Basic Research

The Effect of An Education Program on Adolescent Masturbation Knowledge, Self-Esteem, Body Image and Attitude Using a Participatory Learning Approach

¹Aliaa Mohammed Othman El-afandy and ²Eman Hafez Ahmed Hagrasy

¹Assistant professor in Community Health Nursing Department, Faculty of Nursing, Helwan University, Egypt. ²Lecturer, community health nursing. Faculty of Nursing, Fayoum university

Abstract

Masturbation can lead to several issues, including harm to one's physical or mental wellbeing and in certain cases, Peyronie's disease, where a localized benign tumor is caused by vigorous manipulation that distorts the look of erectile function. Aim: evaluate the effect of an education program on adolescent masturbation knowledge, self- esteem, body image, and attitude using a participatory learning approach. **Design**: A quasi- experimental design with one-group pretest-posttest was used setting: This study was conducted at two secondary schools (Tagreeby) that selected randomly in El-Masara, Helwan district, Egypt. Sample: purposive sampling technique was used to choose 80 students, of both sexes. Tool: One tool was used as self-administered questionnaire consisting of five parts; students' demographic data, knowledge questionnaires, attitudes assessment scale, self-esteem scale, and body image assessment scale regarding masturbation. **Results**: 22.5%, and 53.8% of the studied students had good knowledge and negative attitude pre-program, which improved to 87.5%, and 92.5% of them had good knowledge and negative attitude post-program respectively, also self-esteem, and body image mean ± SD changed from 19.27±1.93, and 10.50±3.20 to 24.65±1.64, and 11.75±2.85 post program respectively with highly statistically significant difference. Conclusion: The hypothesis was accepted since the secondary school students' knowledge, attitudes, self-esteem, and body image regarding masturbation improved as a result of an education Program that used a participatory learning approach Recommendations: continuous education program to increase information about masturbation and its consequences among all students in secondary schools.

Key words: adolescent, attitude, body image, education program, knowledge, masturbation, participatory learning approach, and self-esteem.

Introduction:

Masturbation is a communal sexual behavior throughout the lifecycle. Understanding its role in sexual functioning, satisfaction, and psychological well-being is essential. Historically, masturbation has been prohibited in many religions and cultures, often viewed as a vice due to its focus on pleasure and beliefs that it weakens the body or affects sexual potency. Recently, a more objective perspective has emerged, recognizing masturbation as an important pathway for adolescents to learn about their bodies and sexual responsiveness (Chavula et al., 2022).

Masturbation involves self-stimulation of the genital organs, typically the penis or clitoris, for sexual gratification, often accompanied by sexual fantasies or erotic media (pictures, or videos). It can also include the use of mechanical devices or self-stimulation of other body parts as anus or nipples and can occur alone or with another person that called mutual masturbation (**Herbenick et al., 2022**).

Worldwide adolescents engage in sexual activities and have a tendency to be involved in possibly unhealthy sexual behavior, facing health risks such as HIV/AIDS. Internationally approximately 40% of all human immune virus/aids diseases cases involve adolescents aged 15-20 years, with an estimated 7000 youths infected daily. Masturbation, though stigmatized, is prevalent globally, with men reporting more frequent masturbation compared to women. Studies direct high rates of masturbation among adolescents in different nations around the world containing Australia, China, Croatia, Denmark, Finland, Germany, the UK, and the USA. Various studies have established that masturbation is United Kingdom came in at first. Germany came second. The U.S. denoted 76 percent of girls masturbating from time to time that tied for second (Kılıçet al., 2023).

The proportion of adolescents in the world's population is 16%, the highest in recorded history. Embarrassment and silence from adults, such as parents, teachers, and religious leaders, can intensify conflicting, negative, and confused signals about sexuality that many young people encounter as they approach adulthood. Occurrence of masturbation is influenced by resistance to sexual tension, levels of hormones, sex behaviors, and effects of peer, and cultural attitudes. Medical causes have also been associated with masturbation, though typically as an effect rather than a cause, with the exclusion of placing a foreign thing into the urinary bladder (**Herbenick et al., 2023**)

Effective health education program for adolescents in schools needs attractive and effective means of teaching as participatory learning approach, which is considered a distinctive method of a powerfully ways of getting people involved, contributors in the full life cycle of tasks, examinations and assignments, learner focused, and engaging students actively through learning by doing ,role-playing, discussions in small groups, solving problems, playing gamed based on concrete material and peer teaching. This approach enhances knowledge, attitudes, and skills more effectively than traditional methods (Nazarpour et al., 2021).

School health nurses play a crucial role in sexual health education and improve access to information and resources to mitigate the negative consequences of early, unprotected, or forced sexual intercourse. School nurses are the main associates for student's information of healthy sex and help stop the spread of sexually transmitted diseases such as HIV infection through students screening. The magnitudes of high-risk sexual behaviors, requiring knowledge, skills, and a supportive attitude those are important in compelling significant sexual histories and providing counseling. School nurses must convey support to students and

provide a non-judgmental attitude rather than know what to ask students, and how to do in a sensitive, and caring manner (Conceição, et al .2024).

Significance of the study

In Egypt masturbation is still a serious but little-discussed health problem, where it is prohibited for people to engage in. The most prominently displayed misunderstandings in Egypt are those pertaining to menstruation, virginity, masturbation, and men's capacity to regulate sexual desire; even with official figures, the data would still be wildly inaccurate. In Egypt and most Muslim countries, a large number of highly trained medical professionals hold the view that masturbating is an unhealthy practice and viewed as a sin in Islam (**Fischer and Træen 2022**).

Study aim

The study aimed to evaluate the effect of an education program on adolescent masturbation knowledge, self-esteem, body image, and attitude using a participatory learning approach.

Research hypothesis:

Implementing an educational program will improve adolescents' knowledge about masturbation, self-esteem, body image, and attitudes using a participatory learning approach

Operational definition of participatory learning approach:

An approach to teaching and learning that focuses on the learner. It encourages learning by doing, using small groups, concrete materials, opens questioning, and peers teaching.

Sexual experience defined as the name suggests requires the cooperation with another person to express their sexuality and people engage in a variety of sexual acts. Unlike masturbation where you just need to ask yourself, sexual experience requires to get many more things coordinated for it to work and occur, and dealing with two people who at any given moment may be thinking, feeling or wanting very different and conflicting things.

Subjects & Method

Research design:

In this study a quasi-experimental research design with one-group pretest-posttest was used

Setting:

The study was directed at secondary schools (Tagreeby) in El-Masara district Helwan, Cairo Governorate Egypt. El-Masara district contains four secondary schools(Tagreeby), selected one randomly that contain two classes for 1st grades, and two for second grades, the total number of students in each class recruited through the academic year 2021-2022 was 35–40

Subjects:

It is purposive sampling technique selected 80 students, with selection criteria of both sexes, certain age groups, having smart phones, and agreed to participate.

Tools of data collection:

Tool designing after appraising the latest literature,

Structured Pre-Post assessment self-administrated questionnaire that contains the following five parts

Part one: Demographic Assessment data that used to assess participants demographic as age, sex, educational level, first masturbation and sexual experience.

Part two: knowledge questionnaire guided by Jiao, et al 2022 that used to assess knowledge about masturbation as (definition, causes, symptoms, diagnosis, complications and treatment).

Scoring: The scale composed of forty closed ended questions with yes and no alternative response summed the total score A scoring system categorized knowledge levels as poor (<50%), average (50%-75%), and good (>75%).

Part three: Self-esteem assessment scale by (Gray-Little., et al 1997)

This tool translated by researchers to Arabic language that inquiry Personality and Social Psychology Bulletin. Comprise 10-item that measures both positive and negative feelings about the self, using 4point Likert scale format ranging from strongly agree take four points to strongly disagree that take one point

Scoring:

Items 2, 5, 6, 8, 9 are reverse scored. Sum scores and keep scores on a continuous scale. Higher scores indicate higher self-esteem.

Part four: Negative attitude assessment Likert Scale by Mosher, 2011.

Was used to assess participant negative attitude about masturbation

Scoring: Composed of 30-item, with 3-point Likert scale of the attitudes towards masturbation Inventory, that anchored by 1 (not at all true for me) and 3 (true for me). The item number 3, 5, 8, 11, 13, 14, 17, 22, 27, and 29 were reversed score. Summed score from 30 to 90 with higher scores indicating more negative attitudes. Attitudes were categorized as negative (<50%) or positive ($\ge50\%$).

Part five: Body Image assessment Likert scale guided by (Oliveira, 2015)

Was used to assess body image and contain five items as "How well do the following statements apply to you?" was the main query. The five comments were: "I feel strong and healthy," "I am proud of my body," "I am happy with the physical changes of my body in recent years," and "I am happy when I think about how I will look in the future."

Scoring: a four-point Likert scale that went from (1) "Describes me very well" to (4) "Does not describe me at all," participants assessed how well the statements related to them. Five statements were scored in reverse order, with a higher score denoting a more positive body image. The scale's results fell between 5 and 20, where 5 denoted a very low body image and 20 a very high body image.

Testing validity:

A board of five community health nursing specialists reviewed the tools' content and face validity for appropriateness, completeness, clearness, and consequence. No changes were made; however, the experts suggested rewording a few of the tool's questions and elements.

Tools reliability:

Was evaluated in order to ascertain how closely the questionnaire items relate to one another. Using Alpha Cronbach reliability analysis to test the tool's dependability revealed that:

Tools	Alpha Cronbach
Knowledge items	0.82
Attitudes items	0.94
Self esteem	0.87
Body image	0.92

Ethical Considerations

A formal consent to accomplish the proposed study established from Helwan University's Faculty of Nursing's Scientific Research Ethics Committee. Subjects were fully

informed about the study, including its nature and purpose, the decision to withdraw at any time, and the confidentiality of the data, which would not be shared with third parties without the participants' consent. Participation in the study was entirely voluntary. Respect was shown for ethics, morals, culture, and beliefs.

Pilot Study

A formal consent was obtained to administer the work to eight students, or ten percent of the sample, in order to evaluate the tools' for practicability, simplicity, and transparency. The duration of the questionnaire collection was also determined upon, and any problems encountered during data collection were documented. Participants in the pilot research were involved in the total sample size because no modifications were made.

Field Work:

The education program phases: This study was conducted by assessment, planning, implementation and evaluation phases as following:

I. Assessment phase:

With the permission of the school directors, the researchers met with the students and clarified the objective of the study, how to use the participatory learning approach to gather, gain and present information by the students' and their peers' assistance, in order to achieve the desired outcome. The data collection and providing the program took place around two semesters (November to May), on Tuesday, **from 10:00 a.m. to 1:00 p.m** in the available school classes designated for activities. each student **need from 20 to 35 minutes** to finish the questionnaire during the students' academic day, which the researcher reviewed to make sure that the answers were as uniform as possible and to offer clarification when necessary which lasted two weeks for pretest approximately, and then began the program sessions, which lasted for four months, with four sessions for each group, each session lasting two hours and a half, the sessions were given to one groups daily and then the post-test was conducted, which also took two weeks.

II. Planning phase: Programme objectives were established after areas of weakness in students' information were determined by an examination of pretest data that obtained during the assessment phase on identifying the actual needs of students and pertinent literature. Therefore, the researchers used participatory approaches to construct an education Programme about masturbation aimed at improving students' knowledge, attitude, self-esteem, and body image.

The number of required sessions and the participation education approaches were decided. With the help of the students, a simple Arabic text book was created, complete with eyecatching, vibrant illustrations that will serve as a future guide and reference for the learners. Through lectures, brainstorming sessions, role plays, demonstrations, and re-demonstrations utilizing data displays, images, videos, and a booklet created by the researchers and students, the participatory education Programme was carried out.

IV. Implementation phase: The researcher carried out the education Programme sessions at this period. The sessions lasted for thirty weeks, or half a year. Every week, each group had four sessions lasting from 45-60 minute. The study sample was split up into four groups, with 20 students in each group. The groups met for four days.

This booklet contains an overview of the meaning and causes of masturbation, as well as information on high-risk groups, risks factors, complications, general effects, effects on future sex and sexual practice, physical, psychological, and social effects, educational effects,

and protective methods using participatory learning approach that focused on learner based participation. It also includes information on self-esteem, body image, participatory learning approach meaning, methods, and process, as well as information on how learning achievement. Each session ended with a review of the previous one and an explanation of the goals for the following one.

V. Evaluation phase: An evaluation was conducted on the effect of an education Programme on masturbation among secondary school students, using the same instrument, they would be completed twice: once before Programme implementation and once just after Programme sessions conclude.

IV. Statistical analysis:

Data entry and statistical analysis were done using the statistical package for social science (SPSS), version 26. Frequencies and percentages for qualitative variables, Chi-Square test for comparing qualitative categorical variables. Paired T Test used for comparing means in normally distributed quantitative variables between two groups. Pearson's Correlation Coefficient for detecting correlation between two quantitative variables in one group. Significance Levels arranged as Not Significant when P-value > 0.05, Statistically Significant when P-value ≤ 0.05 and Highly Statistically Significant with P-value ≤ 0.001

Results:

Table (1) indicates that 86.3% of the studied students were in the age group 14-15 years old, with mean and standard deviation 15.18 \pm 1.92 years, 55% of them were males, 93.8% , and 36.2of them never experience sexual and masturbation practice before respectively with 52.5% practice masturbation once a month.

Table (2): shed light on, 53.8% of the studied school students had negative attitude regarding masturbation preprogram, which improved to 92.5% from them had negative attitude level post program with 13.46 paired T test and 0.000 p value.

Figure (I): illustrate significant improvement in student attitude in post program than pre program

Table (3): represents that, 61.2% of the studied school students had average knowledge level and 22.5% had good level regarding masturbation preprogram, which improved to 87.5% from them had good knowledge level post program with 15.65 paired T test and 0.000 p value.

Table (4): shows that there was highly statistically significant difference ($P \le 0.001$) in school students' self-esteem regarding masturbation pre and post program, and there was a statistically significant change (P < 0.05) for body image.

Table (5) shows that the pre-program total knowledge and attitude of the examined students had a very statistically significant positive link. Additionally, there was a strong positive association ($P \le 0.001$) between attitudes, knowledge, and self-esteem and body image.

Table (I): Distribution of Secondary School Students' According to their Demographic Characteristics regarding masturbation (n=80).

Demographic characteristics	The studied sample (n=80)					
	No.	%				
Age	•					
Mean $\pm SD \pm 15.18 \pm 1.92$						
14-<16	69	86.3				
16-≤18	11	13.7				
Gender						
Male	44	55				
Female	36	45				
Age of first sexual experience(interco	urse)					
Non	75	93.75				
14	5	6.25				
Age of first masturbation experience(s	self-manipulated					
Non	29	36.2				
12	12	15				
13	32	40				
14	7	8.8				
Current masturbation frequency						
Never	29	36.25				
Once a month	42	52.5				
few times every month	4	5				
One per week	5	6.25				

Table (2): Statistical Difference between the Studied sample total Secondary school Students' attitude regarding masturbation Pre and Post education Program (n=80).

Total attitude	Studied Sample(n=80)					P
	Pre		Post			
	No.	%	No.	%		
Levels of total attitude :						0.008
Negative level	43	53.8	74	92.5		
Positive level	37	46.2	6	7.5		
Range	34		19			
Mean ± SD	58.9±6.8		74.03±8.21			
Paired T test	13.46					0.000

^{*}Significant (P<0.05)

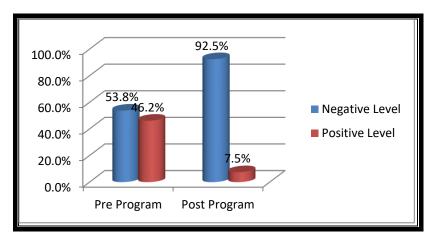


Figure (1): Percentage distribution of Students' attitude about masturbation before and after education programme (n=80).

Table (3): Statistical Difference between the Studied secondary School Students' total knowledge regarding masturbation Pre and Post education Program (n=80).

Total knowledge	Studied Sample(n=80)				χ^2	P
	Pre		Post	Post		
	No.	%	No.	%		
Levels of total know	Levels of total knowledge:					
Poor level	13	16.2				
Average level	49	61.2	10	12.5		
Good level	18	22.5	70	87.5		
Range Mean ± SD	37 65.15±9.100		7	16 70.32±4.64		
Paired T test		15.65				0.000

^{*}Significant (P<0.05)

Table (4): Mean and standard deviation of studied secondary school self-esteem and body image pre and post program, (N = 80).

self-esteem and body image	The studied sample						
	Pre	T-test	P value				
	Range	Range					
	Mean ± SD	Mean ± SD					
Self-esteem	19.27±1.93	24.65±1.64	23.21	0.000**			
Body image	10.50±3.20	11.75±2.85	2.07	0.04*			

^{*}Significant (P<0.05)

applying program (N=80).								
Knowledge,	Changes of scores of total knowledge, attitude, self-esteem and bod						d body	
attitude, self-	image pre program							
esteem and	knowledge Attitude Self esteem					steem	Body image	
body image								
	r	р	r	р			r	р
Knowledge	1		0.856	0.000	0.144	0.203	0.725	0.000
Attitude	0.856	0.000	1		0.051	0.650	0.685	0.000
Self esteem	0.144	0.203	0.051	0.650	1		0.386	0.000
Body image	0.725	0.000	0.685	0.000	0.386	0.000	1	

Table (5): Correlation between Knowledge, attitude, body image and self-esteem Pre applying program (N=80).

Discussion:

Masturbation, when practiced excessively, can lead to various physical and psychological complications that may impact an individual's daily life and relationships. These complications include feelings of guilt, often stemming from cultural, spiritual, or religious beliefs, and physical symptoms such as lower back pain, fatigue, hair loss, erectile dysfunction, premature ejaculation, vision problems, and pelvic or groin pain (WHO, 2024).

Concerning demographic characteristics the present study found that most of the participants were in age group from 14-16 years old, possessing a mean age of 15.18 ± 1.92 years. Approximately half of the participants were male. Most of participant and nearly more than one-third had never engaged in sexual activity or masturbation before respectively, while more than half practiced masturbation once a month. These findings align with those of **Díaz-Rodríguez**, et al. (2024), Spain, who reported similar demographic characteristics in their study on "Insights from a Qualitative Exploration of Adolescents' Opinions on Sex Education" and stated that nearly all of the participants in the study were 14- 15year-old students; 50% were male and 50% female.

Also agree with **Chou,etal.(2022)**in Southern Taiwan, who study "Effectiveness of a school-based social marketing intervention to promote adolescent sexual health "and reported that In total, 76 participants reported having had prior sexual experience (5.4%); among these, 59 were boys (4.2%) and 17were girls (1.2%). In addition, 19 (25.0%) and 57 (75.0%) of participants had their first sexual experiences when at elementary and junior high school, respectively.

From the perspective of the researcher, the little practices of sexual and masturbation activity may be connected to the fact that masturbation conflict with morals or values, or being against one's religion and we live in an Islamic society that is governed by Islamic allusions, customs, and traditions that limit and postpone masturbation and illicit sexual activity.

Regarding knowledge and attitude level the findings of this study found before the educational program, less than two-thirds of the students had an average knowledge level about masturbation, and less than one-quarter had a good knowledge level. Post-program, a significant improvement was observed, with the majority achieving good knowledge levels with 15.65 paired T test and 0.000 p values. Also the study demonstrated a significant improvement in students' attitudes toward masturbation post-program, that more than half from study sample had positive attitude regarding masturbation preprogram, which improved

^{*}Significant (P<0.05)

to most from them had negative attitude level post program with 13.46 paired T test and 0.000 p value.

These finding are in the same line with **Chou,et al.(2022)**showed that following the sessions, the participants' overall average sexual knowledge score was 1.55 points higher, showing a substantial gain in sexual knowledge (p <.001). Following the sessions, individuals' sexual attitudes showed a significant improvement over their pre-intervention opinions (p <.001). Additionally, there was a positive link between the individuals' attitudes and sexual knowledge (r = .357, p < .001).

These findings are consistent with those of **Mohamed et al. (2017),** who observed significant improvements in knowledge and attitudes toward masturbation among blind adolescents post-educational intervention in a study title "Effect of Educational Program about Masturbation on Blind Adolescent Students' Knowledge and Attitude "Egypt, whom reported that adolescents affected with blind had poor knowledge and negative attitude related to masturbation and there was a very statistically significant difference in pre than post program implementation.

Similarly, **Díaz-Rodríguez et al.** (2024) noted a general lack of knowledge about sex education among participants, highlighting the need for comprehensive educational programs.

Nazarpour et al.2021 study "A Comparison between the Skills-Based Education with a Lecture-Based Education on Female Adolescents' Knowledge, Attitude and Practice about Health in Puberty: A Randomized Trail Stud" in Tehran, Iran found that knowledge and attitude were significantly better in the skills-based education group compared to the lecture-based group immediately after the interventions (P = 0.002 and P = 0.045, respectively) and two months later (P = 0.001 and P = 0.034, respectively.

Based on the perspective of the researchers, lack of knowledge and attitude may be related to the fact that masturbation is an unpleasant matter for the community and is still viewed as a sensitive and uncomfortable subject in addition that Islamic nation as Egypt and many societies have attitudes and laws that discourage public discussion about masturbation and sexual behaviour, this inadequate preparation increases the risk of other harmful outcomes for adolescents and youth and finally in Egypt, there are no official education curriculums that address masturbation and other sensitive topic.

The point of view presented by the researchers was accepted by **Achora et al. (2020)** in Pretoria, South Africa. They conducted a study on "Perceptions of adolescents and teachers on school-based sexuality education in rural primary schools in Uganda" and reported that their data analysis showed that school-based sexuality education was beneficial to adolescents.

The results of this study are corroborated by a study by **Mbarushimana et al. (2023)** titled "Not just the consequences, but also the pleasurable sex": a review of the content of comprehensive sexuality education for early adolescents in Rwanda. The study examines the content of CSE for early adolescents that lead to significant improvement after the program carry out.

Regarding self-esteem and body image the study showed a highly significant improvement in students' self-esteem and body image post-educational program, with a p-value ≤ 0.001 for self-esteem and < 0.05 for body image. These results consistent with **Alimohammadi et al .2019**whom reported significant increases in self-esteem scores following an educational intervention in study titled "The Effects of Multimedia-Based Puberty Health Education on Male Students' Self-Esteem in the Middle School" Iran and found that before the education, the intervention and control groups' mean and standard deviation of the self-esteem ratings were 28.37+3.58 and 27.89+3.82, immediately after the

education, 32.17+3.12 and 27.50+3.56, and three months later, 33.83+3.32 and 27.32+4.37, respectively. After the intervention, there was a substantial difference (p<0.001) in the mean self-esteem scores between the two.

Similar findings were reported by **Tavakoli et al. (2018)** who studied "the influence of assertiveness training on self-esteem in female students of government high schools of Shiraz, Iran: A randomized controlled trail" and **Yoo, 2018** studied "the effect of school based Maum meditation program on the self-esteem and school adjustment in school students "Korea, who demonstrated that educational interventions could effectively enhance students' self-esteem.

Philippa et al 2024 who study "A pre-post evaluation of the impact of the Embrace Kids film on adolescent's and adults' body image and self-compassion "Australia , and reported improvements in body image and self-compassion among young people and adults after watching the Embrace Kids film, reinforcing the positive impact of educational content on self-perception .

Rom researchers point of view these improvement may be related to the effect of education program especially with using participatory learning approach which improve participant cooperation and acquiring more knowledge, negative attitude, increased self-esteem and improve participant body image.

In terms of study variable correlation the study discovered a strong statistically significant positive correlation between students' pre-program attitudes and overall knowledge. Furthermore, a statistically significant positive association (p < 0.001) was found between self-esteem, knowledge, attitudes, and body image. These results are consistent with those of **Awiti and Jura (2022)**, whom study Comprehensive sexuality education (CSE) toolkit trainer's instructional guide and showed there was a statistically significant positive link found between the attitude of student's immediately following Programme implementation and their total knowledge scores. Sexuality education has the most impact when school-based programmes are complemented with the involvement of parents and teachers, training institutes and youth-friendly services.

From researchers perspective these finding may be related to improved knowledge lead to improve attitude and change body image, that lead to enhance self-esteem.

Conclusion: Drawing on the study's results and research hypotheses, the following conclusions can be made:

The results of the study supported the research hypothesis which showed that, the educational program using participatory learning approach significantly improved secondary experimental school students' knowledge, attitudes, self-esteem, and body image regarding masturbation. A highly significant positive correlation was found between knowledge and attitudes, as well as between body image, attitudes, knowledge, and self-esteem pre-program ($P \le 0.001$).

The current study's findings led to the following recommendation suggestions being made:

- Incorporate ongoing education program for secondary school students to improve their comprehension of self-mutilation, or masturbation.
- **Solution** Give educational pamphlets about masturbating to students in the classroom.

Further research:

More studies on masturbation among schoolchildren are required, including a big sample drawn from all Egyptian schools

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الملخص العربي

تأثير البرنامج التعليمى على معرفة المراهقين بالعادة السرية، واحترام الذات، وصورة الجسم والاتجاهات باستخدام نهج التعلم التشاركي.

المقدمه :يمكن أن تؤدي العادة السرية إلى عدد من المشكلات، بما في ذلك الإضرار بالصحة الجسدية أو العقلية أو التعب أو الألم، وفي بعض الحالات، مرض بيروني، حيث يؤدي التلاعب العدواني - مثل التغير أثناء فترة المراهقة أو ثني القضيب أو التواءه - إلى حدوث ورم موضعي حميد. ورم يشوه مظهر وظيفة الانتصاب.

الهدف: تقييم تأثير البرنامج التعليمي على معرفة المراهقين بالعادة السرية، واحترام الذات، وصورة الجسم والاتجاهات باستخدام نهج التعلم التشاركي.

التصميم: تصميم شبه تجريبي.

مكان الدراسة: أجريت هذه الدراسة في مدرستين ثانويتين تجريبتين تم اختيار هما عشوائيا في منطقة المعصرة بمحافظة حلوان بمصر.

العينة: عينة مناسبه مكونة من 80 طالباً من الصف الأول الثانوي التجريبي.

الأداة: تم استخدام إحدى الأدوات وهي ورقة استبيان ذاتية الإدارة مكونة من خمسة أجزاء؛ البيانات الديمو غرافية للطلاب والمعرفة والاتجاهات واحترام الذات وصورة الجسم فيما يتعلق بالاستمناء.

النتائج: اسفرت النتائج على تحسن معرفة طلاب المدارس الثانوية واتجاهاتهم واحترامهم لذاتهم وصورة الجسم فيما يتعلق بالعادة السرية نتيجة للبرنامج التعليمي الذي استخدم منهج التعلم التشاركي

التوصيات: مواصلة الحملات التعليميه التثقيفية لزيادة الوعي بالعادة السرية بين جميع الطلاب في المدارس الثانوية.