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The Effect of Assertive Training on Adolescents' Ability to Assertive in Refusing Premarital Sex: A Quasi-Experimental Approach

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ABSTRACT: Premarital sex behavior among adolescents is reproductive health issue. The behavior has been reported to be primarily caused by low assertiveness, which encourages engagement in premarital sex. This study aimed to determine the effect of assertive training on increasing assertiveness against premarital sex in adolescents. This quantitative study was carried out using a quasi-experimental and a control group pretest-posttest design. The procedures were conducted in Wonokromo sub district of Surabaya Indonesia, from May to July 2025. The sample consisted of 40 adolescents aged 13–20 years old, who were selected using a purposive sampling technique and divided into 2 groups. Each group comprised an experimental and a control group. Subsequently, intervention was carried out through assertive training over 5 sessions. The instrument used was Sexual Assertiveness Scale questionnaire, followed by data analysis using paired and independent t-tests. The results showed that the independent t-test gave a *q* value of 0.000 ($p < 0.05$), indicating a significant difference in the mean level of assertiveness after the intervention between experimental and control groups. The paired t-test showed a *q* value of 0.000 ($p < 0.05$) for pre- and post-intervention assertiveness levels in the experimental group, showing a significant increase after the intervention. Based on the results, assertive training was effective in improving adolescents' ability to refuse premarital sex firmly and is recommended for integration into reproductive health education programs.

1. INTRODUCTION

Adolescence is a complex developmental phase characterized by the search for self-identity, increased social exploration, and the emergence of sexual interest. During this phase, adolescents experience significant biological, psychological, and social changes, leading to risky decision-making regarding sexual behavior[1].

Based on the current phenomena, the majority of adolescents are often in romantic relationships. A previous study revealed that most adolescents believed this phase was a time for dating. Consequently, those who are not in relationships are often considered to be outdated, out of touch with the times, and socially inexperienced[2]. Other studies showed that their sexual behavior in dating often leads to free sex behavior[3]. Dating activities typically include chatting, kissing, and necking, which all started with curiosity and eventually became commonplace[4].

Another challenge faced by adolescents presently is the increasing exposure to uncontrolled sexual information through social media, the internet, or social circles [5] which increases the chance of premarital sex. Coercion or invitation from a boyfriend is also a major cause, due to the fear of being dumped [6]. This is primarily caused by a lack of knowledge and skills in managing social pressures related to sexuality.

When these challenges are not addressed, it can lead to many negative effects that are harmful. Premarital sex in adolescents often causes several serious issues, such as out-of-wedlock pregnancy, unsafe abortions, transmission of sexually transmitted infections (STIs), psychological problems, and even dropping out of school [7]. Although adolescents have negative attitudes toward premarital sex, many often cannot refuse sexual advances due to a lack of assertiveness in expressing their views and defending decisions.

According to previous studies, sexual assertiveness is the ability to express one's needs, boundaries, and decisions firmly in a sexual context without feeling guilty or afraid of offending others [8]. This ability is crucial to establish boundaries in relationships, resist pressure from partners, and make sexual decisions that align with their values and beliefs.

Adolescents' assertiveness skills are often low due to inadequate education or training on how to communicate assertively and self-respect in social and sexual relationships [9]. One technique that can be applied for improvement is assertiveness training, which is a psychological intervention aimed at improving the ability to express thoughts, feelings, and desires honestly without harming others [10].

Assertiveness training has been proven effective in numerous studies for improving interpersonal skills, including in the context of reproductive health. The training provides not only knowledge but also practical experience through role-playing techniques, group discussions, and feedback, which can strengthen the ability to deal with sexually stressful situations [11]. It can also help adolescents recognize their right to say "no" to unwanted sexual. Therefore, this study aimed to determine the effect of assertive training on increasing assertiveness against premarital sex or unwanted sexual in adolescents. The results are expected to support efforts to prevent risky sexual behavior and serve as a foundation for creating more practical as well as context-specific reproductive health education programs in Indonesia.

2. MATERIALS AND METHODS

2.1 Study design

This quantitative study was conducted with a quasi-experimental and control group pretest-posttest design. The independent variable was Assertive Training, and the dependent variable was Adolescents' Anti-Premarital Sex Assertiveness.

2.2 Setting

This study was conducted in the Wonokromo sub district of Surabaya Indonesia, from May to July 2025.

2.3 Sample

The sample size was 40 adolescents, who were selected using purposive sampling, using inclusion criteria. The inclusion criteria were adolescents aged 13 to 20, able to read and write, and in a relationship, while exclusion criteria were those who refused to participate. After eligibility screening and completion of the pre-test, participants were allocated into an experimental group (n=20) and a control group (n=20) using a non-random allocation procedure. Experimental group received assertiveness training, while control group received did not receive the assertiveness training during the study period.

2.4 Instrument

The instrument used was Sexual Assertiveness Questionnaire (SAQ) for Adolescents, which was developed based on aspects of sexual communication, refusal skills, and assertiveness in setting boundaries (reliability $\alpha = 0.85$). Each variable was classified into 4 categories based on a score, namely very good, good, poor, and very poor. The questionnaire's validity test results were declared valid with a significance value of less than 0.05, and its reliability value was declared reliable with a Cronbach's Alpha value of more than 0.50. Furthermore, the intervention procedure was carried out over 5 sessions.

2.5 Intervention

The intervention procedure was conducted in five sessions over two days. Session 1 focused on an introduction to assertiveness and self-concept; Session 2 addressed understanding sexuality and the impact of premarital sex; Session 3 covered assertive communication techniques; Session 4 involved role-play on refusing sexual intercourse; and Session 5 consisted of reflection and evaluation. Each session lasted 60 minutes.

On the first day, participants conducted pre-test and received material on the definition of assertive behavior and comprehensive knowledge of reproductive health and the risks of premarital sex using lectures, discussions, and brief case

examples. On the second day, participants learned basic assertive communication techniques and practiced skills to refuse premarital sexual advances through role-play and demonstrations.

The final stage of the intervention involved reflection and evaluation through group discussions, exercises to develop personal action plans, and self-commitment. Before the completion of the assertiveness training, a post-test was administered to assess adolescents' sexual assertiveness in refusing premarital sexual advances using the Sexual Assertiveness Questionnaire (SAQ) (Figure 1).

Table 1. Topics of Assertive Training

Session	Indicators
Pre-test	Pre-test Sexual Assertiveness Scale (SAQ)
Session 1	introduction to assertiveness and self-concept
Session 2	understanding sexuality and the impact of premarital sex
Session 3	assertive communication techniques
Session 4	role-play on refusing sexual intercourse
Session 5	reflection and evaluation
Post-test	Post-test Sexual Assertiveness Scale (SAQ)

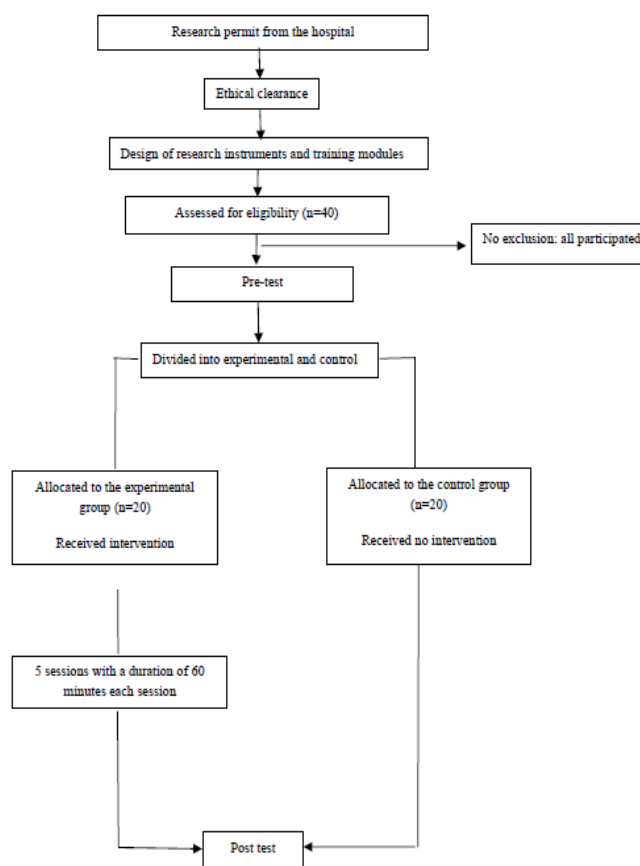


Figure 1. Flow chart of the study

2.6 Data analysis

Data were analyzed using a paired t-test, and the independent t-test was used to test the mean difference between experimental and control groups in SPSS.

2.7 Ethical considerations

This study received approval from the Chakra Brahmanda Lentera Institution Study Ethics Committee with ethics letter number: No. 024/10/V/EC/KEP/LCBL/2025. All participants were given a complete explanation of the objectives as well as procedures and provided written informed consent. This study was conducted while upholding ethical principles, including respecting participants' rights, maintaining data confidentiality, and ensuring that there were no risks that harmed participants.

3. RESULTS AND DISCUSSION

3.1 Descriptive statistics of variable

Table 2 showed that total of respondents was 40 participants, the majority of participants were in late adolescence (17-19 years old) (52.5%), and most of respondents were female (60%).

Table 2. Adolescents' Characteristics

Variable	N	%
Age		
Early Adolescence (10-13 years)	5	12,5
Middle Adolescence (14-16 years)	14	35
Late Adolescence (17-19 years)	21	52,5
Gender		
Female	24	60
Male	16	40

3.2 Differences in the Level of Sexual Assertiveness in Experimental and Control Groups

Table 3 showed that the mean level of assertiveness in experimental group before the intervention was 15.10 ± 4.025 , while the mean in control group was 14.50 ± 3.253 . Independent t-test obtained a p value of 0.607, indicating no significant difference in the mean level of assertiveness before the intervention between experimental and control groups.

After the intervention, the mean level of assertiveness in experimental group was measured at 20.60 ± 3.691 , while the mean in control group was 15.00 ± 3.277 . Independent t-test obtained a p value of 0.000, indicating a significant difference in the mean level of assertiveness after the intervention between experimental and control groups.

The results of the Paired t-test showed that the level of assertiveness before and after the intervention in experimental group obtained a value of $p = 0.000$, indicating a significant increase in adolescent sexual assertiveness after the intervention. This suggested that assertive training effectively increased adolescent sexual assertiveness. In the control group, the paired-samples t-test showed no significant difference between pre-test and post-test assertiveness scores ($p=0.66$).

Table 3. Differences in the Level of Sexual Assertiveness in Experimental and Control Groups

Variable	Group		p -value
	Experimental (n=20)	Control (n=20)	
Before Intervention			
Mean $\pm$ SD	15.10 $\pm$ 4.025	14.50 $\pm$ 3.253	0.607 ¹
After Intervention			
Mean $\pm$ SD	20.60 $\pm$ 3.691	15.00 $\pm$ 3.277	0.000 ¹
Difference between the p-values before and after the intervention	0.000 ²	0.66 ²	

¹independent t test

²paired t Test

3.3 Discussion

Most participants in this study (52.5%) were in late adolescence (17-19 years old). This is a time when young people often explore their identity, experience a heightened sexual drive, and are heavily influenced by peers, media, and romantic relationships [12]. Lacking assertiveness can make adolescents more likely to give in to pressure for sexual intercourse, even if it goes against what personal beliefs [12]. Sexual assertiveness is simply the ability to clearly communicate one's needs, limits, and choices about sex, such as saying 'no,' setting physical boundaries, and refusing unwanted advances without feeling guilty or worried about upsetting someone [13]. When young people aren't assertive, there is a higher risk of premarital sex, unplanned pregnancies, and STIs [14].

The study showed that the intervention significantly boosted sexual assertiveness in the experimental group ($p = 0.000$), indicating its effectiveness. This training helped adolescents understand their bodily autonomy and sexual decision-making rights. It also built their confidence to firmly refuse sexual advances and improved communication skills for healthier relationships. Ultimately, assertiveness-based programs can strengthen adolescents' refusal skills against sexual pressure, helping to reduce early sexual activity [15].

Essentially, this psychological training teaches people how to express their thoughts, feelings, and opinions directly, honestly, and politely in all kinds of social situations, even when it comes to sexual decisions¹⁰. The training involved group discussions, role-playing, feedback, and self-reflection. It worked well because it helped adolescents grasp their bodily autonomy and sexual rights, gave more confidence to firmly say no to sexual advances, and taught communication skills necessary for healthy social and romantic relationships. The study found a significant increase in assertiveness scores for the trained group compared to the control group, directly showing that the training improved adolescents' ability to refuse premarital sex. This improved assertiveness was also linked to better self-confidence, a clearer understanding of personal rights, and stronger communication skills learned during the training. The lack of improvement in the control group further validated the intervention's impact. These outcomes support the cognitive-behavioural idea that social behaviour can be built and reinforced through practice and positive feedback [16]. Assertive training provided a safe space for adolescents to try new behaviours, get feedback, and build confidence.

The study results offered important insights for adolescent reproductive health programs. Many schools and educational institutions focused only on the biological aspects of sexuality education, neglecting to develop social-emotional skills like assertiveness. Assertiveness training programs must be incorporated into the school reproductive health curriculum through collaboration with guidance counsellors, school psychologists, or adolescent health facilitators. Such training not only helped prevent premarital sex but also reduced the risk of sexual violence and promoted healthy relationships in the future.

4. CONCLUSION

In conclusion, assertive training has been proven effective in increasing assertiveness against premarital sex among adolescents. This training develops adolescents' assertive communication skills, boosts self-confidence, and enables refusal to unwanted sexual advances firmly. Based on the results in this study, strengthening sexual assertiveness is an essential part of efforts to prevent risky sexual behaviour among adolescents. This training serves as a preventive approach in adolescent reproductive health programs. Schools and educational institutions can include assertive skills training in the guidance and counselling or adolescent reproductive health curriculum, making it applicable and relevant, specifically in addressing the increasingly complex social and cultural challenges of today's digital era. This study had several limitations, including a relatively small sample size and brief training duration. Purposive sampling may have introduced selection bias because participants were selected based on predefined eligibility criteria. Third, the outcomes were assessed immediately after the intervention, so it is unclear whether the improvement in assertiveness was maintained over time. Furthermore, cultural and religious factors affecting attitudes toward premarital sex were not directly assessed. Future studies must use a longitudinal design to examine long-term effects and include other variables such as self-esteem, peer pressure, and religiosity to explore variations in responses to training.

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AUTHOR CONTRIBUTIONS

Siska Nurul Abidah: Conceptualization, Investigation, Writing—Review & Editing.

Lutfi Agus Salim: Supervision, Methodology.

Nurul Hartini: Supervision, Data Curation, Formal Analysis.

Yati Isnaini Safitri: Data Curation, Formal Analysis.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ETHICS STATEMENT

This study received approval from the Chakra Brahmanda Lentera Institution Study Ethics Committee with ethics letter number: No. 024/10/V/EC/KEP/LCBL/2025.

DATA AVAILABILITY STATEMENT

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

REFERENCES

- [1]. Santrock JW, ProQuest. Adolescence: McGraw-Hill Education; 2015.
- [2]. Setiawan R. The influence of dating on premarital sexual behavior. *Soul Journal*. 2008;1.
- [3]. Kaltiala-Heino R, Savioja H, Fröjd S, Marttunen M. Experiences of sexual harassment are associated with the sexual behavior of 14- to 18-year-old adolescents. *Child abuse & neglect*. 2018;77:46-57. 10.1016/j.chiabu.2017.12.014.
- [4]. Moore S, Rosenthal D, Moore SM, Rosenthal DA. Sexuality in adolescence: Current trends: routledge; 2007.
- [5]. Haberland N, Rogow D. Sexuality education: emerging trends in evidence and practice. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*. 2015;56(1 Suppl):S15-21. 10.1016/j.jadohealth.2014.08.013.
- [6]. Karantzas GC, McCabe MP, Karantzas KM, Pizzirani B, Campbell H, Mullins ER. Attachment Style and Less Severe Forms of Sexual Coercion: A Systematic Review. *Arch Sex Behav*. 2016;45(5):1053-68. 10.1007/s10508-015-0600-7.
- [7]. Kirby DB, Laris BA, Roller LA. Sex and HIV education programs: their impact on sexual behaviors of young people throughout the world. *Journal of adolescent Health*. 2007;40(3):206-17.
- [8]. Noar SM, Morokoff PJ, Harlow LL. Condom negotiation in heterosexually active men and women: Development and validation of a condom influence strategy questionnaire. *Psychology and Health*. 2002;17(6):711-35.
- [9]. Widman L, Choukas-Bradley S, Helms SW, Golin CE, Prinstein MJ. Sexual communication between early adolescents and their dating partners, parents, and best friends. *The Journal of Sex Research*. 2014;51(7):731-41.
- [10]. Alberti R, Emmons M. Your perfect right: Assertiveness and equality in your life and relationships: new harbinger publications; 2017.
- [11]. Deardorff J, Tschann JM, Flores E, Ozer EJ. Sexual values and risky sexual behaviors among Latino youths. *Perspectives on sexual and reproductive health*. 2010;42(1):23-32.
- [12]. Sarwono SW. Psikologi remaja. 2001.
- [13]. Rickert VI, Sanghvi R, Wiemann CM. Is lack of sexual assertiveness among adolescent and young adult women a cause for concern? *Perspectives on sexual and reproductive health*. 2002:178-83.
- [14]. Turchik JA, Gidycz CA. Prediction of sexual risk behaviors in college students using the theory of planned behavior: A prospective analysis. *Journal of Social and Clinical Psychology*. 2012;31(1):1-27.

- [15]. Sarkova M, Bacikova-Sleskova M, Orosova O, Madarasova Geckova A, Katreniakova Z, Klein D, et al. Associations between assertiveness, psychological well-being, and self-esteem in adolescents. *Journal of Applied Social Psychology*. 2013;43(1):147-54.
- [16]. Bandura A. Social foundations of thought and action. Englewood Cliffs, NJ. 1986;1986(23-28):2.