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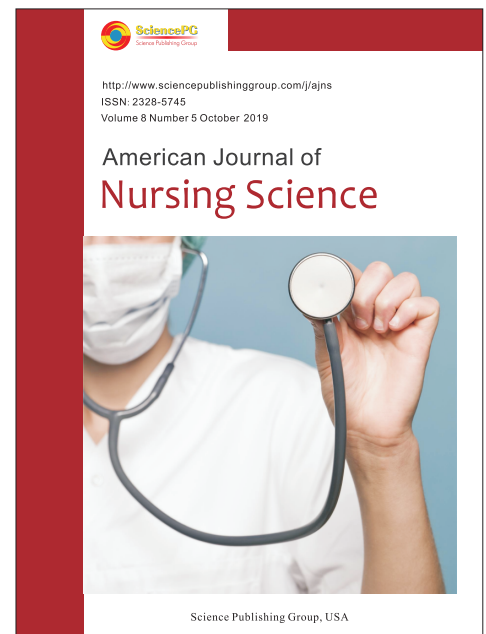
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The Effect of Life Skills Intervention on Social Self Efficacy for Prevention of Drug Abuse Among Young Adolescent Students at Benha City

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Abstract: *Background.* Young adolescent has to prepare for a global successful adult life of competition and independent functioning which is possible only through enhancing their psychosocial competencies through life skills training. As a health care provider, the school nurse is in a unique position to act as health educator, a change agent for youth substance abuse prevention. This study aims to evaluate the effect of life skills intervention on social self-efficacy for prevention of drug abuse among young adolescent students at Benha City. *Methods.* A quasi-experimental design was utilized. The study was conducted at two Preparatory Schools in Benha City (Benha Preparatory School for Boys and Benha Shared Preparatory School). Simple random sample of 120 students were included in the present study. Two tools were used for data collection; first tool. The Children's Self-Efficacy in Peer Interactions (CSPI). It was used to measure confidence in social interactions. Second tool; The Life Skills Training Questionnaire-Elementary Student (LSTQ-ES). This tool is designed to measure changes in knowledge, attitudes, and behaviors of elementary students related to social confidence and drug resistance skills. *Results.* The mean age of the studied students was 14.9±0.45 years. There were statistically significant improvements ($P<0.05$) regarding to students' social self-efficacy in conflict & non-conflict situations, life skills knowledge & anti-smoking knowledge, anti-drinking and anti-smoking attitudes and life skills behaviors after the life skills intervention as compared to before. *Conclusion.* life skills intervention was efficient in improving students' social self-efficacy in conflict & non-conflict situations. also, knowledge of life skills & anti-smoking knowledge, anti-drinking and anti-smoking attitudes and life skills behaviors were improved after implementation stage on young adolescent students. *Recommendation.* The school nurse should plan and perform constant life skills training workshops for students as effective tools of drug abuse prevention in schools.

Keywords: Life Skills, Social Self Efficacy, Drug Abuse, Students

1. Introduction

Adolescence is the period of transition from child hood to adulthood and from period under parental control to the independence during which major physical, cognitive, and psychological changes occur that may have impact on adolescent's life. This period of development is between the

ages of 10 and 19 years. It is also a period of "storm and stress" for many adolescents. Though, biological forces play a significant role in the physical changes that takes place during this period. It is a time young people drift away and distance from parents. Spending more time with peers and conforming to the ideas and judgments of their peers. This transition is so crucial as they face problems in certain areas of life such as parent child conflicts, substance abuse,

violence, risky behaviors and mood changes. If these issues are not resolved the individual suffers role diffusion or negative identity, which results in mismatched abilities and desires. [1-2]

Teenagers became involved in substance use at an early age, especially between 11 and 14 years. Young people in this age range have little self-efficacy and resistance against substance use and are often unable to resist peer pressure attempts to use various substances. [3] The self-efficacy and helping adolescent to behave more rationally in the face of challenging life experiences is an effective factor in preventing the use of harmful substances such as alcohol and cigarette. However, if children and youth have not developed a positive self-efficacy, which is associated with self-esteem, they may become more vulnerable to a negative or risky response to experiences which require a strong self-efficacy. Individuals with low self-esteem have lower self-efficacy in resisting substance use. [4, 5]

Drug addiction is the root of insecurities in the society and poses threats to health and hygiene of the society as the whole. Due to medical, health, economic, social, and legal problems caused by drug abuse, the society needs to seriously pay more attention to effective preventive strategies. [6, 7] The trainings have been helpful for controlling smoking and drinking habits and drug abuse, preventing violence and crime, preventing suicide improving emotional and social adaptation, decreasing anxiety. [8]

Life skills training is a comprehensive and general program that actually deals with the skills that an individual needs to succeed in their adult lives like self-awareness, proper communication, problem solving, anger management, and handling stress are of the main concepts dealt in training. [9] Some examples also include teamwork, targeting and leadership. Such life skills can be seen as individual funds that improve educational states of young adolescent, life qualities and economic prosperity in their future lives. Public health programs should be directed targeting adolescents to prevent the onset of substance use and ultimately addiction in Egypt and elsewhere. [10, 11]

The adolescent has to prepare for a global successful adult life of competition and independent functioning which is possible only through enhancing their psychosocial competencies through life skills training. As a health care provider, the school nurse is in a unique position to act as health educator, a change agent for youth substance abuse prevention. School nurses have the opportunity to identify, address the impact both risk factors and protective factors within school, family and community liaison. [12]

1.1. Conceptual Framework

The conceptual framework underlying the current study builds on the Bandura's self-efficacy theory as it defined self-efficacy as an individual's judgment of their capabilities to organize and execute courses of action. It implies that people can exercise influence over what they do and, through reflective thought, a person can use knowledge and skills to perform specific behaviors. Social confidence implies

perceived capabilities to execute a course of action in social interactions and suggested that judgment about an individual's self-efficacy is based on four informational sources enactive attainment, vicarious experience, verbal persuasion, and physiological feedback. [13]

Social support and social skills decrease vulnerability to stress, depression, physical illness, and poor health choices such as cigarette smoking, alcohol, and marijuana use, also through self-efficacy, perceived confidence in social capabilities will allow children to resist the pressure to engage in high risk activities such as drug use and early sexual activity. Botvin life skill training is one of the most widely disseminated drug prevention programs that improves self-esteem, decision-making skills, understanding harmful effects of tobacco use and misleading practices in advertising, and coping skills; and increase social confidence for resisting substance abuse and interacting positively with peers, social, and assertiveness skills. Life skill training extensively tested in a series of randomized trials and found effective in preventing cigarette smoking, alcohol, and drug use as well as violence and other health-risk behaviors. [14, 15]

Life skills training is one of the strategies proposed by the researchers. The term "life skills" refers to a large set of mental, social, and interpersonal skills that can help people make more informed decisions, effectively interact with others, enjoy physical-mental and social health, and deal with challenges and needs of their daily lives. [16]

1.2. Significance of the Study

Substance abuse is among the social challenges facing children. Children who lack social confidence and life skills are at risk for these and other socially deviant behaviors. Keeping children safe from drugs, violence, and bullying is a major goal of schools, communities, and health care providers. Evidence-based programs providing enhancement of social confidence and self-management of life skills during childhood are important for prevention of social problems such as peer violence and substance abuse. [17]

It is estimated that More than 1 in 5 of Egyptian university students used a substance at least once in their lives and the most common substances used by university students were cannabis (83.4%), tramadol (54.7%), and (40%) using alcohol. In total, 59% of the students who used substance had either drug-related problems or dependence while Egyptian young adolescent school males ages 12-18 who reported smoking cigarettes were (25%), water pipes (15%), hashish (6%), drinking alcohol (16%), and taking Tramadol (3%). [18, 19]

Young adolescent must be equipped with life skills for social confidence, self-management, and protection against drug use to deflate the challenges of substance abuse. Asserted that socially confident children are more academically successful and poor social skills are a strong predictor of academic failure. IT has posited that development of self-esteem, social skills, and empathy improves social functioning of adolescent, so prevention

programs should focus on development of self-control, emotional awareness, communication, and social problem solving and provision of academic support. [20] Therefore, the significance of this study can be reflected in its value in terms of continued research in this area, as well as what the results of this research will add to adolescents in schools, also it will open the way to many researchers to study new useful interventions for substance abuse. These data will help in the implementation of prevention and treatment programs in Egypt, and this fact emphasizes the importance of the current study.

1.3. Aim of the Study

To evaluate the effect of life skills intervention on social self-efficacy for prevention of drug abuse among young adolescent students at Benha City. This aim achieved through.

1. Assessing social self-efficacy, life skills & anti-smoking knowledge and attitude of young adolescent students to identify their needs.
2. Designing and implementing life skills intervention according to young adolescent students' needs.
3. Evaluating the effect of life skills intervention on young adolescent students' self-efficacy knowledge, attitudes, and behaviors related to and drug resistance skills.

1.4. Research Hypothesis

Self-efficacy, knowledge, attitudes, and behaviors related drug resistance skills will be improved after implementation of life skills intervention on young adolescent students

2. Subjects and Methods

2.1. Research Design

A quasi-experimental research design (pre/post-test) was used to test the study hypothesis.

2.2. Setting

The study was conducted at two Preparatory Schools in Benha City (Benha Preparatory School for Boys and Benha Shared Preparatory School).

2.3. Sample Type and Criteria

Simple random sample technique was used in this study. Four classes from eighth grade and ninth grade have been chosen randomly from the previous two schools, then male students of these classes who scored average or below average in all the two tests as per the norms of the test and accepted to participate in the study were included in the intervention.

2.4. Sample Size

120 students from the previously mentioned settings were taken.

2.5. Tools of Data Collection

Two tools were translated into Arabic language and used to conduct the study.

2.5.1. Tool I

The Children's Self-Efficacy in Peer Interactions (CSPI). It was used to measure confidence in social interactions. Developed by Wheeler & Ladd [21] the tool measures youths' perceptions of their ability to be successful in conflict and non-conflict social interactions. The tool was used before and after implementation of intervention and consists of 22 items that *was scored on four point scale* that consists of HARD!, Hard, Easy, and EASY! The students were instructed to choose HARD! if the social interaction was extremely hard and Hard if social interaction was less hard. The students were instructed to choose Easy if the social interaction was easy and EASY! if social interaction was extremely easy. The subscale items are summed to produce total scores. Items for efficacy in conflict situations subscale are 1, 4, 6, 10, 11, 13, 15, 17, 19, 21. Items for the non-conflict situations subscale are 2, 3, 5, 7, 8, 9, 12, 14, 16, 18, 20, 22. All 22 items can also be combined and summed to produce a total score of children's self-efficacy in peer interactions.

2.5.2. Tool II

The Life Skills Training Questionnaire-Elementary Student (LSTQ-ES). This tool is designed to measure changes in knowledge, attitudes, and behaviors of elementary students related to social confidence and drug resistance skills by National Health Promotion Associates [22] It was used before and after implementation of intervention and comprised of 42 items and involved four main sections.

1. Section A. Students' demographic data. This section assesses the student's birthday, gender, family structure, race and related variables (8 items)
2. Section B. Knowledge about life skills. This section includes 18 true/false items that assesses knowledge of various life skills training, two summary scores are produced. Anti-Smoking Knowledge and life skills knowledge. Summary scores reflect the number of knowledge items answered correctly. There is an overall knowledge score, as well as knowledge sub scores for anti-smoking knowledge and life skills knowledge.
3. To create an *overall knowledge summary score*, add up the number of items that are answered correctly and divide by 18 (the total number of knowledge items). This number gives you the proportion of knowledge items answered correctly.
4. To create *anti-smoking knowledge summary score*, add up the number of items (out of items 1-7) that are answered correctly and divide by 7 (the total number of drug knowledge items). This number gives you the proportion of drug knowledge items answered correctly.
5. To create *life skills knowledge summary score*, add up the number of items (out of items 8-18) that are answered correctly and divide by 11 (the total number of life skills

knowledge items). This number gives you the proportion of life skills knowledge items answered correctly.

6. Section C. Pro-Smoking and Pro-Drinking Attitudes. This section includes 8 items that assesses positive attitudes regarding alcohol and tobacco use. The best answer for these questions is for students to disagree with the statements. To create an *antismoking attitudes* summary score, add the number of times students disagreed with items 1, 2, 3, and 7 and to create an *anti-drinking attitudes* summary score, add the number of times students disagreed with items 4, 5, 6, and 8 in. Higher scores indicate better attitudes.
7. Section D. The life skills assessment. This section includes 8 items that assesses behaviors associated with social confidence and self-management. There are eight life skills items. The best answer for these questions is for students to respond *most of the time* or *very likely* with the statements, and the second best answer is for students to respond *some of the time* or *somewhat likely*. To create a life skills summary score, give each item a score of 2 for "most of the time" or "very likely," and 1 for "some of the time" or "somewhat likely" and 0 for "never" or "not likely." Then add up the scores for the individual items. Higher scores indicate better life skills.

2.5.3. Tools Validity

The tools were revised for validity of the content by a panel of six experts, three in Psychiatric Mental Health Nursing and three in community health nursing field to ascertain relevance and comprehensiveness.

2.5.4. Tools Reliability

Cronbach's Alpha coefficient test was used to test reliability which displayed that the tools involved homogenous items as showed by the moderate to high reliability of each tool. The internal consistency for entire scale of Self-efficacy was ($\alpha=.85$), for subscales ($\alpha=.73-.85$), and for LSTQ-ES was 0.77.

2.6. Ethical Considerations

Before data collection, the participants were knowledgeable about the purpose of the study. They were given a chance to reject or to join in the study. Moreover, they were informed that, their collected information would be personal and used only for the purpose of the study.

2.7. Pilot Study

10% of the sample (12) students was used for pilot study and were excluded from the study sample. The main purpose to assess the tools clarity and objectivity and estimate the time required to fill the tools of data collection.

2.8. Field Work (Intervention Construction)

A written approval to conduct this study after clarifying its purpose was taken from the Educational Administration in Benha and Undersecretary of the Ministry of Education.

Then written approval letter was given to the directors of the chosen schools. The study was carried out through four main phases. assessment, planning, implementation, and evaluation. These phases were carried out from beginning of July 2018 to the end of March 2019, covering along a period of 9 months. The previous settings was visited by the researchers two days/week (Sunday and Thursday).

2.8.1. Assessment Phase

The researchers interviewed the students during the school day. Upon consent to participate, students were interviewed to assess demographic data, Self-Efficacy in peer interaction, as well as The Life Skills. Students are asked to fill Self-Efficacy in peer interaction & Life Skills Training Questionnaire-Elementary Student. The data attained during this phase considered the baseline for further comparisons to evaluate the effect of intervention on students. Time needed to complete of interviewing questionnaires (25 minutes). An average number of interviewed students / week 5 student.

2.8.2. Planning Phase

The intervention was designed by the researchers in a form of printed Arabic booklet to satisfy the young adolescents' deficit knowledge and skills and according to the goal of the intervention which was to prevent drug abuse by providing youth with the necessary knowledge and skills for improving social self-efficacy to resist social influences to use drug, as well as to reduce motivation to use these substances. A booklet was designed specifically for students, in simple Arabic language to suit their level of understanding. It educates students life skills. The main focus of the intervention was on teaching of information for drug resistance skills, personal self-management and general social skills for increasing overall competence and promoting the development of characteristics associated with decreased risk of using drugs in the future. It comprises teaching self-awareness, proper communication, problem solving, anger management, handling stress, self-esteem, decision-making skills, understanding harmful effects of tobacco use and misleading practices in advertising, and coping skills; and increase social confidence for resisting substance abuse and interacting positively with peers, social, and assertiveness skills. All are of the main concepts dealt in training.

2.8.3. Implementation Phase

During implementation phase the intervention was applied. The researchers explained the educational materials using appropriate strategies as follow. Teaching communication skills and being an active listener was taught to them practically and verbally and role playing was used for teaching this skill as two students were asked to talk to each other. In using solution instead of criticizing the students were asked to find a solution when a problem occurs instead of criticizing others (problem-solving skill). Teaching controlling anger through using distraction techniques (including counting, leaving the situation and so on), breathing from diaphragm (in which the individuals inhale while counting to the number 3 in their minds and then

exhale slowly through mouth counting to the number 5), and relaxation were taught to the students. Teaching expressing emotions by using the sentence "I feel angered". Teaching creative thinking and using imagination when problems occurs. The students were asked to define their problems first when they occur and then imagine the solutions, finally employ them and innovate new solutions and take advantage of brainstorming. The intervention involved ten sessions which conducted to a small group (5-10) of the students (30-45 minutes each). At the beginning of the first session an orientation to the intervention and its purpose taken place. Feedback was given at the beginning of each session about the previous one. Methods utilized to teach the content of the intervention included lectures, facilitation and group discussion, as well as cognitive-behavioural skills, modelling and practice. The central role of the intervention provider was to act as a skills trainer or coach because the intervention emphasized the acquisition of personal, interpersonal, and social resistance skills. Cognitive-behavioral skills were taught by combining instruction, demonstration, behavioural.

rehearsal, social reinforcement and extended practice in the form of behavioural homework assignments.

2.8.4. Evaluation Phase

Evaluation was applied by comparing social self-efficacy, total knowledge scores and Pro-Smoking and Pro-Drinking Attitudes. The post-test was done three months after intervention to evaluate the effect of the implemented intervention.

2.9. Statistical Analysis

Data analysis was performed using Statistical Package for Social Sciences (SPSS version 20). Descriptive statistics were applied (e.g. frequency, percentages, mean, and standard deviation). Test of significance (paired t test, r test and chi-square test) was used to test the study hypothesis. Correlation coefficient was calculated between social self-efficacy, total knowledge scores, Anti-Smoking and Anti - Drinking Attitudes and life skills behaviours. A significant difference was considered at p-value ≤ 0.05 .

3. Results

Table 1. Distribution of the study participants according to their socio-demographic characteristics, and obstetric history. (n = 86).

Characteristics	No	%
Age		
14<15	18	15.0
15<16	94	78.3
16<17	8	6.7
Mean \pm SD	14.9 \pm 0.45	
living with whom		
Mother and father	120	100.0
Class		
8th grade	20	16.7
9th grade	100	83.3
Grades get in school		
Mostly A's (90-100)	52	43.3
Mostly B's (80-89)	48	40.0
Mostly C's (70-79)	12	10.0
Mostly D's (60-69)	2	1.7
D's or lower (less than 60)	6	5.0

Table 1: demonstrates demographic characteristics of the studied participants. It was clear that 78.3% of the studied students was aged from 15<16 years, with a mean age 14.9 \pm 0.45 years and all of the students living with mother and father. Moreover,

83.3% of them were in the 8th grade. Regarding students' grades in school, 43.3% of them mostly had A's (90-100) while only 5.0% of them had D's or lower (less than 60) More than half of them (51.2%) reported insufficient monthly income.

Table 2. Distribution of the studied participants according to their life skills knowledge and anti-smoking knowledge (n=120).

Items	Pre-intervention				Post-intervention				X ²	p-value
	Correct answer		Incorrect answer		Correct answer		Incorrect answer			
	No	%	No	%	No	%	No	%		
life skills knowledge and anti-smoking knowledge	43	35.8	77	64.2	120	100.0	0	0.0	113.3	0.000**
Cigarette smoking can cause your skin to wrinkle	48	40.0	72	60.0	120	100.0	0	0.0	102.8	0.000**
Cigarette smoking can cause your teeth to turn yellow or brown	48	40.0	72	60.0	118	98.3	2	1.7	95.7	0.000**
Cigarette smoking causes your heart to beat faster	48	40.0	72	60.0	120	100.0	0	0.0	102.8	0.000**
Smoking cigarettes can cause mouth cancer	82	68.3	38	31.7	118	98.3	2	1.7	38.8	0.000**
People who smoke cigarettes can usually stop anytime they										

Items	Pre-intervention				Post-intervention				X ²	p-value
	Correct answer		Incorrect answer		Correct answer		Incorrect answer			
	No	%	No	%	No	%	No	%		
want										
Most teenagers smoke cigarettes	86	71.7	34	28.3	120	100.0	0	0.0	39.6	0.000**
Most adults smoke cigarettes.	80	66.7	40	33.3	118	98.3	2	1.7	41.6	0.000**
It’s always best to make decisions quickly.	34	28.3	86	71.7	16	13.3	104	86.7	8.18	0.004*
You should always let other people influence your decisions.	22	18.3	98	81.7	6	5.0	114	95.0	10.3	0.001**
Advertisements are always true.	48	40.0	72	60.0	16	13.3	104	86.7	21.8	0.000**
Stress can cause you to get sick	51	42.5	69	57.5	112	93.3	8	6.7	71.1	0.000**
When you feel stressed, there is nothing you can do to stop it.	82	68.3	38	31.7	30	25.0	90	75.0	45.2	0.000**
We can tell how someone feels by the way he moves his body without saying anything	52	43.3	68	56.7	114	95.0	6	5.0	75.1	0.000**
A good way to refuse to do something is to be assertive	39	32.5	81	67.5	112	93.3	8	6.7	95.1	0.000**
A good way to be assertive by beginning your sentences with the word “I”.	34	28.3	86	71.7	104	86.7	16	13.3	83.5	0.000**
“Peer pressure” means that an adult tries to get you to do something you do not want to do.	72	60.0	48	40.0	84	70.0	36	30.0	2.63	0.104
There is nothing you can do about peer pressure except go along with it.	62	51.7	58	48.3	10	8.3	110	91.7	53.6	0.000**
When we feel bad about ourselves, it affects how well we do in school, sports or other activities.	41	34.2	79	65.8	108	90.0	12	10.0	79.4	0.000**

χ^2 = Chi-squared test, *statistically significant difference at $P \leq 0.000$

Table 2: declares that, a significant differences were present ($P < 0.000$) before and after the intervention in relation to students' life skills knowledge and anti-smoking knowledge.

Table 3. Distribution of the studied participants according to their anti-smoking and anti-drinking attitudes before and after the intervention ($n=120$).

Attitude Statements	Pre-intervention						Post intervention						X ²	p-value
	Disagree		Not sure		Agree		Disagree		Not sure		Agree			
	No	%	No	%	No	%	No	%	No	%	No	%		
- Anti-Drinking Attitudes														
1. Kids who smoke cigarettes have more fun than non-smokers.	16	13.3	28	23.3	76	63.3	88	73.3	10	8.3	22	18.3	88.1	0.000**
2. Kids who smoke cigarettes have more friends than non-smokers	4	3.3	36	30.0	80	66.7	50	41.7	64	53.3	6	5.0	110.7	0.000**
2. Kids who smoke cigarettes look more grown-up than non-smokers.	26	21.7	36	30.0	58	48.3	22	18.3	42	35.0	56	46.7	0.83	0.05*
4. Since a lot of people smoke cigarettes, it can't be that bad for you.	10	8.3	52	43.3	58	48.3	28	23.3	46	38.3	46	38.3	10.2	0.006**
-Anti-Smoking Attitudes														
5. Kids who drink alcohol (beer, wine, or liquor) have more fun than non-drinkers	8	6.7	42	35.0	70	58.3	65	54.2	49	40.8	6	5.0	98.9	0.000**
6. Kids who drink alcohol have more friends than non-drinkers	20	16.7	44	36.7	56	46.7	102	85.0	16	13.3	2	1.7	118.4	0.000**
7. Kids who drink alcohol look more grown-up than non-drinkers.	36	30.0	50	41.7	34	28.3	38	31.7	64	53.3	18	15.0	6.69	0.03*
8. Since a lot of people drink alcohol, it can't be that bad for you.	8	6.7	52	43.3	60	50.0	40	33.3	36	30.0	44	36.7	26.7	0.000**

χ^2 = Chi-squared test, *statistically significant difference at $P \leq 0.05$

Table 3: Displays significant differences ($P < 0.00$) before and after the intervention in relation to all items related to anti-smoking and anti-drinking attitudes.

Figure 1 portrays that, 56.7% of the studied students had

positive attitudes pre-intervention. Meanwhile post intervention the positive attitudes become 85.0%. Moreover, there was a significant difference between results ($P = 0.05$) before and after intervention.

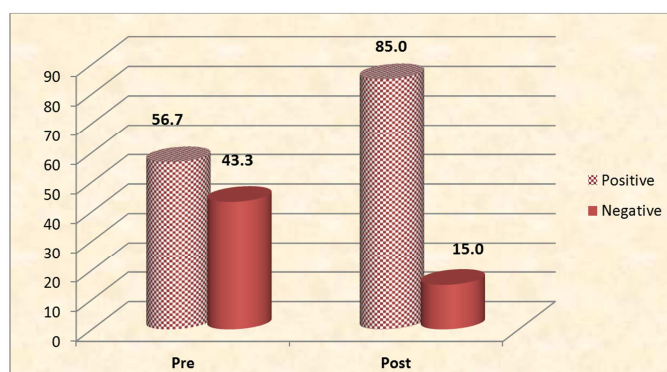


Figure 1. Distribution of the study subject according to their total attitudes pre and post- intervention (n = 120).

Table 4. Distribution of the studied participants according to their life skills behaviours before and after the intervention (n=120).

life skills behaviours statements	Pre-intervention						Post intervention						X2	p-value
	Never		Sometimes		Most of the Time		Never		Sometimes		Most of the Time			
	No	%	No	%	No	%	No	%	No	%	No	%		
1. When you need to make a decision, how often do you think about your choices and what will happen?	7	5.8	21	17.5	92	76.7	16	13.3	90	75.0	14	11.7	103.8	0.000**
2. How often do you remember that ads on TV or the radio might not be telling the truth?.	19	15.8	86	71.7	15	12.5	14	11.7	100	83.3	6	5.0	5.66	0.059
3. When you feel nervous or stressed out, how often do you take deep breaths to relax?	19	15.8	31	25.8	70	58.3	34	28.3	80	66.7	6	5.0	79.7	0.000**
4. When you feel nervous or stressed out, how often do you imagine something in your head to relax?	6	5.0	46	38.3	68	56.7	18	15.0	94	78.3	8	6.7	69.8	0.000**
5. How often do you try to say things that are clear and easy to understand during communication?	15	12.5	51	42.5	54	45.0	22	18.3	88	73.3	10	8.3	41.4	0.000**
6. How often do you ask questions when you don't understand something?	22	18.3	41	34.2	57	47.5	24	20.0	92	76.7	4	3.3	65.6	0.000**
7. How likely would you be to tell someone to move if they cut ahead of you in line?.	35	29.2	32	26.7	53	44.2	86	71.7	32	26.7	2	1.7	68.7	0.000**
8. How likely would you be to say hello to someone you don't know well?	31	25.8	55	45.8	34	28.3	74	61.7	46	38.3	0	0.0	52.4	0.000**

Table 4: clarifies that life skills behaviours were highly significantly different ($P < 0.000$) before and after the intervention.

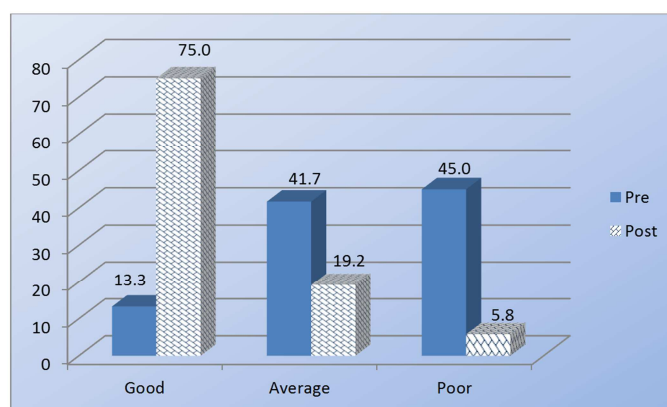


Figure 2. Distribution of the study subject according to their total life skills behaviours pre and post- intervention (n = 120).

Figure 2: portrays that 75% of the studied students had good life skills behaviours pre-intervention. Meanwhile post intervention, 85.0% of the studied students had good life skills behaviours. Moreover, there was a significant difference between results ($P = 0.05$) before and after intervention.

Table 5. Mean differences of self-efficacy scores of the study participants pre and post intervention ($n=120$).

Items	Maximum score	Pre-intervention	Post-intervention	Paired t test	P value
self-efficacy scores					
- Self-efficacy in conflict situation	40	26.33±3.13	32.68±4.20	14.66	0.000**
- Self-efficacy in non-conflict situation	44	30.90±2.62	38.80±5.36	13.97	0.000**
Total self-efficacy scores	84	57.23±4.70	71.48±9.27	15.40	0.000**

** Highly statistically significant difference at $P \leq 0.000$

Table 5: portrays general improvements ($P= 0.000$) in the mean scores of self-efficacy after the intervention as compared to before intervention.

Table 6. Correlation coefficient between study subjects' subtotal scores of knowledge, attitude, life skills behaviours and their total Self-efficacy scores before and after intervention ($n = 120$).

Variables		Self-efficacy scores			
		Pre-intervention		Post-intervention	
		<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>
Knowledge	Pre-intervention	0.24	0.007*	0.28	0.002**
	Post-intervention				
Attitudes	Pre-intervention	0.028	0.758	0.177	0.05*
	Post-intervention				
Life skills behaviors	Pre-intervention	0.025	0.787	0.38	0.000**
	Post-intervention				

**Correlation is highly statistically significant at ($P \leq 0.002$)

Table 6 indicates a positive correlation ($P=0.002$) between studied students' subtotal scores of knowledge and their total Self-efficacy scores before and after intervention, also a positive correlation between studied students' subtotal scores of attitude, life skills behaviours and their total Self-efficacy scores after intervention.

4. Discussion

Substance use in Egypt has been emerging as a public health problem with increasingly high prevalence among youth. [23] During the first phases of adolescent development, youth are often exposed to several risky behaviors which can have lifelong social and health-related consequences. One of these behaviors involves is the experimental use of drug substances. A primary goal of public health officials is their commitment to the prevention of substance use among adolescent. A first step toward this goal is in the creation of interactive school programs for the 11 to 14 age group. It is important, therefore, to create educational programs for the 11 to 14 age group to prevent their introduction to substance use as much as possible. [24, 25] life skills educational program, it is currently recognized as a specific preventive program in many countries to deal with social damages such as addiction. [26] Therefore, the current study conducted with a view to evaluate the effect of life skills intervention on social self-efficacy for prevention of drug abuse among young adolescent students.

The current study results showed significant improvement in the post intervention stage on students' life skills and anti-

smoking knowledge. This improvement of knowledge post intervention might be reflect the effect of the life skills intervention on increasing knowledge and awareness in this regard. These findings are in agreement with at least other four studies. *First, Moradi et al.* [27] They investigated the effect of drug abuse resistance and prevention skills training on 181 workers of Asalooeyeh Petrochemical Company under two intervention and control groups. Results indicated the positive impact of training on the intervention group's knowledge and insight, drug abuse resistance skills, self-efficacy and decision-making in preventive actions. *Second, Moshki et al.* [28] who had conducted field trial experimental study on 60 students of Gonabad Medical University to study the effect of life skills training on drug abuse preventive behaviors among university students. Found that life skills training could either promote participant's knowledge about drug abuse preventive behaviors or decrease risk factors leading to drug abuse. *Third, Nazarpour et al.* [29] They had reported claimed a promotion in the participants' knowledge and social skills and also a meaningful increase in the change of outlook toward drug abuse after attending workshops. *Fourth, Williams et al.* [30] their study findings demonstrated significant intervention effects on substance-use knowledge, attitudes, normative expectations, and general life skills among sixth and seventh grade adolescents who either participated in the life skill training CD-ROM prevention program.

An important finding from the current study is that anti-smoking and anti-drinking attitudes of the studied group was significantly ($P < 0.000$) improved after intervention. In this

regard *Tymes, et al.* [17] who had also applied life skills interventions to improve social confidence, self-management, and protection against drug use in rural elementary school aged children, and showed statistically significant difference ($P < 0.05$) before and after intervention regarding the anti-smoking and anti-drinking attitudes and indicating the children reported improvements in antismoking and anti-drinking attitudes. Moreover, findings of this study are also in line with the findings of study in Fredrick University by *Buhler*. [31] who demonstrated not only the preventive role of life skills training among non-smokers and non-drinkers but also its great impact on smokers and drinkers. Furthermore, *Botvin et al.* [32] who had examined the effectiveness of a substance abuse prevention program in preventing tobacco and alcohol use among elementary school students in grades 3 through life skills training. Found that intervention students at the posttest assessment reported less smoking in the past year $p < .038$, higher anti-drinking attitudes, $p < .044$, increased substance use knowledge, $p < .031$, and increased skills-related knowledge.

The finding of the current study showed statistically significant difference ($P = 0.000$) before and after the intervention in relation to students' self-efficacy in conflict and non-conflict situations. This finding suggests that the life skills intervention motivate and develop self-efficacy and proves the effectiveness of the intervention. In this regard *Muafi et al.* [33] who had conducted an experimental research to investigate the role of life skills training in influencing self-efficacy, self-esteem, life interest and role behavior for unemployed youth in Paciran sub district. They found that there is a significant difference of self-efficacy before and after training. It means that an individual who involved in the training has different level of self-efficacy than who do not involved. Moreover, *Gheitarani et al.* [34] who had conducted a quasi-experimental study 462 male high school students of Silvana area in Urmia city, indicated that experiment group had significantly higher self-efficacy in compare with the control group. Teaching life skills to students increased their self-efficacy. Also, this finding in consistency with the results obtained by *Lou, et al.* [35] stating that teaching life skills is effective on increasing self-efficacy and decreasing risky behaviors of the students in experimental group. Also, previous studies by *Vatankhah et al.* [36] showed that teaching life skills has an effect on improving self-efficacy and the family performance in female-headed households. In addition, the study by *Ghazavi, et al.* [37] have shown that life skill training is a cost-effective non-drug intervention to improve social, emotional, self-efficacy and educational performance. Furthermore, the study by *Thomas & Franz X.* [38] has shown that their life-skills-program influenced student's self-esteem positively and concluded that promotion of self-esteem should be linked with basic instruction about drugs and resistance self-efficacy training.

Additionally, the finding of current study pointed out that, life skills behaviours were highly significantly different ($P < 0.000$) before and after the intervention. This finding in the

same line with the previously mentioned study by *Moshki et al.* [28] they demonstrating a significant improve in the post-test drug abuse preventive behaviors of intervention groups immediately after intervention than the control group. In other words, life skills training could successfully promote drug abuse preventive behaviors or reduce risk factors leading to drug abuse. In addition, the study of *Tymes, et al.* [17] agreed with our study findings indicating an improvement in the children life skills behavior score post intervention compared to pre intervention. Moreover, *Jahanbin et al.* [39] who had conducted a semi-experimental study to determine the effect of life skills training on social communication of male drug addicts who referred to Tavalod Novin Drug Clinic in Larestan, Iran. Their study findings indicated a positive significant relationship between life skills training to patients referring to drug clinics and improvement of their communication skills. In other words, an increase in life skills resulted in an improvement in the individual's communicational abilities. In addition, *Pujar and Patil.* [40] conducted a study on the life skills in the 13-15 age group and found that these students who received education on life skills developed skills such as problem solving and stress coping.

The correlations between students' subtotal scores of knowledge, attitude, life skills behaviours and their total Self-efficacy scores before and after intervention were took place in the this study. Accordingly, there were a positive, significant correlations ($P = 0.002$) between studied students' subtotal scores of knowledge and their total self-efficacy scores before and after intervention, also a positive correlation between studied students' subtotal scores of attitude, life skills behaviours and their total self-efficacy scores after intervention. These results were supported by at least two other researches. *First*, the previously mentioned *Muafi et al.* [33]. Found that an individual with high life skills will form a strong self-efficacy compared with an individual with low life skills, It means that there is a significant difference of self-efficacy before and after training. *Second* the previously mentioned *Tymes et al.* [17] who had reported that continuing the life skills training program using self-efficacy will reinforce life skills and using of self-efficacy is consistent with goals to improve social confidence in conflict and non-conflict interactions. Self-efficacy provides the framework for equipping adolescents with self-management and social and drug resistance skills. Given that the life skills intervention to prevent drug abuse is a novel preventive approach and regarding that promising results in different cultures and countries have been obtained by studies in Iran. [41] and other countries. [42, 43]

5. Conclusion

Based on the results of the current study, it can be concluded that, the above mentioned findings proved and reinforced the research hypothesis. The life skills based intervention was efficient in knowledge, attitudes, and behaviors related drug resistance skills. The findings

indicated a positive significant relationship between providing life skills training to students and improvement of their social self-efficacy. This has been observed in improving students' social self-efficacy in conflict & non-conflict situations, life skills knowledge & anti-smoking knowledge, anti-drinking and anti-smoking attitudes and life skills behaviors after implementation of life skills intervention on young adolescent students. The results also highlight the significance of life skills intervention as a useful framework for prevention of drug abuse among young adolescent students.

6. Recommendations

Based on findings of this study, the following recommendations can be proposed.

1. The school nurse should implement life skills interventions for students to promote their self-efficacy and drug resistance skills.
2. The school nurse should plan and perform constant life skills training workshops for teachers and students as effective tools of drug abuse prevention in schools.

Further Study

Evaluate the effectiveness of life skills interventions on social self-efficacy for prevention of drug abuse with long term follow up and larger sample size with different ages.

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