



The Effectiveness of Life Skills Training on Assertiveness, Self-Esteem and Aggressive Behavior among Patients with Substance Use Disorders

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ABSTRACT

Substance use is not only affected every part of the abuser's life as social life, family life, work productivity, physical health, and personal relationships but also affected the community. Patients with substance use are experiencing problems related to non-assertive and aggressiveness. **Aim:** To examine the effect of life skills training on assertiveness, self-esteem, and aggressive behavior among patients with substance use disorders. **Methods:** A quasi-experimental design (one group pre/ post-test) was used to achieve the aim of the study. The study was conducted at an addiction outpatient clinic at The Psychiatric and Addiction Treatment Hospital in Mit-Khalf at Menoufia, Egypt. A purposive sample of 74 male patients with substance use disorders was included. **Results:** There was a highly statistically significant improvement in both self-esteem and assertiveness skills among the participants after life skills training than before at $p < 0.001$, and there was a highly statistically significant reduction in aggressive behavior among the participants after the life skills training than before at $p < 0.001$. Also, there was a statistically significant negative correlation between self-esteem, assertiveness skills, and total aggression after life skills training at $p = 0.016, 0.031$. **Conclusion:** Life skills training significantly improved self-esteem, assertiveness, and decreased aggressive behavior among patients with substance use disorders.

Keywords: Life Skills Training, Assertiveness, Self-Esteem, Aggressive Behavior.

Introduction

Substance use disorders affected community health, social, political, and economic stability (Rounaghi et al, 2018). Substance use disorders is a major problem in Egypt, according to the national addiction research study that found the prevalence of use, 33% in Cairo, 22.4% in Upper Egypt, and 9.6% in

Delta (Rabie et al, 2020). Although most diseases are physical, psychological, or emotional in nature, addiction and alcohol abuse can affect all aspects of the victim's life and have serious, life-changing consequences (American Addiction Center, 2019). Substance use is an inappropriate pattern of drug use that can cause serious side effects, manifested as

psychosocial, medical, or legal problems (Gaurishanker & Kumar,2018).

According to the DSM-5, a “substance use disorder describes a problematic pattern of using alcohol or another substance that results in impairment in daily life or noticeable distress” (American Psychiatric Association, 2013). The main predictors of substance use are socio-demographic characteristics, economic level, and intra-individual characteristics (Mohebi et al, 2018). Intra-individual characteristics, such as aggression and assertiveness may be closely related to drug use. Say no to requests one does not want to make and defend oneself in a confident way is called assertion (Hajihassani et al, 2012). Assertiveness is the ability to express feelings, opinions, and attitudes freely, without hurting others (Narconon International, 2020). Assertive behavior helps the person adapt to social situations and reduces social anxiety. Non-assertive behavior can lead to negative consequences such as aggressive behavior and substance use (Stoner, 2008., Hajihassani et al, 2012)

There is a significant relationship between aggression and the likelihood of addiction. Aggressive people do not just take drugs for pleasure. They can use substances to suppress and overcome inner chaos. In addition, aggressive behavior is likely to cause individuals to be isolated by active peers, who have a logical and indifferent response to problems in life, so aggressive behavior may cause individuals to join abnormal groups that increase the likelihood of drug addiction (Amiri et al, 2020).

Aggressive behavior is a problem in some societies because they harm people and threaten public health (Sharma,2011). Aggression is characterized by the violation of the rights of others and any planned verbal or nonverbal conduct that result in any kind of

harm; emotional, physical, or economic (Allen & Anderson, 2017). Aggressive behavior is one of the main risk factors for drug use and is common among adults with substance use disorders (Morie et al , 2014). Lack of self-esteem can lead to misconduct and addiction (Alavi, 2011). Self-esteem is a stable feeling of personal worth. Feeling valuable affects all aspects of a person's life, including one's perception of their abilities (Moradi, Ghanbari & Sh'erbaf, 2010). Low self-esteem is a high-risk factor for substance use for adolescents and young (Akhter, 2013). High self-esteem is related to regular exercise, which helps to avoid substance use (Kounenou, 2010).

The literature indicates that patients with substance use are non-assertive. Thus, a comprehensive nursing plan is needed to train patients with substance use on assertiveness skills. This will increase the level of self-confidence and self-esteem of patients, which in turn will help them adopt healthy coping strategies instead of relying on drugs. After detoxification, he will avoid relapse and detoxify in the future. While interacting with drug use patients, nurses can combine formal and informal training to promote assertiveness skills, self-esteem, coping skills, and quality of life of patients with substance use (Jyothi, 2012). Life skills training (LST) is a comprehensive training that involves skills like; self-awareness, proper communication, decision making, problem-solving, anger management, stress management (Moshki , Hassanzade & Taymoori ,2014., Jamali et al, 2016) personal and social skills (Moshki & Aslinejad, 2013)

Significance of the study

Substance use can cause various social difficulties, including crime, traffic and workplace accidents, suicide, poor academic performance, absenteeism, child abuse, depression, and anxiety (Valkov,2018). In Egypt, with changes in substance use is rapidly

increasing. A cross-sectional community survey covering all governorates in Egypt except ElWadi ElGedid, showed that more than three-quarters of total substance use in all regions is used cannabis, opioids are the second most used substance in Upper Egypt, while alcohol is the second most common substance in governorates outside Upper Egypt (Hamdi et al,2016)..

Drug users often have problems with social and interpersonal relationships. The lack of adequate social relationships for patients will have various negative personal and social consequences for the health of patients, their families, friends, and society. Life skills training can effectively improve their social communication with parents, family, and friends. Life skills training should be part of addiction training programs. Life skills training can be seen as a way to provide support services to the most vulnerable groups. It is recommended to implement training as an effective, useful, and economical way to prevent and control conflicts caused by drug addiction and improve the quality of life (Jahanbin et al, 2017). So, the study aimed to examine the effect of life skills training on assertiveness, self-esteem, and aggressive behavior among patients with substance use disorders

Theoretical and operational definitions:

- Life skills training is a comprehensive program designed to address the skills a person needs to be successful in adult life, such as self-awareness, proper communication, problem-solving, anger, and stress management (El Sayed et al, 2019). Life skills training in the present study was operationally defined as a comprehensive program that is designed to training substance users on some of the life skills as (self-awareness, empathy, courageous behavior skill, emotional regulation skills, assertive skills, effective interpersonal, and communication skills, anger management, self-expression and coping skills and

stress management skills) based on the skills provided by WHO (Rezaee , Navidian & Moshtaghi ,2017). It aimed to lower the score of aggression, and improve the score on assertiveness skills and self-esteem. It was evaluated by comparing substance user aggression, assertiveness, and self-esteem scores before and after the training.

- Aggression is defined as overt or covert social interaction, usually harmful to others. It can happen with or without reason (DeBono & Muraven, 2014). Substance users often experience aggressive behavior as (physical aggression, verbal aggression, anger, and hostility as it will be measured by using the Aggression Scale (Buss & Perry, 1992).

- Assertiveness refers to self-confident behavior that allows a person to act in accordance with their interests, express their true feelings without anxiety, and at the same time respect the rights of others (Amiri et al, 2020). Assertiveness in the present study was operationally defined as a substance abuser's ability to say no to requests one does not want to make and expressing needs, desires, thoughts, and feelings in a worthy and without anxiety away while respecting desires, thoughts, and feelings of others people. It will be measured by using the assertiveness scale (Elawad & Nehely, 2017).

-Self-esteem is a sense of an individual's value or worth and the extent to which his worth or value is approved or appreciated (Cheema & Bhardwaj, 2021). Self-esteem in the present study was operationally defined as an evaluation of a substance user's self-concept, it is a positive or negative attitude towards one's self. It will be measured with Rosenberg Self-esteem Scale, developed by Rosenberg, (1965).

- Substance use disorder refers to the continued use of drugs despite serious harmful consequences. It is

characterized by a series of mental/emotional, physical, and behavioral problems, such as chronic guilt, inability to reduce or stop using the substance despite repeated attempts, and physical withdrawal symptoms (Adewumi, 2017).

METHODS

The aim of the study:

Examine the effect of life skills training on assertiveness, self-esteem, and aggressive behavior among patients with substance use disorders

Research Hypotheses:

- 1- Patients who participate in the life skills training are more likely to have a lower score on aggression post-intervention than before
- 2- Patients who participate in the life skills training are more likely to have a higher score on assertiveness skills and self-esteem post-intervention than before

Design:

A quasi-experimental design (one group pre/ post-test) was used to achieve the aim of the study

Setting:

The study was conducted at an addiction outpatient clinic at The Psychiatric and Addiction Treatment Hospital in Mit-Khalf at Menoufia, Egypt

Subjects:

All male patients came to the addiction out-patient clinic at the above-mentioned setting during three months' duration and fitting the inclusion criteria; patients with addiction, aged 18 or older, come to daycare, don't have other psychiatric illnesses or cognitive impairment, approved to join in the study and complete life skills training. The final sample was a

purposive sample of 74 male patients with substance use disorders.

Tools of Data Collection:

Tool (1): Interviewing questionnaire: It was developed by the research team. It comprised socio-demographic characteristics such as age, sex, level of education, marital status in addition to the type and duration of drug use.

Tool (2): Assertiveness scale: it was originally developed by Rathus, (1978), which modified and translated into Arabic by Elawad& Nehely, (2017). The scale consisted of 29 items (12 items were positive and 17 items were negative). Each item was rated on a three-point scale from one to three (one = no, two = sometimes, and three = always). Total scores can range from 29 to 87; low level from 29 - 48, moderate level from 49- 67, and high level of assertiveness from (68-87). It was reliable; the value of the Spearman half was 0.79 and Cronbach,s alpha coefficient was 0.74.

Tool (3) Aggression Scale (BPA): it was originally developed by Bus and Berry, (1992) and translated into Arabic and modified by the researchers. The scale consisted of 29 positive statements covered four categories (physical aggression, verbal aggression, anger, and hostility). These statements are rated on a four-point scale from one (strongly disagree) to four (strongly agree). The total score of aggression ranges from 29 to 116; less than 43 means no aggression, from 43 – 72 means mild aggression, 73-101means moderate aggression, and from101-116 means a severe level of aggression. The reliability of the tool was done using test-retest reliability at 0.78.

Tool (4) Rosenberg's Global Self-esteem Scale: Arabic version of Rosenberg's Global self-esteem scale was used Garas, Ahmed, & Bader, (1991). The scale

was designed to measure the global negative and positive self-attitudes. It consists of 10 statements (5 statements are phrased positively and 5 statements are phrased negatively). These statements are rated on a 4-point scales, which are: (4) strongly agree, (3) Agree, (2) disagree, (1) strongly disagree. According to these answers, scoring ranges from 1 to 40, with 40 indicating the highest possible score. Scoring for negative answers was reversed. Total scores were; less than 20 was a low level of self-esteem, from 20 to 24 was moderate and from 25 and more was a high level of self-esteem.

Ethical consideration:

Ethical approval was obtained from the ethical and rehearsal research committee of the faculty of Nursing, Menoufia University. Informed consent was taken from each participant after receiving detailed information about the purpose of the study and assures maintaining anonymity and confidentiality of the subject's data.

Procedure of data collection:

Permission to conduct the study was attained from the directors of The Psychiatric and Addiction Treatment Hospital in Mit-Khalf at Menoufia, Egypt. A pilot study was carried out with 10% of the total sample (9 patients) to test the clarity of the tools and excluded from the main study sample. The study was carried out from the beginning of August 2020 to the end of January 2021. The data in the current study was collected through four phases; assessment, planning, implementation, and evaluation phase.

-Assessment phase: The researchers asked the doctors at the outpatient clinics for transferring the patients who fulfill the inclusion criteria and the researchers have interviewed the participants individually at the waiting area where informed consent was taken from each participant after receiving detailed

information about the purpose of the study. The researchers collected the pre-test during the morning each Sunday and Wednesday from 9 to 12 AM for three months (from August to October 2020).

-Planning phase: Arabic guide booklet was prepared by the researchers after reviewing literature as electronic studies, books, and periodicals then reviewed by the researchers to prepare it in an easy and motivating way according to the characteristics of the participants. The participants were divided into six groups; each group was about thirteen individuals and attend once a week for 60 minutes for two months during November and December 2020). Lecture, discussions, brainstorming, and demonstration, re-demonstration, role-playing, giving examples & modeling were used as teaching methods. Data show, video, pictures and booklet were used as media.

- Implementation Phase: Implementation of the life skills training was done at the meeting room in small groups each group about thirteen participants, each group attends once a week for 60 minutes for two months during November and December 2020). The content of life skills training included; self-awareness skill, assertiveness skills, communication skills, techniques of emotional regulation, problem-solving and decision-making skills, and interpersonal relationships skills. After each session, the researchers provided a summary, took feedback, and gave the participants homework. The general objective of the life skills training was to improve the assertiveness skills, self-esteem and reduce aggressive behavior among the participants. The specific objectives of the life skills training were helping the participants to be able to; identify the negative and positive beliefs about oneself, apply different ways of self-awareness, explain the concept of self-esteem and its use to achieve goals, identify the obstacles of assertiveness, practice saying

“No” assertively, exercise making a request assertively, apply methods of giving criticism assertively; and expressing anger assertively, apply techniques of promoting self-esteem, apply the communication skills, allocating the situations that cause anger, apply techniques of emotional regulation, explain the concept of determinism and its impact on anger management, relate problem-solving to self-awareness, apply the brainstorming and problem-solving methods, explain the stages of decision making, differentiate between empathy and sympathy, exercise skills of self-expression, determinism, practice empathy and courage.

The evaluation phase: In this phase, the researchers welcomed all participants and thanked them for attending and completing the life skills training then the researchers collected (post-test) after one month of completing the life skills training using the research instruments two, three, and four again to evaluate the effect of the life skills training.

Statistical Analysis:

Data were collected, tabulated, statistically analyzed using an IBM personal computer with Statistical Package of Social Science (SPSS) version 22. Data were presented using descriptive statistics in the form of mean, standard deviation (SD), range, and qualitative data were presented in the form of numbers and percentages. to test significance, Mann-Whitney, Kruskal-Wallis, Wilcoxon signed-rank test, the marginal homogeneity test was used and Spearman's correlation (r) was used for two quantitative variables not normally distributed. P-value of >0.05 was considered statistically non-significant, P-value of <0.05 was considered statistically significant, and P-value of <0.001 was considered statistically highly significant..

RESULTS

Table (1): Revealed that the studied patients were in the age group between 25- 45 years, 70.3% of them were from urban areas, 56.8% were married, while only 10.8% were divorced. Concerning the educational level, 10.8% were illiterate and the same percentage had a high educational level while about two-thirds of the participants 64.9% finished secondary education. The majority of the participants (83.8%) were worked. 59.5% had a positive family history of addiction. According to income, about three quarter had enough income. Regarding the type of addiction, 56.8% were taking heroin

Figure (1): Illustrated that there was a highly statistically significant improvement in both self-esteem and assertiveness skills among the participants post-intervention than pre-intervention at $P < 0.001$. Also, there was a highly statistically significant reduction in aggressive behavior among the participants post-intervention than pre-intervention at $P < 0.001$

Table (2): Illustrated that there was a highly statistically significant improvement in the level of self-esteem and assertiveness skills post-intervention compared to pre-intervention where ($P < 0.001$); 85.1% of the participants had a high level of self-esteem post-intervention compared to 40.5% pre-intervention and 81.1% of them had a high level of assertiveness skills post-intervention compared to 8.10% pre-intervention. Also revealed that there was a highly statistically significant reduction in the level of aggression post-intervention compared to pre-intervention where ($P < 0.001$); 77% of the participants had mild level of aggression post-intervention compared to 8.10 % pre-intervention.

Table (3): Revealed that there was a highly statistically significant reduction in all categories of

aggression (physical aggression, verbal aggression, anger, and hostility) post-intervention compared to pre-intervention where ($P < 0.001$).

Table (4): Reflected that there was a statically significant negative correlation between self-esteem, assertiveness skills, and total aggression post-intervention at $P = 0.016, 0.031$ respectively. This means that when the patients have high self-esteem and assertiveness skills, the aggressive behavior will be decreased.

Table (5): There was a statistically significant relationship between age, the residence of the participants, and both aggression and assertiveness skills at $P\text{-value} = (0.032, 0.011; 0.002, 0.001)$ respectively. Also, there was a statistically significant relationship between occupation, the income of the participants and aggression, assertiveness skills, and self-esteem. While there was a highly statistically significant relation between positive family history of addiction and only aggression, type of addicted material and only assertiveness skills.

There is a significant relationship between aggression and the likelihood of addiction. Aggressive people do not just take drugs for pleasure. They can use substances to suppress and overcome inner chaos. In addition, aggressive behavior is likely to cause individuals to be isolated by active peers, who have a logical and indifferent response to problems in life, so aggressive behavior may cause individuals to join abnormal groups that increase the likelihood of drug addiction(Amiri et al,2020)

Aggressive behavior is a problem in some societies because they harm people and threaten public health (Sharma,2011). Aggression is characterized by the violation of the rights of others and any planned verbal or nonverbal conduct that result in any kind of

harm; emotional, physical, or economic (Allen & Anderson, 2017). Aggressive behavior is one of the main risk factors for drug use and is common among adults with substance use disorders (Morie et al , 2014). Lack of self-esteem can lead to misconduct and addiction (Alavi, 2011). Self-esteem is a stable feeling of personal worth. Feeling valuable affects all aspects of a person's life, including one's perception of their abilities (Moradi, Ghanbari & Sh'erbafe, 2010). Low self-esteem is a high-risk factor for substance use for adolescents and young (Akhter, 2013). High self-esteem is related to regular exercise, which helps to avoid substance use (Kounenou, 2010).

Table 1 :Distribution of The Studied Participants According to Socio-Demographic Characteristics.

Socio-demographic characters	The study group (N= 74)	
	No.	%
Age / years		
Mean ±SD	43.1±6.15	
Range	25.0 - 45.0	
Residence		
Urban	52	70.3
Rural	22	29.7
Educational level		
Illiterate	8	10.8
Read and Write	10	13.5
Secondary	48	64.9
High Education	8	10.8
Marital state		
Single	24	32.4
Married	42	56.8
Divorced	8	10.8
Occupation		
Worked	62	83.8
Not worked	12	16.2
Income		
Enough	58	78.4
Not enough	16	21.6
Family history of addiction		
Positive	44	59.5
Negative	30	40.5
Type of addicted material		
Heroin	42	56.8
Multiple	32	43.2

Figure 1 The Mean Score of Aggression, Assertiveness Skills and Self-Esteem Pre and Post-Intervention (N= 74):

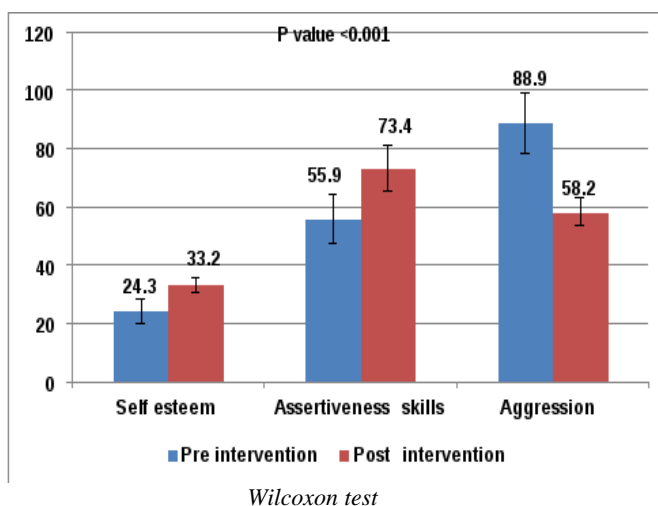


Table 2 Comparison of The levels of Self-Esteem, Assertiveness Skills and Aggression among The Participants Pre and Post-Intervention (N= 74):

Studied Variables		Pre-Intervention		Post Intervention		Marginal Homogeneity Test	P-value
		No.	%	No.	%		
Self-esteem	Low	4	5.40	2	2.70	5.10	<0.001**
	Moderate	40	54.1	9	12.2		
	High	30	40.5	63	85.1		
Assertiveness	Low	16	21.6	0	0.00	7.37	<0.001**
	Moderate	52	70.3	14	18.9		
	High	6	8.10	60	81.1		
Aggression	Mild	6	8.10	57	77.0	7.07	<0.001**
	Moderate	56	75.7	11	14.9		
	High	12	16.2	6	8.10		

**High significant

Table 3 Physical Aggression, Verbal Aggression, Anger, and Hostility among the participants' Pre and Post-Intervention (N= 74).

Studied variables	Pre-Intervention	Post-Intervention	Wilcoxon Test	P-value
	Mean ±SD	Mean ±SD		
Physical Aggression	27.1±6.16	17.4±2.31	7.49	<0.001**
Verbal Aggression	13.9±2.11	9.83±1.08	7.42	<0.001**
Anger	22.7±3.61	12.8±2.05	7.55	<0.001**
Hostility	24.9±2.71	17.2±3.06	7.52	<0.001**

**High significant

Table 4 Spearman's Correlation between Self-Esteem, Assertiveness Skills, and Total Aggression among The Participants Post-Intervention

Studied Variables	Total Aggression	
	r	P value
Self -Esteem	- 0.280	0.016*
Assertiveness Skills	- 0.251	0.031*

*Significant

Table 5 Relation between Aggression, Assertiveness Skills, Self-esteem and Socio-Demographic Characteristics of the Participants

Socio-demographic characters		Aggression Mean ±SD	Test of sig P-value	Assertiveness Mean ±SD	Test of sig P-value	Self-esteem Mean ±SD	Test of sig P-value
Age / years	<35	59.5±4.92	U= 2.14	76.0±6.23	U= 2.54	33.0±2.30	U=0.21
	≥35	56.9±4.27	0.032*	70.8±8.36	0.011*	33.4±2.90	0.827
Residence	Urban	59.3±4.45	U= 3.16	71.5±8.06	U= 3.71	33.0±2.21	U= 0.168
	Rural	55.5±4.28	0.002**	77.8±4.83	0.001**	33.7±3.41	0.867
Education level	Illiterate	57.7±1.90	K= 1.71	79.0±2.13	K= 5.12	33.5±1.77	K= 3.60
	Read & write	62.4±3.16		72.6±8.15		32.2±1.81	
	Secondary	58.0±5.15	0.635	72.6±8.26	0.163	33.3±3.04	0.308
	High	54.5±0.92		73.5±0.92		33.7±0.46	
Marital state	Single	58.0±2.22	K= 5.59	73.7±6.08	K= 0.021	32.6±1.40	K= 0.410
	Married	58.5±5.50		73.2±9.14		33.4±3.00	
	Divorced	57.0±6.41		73.0±4.27		34.0±0.92	
Occupation	Work	59.1±4.56	U= 3.71	78.7±2.46	U= 3.06	36.0±3.13	U= 3.17
	Not work	53.8±3.21		72.3±8.05		32.7±2.16	
Income	Enough	59.2±4.61	U= 3.54	76.7±4.15	U= 2.29	35.0±3.38	U= 2.28
	Not enough	54.7±3.67		72.5±8.30		32.8±2.16	
Family history of addiction	Positive	60.6±4.92	U= 3.69	74.6±9.30	U= 1.06	33.2±2.79	U= 0.379
	Negative	56.5±3.92		72.5±6.53		33.3±2.39	
Type of addicted material	Heroin	58.2±4.16	U= 0.681	69.3±6.23	U= 5.35	32.8±1.98	U= 0.707
	Multiple	58.1±5.53		78.7±6.25		33.7±3.24	

U: Mann Whitney test K: Kruskal Wallis test **High significant *significant

Discussion

Substance use has become a major crisis that threatens the user's life as social life, family life, work productivity, physical health, and personal relationships (Elsayed et al, 2020). It also affected the country's social structure and threatened political and economic stability (Rounaghi et al, 2018). Jyothi & Vijayalakshmi, (2017) illustrated that substance-use patients are statistically more likely to be non-assertive and engaged in aggressive behavior compared to the general population (Zhong, Yu,& Fazel,2020). Life Skills Training (LST) is a comprehensive program designed to teach people a variety of personal and social skills, with great potential to prevent social problems and dangers (Navidian , Moshtaghi &

Rezaee, 2019). As a result, the aim of this study was to examine the effect of life skills training on assertiveness, self-esteem and, aggressive behavior among patients with substance use disorders.

The current study's findings revealed that the participants in the study were between the ages of 25 and 45. This could be related to life obstacles including adjustment difficulties, which lead to drug misuse at this age, as well as peer pressure by recommending and encouraging them to take the substance. This finding was in line with Ibrahim et al, (2018), who discovered that the age range of 20-40 years had the highest rate of substance misuse. Similarly, Abdel Moneim et al,(2020), found that the majority of admitted patients were between the ages of 25 and 45. However, Manghani et al,(2020), illustrated that the majority of students who started using substances were between the ages of 21 and 23.

According to the findings of the current study, more than two-thirds of the participants (70.3%) were from urban areas. This is probably related to the cultural context by the openness of the people's social life in the urban region, which makes it easier to access drug cultivation and dealer areas, in contrast to the "healthy" rural lifestyle, where people have greater familial and social bonds and fear of the stigma of addiction. The above finding was in harmony with, Chaman et al,(2020), they indicated that (74 %) of the studied population who resided in urban areas have a greater tendency to substance use compared to the people in rural areas. Moreover, McInnis et al,(2015), illustrated that nearly one-quarter (29.3%) of studied students with substance use were from rural areas. while Jadnanansing et al,(2021), reported that most substance users were coming from urban areas.

The current result confirmed that more than half of the participants (56.8%) were married. This can be

associated with the inability of participants to face marital problems so turn to use drug to escape from it. This result was supported by Abdel Moneim et al, (2020), who indicated that more than half of the studied users (58.75%) were married. In the same line, Dawood, (2018), illustrated that about half of relapsed substance users (49.2%) were married. Further, Hamdi et al,(2016), showed that there was a significant association between marital status and substance use, and the incidence rate is higher for people who married twice (30.9%), indicating that there is a causal relationship between marital instability and substance use.

Concerning the educational level, the current finding revealed that nearly two-thirds of the substance user (64.9%) completed secondary education. This result was in the same line with Karajibani et al, (2014), who assumed that most addict patients had a medium level of education. Also, Abdel Naem, et al, (2020), indicated that 56% of participants graduated from a preparatory and technical school.

Regarding occupation, this study indicated that the majority of the studied participants (83.8%) were worked and three-quarters of the study participants had enough income. This might ensue to individuals with a secondary level of education are usually work technicians or commercial jobs with the relatively high income which is directed to the utilization of substance rather than other useful activities. While Abdel Moneim et al, (2020), showed that workers represented (60%) of users and high prevalence of substance use was among workers (e.g. mechanists and technicians) will be probably attributed to their lower education and socioeconomic status

Regarding the family history of addiction, the finding of the present study illustrated that almost two-thirds (59.5%) of substance user had a positive family

history of addiction. This may be related to many factors as genetic mutations, as alterations of the brain structure, within the same context, people could also be genetically more likely to exhibit problems like impulsivity, executive dysfunction, and poor emotion regulation skills that will increase their risk for using substances. This result was congruent with Amr et al,(2019), who reflected that (42.4%) of street youth reported positive family history of substance use. Also, Rabie et al, (2020), reported that male and feminine students had a positive family history of nicotine, cannabis, and benzodiazepine use. This result contrasts with El-Awady et al, (2017), who showed that quite two-thirds (76%) of studied groups had negative parental substance use.

Regarding the type of addictive material, the current study reported that more than half of the participants (56.8%) were taking heroin. This result was justified from the participant's point of view as the participants tried different types of substances and then go to heroin to feel the high effect of the substance, two-third of the participants had enough income and were able to get it. This result was congruent Baconi et al, (2018), who showed that more than half of the patients (52.5%) of the target group were consumed heroin. Also, Yassa and Badea, (2019), found that most patients used multiple drugs, followed by tramadol, a synthetic opioid that appeared mainly as an analgesic in Egypt and later as an addictive drug.

Concerning the effect of life skills training (LST) on self-esteem and assertiveness skills, the findings of current research reflected that there was a highly statistically significant improvement in self-esteem and assertiveness skills after the training compared to before, most of the participants (85.1%) had a high level of self-esteem after the training compared to (40.5%) before, 81.1% of the participants had a high

level of assertiveness skills after training compared to (8.10%) before. This effect can be related to the psychological and interpersonal skills involved in the life skills training which help an individual to develop effective communication, self-control, conscious decisions, and adopt an active healthy lifestyle. Besides, providing constructive feedback during the training, the presence of group activities, and role-play, when the participants feel competent to tackle the tasks and challenges they encounter daily in their lives they often experience high self-esteem. This result was justified by Utami et al,(2019), who showed that assertiveness training can improve self-esteem when the person accepts their weakness, has more positive self-appraisals of competence, person will experience substantial self-worth and high self-esteem. Moreover, Hussin et al, (2018), found that the mean score percentage of self-esteem was increased for the intervention group (70.8%) post-test compared with a pre-test. In the same vein, De Francisco et al, (2019), they trying to enhance self-esteem among addicted people through applying relaxation techniques, humor, unblocking confidence and communication, and managing emotions via group activity (game and role-plays). They indicated that people who attended the program session experienced high self-esteem than people who don't attend the program. Additionally, Elsayed et al, (2020), they found that more than half of the studied patients (55%) had high self-esteem level post-psycho-educational program compared to only ten percent before the program. Also, this result was in line with a study carried out by Sribalan and Nevetha,(2018), Jyothi & Vijayalakshmi, (2017), they showed that the experimental group has extremely significant improvement in assertive skills after the administration of assertiveness training.

Regarding the effect of the life skills training on aggression among studied patients, the current research showed that there was a highly statistically significant reduction in all categories of aggression (physical aggression, verbal aggression, anger, and hostility) after the training compared to before. Also, the current study reflected that more than two-thirds (77%) of the participants had a mild level of aggression after the training compared to (8.10 %) before. The results indicated that life skills training was effective in helping participants to regulate their emotions and use more effective coping in interpersonal problems, and be able to deal with anger and frustration. This may be due to the content of the life skills training which involved proper ways of emotional control, interpersonal skills, and problem-solving skills. According to the participants' report, they were allowed to openly share their feelings, explore and discuss their interpersonal problems from different perspectives and find a solution other than aggression for their interpersonal problems. This result was congruent with Choopan et al, (2016), who reflected that addicts people face more problems in regulating their emotions, and the training on emotional regulation can help to control anger. In the same line with Vaghee et al, (2016), reflected that the mean score of physical aggression, verbal aggression, anger, and hostility of the experimental group significantly reduced after the training compared to the control group. Additionally, Abbasi et al, (2018), found that the skills training on self-esteem, assertiveness, and aggression significantly reduced body aggression, verbal aggression, anger, and hostility in the training group compared to the control group. Moreover, Navidian, Moshtaghi, & Rezaee, (2020), illustrated that the intervention group who received some of the life skills (Self-awareness, interpersonal relationships, emotional management, and self-expression) had lower anger score post-intervention.

Also, this finding was following Zarshenas et al, (2017), who showed a significant reduction in aggression level among the intervention group compared with the control group. In the same line, Rashid & Srivastava,(2020), reported that alcohol-dependent individuals who had been trained on progressive muscle relaxation show low scores of aggression levels post-training than pre-training.

Regarding the correlation between self-esteem and total aggression, the current result illustrated that there was a statically significant negative correlation between self-esteem and total aggression. This implies that when the individual has high self-esteem, the aggressive behavior will be decreased. This may be due to that individual with high self-esteem value themselves, think positively, has positive feelings and able to solve problems. This result was in the same vein with Zaeaf & Youssef,(2016)., and Hassan,(2016), they reported that there was a negative correlation between self-esteem and aggressive behavior and illustrated that the cause of the addict's aggressive behavior is the desire for immediate gratification and intolerance to frustration. This result was incongruity with Abd al-Samad, Abd El Hameed, and Ayman,(2017), they found that there was no relationship between self-esteem and aggressive behavior among students.

Additionally, the current study indicated that, a statically significant negative correlation between assertiveness skills and total aggression. This means that when patients have assertiveness skills, the aggressive behavior will be decreased. This could be due to participants act fair and in a reasoning manner and are obliged to mutual respect in interpersonal communication and having proper skills in resolving the conflict. Thus, aggressive behavior is reduced. In other words, people who lack assertive skills have the less social adjustment in interaction with others. When

they fail in their interactions, they react aggressively. So, assertiveness skills help them to realize reasons for incorrect or inappropriate behavior, and they learn different methods to cope with situations. This result was in harmony with the results of Khademi, and Mehrabi, (2015), concluded that there was a significant a notable negative association between aggression and assertiveness ($p < 0.003$). So, they recommended training to reinforce assertive behaviors to reduce aggression and mental health promotion. Also, Parray, Kumar, and David,(2020), found that the assertiveness training had significantly modified the behavior of the students from aggressive to assertive.

The results of this study revealed that there was a statistically significant relationship between participants' age and aggression. This can be justified that with increasing age, the life responsibilities increased, or different problems increase which places a burden on the individual that potentially catalyzes the development of aggression. This result was supported by Rounaghi et al, (2018), While Andaç Demirtaş ,(2018), reported that, there was no significant relationship between age and aggression.

The results of the current study revealed that there was a statistically significant relationship between the residence of the participants and aggression. This may be due to a lack of social relations and support systems in the urban areas, which can lead to a greater incidence of aggression. This result was consistent with Paisi-Lazarescu, (2014), who reported that there was a relationship between residence and aggression and illustrated that aggressive behavior was found greater among subjects living in urban areas than those in rural areas. This result was incongruent with Amiri et al,(2020), who reported that there was no significant relationship between aggression and residence.

The finding of the current study reflected that there was a statistically significant relationship between age and assertiveness skills. This is maybe due to the experiences that an individual acquires through different age stages and older individuals may exhibit assertive behavior as a result of coping with major social changes in life. This point of view was consistent with Jyothi and Vijayalakshmi,(2017), point out that as the age grows, individuals will learn interpersonal skills, which in turn will increase the trust in interpersonal interactions. With a sense of self-efficacy, individuals will react assertively with others. The current finding aligned with Larijani et al, (2017), who showed a significant relationship between age and assertiveness. While Shrestha,(2019), revealed that there was no significant relationship between age and assertiveness. The contradiction may be a return to the majority of respondents of previous research belongs to 16-20 years. The current study was compatible with the findings of Amiri et al, (2020), who showed a significant relationship between the respondent's current residence, and assertiveness. While inconsistent with Maheshwari and Gill,(2015), who found that there was no relationship between residence and assertive behavior.

The finding of the current study indicated that there was a statistically significant relationship between occupation, the income of the participants, and self-esteem. This could be due to feelings of productivity and independence. This result was identical with the outcomes of Elsayed et al, (2020), they demonstrated that there was a highly statistically significant relationship between the level of self-esteem and occupation. A higher level of self-esteem was found among working participants. In contrast, Abd Elhamid, (2018), discovered that there was no significant relationship between self-esteem and occupation.

The finding of the current study reflected that there was a statistically significant relationship between occupation, the income of the participants, and assertiveness skills. This result was following Amiri, et al, (2020), they mentioned that there was a significant relationship between participant's economic status and assertiveness. This result was in disagreement with Kazemi and Kazemi,(2020)., Jyothi, (2012), they found that there was no significant relationship between occupation, monthly income, and the level of assertiveness skills ($p > 0.05$).

The results of the current study showed that there was a highly statistically significant relationship between the type of addicted material (heroin) and only assertiveness skills. This result was with alshahraa, (2005), who demonstrated that there was a relation between self -assertiveness and heroin addiction than other types of drugs and justified this result as heroin addicts usually have psychopaths personality. These personalities are characterized by aggression and poor relationship with other. So people use heroin to achieve desires to assert themselves, reduce tension and anxiety associated with stressful interpersonal situations.

The finding of the current research reflected that there was a statistically significant relationship between aggression and occupation, the income of the participants, and family history of addiction. These findings are probably associated with the majority of participants are working in technical or commercial jobs with high irregular incomes; they have, financial and social insecurity. So aggression is an excitement-based reaction to facing problems or stress. Also, the aggressive behavior can stem from a child's resentment toward the addict's parent or from witnessing domestic violence in the home. This result was in the same direction as Rounaghi et al, (2018), who reported a relation between participants' income, the history of substance use in the family, and aggression.

Limitations of this study

The results cannot be generalized to the drug addict population because of the small sample size and absence of the control group.

CONCLUSION

The life skills training significantly improved self-esteem, assertiveness, and decreased aggressive behavior among patients with substance use disorders.

RECOMMENDATIONS

Life skills training should be applied in the drug rehabilitation centers, along with detoxification treatments to prevent people from aggression and improve self-esteem and assertiveness and maintain sobriety. Life skills training should be given to psychiatric nurses in different psychiatric and mental health settings.

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