Relationship between self-esteem and bullying behavior of individuals addicted to stimulants and sedatives post-treatment and aging

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ABSTRACT

The study aimed to investigate the relationship between self-esteem and bullying behavior among addicts. The targeted participants are stimulant users and sedative users after treatment. The study sample consisted of 32 addicted to sedatives and 19 addicted to stimulants, aged between 17 and 52. The findings showed a statistically inverse significant association between age and bullying behavior post-treatment for both addicted to stimulants and sedatives. Also, there are no associations between self-esteem and age among addicted to stimulants and sedatives post-treatment. The findings also showed no association between self-esteem and bullying behavior among addicted to stimulants and sedatives post-treatment.

Keywords: Self-esteem; Bullying Behavior; Addicts; Stimulants; Sedatives; Post-treatment

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1. Introduction

Bullying behavior has risen in recent years, which has become high frequently noticed in public areas; accordingly, the American Psychiatric Association (APA) described bullying as an epidemic of violence. Psychiatrists asserted that bullying could cause devastating effects without a convenient intervention due to the progress prevalence of bullying either verbally or physically. Also, bullying is a kind of illegal harassment and offence that carries punishment by law. The phenomenon of bullying is defined as continuous expose to intrusion and irritation that are more likely to be physical, psychological, or emotional harassment inducing pain to a victim categorized as one of the aggressive behavior categories. Likewise, bullying is aggressive behavior that comprises adverse attitudes often from one or a group against a particular person (victim). Thereby, it is an imbalance act of power, in which a bully can be aggressive, older, physically larger, seek for substance, or seek self-affirmation. An aspect related to bullying is self-esteem. Ziglar considers self-esteem as a social construction of self, manifests self-esteem according to the field theory of personality, and states that self-esteem is an individual evaluation of self-worth. All life aspects are influenced by self-esteem level due to the association among self-esteem and several life variables like; self-dependence, trust feelings, self-efficacy, openness to new experiences, and sufficient social communication. Also, it is asserted that ageing endures conflict, self-challenges, and social challenges in various life spans. Once individuals become elder, he is more likely to need care and attention more than before from surrounding and care providers to help him adapt to emerged variables in life [1-3]. According to the diagnostic and statistical manual of Mental Disorders (5th Ed) DSM-5, addiction-related disorders are difficulties caused by substance misuse like stimulants, sedatives, or hypnotics. Addiction takes over plenty of daily-life activities seeking stimulants, sedatives, or hypnotic, or even recover from its effects, due to a compulsive desire to obtain and use stimulants, sedatives, or hypnotic [4, 5]. Besides, DSM-5 defined stimulants as constant using or abusing of substances, like amphetamine, cocaine, and any other stimulants that cause clinically negative significant impact or distress, resulted from severe use of the stimulants or repeated use of the substance over a longer period, and it is related to constant desire to take the substance or inability to stop use or control use of stimulants [4, 6]. Addiction is a major cause of health,



psychological, and social issues [7, 8]. Stimulants-related disorder takes over plenty of daily-life activities seeking stimulants, use the stimulants, and even recover from their effects due to a compulsive desire to obtain and use stimulants. Despite its social and personal consequences, the recurrence of stimulant use endures breaking daily life commitments toward either home, work, or school. From the social aspect, using stimulants leads to withdrawal or significantly reduces social or recreational activities. This is because of the persistent use of stimulants, recurrence use of the substance in physically risk situations, or constant use of stimulants, despite the exacerbated or frequent psychological, health, and social problems that stimulants use causes [4, 9, 10]. In the term of social effect of addiction, addiction leads to crimes, rape, destitution, and poverty. It provokes social disintegration, hate-spreading, hostility, and congenital anomalies, leading to corrupted social relationships, loss of intimacy and compassion between people, and loss of fraternity and magnanimity. All mentioned mainly induce unstable social and psychological aspects of the addict's family because the family is always at risk of a home break-in by drug control policy. As well as, having a perverted father means losing children and a wife. It may also cause perversion of both children and wife, family disintegration, or even child displacement. One of the most noticed conducts was the aggressive behavior against police officers shown by drug mules and drug dealers and utilizing the money to facilitate these men's works. Moreover, the most common threaten of addiction is targeting youth minds and souls. Studies introduced empirical evidence that people, who have precedent in a robbery, smoking, and drug use at early ages, conduct an aggressive attitude. Because they feel free to express their opinion and perspectives, exhibiting various manifest behaviors like working against political control parties, violence, and sabotages. Furthermore, studies showed that the addict has a degraded self-image, such as feeling like an outcast and socially discriminated, making him careless toward what is going on around him, failing academically. In this context, it can be realized the personal stimulus of drug-using or addicting. If we agreed that a drug misuser or abuser is a kind of pervert, Addon le mot defined a pervert as a person who acts out particular social nature, which means that he does what others considered prohibited. Le Mot underpinned that pervert behavior (drug using) indicates to situations, which conduct oriented condemnably according to arbiter perspectives, and this conduct overreaches the defined social determinations. Thus, drugusing is a pervert conduct and transcending social standards simultaneously [7, 8, 11, 12].

2. Literature review

2.1. Self-esteem

Self-esteem definitions vary among psychiatrists and researchers in the literature. One definition of self-esteem is a perspective or perception that represents an individual recognition of self-worth or his capabilities, or it is about the inner assessment of self-categories, either the positive or negative poles or between both. Or it is a set of positive and negative estimations of individual owns. Likewise, it is defined as a set of self-perspectives toward himself in personal, academic, social, and family domains. Self-esteem is a group of attitudes and beliefs used to face the surroundings world, or it is a set of others' perspectives as perceived by an individual toward oneself. Accordingly, an individual who believes in his significance and value has high self-esteem. On the contradictory, an individual with low self-esteem doubts his competencies, refuses and degrades his own, and unsatisfied with himself. Self develops as one grows old. There are plenty of personality theories that distinguish between self and self-concepts; Rogers theory deems self as a core of personality. Roger's theory bases on the concepts of human as organic being, external image, and self. But Rosenberg scrutinizes self-esteem as an orientation is defined by an individual own. Ziglar regards self-esteem as basis of self-evaluation, while smith distinguishes two categories of self-esteem; realistic and defensive [13-16]. Many studies have investigated the psychological phenomenon of self-esteem. Hothan [7] conducted a study to investigate the relationship between depression and self-adhering behavior among a sample of cannabis and amphetamines living in the Al-Amal for mental health care center in Riyadh and those who exhibit depression symptoms. Sample participants count 100 (50 cannabis and 50 amphetamines). Following the descriptive correlational method, the study adopted the PICK scale of depression and affirmative behavior measures. The study found that there is a negative relationship between depression and affirmative behavior among cannabis and ampethamine addicts, the low level of awareness and affirmative behavior among cannabis and ampethamine addicts pre-treatment increases their depression level and declines their making-decision ability, and the cannabis and ampethamine, who receive Alamal care center services, exhibit a reduced level of depression corresponding to a higher level of affirmative behavior, which represents the adequate behavioral, psychological, and counseling supports provided at AL-Amal care center for mental health. Likewise, Zamboanga, Schwartz, Jarvis, & Tyne [17] targeted Hispanic and American early-adolescents in order to examine the direct and indirect association

between acculturation and the likelihood of substance use through self-esteem and acculturative stress. The study showed the mediating role of acculturative stress and self-esteem in the relationship between the likelihood of substance use and the predictive validity of substance use through self-esteem interpretation. Zaaf & Al-jilali study aimed to inspect the correlation between self-esteem and aggressive behavior, targeted addicts, those visiting sanitarium, and non-addicts selected randomly. Applying Smith Cooper's scale of self-esteem and Arnold Buss & Mark's aggressive behaviour scale found a weak inverse and non statistically significant association between self-esteem and aggressive behavior between addicts and non-addicts participants. A study conducted that targeted 88 street children found a significant relationship between aggressive behaviour and self-esteem for both female and young street children. A variety of variables may affect self-esteem: age, gender, and psychological adjustments. Ahmed [18] provided empirical evidence of the association between negative and positive self-esteem and psychological adjustment. Also, the author deliberated differences in self-esteem imputed to gender and age.

2.2. Bullying

There are many definitions of bullying. Zaitoun and Alshraah [19] defined bullying as conduct that occurs due to an imbalance of power among two parties, first known as a bully, and second called the victim. This conduct includes physical abuse, verbal abuse, financial exploitation, and general humiliation like stigmatizing, spreading rumors, or discriminating. Previous literature defined several forms of bullying: physical bullying such as hitting, kicking, slapping, pushing, shoving, or pinching. Second, verbal bullying such as threaten, stigmatizing, racial stigma, taunting, slurring, mocking, insulting, or spreading fake rumors. Third, Sexual bullying includes sexual comments, touching, sexual stigmatizing, sexual harassment, or sexual insulting. Fourth, Social bullying prevents some people from practicing activities, spreading rumors, discriminating, intimating, group refusal, or coexistence of friendship. Finally, Property bullying such as damage and broken others' possessions, taking other's properties without retrieving them [19]. Many studies have addressed selfesteem like the meta-analysis study of the literature and previous studies by [20], and it found that the youth who have been bullied at school ages has a duplicate likelihood of using the drug at later ages compared to those who have not been bullied. This consistent with the findings of Niemelä et al. [21], that there is association between bullying behavior and drug use at prospective ages. This longitude study of 2946 children at age eight and eighteen and revealed that bullying at childhood is a predictor for substance use in prospective ages while being bullied is a predictor for subsequent smoking. As such, a study of 7508 American adolescents revealed that bullying, gender, and race have a significant relationship with substance use [22]. The study also showed that females, older, and Hispanic have a higher prospect of using substances, while males, young, and African Americans have more likelihood to be bullies and substance-using bullies [22]. Individuals may expose to a variety of bullying rather than childhood bullying, Niedhammer, David, Degioanni, Drummond, & Philip [23] conducted a workplace bullying, and its relationship to drug use targeted 3132 male and 4562 female workers in the south-east of France and corroborated that the workplace bullying and drug use shared a strong association, in which the pre-exposure to bullying elevates this association with a potential of partially mediating of physical and mental health. Accordingly, researchers developed various detection programs or software of drug use based on bullying behavior at early ages as a predictor, such as the Mii-School program [24, 25].

3. Method and materials

The study sample consisted of 32 addicted to sedatives and 19 addicted to stimulants, aged between 17 and 52 years old.

3.1. Instruments of the study

1. Bullying Behavior Scale: The study utilized the scale of bullying behavior introduced by Awad [26] for the Jordanian environment taking advantage of several foreign scales of bullying behavior. The scale encompasses 45 items, divided into four main factors. The first factor is the physical bullying that includes 12 items (items no. 11, 1, 4, 7, 9, 12, 15, 17, 19, 22, 25, 34. The second factor is the verbal bullying includes 13 items (items no. 5, 2, 6, 16, 18, 20, 23, 26, 30, 32, 36, 39, 40). The third factor is social bullying includes 12 items (items no. 8, 11, 13, 21, 24, 28, 31, 35, 37, 40, 44, 45). At final, psychological bullying includes 8 items (items no. 10, 14, 27, 29, 33, 38, 42, 43). The scale exposed to a panel of arbiters involved ten specialists of special education, educational psychology, and educational counseling working in AL-Beit university. The researchers update and

amend the scale as per panel recommendations that gained the highest degree of consent. Awad [27] using validate scale development procedures based on specific international scales and current literature. The scale compared to different previous bullying behavior scales, in which Awad [27] scale is utilized in this study due to its distinctness. Scale items scored using five point-Likert scale, in which each response weighted as following; (never =1, seldom=2, sometimes =3, frequent=4; very frequent=5). The score summation of the overall score and factors ranged from in which the highest value indicates a high level of bullying behavior. On the contrary, the lowest value indicates a low level of bullying behavior or forfeited. The Researcher used two approaches to measure the reliability of the scale, split-half approach, and Cronbach alpha, as shown in Table (1).

Table 1. Reliability measurement of the bullying behavior scale								
Scale Factors	Addicted to	Addicted to	Addicted to	Addicted to				
	Stimulants	sedatives	stimulants	sedatives				
	Half-Split	Cronbach	Half-Split	Cronbach				
		Alpha		Alpha				
Physical bullying	.897	.941	.868	.852				
Verbal bullying	.905	.905 .985		.874				
Social bullying	.901	.901 .911 .919		.890				
Psychological bullying	.904	.944	.853	.907				
Overall scale	.943	.981	.923	.962				

According to the table above, the bullying behavior scale and its four factors have a distinctive degree of reliability for both samples, addicted to stimulants, and addicted to sedatives. Thus, it is empirically applicable. Self-esteem Scale, which Bruss Hair designed, consists of 30 items divided into three factors that described the self-esteem dimensions for students aged 6-12 years and upper. Hair self-esteem scale (1985) standardized on the Arabic environment by[28], scale items devised into three factors as following:

- Family self-esteem includes items from 1 to 10.

- Professional self-esteem includes items from 11 to 20.

-Peer self-esteem includes items from 21 to 30.

Each item has to be answered using four points Likert scale ranged from strongly agree to strongly disagree that weighted from 1 to 4, respectively of affirmative items. On the contrary, weights were inversed for negative items. Table 2 shows the negative and affirmative items number according to three factors.

Table 2. Negative and affirmative of the self-esteem scale						
Items No.						
1-3-5-7-9						
2-4-6-8-10						
11-13-15-17-19						
12-14-16-18-20						
21-23-25-27-29						
22-24-26-28-30						

The overall score for participants ranged from 30 to 120 according to Table 3.

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Overall Score of self-esteem scale	Rank
30-59	Mild self-esteem
60-89	Moderate self-esteem
90-120	High self-esteem

Dhaidan[29] ensured the validity of the standardized version of scale adopted two approaches, content validity based experts panel and internal consistency using correlation coefficient between each item and its related factor. Dhaidan [29] summarized that the standardized version of the scale has an acceptable validity since all correlation scores were statistically significant among items. Overall, the factor score ranged from 0.29 to 0.53 for both family and scholar self-esteem factors and 0.21 to 0.40 for peer self-esteem. The reliability of

standardized self-esteem was stated among different studies. Aldarini, Salamah, & Kamel [30] applied scale on Egyptian environments and used correlation measurement for reliability test, and Nada [31] used the test-retest approach for reliability testing. The researcher used split-half and Cronbach Alpha tests for reliability testing in the current study as shown in Table 4. Scores obtained for both half-split and Cronbach-Alpha tests were acceptable and represented satisfied reliability for both samples: addicted to stimulants and addicted to sedatives. Thus, the scale is suitable for empirical applications.

Table 4. Reliability measurement of self-esteem scale							
	Addicted to	Stimulants	Addicted to sedatives				
Scale factors	Half-Split Cronbach Alpha		Half-Split	Cronbach Alpha			
Family Self-esteem	.849	.806	0.77	0.79			
Scholar Self-esteem	.911	.971	0.81	0.88			
Peer self-esteem	.915	.985	0.86	0.90			
Overall scale	0.800	.883	0.87	.901			

4. Results

4.1. Self-esteem and bullying levels among addicted to stimulants and sedatives post-treatment

One sample T-Test is conducted to investigate self-esteem level and bullying behavior level among addicted to stimulants and sedatives post-treatment as shown in Table 5.

Stimulant Addicts: stimulant addicts exhibit low levels of bullying and self-esteem; since arithmetic means of bullying and self-esteem levels are less than hypothetical means at a significance level less than 0.01.

Variable	df	Hyp M.	Items No.	М.	SD	Т	Sig. level	Sig.	Relevent Weight
				Stimu	lant add	dicts			
Self-	18	75	30	53.9	11.4	-	.000	Sig	44.91
esteem						8.01			
Bullying	18	135	45	72.6	19.1	-	.000	Sig	32.28
						14.2		-	
	Sedative addicts								
Self-	31	75	30	101.5	8.8	17	.000	Sig	84.5
esteem									
Bullying	31	135	45	141.1	25.6	1.35	.187	Non	62.7
								Sig.	

Table 5. One sample T-test results for self-esteem and bullying behavior levels

According to the researcher's observation and therapeutic experience, stimulants addicts seek stimulants to achieve a higher level of self-esteem and activity while post-treatment addicts return to the same level of self-esteem pre-addiction (i.e., negative self-perspective).

Sedatives Addicts: It is obvious that the arithmetic means of sedative addicts' self-esteem exceeds the hypothetical value at the significance level of less than 0.01, indicating a high level of self-esteem among sedative addicts. The sedative user appreciates and cherishes himself. However, the arithmetic mean of bullying is non significantly approximates the hypothetical value since the significance level is beyond the determined significance level of 0.05. Thus, it can not release a clear and precise arbitration if sedative addicts are bullies or not. Arguably, addicts have a medium level of bullying behavior associates with relative weight measurement (62%).

4.2. Association between Bullying behavior and age among addicted to stimulants and sedatives posttreatment

To figure out the association between bullying behavior and age, we use Pearson correlation for both groups as shown in Table 6.

Table 6. Pearson correlation coefficient between age and bullying behavior for both addiction groups

Group	Pearson Coefficients	Frequency	Sig. Level
Stimulant addicts	-0.807	19	.000
Sedative addicts	-0,690	32	.000

According to Table 6, there is a statistically inverse significant association between age and bullying behavior post-treatment for both addicted to stimulants and sedatives. Pointing out bullying behavior decreased as growing up. Avoiding contradictory behavior and exhibiting prosocial behavior become preferences through getting elderly.

4.3. Association between self-esteem and age among addicted to stimulants and sedatives post-treatment

To figure out the association between self-esteem and age, we use Pearson correlation for both groups as shown in Table 7.

Table 7. Pearson correlation coefficient between age and self-esteem for both addiction groups

Group	Pearson Coefficients	Freq.	Sig. Level
Stimulant addicts	0.157	19	.521
Sedative addicts	0.043	32	.816

According to Pearson's correlation coefficient between self-esteem and age, there are no associations between self-esteem and age among addicted to stimulants and sedatives post-treatment. Hence, age is not related to the self-esteem of addicted to stimulants and sedatives.

4.1. Association between self-esteem and bullying behavior among addicted to stimulants and sedatives post-treatment

To figure out the association between self-esteem and age, we use Pearson correlation for both groups, and the result is presented in Table 8.

Table 8. Pearson correlation coefficient between bullying behavior and self-esteem for both addiction

	groups		
Group	Pearson Coefficients	Freq.	Sig. Level
Stimulant addicts	-0,426	19	.069
Sedative addicts	-0.077	32	.675

Table 8 shows no association between self-esteem and bullying behavior among addicted to stimulants and sedatives post-treatment, since the significance level is above the predefined significance level (0.05).

4.2. Differences in self-esteem and bullying behavior across addicted to stimulants and sedatives posttreatment

To examine differences among those addicted to stimulants and sedatives in bullying behavior and self-esteem, we used the independent t-test as shown in Table 9.

Table 9. Result of in	dependent T-test of	bullying b	behavior	and self	f-esteen	n for both ac	diction groups
Group	Frequency	Mean	SD	Df	Т	Sig.	Sig. Level
A. Bullying Behavior							

- -

- -

Stimulant addicts	19	72.6	19.1	49	-10.07	.000	significant	
Sedative addicts	32	141.1	25.7					
B. Self-esteem								
Stimulant addicts	19	53.9	11.5	49	-16.64	.000	significant	
Sedative addicts	32	101.5	8.8				-	

Table 9 shows statistically significant differences between addicted to stimulants and addicted to sedatives; since the significance level is below 0.05. Differences are plausible since there is a difference in arithmetic means of bullying behavior across groups in favor of the sedatives user group.

B. Differences in self-esteem Table (9) illustrates the significant differences across addicts groups in self-esteem due to a low significance level below 0.05. Differences are in favor of the sedative users group, indicating the higher level of self-esteem among sedative users than stimulant users, which is plausible considering the difference among arithmetic means between the two groups. As previously mentioned, addicts look for stimulants to elevate their self-esteem level, because stimulants increase their efficacy across societies and their achievements due to the increase in power and competencies.

5. Discussion

The findings of the study showed that stimulants addicts seeking stimulants to achieve a higher level of selfesteem and activity. These findings are also in line with Ttofi et al. [20]that bullies adolescents are more likely to drug use at later ages. Besides, the study findings showed that there is a statistically inverse significant relationship between age and bullying behavior post-treatment for both addicted to stimulants and sedatives. Pointing out bullying behavior decreased as growing up. Avoiding contradictory behavior and exhibiting prosocial behavior become preferences through getting elderly. According to[22], older and Hispanic adolescents have a higher likelihood of being drug users and drug user bullies, while American early-adolescents and Africans are more likely to be bullied. According to the Arabian acculturative environment, elderlies are more respectful and precious contrary to western settings that [22] targeted. Furthermore, arabian culture obligates the elderly to adopt prosocial behavior and objected to generic aggressive behavior such as bullying. The current study's findings also showed that age is not related to the self-esteem of addicted to stimulants and sedatives, and there is no association between self-esteem and bullying behavior among addicted to stimulants and sedatives post-treatment. Also, the findings of the study showed that there are significant differences across addicts groups in self-esteem. These findings are in line with previous studies illuminating the relationship between substance use and bullying behavior [21-23]. Generally speaking, substance users are more likely to exhibit bullying than others, indicating that bullying behaviour increases among sedative users than stimulant users. Hothan [7] argued that the higher level of adhering behavior among cannabis and amphetamines reflects a higher self-esteem level, but addicts after treatment retrieve their psychological and physical balance since they seek stimulants to compensate for the deficiency that they look to fill. Thus, an individual with a low level of self-esteem is looking to elevate his self-esteem level through stimulant use. Also, sedative addicts' selfesteem was found to be significant. However, the arithmetic mean of bullying is not significant. That is, a low level of self-esteem could negatively affect the adaptation competencies substantially with aging, in which productivity and activeness become at low levels induce feelings of resignation and weakness. Thus, the selfesteem in these ages is reduced according to failure and acceptance of the reality. In this context, Farooq Abdulfatah mentioned that individuals with declined self-esteem tend to give up before even engage in new or complicated experiences and previously predict failure [32]. Moreover, it is asserted that aging endures conflict, self-challenges, and social challenges in various life spans. Once individuals become elder, he is more likely to need care and attention more than before from surrounding and care providers to help him adapt to emerged variables in life. Furthermore, aggregated experience gained through life span enables the elder to recognize life secrets, in which daily life experiences support him. Despite that, reality reflects the contradictory meaning of this truth considerably for addicts; since they acquire different experiences that their peers did not encounter. Commonly, individuals with low self-esteem look for stimulants, while medium and high self-esteem tend to look for sedatives. This is important in explaining differences in self-esteem among the two groups. Consensus with Zamboanga et al. [17] identified self-esteem as an important protective factor against drug use and predictor of drug use. According to [33], Ziglar considers self-esteem as a social construction of self, manifests selfesteem according to the field theory of personality, and states that self-esteem is an individual evaluation of self-worth. Accordingly, if changes occurred in a person's social environment, self-esteem will be the arbiter factor of a qualitative change that would affect the evaluation of self-worth. Self-esteem is a mediator between self and realism. Besides, self-esteem is associated with the meaning of overall personality and the individual responding capability to various stimuli that he exposure. Thus, the personality with a high degree of integrality has a correspondingly high level of self-esteem [33].

6. Conclusion and implications

The current study investigates the relationship between self-esteem and bullying behavior among stimulant users and sedative users after treatment. The study's findings showed a statistically inverse significant association between age and bullying behavior post-treatment for both addicted to stimulants and sedatives;

however, there is no relationship between self-esteem and age and there is no relationship between self-esteem and bullying behavior among participants. In order to sustain security stability and determine crime prevalence, a collaboration between researcher interests and decision-maker effort must conduct to lodge a purposive strategy that aims to preserve human construction. Researchers can carry out a longitudinal investigation of addiction, addicts' characteristics and impacts of addiction with aging, focusing on different factors, such as self-esteem, aggressive behavior, criminal behavior, and pre-criminal behavior. This can provide better understanding of these issues so that doctors and experts can offer suitable treatment for addicted individuals. Moreover, investigating psychological intervention, financial intervention, and legal interventions, which country has, is essential to sanction a law to prevent crimes and addiction, especially among adults because addiction negatively influences self, family, and society.

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