports which have shown that interventions that actively engage parents, utilize culturally relevant strategies, and deliver information using age-specific modules have produced important result in terms of enhancement sexual knowledge and reduction of unhealthy sex behaviors (Holmes et al., 2019; Hamdan, 2022; Anza et al., 2024). Moreover, given women with ASD special difficulties at pubertal stage, programs involving mothers and receiving specific training is needed for in improving their sexual knowledge and health development. Therefore, it is timely and required that these promising interventions are applied to address the identified gap in literature (Shakuri & Alzahrani, 2023; Maggio et al., 2022; Corbett et al., 2020).

METHODOLOGY

Research Design

The present study utilized a quasi-experimental design to investigate a social skills-based training intervention designed to impact mothers' knowledge about sexual behavior in their postpubertal daughters with autism spectrum disorder (ASD). The design was made up with treatment group and control groups (untrained in relation to the former) for both pre- and post-testing. For educational and psychological interventions where randomization is not feasible, this quasi-experimental model is highly suitable (Akrami et al., 2023; Anza et al., 2024). The design description is given by:

Experimental group: (O₁ X O₂)

Control group: (O₁ O₂)

(O) observation or testing; X treatment or intervention. This method allowed us to test the effectiveness of the training programme in relation to our dependent variable—awareness of sexual issues amongst mothers—and it gave us a good amount of control over confounding variables.

Study Population and Sample

This study population was mothers of adolescent girls with ASD and sexual behaviour problems attending some special education centres with Jordanian Zarqa governorate during the academic year (2024-2025). The girls were 12–15 years old, an age at which significant physiological and psychological changes associated with puberty take place (Hamdan, 2022; Corbett et al., 2020). The researchers carried out an initial survey among more than one autism centre (Zarqa Autism Centre, Malak Al-Nour Autism Centre and Steady Steps Autism Centre) to select the study participants.

A sample of 40 mothers was recruited initially, and they were evaluated using the Sexual Aspects of Adolescent Girls with Autism Spectrum Disorder Scale. For the study sample, 30 mothers from that group whose scores on the measure belonged in the higher range—suggesting more difficulties and need for intervention—were purposively selected. Participants After obtaining ethical approval and informed consent following general research practices (Assaf & Al-Hayeh, 2024; Holmes et al., 2019), we recruited participants that were randomly assigned to the experimental condition (n = 15) or control group (n = 15). Table 1 Distribution of the study sample by group and test phase.

TABLE 1 Distribution of study sample members according to group type and scale in pre- and post-tests

Group type	Pre-test	Post-test	Follow-up test
Experimental group	15	15	15

Control group	15	15	—
Total	30	30	15

Only the follow-up (tracing) test to ascertain whether training effects persisted over time was administered in the experimental group of children as presented in Table 1.

Group Equivalence

To establish the equivalence of experimental and control groups prior to the implementation of intervention, means and standard deviations were calculated and independent sample t-test for pre-test scores of sexual aspects scale was administered by the researchers. There were no significant differences between the groups after completing ANZEA with respect to all of these variables ($p > 0.05$), which suggests that at baseline, both of them were similar (Anza et al., 2024). This should enhance the internal validity of this study and anything measured post test should be assignable to intervention versus control effects. Tables 2 shows the results.

TABLE 2. Application of the t test and means (and standard deviation) for experimental (n=15, in control group and n=15 in experimental group) groups on the pre-test scale of sexual problems as per Group variable

Group	Number	Arithmetic Mean	Standard Deviation	t-value	df	Sig. (p)
Experimental	15	3.31	0.269	0.399	28	0.693
Control	15	3.27	0.255	—	—	—

The non-significant difference ($p = 0.693$) indicates that groups are not different before the social skills training programme has been introduced.

Instrument

The core instrument of data collection was the newly developed Sexual Aspects of Adolescent Girls with Autism Spectrum Disorder Scale, built after a thorough study of literature on sex and autism (Eftekhari et al., 2022; Fauziyah et al., 2023; Maggio et al., 2022). The scale comprised 49 items measured on a five-point Likert scale from “1 = to a small extent” through “5 = to a very great extent”. It was developed to assess the degree of sexual and social knowledge that mothers of females with ASD have concerning their daughters’ sexual and social issues in areas including knowledge about sex, autism’s effect on communication and behaviour.

Instrument Validity and Reliability

Construct validity was achieved by computing correlations between each item and the total scale score in an exploratory sample of 30 mothers. As displayed in Table 3, the correlation coefficients varied from 0.53 to 0.89, $p < 0.01$ for all of these analyses. These findings indicate the internal consistency and construct validity of the scale (Frieht et al., 2023).

TABLE 3. Correlates of the items with total scale score

Item No.	r	Item No.	r	Item No.	r
1	.78**	18	.79**	35	.67**
2	.77**	19	.82**	36	.83**
3	.73**	20	.72**	37	.68**
4	.77**	21	.75**	38	.66**
5	.66**	22	.73**	39	.77**
6	.67**	23	.79**	40	.75**
7	.73**	24	.65**	41	.78**
8	.63**	25	.56**	42	.81**
9	.86**	26	.73**	43	.70**
10	.89**	27	.56**	44	.87**
11	.67**	28	.78**	45	.64**
12	.74**	29	.56**	46	.86**
13	.76**	30	.63**	47	.82**
14	.88**	31	.73**	48	.77**
15	.53**	32	.78**	49	.82**

16	.70**	33	.66**	—	—
17	.74**	34	.76**	—	—

* $p < 0.05$, ** $p < 0.01$

In addition, a test–retest method was used to assess reliability with a correlation coefficient of 0.88 for Test and Cronbach’s $\alpha = 0.83$ for Test, both indicators of strong reliability (Visser et al., 2015; Anza et al., 2024).

Normality Test

Normal distribution of the data was tested by the Kolmogorov-Smirnov test and Shapiro–Wilk tests before parametric test. The results showed that variables were normally distributed ($p > 0.05$) and, consequently, the data was amenable to parametric statistical analysis (Akrami et al., 2023). See Table 4 for these data.

TABLE 4. One-Sample Kolmogorov-Smirnov and Shapiro–Wilk tests for study variables

Variable	Kolmogorov–Smirnov (Test Value)	Sig.	Shapiro–Wilk	Sig.
Experimental (Pre-test)	0.103	0.2	0.976	0.935
Experimental (Post-test)	0.124	0.2	0.967	0.813
Experimental (Follow-up)	0.096	0.2	0.987	0.997
Control (Pre-test)	0.128	0.2	0.977	0.948
Control (Post-test)	0.165	0.2	0.925	0.227

The result with non-significant ($p > 0.05$) shows that there is normal distribution of the variables.

Training Programme

The social skills–based training program aimed to help mothers understand sex and social themes among adolescent girls with ASD. The program consisted of 13 sessions, delivered in 4 weeks (3 times per week), and lasting for 40–50 minutes/session. The content was addressed through key areas such as communication skills, knowledge of puberty, emotional development, setting physical boundaries and healthy sexual behavior (Goleman, 2006; Ragaglia et al., 2023). The mixture of lectures, discussions and exercises aimed at establishing a good level of participation and practical activity.

The covered sessions as well as their structure and topics are shown in Table 5.

TABLE 5. Programme sessions to raise parents’ awareness about the sexual conflicts experienced by adolescent girls with ASD

Session	Session Title	Session Objectives	Session Procedures / Techniques Used
1–2	Relationship building	Establish trust, introduce goals, and encourage participation	Lecture, open discussion
3–4	Improving communication	Teach effective verbal and non-verbal communication strategies	Discussion, guided role-play
5	Understanding sexual issues	Explore puberty-related changes and challenges	Lecture, dialogue
6–7	Raising awareness of sexual drive	Discuss healthy sexual needs and boundaries	Expert talks, practical activities
8–9	Addressing sexual preoccupations	Identify and manage inappropriate sexual behaviours	Case studies, group reflection
10	Promoting healthy behaviour	Enhance understanding of healthy sexual conduct	Group sharing, skills training
11	Cleansing therapy	Teach appropriate personal hygiene management	Demonstration, guided support
12	Alienation therapy	Introduce therapeutic distancing strategies	Discussion, family role-play
13	Final session	Review achievements and gather feedback	Group reflection, evaluation

Study Procedures

The research was systematically conducted for consistency and reliability. In the first phase of the study, researchers visited autism centres to present the study, sign informed consent and recruit participants. Mothers were borderline aware with SA Scale at baseline assessment. After this procedure, participants were randomized to the experimental and control conditions. The intervention group attended the training sessions and were compared with a no-treatment control group on a waitlist during the study period.

Pre-, post-on follow-up tests were developed and administered at different time points to assess the change of awareness. The group took place for 2 months, followed by data collection and intervention, and all the results were statistically analyzed in order to determine the efficiency of the training program (Visser et al., 2015; Shakuri & Alzahrani, 2023).

This Methodology describes a sound and consistent design of the study, sampling design, measuring instruments and statistical confirmation as well as intervention programme that is well based on most recent scientific literature providing clear tables for transparency.

FINDINGS

First Hypothesis

The first null hypothesis (H0) of the study was that; "there is no significant difference at 0.05 level between the mean ratings of subjects who are members of experimental-groups and those who are members of control groups on whom programme-use to raise awareness among mothers towards sex among their adolescent-girls with autism- after puberty" was rejected.

To test this hypothesis, arithmetic means, standard deviations, and adjusted mean scores of mothers of adolescent daughters diagnosed with ASD on the Sexual Aspects Scale at both pre-test and post-test assessment as a function of type of group (experimental vs. control) were computed. Results are listed in Table 5.

TABLE 5. Means, SDs and adjusted means of mothers scores on the sexual aspects scale pretest and post-test by group (EXPER; CTRL) in adolescent girls with autism spectrum disorder.

Group	N	Pre-test		Post-test		Adjusted Mean	Standard Error
		Mean	SD	Mean	SD		
Experimental	15	3.31	0.269	3.92	0.215	3.909	0.05
Control	15	3.27	0.255	3.62	0.206	3.624	0.05

If you look at table 5, you will see that there are discrepancies between the means and adjusted means of both these groups; in fact, the arithmetic means of post-tests scores are higher among the experimental group than their counterparts in the other group members. To test for the significance of these differences, posttest scores were submitted to a one-way ANCOVA controlling for pretest effect. The results are shown in Table 6.

TABLE 6. One-way ANCOVA results for post-test scores of mothers of adolescent girls with autism spectrum disorder in the sexual aspects scale after controlling pre-test scores

Source of Variance	Sum of Squares	df	Mean Square	F-value	Sig. (p)	Eta ² (η ²)
Pre-test	0.242	1	0.242	6.517	0.017	0.194
Group	0.603	1	0.603	16.222	0	0.375
Error	1.004	27	0.037	—	—	—
Total	1.912	29	—	—	—	—

As can be seen in Table 6, the differences are statistically significant ($\alpha = 0.05$) between experimental and control groups on the Sexual Aspects Scale. Statistically the difference is found to be significant, and in favour of experimental group, with $F = 16.222$ ($p = 0.000$). In addition, the effect size ($\eta^2 = 0.375$) indicates that the training intervention explained about 37.5% of the variability in the dependent variable, which is a large effect.

Thus the null hypothesis is rejected and the alternate is accepted, which established that, after application of training programme mothers of adolescent daughters with ASD showed significant awareness about sexual issues. These findings are in accordance with earlier studies regarding the effectiveness of systematic educational interventions in improving parental knowledge about sexual development and proper behavioural setting for children with ASD (Anza et al., 2024; Akrami et al., 2023).

Second Hypothesis

The other hypothesis was that "there are no statistically significant differences at the significance level ($\alpha = 0.05$) between the mean scores of experimental group in post-test and follow-up test to sexual aspects scale for adolescent girls with autism spectrum disorders directed to mothers."

To test this hypothesis, paired sample t-tests were used to compare the scores of the experimental group in post- and follow-up tests. The average and the standard deviations of both testing phases are depicted in Table 7.

TABLE 7. Means, Standard Deviations and T-test results of the scores of mother of adolescent girls with autism spectrum disorder in sexual aspects scale for pre and follow up tests

Application	N	Mean	SD	t-value	df	Sig. (p)
Post-test	15	3.92	0.215	1.382	14	0.189
Follow-up	15	3.89	0.202	—	—	—

The information in Table 7 shows that there are no significant differences ($p = 0.189 > 0.05$) between the post-test and follow-up test scores for mothers of the experimental group. This indicates that the effects of the training programme were retained over time (an enduring treatment effect).

DISCUSSION

Discussion of the First Hypothesis

The results of the first hypothesis clearly indicate that the training programme which is based on social skills significantly increased mothers' knowledge about sexuality-related issues of their adolescent daughters with ASD. The positive post-test increase in experimental group scores as compared to controls suggests that structured parent education might have had an influence on sexual and behavioral problems related with autism. This finding is in good agreement with that obtained by Anza et al. (2024), who demonstrated that parent education based on social skills approaches can increase awareness and decrease maladaptive behaviours in girls with ASD.

Additionally, the results of the present study are in line with Akrami et al. (2023) who demonstrated that programs targeting sexual knowledge and social interaction skills were even successful in increasing self-control and insight of HFAs when parents, teachers or professionals invested at least eight hours supporting the learning process. The current findings lend more support to the previous findings of Fauziyah et al. (2023) and Holmes et al. (2019) who underscored the importance of parental communication, and involvement in improving sexual education outcomes for adolescents with autism.

However, these results are not consistent with those obtained by Elsaid (2024), whose intervention based on the training of mothers of children affected by ID showed no significant gains in sexual awareness. The difference might be attributed to programme arrangements, training time and the unique characteristics of children with different developmental disorders. In this context, the emphasis of the current intervention on social cognition, communication and real-life application seems to have paid off.

Discussion Of The Second Hypothesis

Hypothesis 2: Long-term effects of the intervention across time period. Further, the failure to find significant differences between post-test and follow-up scores indicates that mothers maintained their increased sensitivity without subsequent reinforcement for at least 1 month. This result suggests that the training programme enabled long-term learning and internalisation of behaviour, crucial to its success (Maggio et al., 2022).

Longitudinal study by Visser et al. (2015), who found that sexual education programs for youth with ASD led to enduring increases in knowledge and social skills when parents were actively involved. Moreover, the present findings are consistent with those of Shakuri and Alzahrani (2023) who emphasised that parents' sustained, informed involvement in their children's lives acknowledges confidence enhances the effectiveness of sex education interventions for autistic children.

Conversely, Corbett et al. (2020) observed that differences in timing of puberty among girls with ASD can affect stability in the effects of intervention. Notwithstanding these developmental difference, the current examination highlights that organised parental sex education brings about a lasting framework for facing sexual issues, albeit with its evolution influenced by individual development epoches.

Comparative Interpretation with Previous Studies

The present results, and their contrast to previous literature, suggest the criticality of parental education in addressing sexual and developmental issues among adolescents with ASD. The obtained results agree with those of Jocelyn et al. (2019) who found that early and structured family-based education has a positive effect on parents' preparedness to navigate their children's transition through puberty. Similarly, Hamdan (2022) emphasized the need to enable parents with knowledge about puberty-based challenges that hopefully encourage adaptive sexual behaviors among autistic youth.

More broadly, these findings add to a small but increasing pool of empirical support linking broad, socially-targeted educational programs with enhanced parental competence and adolescent well-being (Assaf & Al-

Hayeh, 2024; Ragaglia et al., 2023). The interactive and hands-on nature of the programme (e.g. discussions, modelling, guided communication) probably contributed to its success in delivering positive effects. In conclusion, the findings offered by this study provide strong evidence regarding both the efficacy and long-term durability of a social skills-based training intervention to develop mothers' knowledge about sexual matters in adolescent girls with autism. One) The null hypothesis H 01 : The means of both experimental and control group are equal was void and it indicates the statistical significance differences between groups which were in favor of intervention. The second hypothesis was supported, suggesting that gains were maintained throughout the follow-up interval. Taken together, these results highlight the importance of parent-centered and socially embedded educational interventions to facilitate healthy sexual knowledge as well as adaptive coping for families of youth with ASD.

CONCLUSION

This research adds further support that a manualized, parent-assisted social skills intervention for mothers that increases knowledge of and practice in managing sexual behavior problems within post-pubescent girls with ASD is feasible. The intervention successfully addressed the lack of knowledge among parents related to sexual development, social relationships and behavior management of adolescents with ASD in the particular Jordanian cultural context.

At the post-test evaluation, trained mothers scored significantly higher on the Sexual Aspects Scale and seemed to be better informed about those aspects of sexuality and also had more adequate ways of accompanying daughters' psychosexual development than control ones. This large effect size ($\eta^2 = 0.375$) is further evidence of the practical benefit of such an intervention, as approximately 38% of the variance in knowledge for mothers was the result of program training.

scores as statistically non-significantly decreased after intervention ($p > 0.05$), which showed that the effect of educational program persisted until follow-up studies. This information speaks to the program's ability not only to increase immediate attention but also long-term retention of knowledge and affective strategies that will enable mothers to offer their daughters ongoing support in complex scenarios associated with pubertal development.

The current literature also suggests that parental involvement is one critical aspect of sexual behavior problems in adolescents with ASD. That fact that the presented program, by including interaction (discussion, role plays and real life application), put a lot of emphasis on interactive learning might have further increased mothers' confidence, self-efficacy and the skills to address sensitive issues in pragmatic ways. These results are consistent with the existing literature demonstrating both the importance of culturally relevant, parent-based interventions and healthy sexual development for adolescents with ASD.

Collectively, results suggest that parent-focused SST is an effective, sustainable, and culturally appropriate intervention targeting sexual issues in post-pubertal girls with ASD. Such interventions might be a crucial way to improve child and maternal outcomes in children with ASD by improving mothers' knowledge, communication skills, and skills for managing negative behaviour. Future studies need to address scale-up of these programmes, involve fathers and other caregivers, and lengthen follow-up to better capture long-term effects on family processes, adolescent autonomy and psychosocial outcomes.

FUNDINGS: No funding from funding agencies in the public, commercial, or not-for-profit sectors was used.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the mothers who participated in this research and staff of Zarqa Autism Centre, Malak Al-Nour Autism Centre, & Steady Steps Autism Centre for their collaboration and help. The contributions of the research assistants to data collection and intervention delivery are greatly appreciated. The authors would also like to thank colleagues and advisors for feedbacks and directions that improved the quality of this work.

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