

Relation between Mental Resilience and Decision-making Styles among Secondary School Students Prone to Substance Abuse

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Abstract: Substance abuse among adolescents poses significant risks to their health and wellbeing. **Purpose:** To assess the relation between mental resilience and decision-making style among secondary school students prone to substance abuse. **Design:** A descriptive correlational design was utilized. **Setting:** This study was conducted at four secondary schools in Menoufia Governorate, Egypt. **Sample:** A purposive sample of 117 secondary students who fit the inclusion and exclusion criteria. **Instruments:** Four eening test (DAST-20) adolescent version **Results:** Three quarters (75.2%) of studied students had substantial level of drug abuse, and only 23.1% had severe level of drug abuse. More than half of studied students had low resilience, exceptional, high and moderate levels (56.40, 35, 6.80,1.70) respectively. The highest decision-making styles used by studied students were spontaneous, dependent and rational (14.9, 11.4, 11.3) respectively. While the least decision-making styles used by them were avoidant followed by intuitive (10.9, 10.7) respectively. There was a highly statistically significant positive correlation between total resilience and total decision-making **Conclusion:** There was a positive correlation between total resilience and total decision-making among studied students. **Recommendation:** incorporate Regular screening for psychological and behavioral problems should be done for secondary school students

Keywords: Decision making style, mental resilience, substance abuse

Introduction

Secondary school age is a transitional stage of physical and mental human development with substantial risk for initiating substance abuse. Adolescents as being between 10-19 years of age. Experimentation with addictive substances begins in adolescence as they are cognitively immature and vulnerable to social influences. (Hozifa et al., 2018).

Secondary school age use of illicit substances imposes an enormous burden on individuals, families, and communities. Substance use has correlations with violence, including adolescent homicides and relationship victimization. Secondary school age is a time of development, including ongoing maturing of the brain. Sustained substance use can affect

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neuropsychological functioning, resulting in attention deficits, memory problems, and decreased cognitive flexibility (Kulak & Griswold, 2019). It can lead to negative financial and social consequences and can finally lead to death (Rosansky, & Rosenberg., 2019).

Substance abuse and addiction are preventable disorders that interfere with normal healthy functioning, contributing to physical and behavioral health problems, injuries, lost income and productivity, and family dysfunction. Drug abuse and dependency pose a major public health threat and continue to endanger the health and socioeconomic fabric of societies around the world, especially affecting teenagers and young adult. The transition period from mid to late adolescence into early adulthood is identified as a high-risk period for drug use. Young people's involvement with negative behavior during this period may become habituated and develop into lifetime patterns (Mirlashari et al., 2020). Mental resilience usually refers to the ability of individuals to mobilize personal resources (protective factors) to maintain or quickly recover normal psychological functions after experiencing adversities or traumas. It is a successful response to the "self-adjustment mechanism". It is found that individuals with high resilience perceive less psychological distress and have a higher level of mental health than those with low resilience (Jin, et al., 2022). Resilience is a dynamic process and an essential protective factor in preventing teenagers' drug abuse. It is an individual's ability to overcome difficulties or incidents causing stress rapidly and effectively. This often leads to

better changes in an individual life (Dallas, et al. 2023).

Substance use disorder (SUD) is a maladaptive pattern of drug use involving impaired control over drug-taking activities, social impairment, risky use and pharmacological indicators such as tolerance and withdrawal, these diagnostic criteria are clearly indicative of maladaptive cognition and behavior arising from suboptimal decision-making, poor executive function and inappropriate prioritization of goals. Drug seeking and drug taking has replaced normal social, work and leisure activities. Thus, aim of addiction therapy is to inhibit and replace the maladaptive behaviors with others that will allow the individual to lead a more fulfilling lifestyle (Perry & Lawrence, 2017).

Significance of the study

The problem of substance use is becoming one of the most serious and rapidly growing phenomena all over the world (Rabie et al., 2020). In Egypt, the prevalence of drug abuse among secondary school students is 8.3%. The most common drugs used by the students are Cannabis 83.3% and Tramadol 27.8 %. Approximately 9% of the Egyptian students are using "bango" and 3% are using hashish (Taha et al., 2019).

Substance abuse is the most common negative factor affecting secondary school students associated with psychological and social problems such as mental disorders, suicide attempts, and escape from home, aggressive violent social behaviors, crime, poor academic performance, school failure, and disinterest in education. Secondary school age use substances for entertainment, meeting their social and

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emotional needs, escaping from problems, seeking excitement, or to challenge their environment (Mokadem et al., 2021). Substance abuse can be part of a pattern of risky behavior including unsafe sex, driving while intoxicated or other hazardous, unsupervised activities and in cases when a teen does develop a pattern of repeated use, it can pose serious social and health risks including school failure, impaired memory, problem with family and other relationships, loss of interest in normal healthy activities and risk of contracting infectious diseases like HIV or hepatitis C and mental health problems (Nagar & Hamed, 2020).

It is hoped that the increase in resilience, the identification and modification of dysfunctional cognitions and early detection of secondary school students prone to addiction will enable them to develop a more positive perspective on life, cope with the risk factors in their lives without leading to addiction, develop a more flexible system of thought and to continue their lives more strongly by coping more effectively with the problems they encounter at every period in their lives. Therefore, the purpose of this study is to assess the relation between mental resilience and decision-making style among a secondary school student prone to addiction.

Purpose of the study

To assess the relation between mental resilience and decision making among secondary school students prone to substance abuse.

Research Questions:

- 1) What are the levels of mental resilience among secondary school students?

- 2) What are the decision-making styles among secondary school students?
- 3) What is the relation between mental resilience and decision making among secondary school students?

Research design:

A descriptive correlational design was used to achieve the purpose of the study.

Research setting:

A multistage random selection of one educational directorate out of nine educational directorates in Menoufia Governorate was done through simple random selection from the papers in the bowl. The selected directorate was Shebin El- Kom. The researchers randomly selected one village from 35 villages affiliated to Shebin El- Kom namely Shanawan. Then, the researcher randomly selected four secondary schools; two from Shebin El-kom (one for male and one for female) and two from Shanawan (one for males and one for females), the selected schools from Shebin El-kom were Shebin El-Kom Industrial School for Boys and Al Hurriya School for Girls. While, Golden Tex for Boys and Sadat secondary school for girls from Shanawan.

Finally, this study conducted at four secondary schools (Industrial School for Boys and Al Hurriya School for Girls at Shebin El-kom & Golden Tex for Boys and Sadat secondary school for girls at Shanawan) at Menoufia Governorat, Egypt.

Sample Size calculation:

The sample size was relied upon 95% confidence interval (CI) and assuming a (two-sided) α of 0.05. Based on a previous study (Taha et al., 2019), the prevalence of

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substance abuse among Egyptian secondary school children was 8.3%. The sample size was calculated by the following formula:

$$SS = \frac{Z^2 * (p) * (1-p)}{d^2}$$

Where; SS= sample size, Z = Z value (1.96 for 95% confidence level), p = probability of previous similar studies (8.3%), d=estimated marginal error (0.05)

Sampling: -

A purposive sample of 117 secondary students who attended (Industrial School for Boys and Al Hurriya School for Girls at Shebin El-kom & Golden Tex for Boys and Sadat secondary school for girls at Shanawan) at Menoufia Governorat, Egypt, and who had the following inclusion and exclusion criteria; Their ages ranged from 16 to 19 years old, male and female students, voluntary accepting participation and prone to substance abuse. Exclusion criteria: Students who are diagnosed with mental illness or substance use disorder, any history of chronic physical illness e.g. Diabetes mellitus or others

Instruments of data collection:

Four instruments were used for data collection:

Instrument one: A structured interviewing questionnaire

It was developed by the researcher to assess socio-demographic characteristics of the participants which include age, gender, school name, class room, residence, housing, with whom student live, birth order, ranking between brothers

and sisters, father and mother data, family atmosphere (relationship between father and mother, family type, parents health status and history of smoking or substance abuse).

Instrument two: The child and youth resilience measure (CYRM-17):

This scale was developed by Jefferies et al., (2018) to assess factors that differentiate students with poor adjustment from those with resilience. The scale was translated into Arabic by the researcher. It was a three Likert scale (one for disagree, two for sometimes and three for agree). It consisted of 17-items divided into personal resilience, and caregiver resilience. Personal resilience subscale items (1, 2, 3, 7, 9, 10, 12, 13, 14, and 16). Caregiver resilience items :(4, 5, 6, 8, 11, 15, and 17). The total score ranged from (17 – 51); less than 37 reflected low resilience, from 37 to 41 reflected moderate resilience, from 42- 45 reflected high resilience and from 46- 51 reflected exceptional resilience.

Instrument three: Decision making Style Scale

This scale was developed by Scott & Bruce (1995) to assess the individual ability to assess a situation correctly and act appropriately within that situation: The scale was translated into Arabic by the researcher. The instrument consisted of 25 questions with five subscales examining the five decision making styles—rational, intuitive, dependent, avoidant and spontaneous. It was a five Likert scale from strongly disagree (1) to strongly agree (5). Higher scores in a subscale indicated that this style was used more frequently.

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Instrument four: Drug abuse screening test (DAST-20) adolescent version:

It was a brief self-report instrument developed by the researcher based on Skinner (2001) & Anisi J et al (2013) to assess potential involvement with substance use for reasons other than medical use. It consisted of 20 items, rated on yes and no responses. The score for yes response was one and zero score for no response. The total score ranged from 0-20; zero score reflected none, 1-5 reflected low, 6-10 reflected intermediate, 11-15 reflected substantial and 16-20 reflected severe.

Validity

The study instruments were tested for validity by a jury of five experts (scientific degree) in the field specialty of psychiatric mental health nursing, psychiatric medicine and psychologist to ascertain the relevance, coverage of the content and clarity of the questions. The tools were approved to be valid after the judgment of the experts.

Reliability

The internal consistency of the questionnaire was calculated using Cronbach's alpha coefficients. The reliability of the tools was done using test-retest reliability and proved to be strongly reliable at 0.85 for tool two, at 0.72 for tool three and at 0.82 for four tools.

Ethical Consideration

An approval of the ethical and rehearsal research committee of the Faculty of Nursing, Menoufia University was obtained (no 843, date????). The researcher clarified the purpose of the

study to every participant, took their informed consent for participation, assured maintaining anonymity and confidentiality of the subjects data, the students were informed that participation in this study was voluntary, and they had the right to choose to participate in the study and the right to withdraw from the study at any time.

Pilot study

Pilot study was conducted on 10% (11 students) to assess the clarity of the utilized instruments and the time needed for collecting data. Minor modifications were done according to the result of the pilot study in tool one and four.

Procedure

An official letter submitted from the Dean of Faculty of Nursing Menoufia University, then was sent to the directors of selected Secondary schools.

Data collection for this study was carried out in the period from the beginning of October 2023 to the end of December 2023. The researcher collected data two days / week. Each day, the researcher collected data from two different schools.

Once the permission was obtained to continue this proposed study. The researcher clarified the purpose of the study to the students, took their informed consent for participation and drug abuse screening test was distributed for students at the selected schools. Then students who scored more than 6 on the drug abuse screening test were identified. After identification of the students who prone to substance abuse, the instruments one, two and three were distributed for them to assess their total resilience and decision making.

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Statistical Analysis:

Data were collected, tabulated, statistically analyzed using an IBM personal computer with Statistical Package of Social Science (SPSS) version 22 (SPSS, Inc, Chicago, Illinois, USA). where the following statistics were applied: Descriptive statistics: in which quantitative data were presented in the form of mean, standard deviation (SD), range, and qualitative data were presented in the form numbers and percentages. Analytical statistics: used to find out the possible association between studied factors and the targeted disease. The used tests of significance included: Marginal homogeneity test was used to study association between related qualitative variables. Wilcoxon signed rank test (nonparametric test) used for comparison between two related groups not normally distributed having quantitative variables Spearman's correlation was used to measure the association between two quantitative variables. Significance level was set at p value <0.05.

Results

Table 1 revealed that more than half of studied students (60.7%) their age ranged from (17-18) years. Three quarters (78.6%) of them were male. Nearly half of them (48.7 %) at industrial school, more than half (58.1%) of the studied students at first class, and more than two thirds were from rural area (62.4%). More than three quarter of the studied students had adequate ventilation and living with both parents (84.6%, 85.5) respectively. About three quarters of the studied students (74.4%) had three or four brothers or sisters and one third of them (35%) their birth order was the second.

Table 2 revealed that more than three quarters of studied students' father (79.5%) their age was between 30-<50 years old. As regards to level of education more than one third of their fathers (44.4%) had intermediate education followed by (36.8) had high education. More than three quarter of their fathers (82.9 %) had work. The majority of studied students' their mothers age (95.7%) between (30 - <50) years old. As regards to level of education more than one third of the studied students' mothers (40.2%) had high education. More than two third of their mothers (67.5 %) were house wife.

Table 3 revealed that less than half of studied students' family (47%) had just enough income. As regards relation between studied students' father and mother more than one third of them (38.5%) was understanding. As regards family type of studied students' less than three quarters of them (70.1%) was single. About parents' chronic disease, the majority of studied students' parent (93 %) didn't have chronic disease. About half of studied students' family, 50.4 % didn't smoke. More than three quarters of studied students' parent (78.6%) didn't abuse drugs.

Figure 1 showed that there was three quarters (75.2%) of studied students had substantial level of drug abuse, and only 23.1% had severe level of drug abuse.

Figure 2 showed that more than half of studied students had low resilience followed by exceptional, high and moderate (56.40, 35, least6.80,1.70) respectively.

Table 4 showed that the most decision-making styles used by the studied students were spontaneous followed by dependent

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and rational (14.9, 11.4, 11.3) respectively. While the least decision-making styles used by them were avoidant followed by intuitive (10.9, 10.7) respectively.

Table 5 showed that there was no significant relation between socio-demographic characteristics of the studied students and drug abuse levels.

Figure 3 showed that there was a highly statistically significant positive correlation

between total decision making and total resilience among the studied students at p value ($P < 0.01$). This suggests that enhancing resilience will improve decision-making and vice versa. among adolescents prone to substance abuse. This result answered the third research question of current study which stated “What is the relationship between mental resilience and decision making among adolescents prone to substance abuse.

Table (1): Socio-Demographic Characteristics of The Studied Students.

Studied variable	No.	%
Age / years		
16- <17	46	39.3
17 - 18	71	60.7
Gender		
Male	92	78.6
Female	25	21.4
School name		
Industrial school	57	48.7
Hurria school	31	26.5
Golden school	22	18.8
Sadat school	7	6.00
Class room		
First	68	58.1
Second	39	33.3
Third	10	8.50
Residence		
Urban	44	37.6
Rural	73	62.4
Housing		
Adequate ventilation	99	84.6
Inadequate	18	15.4
With whom do you live		
Both parents	100	85.5
Father only	5	4.30
Mother only	8	6.80
Father and stepmother	3	2.60
One of relatives	1	0.90
Number of brothers and sisters		
1-2	20	17.1
3-4	87	74.4
More than 4	10	8.5
Birth order		
First	39	33.3
Second	41	35.0
Third	32	27.4
Fourth	4	3.40
Fifth	1	0.90

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Table (2): Parents Characteristics of The Studied Students.

Studied variable	No.	%
Fathers data		
Age / years		
30 – <50	93	79.5
50 – 60 years	24	20.5
Educational level		
Illiterate	3	2.60
Read and write	19	16.2
Intermediate education	52	44.4
High education	43	36.8
Job		
Works	97	82.9
Doesn't work	20	17.1
Mothers data		
Age / years		
30 – <50	112	95.7
50– 60 years	5	4.30
Educational level		
Illiterate	11	9.40
Read and write	18	15.4
Intermediate education	41	35.0
High education	47	40.2
Job		
Works	38	32.5
House wife	79	67.5

Table (3): Family Characteristics of The Studied Students.

Studied variable	No.	%
Income		
Not enough	21	18
Just enough	55	47.0
Enough and save	41	35.0
Family atmosphere		
Relation between mother and father		
Understanding	45	38.5
Lack of understanding	20	17.1
Father is controlling	18	15.4
Mother is controlling	14	12.0
Both are dominant	20	17.1
Family type		
Single	82	70.1
Extended	35	29.9
Does one of parents suffer from chronic disease (physical or psychological)		
Yes	24	20.5
No	93	79.5
If yes what is the diseases	N=24	
Diabetes	14	58.4
Hypertension	5	20.8
Others	5	20.8
Any family member Smoking		
Yes	58	49.6
No	59	50.4
Drug or substance abuse		
Yes	25	21.4
No	92	78.6

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Figure (1) Percentage Distribution of Drug Abuse Screening Test Finding among The Studied Students

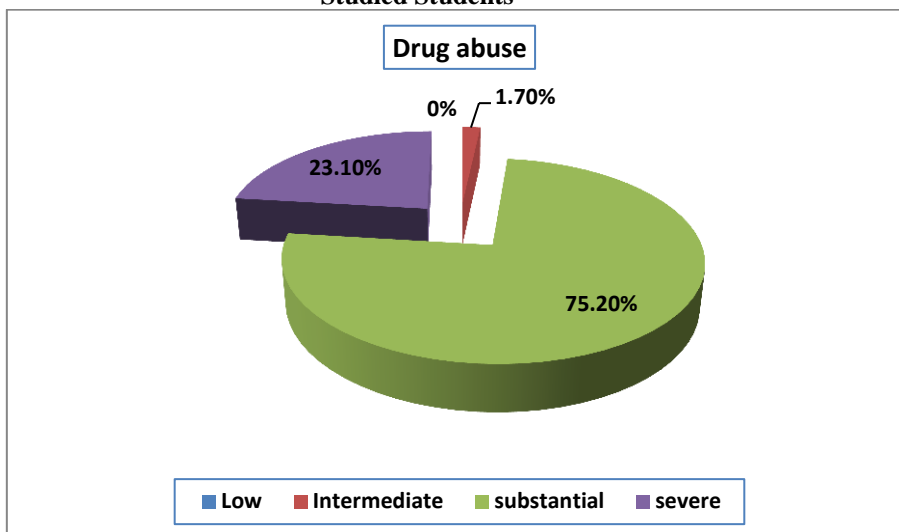


Figure (2) Total Levels of Resilience Score among the studied students

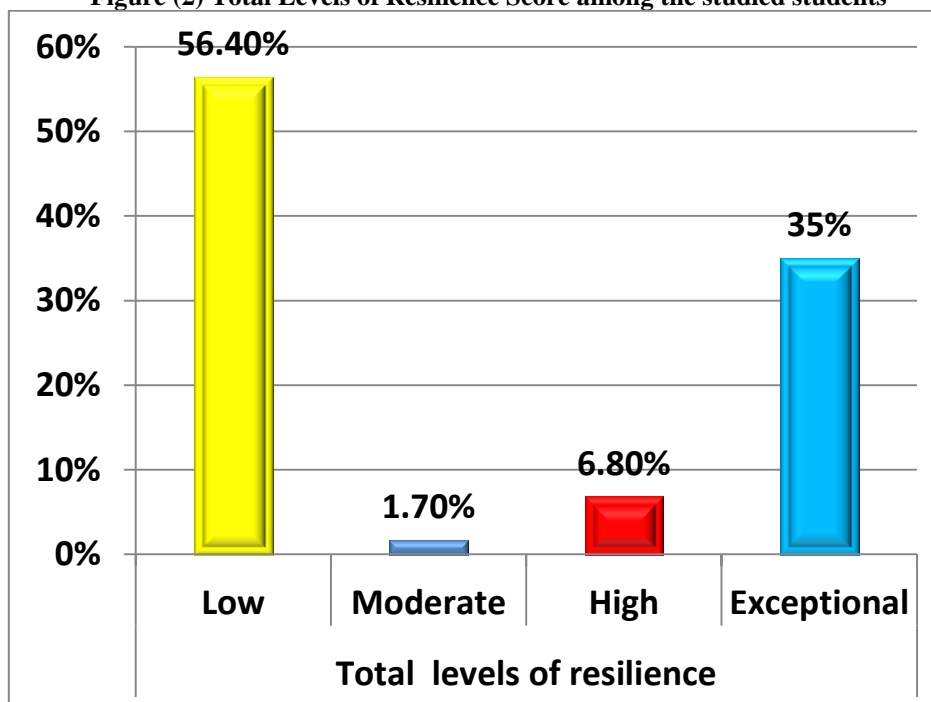


Table (4): Decision making style scale among the studied students

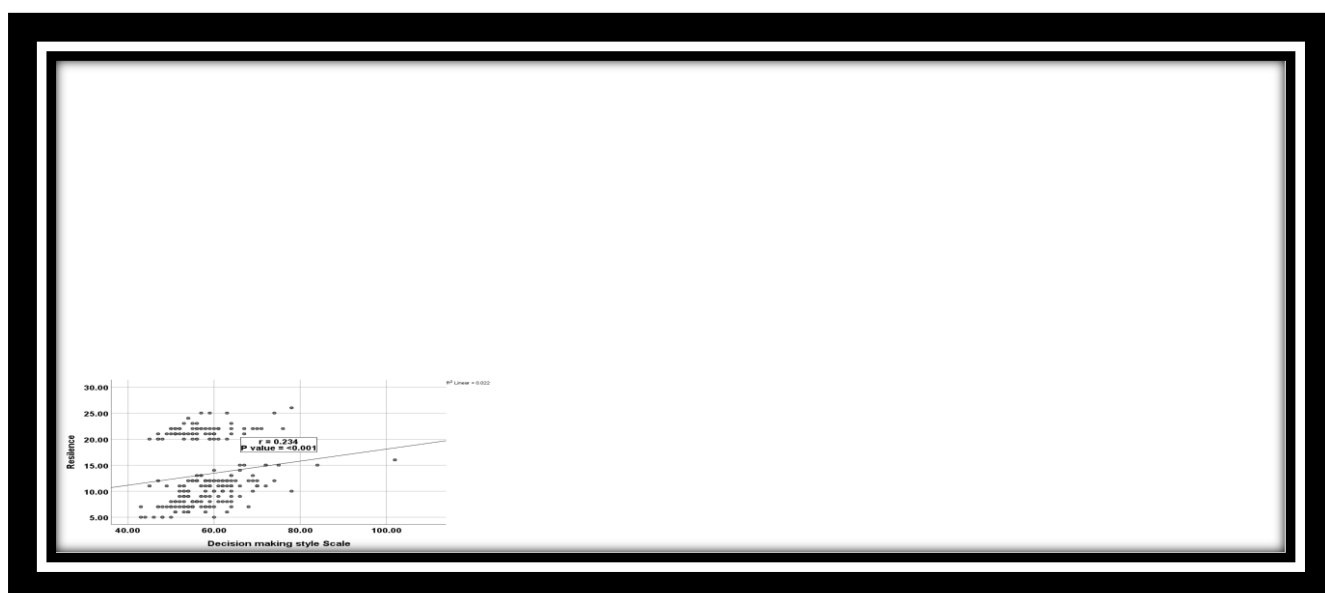
Studied variable	Before CBT
	Mean±SD
Rational	11.3±4.29
Intuitive	10.7±5.15
Dependent	11.4±5.23
Avoidant	10.9±5.12
Spontaneous	14.9±6.00
Total decision-making scale	56.6±5.68

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Table: (5): Relation between Socio-Demographic Characteristics of The Studied Students and levels of Drug Abuse.

Studied variable		Drug abuse		X2 P value
		Intermediate + substantial (n=90)	Severe (n=27)	
		N(%)	N(%)	
Age / years	16-<17 years	34(37.8)	12(44.4)	4.01 0.134
	17- 18 years	56(62.2)	15(55.6)	
Gender	Male	68(75.6)	24(88.9)	2.19 0.138
	Female	22(24.4)	3(11.1)	
School name	Industrial school	42(46.7)	16(59.3)	5.99 0.112
	Hurria school	21(23.3)	9(33.3)	
	Golden school	20(22.2)	2(7.40)	
	Sadat school	7(7.80)	0(0.00)	
Class room	First	51(56.7)	17(63.0)	3.28 0.193
	Second	29(32.2)	10(37.0)	
	Third	10(11.1)	0(0.00)	
Residence	City	32(35.6)	12(44.4)	0.699 0.403
	Rural	58(64.4)	15(55.6)	
Housing	Adequate ventilation	76(84.4)	23(85.2)	0.009 0.925
	Inadequate	14(15.6)	4(14.8)	
With whom do you live	Both parents	74(82.2)	26(96.3)	4.10 0.392
	Father only	4(4.40)	1(3.70)	
	Mother only	8(8.90)	0(0.00)	
	Father and stepmother	3(3.30)	0(0.00)	
	One of relatives	1(1.10)	0(0.00)	
Number of brothers and sisters	1-2	15(16.7)	5(18.5)	6.88 0.229
	3-4	67(74.4)	20(74.10)	
	More Four	8(8.9)	2(7.40)	
Birth orders	First	28(31.1)	11(40.7)	2.13 0.711
	Second	32(35.6)	9(33.3)	
	Third	25(27.8)	7(25.9)	
	Fourth	4(4.40)	0(0.00)	

Fig. (3) Correlation between Total Resilience and Decision Making among The Studied Students.



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Discussion

Substance use among adolescents poses significant risks to their health, wellbeing, and development, particularly in low- and middle-income countries, including Egypt. Adolescence is a developmental phase associated with a greater risk of experimenting and using substances such as alcohol, cannabis and tobacco. Substance use among adolescents is of major public health concern because of the short-and long-term effects on their health and safety as well as the broader negative social consequences. Specifically, substance use is associated with an increased risk of road traffic accidents, violence, sexual risk-taking (such as unprotected sex), mental health disorders (including learning disorders) and suicide (KyeiGyamfi, et al., 2024).

The present study revealed that three quarters (78.6%) of studied students were male. This could be due to traditional gender norms and expectations may play a role in higher rates of substance abuse among men. Men may feel pressure to conform to stereotypes of masculinity, which can lead to behaviors such as substance abuse. As well as engaging in substance use among females was sometimes seen as shameful, and society frowns on it. This result was consistent with Khafagy, et al., (2021). Who studied "Substance use patterns among university students in Egypt" and Liao, et al., (2017) who studied "Prevalence of Substance Abuse among Teenagers in Damietta Governorate" They reflected that the study group,

were 84% males. But this result was disagreement with the study which done by Levy et al., (2023) who studied "Assessment of Screening Tools to Identify Substance Use Disorders Among Adolescents ". They reflected that more than half of participants identified as female (52.0%).

The present study found that about two third of students' family (70.1%) were single type. This may be due to societal trends and changes in family structures. In Egyptian cultures and societies, there has been a shift towards smaller nuclear families rather than large extended

The present findings showed that the majority of studied students' parents and family members (92%) weren't abuse any drugs. This may be due to they became mature enough to understand the negative impact of drug abuse on themselves; they may feel a sense of responsibility towards their family and children. This result was incongruent with McGovern, et al., (2023). Who studied "The association between maternal and paternal substance use and child substance use, internalizing and externalizing problems", they illustrated that both maternal and paternal substance use were associated with child substance use and mental health problems. Also, this result was disharmony Murphy, et al., (2016). "The association between parental attitudes and alcohol consumption and adolescent alcohol consumption in Southern Ireland" they indicated that over one-third (34.2 %)

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of adolescents and 47 % of parents surveyed reported hazardous drinking. Over three quarters (79.5 %) of parents surveyed believed that their alcohol consumption pattern set a good example for their adolescent. Multivariate logistic regression highlights the association between adolescent hazardous alcohol consumption and hazardous drinking by the father.

Regarding to drug abuse screening test, the current study showed that about three quarters (75.2%) of the studied students were substantial to drug abuse. This could due to lack parental supervision or monitoring, allowing them more freedom to experiment with substances without consequences. Or students may have easy access to alcohol, drugs, or other substances either through their social networks or other means, making it more likely for them to experiment with or use these substances. Also, some students not sufficiently educated about the risks and consequences of substance abuse, leading them to make uninformed decisions about drug and alcohol use. This result was in harmony with Akinsefunmi, et al., (2016). "Assessment of substance abuse among students of college of health sciences and technology Ijero Ekiti." They verified that 80% of students were involved in substance abuse while 20% weren't involved. Also, this result was consistent with Uppal et al., (2018) who studied "Prevalence of substance abuse among adolescents and young adults in rural Bangalore-an epidemiological study" They found

62.9% of participants were using the substance in dependence pattern and 37.1% of participants the dependence pattern could not be established. Also, This, result was the same line with Kabbash et al (2022) who studied "Substance abuse among university students in Egypt" Who reflected that 54.8% of participants were using alcohol along with some other substance.

Regarding levels of resilience before the cognitive behavioral therapy, the present study showed that more than half of the studied students had low resilience followed by exceptional, high and moderate (56.4%, 35%, 6.8%,1.7%) respectively. This could due to lack of self-confidence, self-efficacy, parents or family support as well as factors like hormonal changes, developing brains and lack experience to draw from when facing challenges. They were still learning how to cope with stress. This result was covenant with Fauziah et al (2013), they studied "Measuring the level of resilience among teenagers involved with drugs: Implications to drug prevention and rehabilitation" They indicated that three quarters of teenagers involved in the study had moderate levels of resiliency (75.5%). Also, Aschengrau, et al, (2023). Who studied "Association between resilience promotion factors during childhood and risk of drug use disorder during adulthood", they reported participants with 8-9 resilience factors had a 40% reduced risk of having three to eleven criteria for drug use disorder while participants with 10-11 resilience factors had a 60% reduced.

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Regarding, decision-making styles, the current study showed that the most decision-making styles used by the studied students were spontaneous followed by dependent and rational (14.9, 11.4, 11.3) respectively. While the lowest decision-making styles used by them were avoidant followed by intuitive (10.9, 10.7) respectively. This could be due to students still-developing prefrontal cortex, which controls impulse control and decision-making. Dependency and avoidance can also play roles, with some turning to substances as a way to cope with stress or avoid dealing with difficult emotions. Peer pressure and social influences could further impact their choices. This result was consistent with the study of Fooladvand, et al., (2017). Who studied "Decision-making styles and attitude towards substances: Predictors of potential addiction in adolescents "They found that avoidant, spontaneous and dependent decision-making styles had significant positive correlations with potential addiction, while potential addiction was correlated negatively with rational and intuitive decision-making styles.

Additionally, Heyman & Dunn, (2002), studied "Decision biases and persistent illicit drug use". They illustrated that the person's vulnerability to addiction was due to differences in decision-making styles. Therefore, addicts, compared with non-addicts, decide less rationally. Also, addicts have less sensitivity to negative consequences of their decisions, pay more attention to the immediate results of their decisions,

and have more problems in decision making.

The present study showed that there was no significant relation between socio-demographic characteristics of the studied students and drug abuse levels. This could be due to the main reasons of substances experiments were related to peer influences and factor related to students themselves or related to society around them. Or may be because the study group's sample size was insufficient to detect a statistically significant relationship; This study was congruent with the study done by Abio, et al., (2020). Who studied "Substance use and socio-demographic correlates among adolescents in a low-income sub Saharan setting" they demonstrated no significant associations between substance use and age, gender or socioeconomic status neither were having understanding parents.

Concerning the correlation between total decision making and total resilience the present study demonstrated that there was a positive correlation between total resilience and total decision making among the studied students with high statistically significant (P value, 0.001). This suggests that enhancing resilience will improve decision-making and vice versa. This may be due to resilience enables students to overcome obstacles, which in turn affects their capacity to make to make sound decisions. Adolescents who are more resilient are better equipped to cope with stress, manage emotions, and consider consequences when making choices, leading to more positive

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decision-making outcomes. Also, when adolescents faced with difficulties, those with low resilience may be more prone to stress, impulsivity, and emotional reactivity, which can impair their judgment and lead to impulsive or risky decisions.

This result was similar to the study done by Loke & Mohd -Zaharim, (2019). Who studied "Resilience, decision-making and risk behaviors among early adolescents in Penang, Malaysia " They reflected that decision-making significantly mediated the association between resilience and risk behaviors among early adolescents, the relationship between contextual level factors and risk behaviors could be partially explained by decision-making. While this result was in disagreement with Bashir et al., (2013) who studied " Impact of cognitive and decision-making style on resilience: An exploratory study. ". They found that resilience has no relationship with decision making style.

Conclusion

The current study concluded more than half of the studied students showed low resilience. Additionally, the most decision-making styles used by the studied students were spontaneous followed by dependent and rational. The study also revealed a significant positive correlation between total decision making and total resilience among the studied students

Recommendations

This study recommended incorporating regular screening for psychological and behavioral problems

among secondary school students for early detection and early managements of risky behaviors. Awareness about the benefits of improving mental resilience and decision-making among adolescents.

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