

Enhancing Self-Control among University Students Risky for Suicide through Adaptation Strategies

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Abstract

Suicide is a global public health issue that is getting worse. It is difficult to differentiate between thinking about suicide and actually attempting. Suicidal behavior needs explicit attention, by enhancing self-control and self-direction, having a repertoire of efficient adaptation techniques helps reduce suicidal behavior. **Aim:** to enhance self-control among students risky for suicide through adaptation strategies. **Design:** This study followed a quasi- experimental correlational research design. **Setting:** The study was carried out at Tanta university affiliated to Ministry of higher education. **Subject:** The study subject was composed of a convenience sample of fifty students. **Tools:** Three tools were used to collect data of this study, **Tool I:** Multidimensional Self Control Scale (MSCS), **Tool II;** " Suicidal Ideation Scale (SIS), **Tool III:** Adaptation Scale (AS). **Results:** The main results revealed that there were marked significant improvement in the studied students' level of suicidal ideations, self-control, and adaptation level ((1.3800±.6353), (2.4000 ±.63888), (2.5600±,6114) respectively(after implementation of the education program. Also, there were a statistically significant negative correlation between students' level of suicidal ideation, self-control, and their adaptation level on the other side, there were a negative correlation between students' level of self-control, adaptation but this correlation was not statistically significant. **Conclusion:** The present study concluded that, the educational program sessions played a vital role in improvements of studied students' level of suicidal ideations, self-control, and adaptation level after implementation of the education program. **Recommendations:** Health education about practical ways to enhance psychological well-being should be teach to students in the different levels of school and university.

Keywords: Self-Control, University Student, Risk Suicide, adaptation, Program

Introduction

Suicidal behavior in adolescents is a serious public health problem. Adolescents have a lot of psychological conflicts when solving their problems, so they need effective coping strategies to deal with stressors. Suicide is the second leading cause of death for the productive age population, especially the 19 to 24-year-old age group. Suicidal behavior is self-injuring behavior with the intention to die, accompanied by ideas, cues, and actions. Suicidal behavior is divided into three types, namely suicidal ideation, suicide threats, and suicide attempts which are important issues for young people's health. ⁽¹⁾ There are much more suicide attempts, when comparing students to adults, suicide is less common than self-harm, suicidal ideation, and suicide attempts ⁽²⁻³⁾ Additionally, death in young people is accompanying with several other adverse consequences, include comorbid mental disorders, unsuccessful educational and professional endeavors, and early demise brought on by other factors. ⁽⁴⁾ Also, studies demonstrate that adolescent suicide attempts are more common than older attempts. ⁽⁵⁾

There are suicide cases all across the world. according to a World Health Organization study, every 40 seconds (WHO) end-of-year report; more than half of suicides are men perpetrated by individuals under 45 and those between the ages of 15 and 29 years old ⁽⁶⁾. Additionally, there were an estimated over 700,000 suicide deaths worldwide in 2019: ⁽⁷⁾ WHO statistics show that 7881 persons died by suicide in Egypt alone in 2022, while 3022 persons in

Egypt committed suicide in 2019 ⁽⁸⁾. Compared to other countries, Egypt has a suicide rate of 5.0 per 100,000 people, 9.0 on average worldwide. ^(9,10). Suicide also defined as a deliberate attempt to end one's life by harming oneself. An attempt at suicide occurs when someone causes harm to themselves with the intention of ending their life but does not pass away because of their actions. Suicide is linked to various types of harm and violence, such as sexual assault, child abuse, or bullying; for instance, those who have suffered from violence are more likely to commit suicide ⁽¹¹⁾. A non-fatal, self-directed, and potentially injurious behavior with any intention to commit suicide was referred to as an attempt. The likelihood of a young person dying. Earnest 'suicide is increased by prior suicide attempts, often lead to subsequent and more lethal suicide attempts. ⁽¹²⁾ Further that, suicidal ideation is the term used to describe suicidal thoughts or plans ⁽¹³⁾. The seriousness of the idea's ranges from a vague desire to end one's life without any method, strategy, intent, or conduct to active suicidal ideation with a clear plan and goal. ⁽¹⁴⁾

A history of self-harm or previous suicide attempts is strongly associated with suicide, according to much research. A previous suicide attempt preceded about 25–33% of all suicide cases, a tendency that was more common in boys than in girls. Even while we are aware that the suicidal process might take weeks, months, or even years, especially in adolescents, the lethal shift from suicidal ideation and attempted suicide to completed

suicide frequently happens suddenly, unexpectedly, and impulsively⁽¹⁵⁾.

Many writings about student suicide revealed that adolescents were more affected in the age group from (13–20 years). These young people are predisposed to mental health issues, particularly during adolescence⁽¹⁵⁾. This stage of life is marked by change, movement, and simultaneous transitions from one state to another in several different domains. Young people must make decisions concerning significant, real aspects of their lives, such as school, housing arrangements, and peer groups⁽¹⁶⁾. Additionally, they must deal with fresh difficulties in terms of forming their own identities, enhancing their self-worth, gaining higher levels of independence and responsibility, forming fresh intimate bonds. They are nevertheless vulnerable to ongoing, shifting psychological and physical processes. In addition, they frequently face high expectations from important family members and peers. These circumstances invariably bring forth feelings of powerlessness, insecurity, stress, and a sense of losing control⁽¹⁵⁾.

Prior research has suggested that suicidal behavior is a sign of a psychiatric condition such as depression, psychosis, or personality disorder⁽¹⁷⁾. **Suic. Sisti et al. (2020)** argue that the risk for suicidal behavior needs explicit attention. It would be great if diagnostic methods for mental disorders, such as the DSM-5 and ICD-11, had a separate category for suicidal behavior. The identification of risk factors through clinical and academic research may be part of a codable architecture for suicide risk⁽¹⁸⁾

Students must have access to important supportive services to successfully handle these obstacles and emotions. These consist of support and unity throughout the family, especially effective communication, Support from peers and small social networks, community, and school connections. Additionally, cultural or religious beliefs that support healthy living and prevent suicide skills for problem-solving and adaptive coping, such as how to resolve conflicts can play role. Moreover, common sense of purpose, positive self-esteem, and general life contentment and easy access to resources for mental and physical health can help them to successfully handle these obstacles and emotions.^(19, 20)

Adolescents need to develop their self-control, stress management, and self-preservation skills so they can deal with difficult life situations and use adaptation mechanisms to stop negative behavior. Proactive coping is one of the adaptation techniques that can be applied to improve self-protection against suicidal behavior. The goal of proactive coping is to get yourself ready for stress with an emphasis on mitigating and overcoming its effects. Controlling environmental demands and potential dangers is a form of proactive coping that combines this with self-control techniques including controlling, directing, and correcting actions while solving issues.⁽²¹⁾

Strategies in suicide control plans for students classified into two conceptual categories strategies to identify and refer suicidal student for mental health care and strategies to address known or

suspected risk factors for suicide among them. The use of psychotherapy is advising for prevention of suicide. Cognitive behavior psychotherapy for suicide prevention more sessions has shown the possibility in reducing the repetition of suicidal behavior in student who have recently attempted suicide ⁽²²⁾. Another form of psychotherapy used to prevent suicide is coping and support training (CAST). The goal of CAST is to deliver life-skills training in order to increase mood management skills, improve academic performance, and decrease drug involvement ^(20,22). A thorough systematic evaluation is required to support the evidence of proactive coping as a potential factor for boosting self-protection and avoiding suicidal behavior so that it can be used as a guideline for suicide prevention programs in adolescents. ⁽²²⁾

Significance of the study

The risk factors for suicide behavior are numerous and well known. Other cognitive deficiencies have been discovered to be connected to suicide conduct in addition to those that are also linked to depression ^(22,23), as well, attention control, long-term memory, and cognitive ability are mental processes linked to suicidal behavior ^(20,24). According to the UN's Sustainable Development Goals, the WHO's Comprehensive Mental Health Programmed Action Plan 2013–2030 seeks to lower suicide rates around the globe ⁽²⁵⁾. Adaptive abilities can be developed either independently or with the assistance of a professional. It is better meet life's obstacles, enhance student quality of life, and lower your

risk of suicide by developing stronger adaptation mechanisms. Effective techniques to adapt with stress for student is important goal to decrease suicide and suicide attempts in the future.

Aim of the study:

The current study aims to enhance self-control among university student risky for suicide through adaptation strategies.

Research hypotheses:

Directional hypothesis: The educational program will have positive effects on self-control among students risky for suicide through adaptation strategies.

Null hypothesis: The educational program will haven't any positive effects on self-control among student risk for suicide through adaptation strategies.

Operational definition:

Adaptation strategies; is used in the current study as a methods of organizing and applying a certain set of skills to complete tasks more effectively, a "positive growth," which holds that "positive psychological, describe the response of a system (e.g. individual or family) to an experienced threat (e.g. crisis or disease). Specifically in focus are internal threats that challenge the individual's worldview, sense of control or self-esteem. During the process of adaptation, the individual re-establishes personal assumptions of the world (e.g., develops a positive outlook, finds meaning).

Subjects and Methods:

Study Design: A quasi-experimental research design was utilized in the current study.

Setting: The study was carried out at Tanta University (medical and non-medical faculties) in Tanta city affiliated to Ministry of high education.

Subjects:

A convenience sample of 550 students from pervious setting who completed online suicidal ideation scale through WhatsApp group after explaining the purpose of the study and based on statistical analysis of this scale only 50 students of them were found to have suicidal ideation, attempt and fulfill the following inclusion criteria

- Both female and male
- Both medical and non- medical students
- Welling to participate in the study

Tools of the study

Three tools were used in this study:

Tool I: Multidimensional Self Control Scale (MSCS): It consists of two parts:**Part I: Socio-demographic Data Questionnaire.** It was created by the researchers to collect information regarding the sociodemographic data of the study subjects. such as sex, age, residence, income, and faculty, educational level, support system

Part II: Multidimensional Self Control Scale (MSCS): It was established by (Nilsen et.al 2020).⁽²⁶⁾ It was intended to assess self-control. It consists of 36 -item, all items are answered using a 5-point Likert scale format ranging from 1=strongly disagree to 5=strongly agree with a total score ranging between '36' and '180.'

A higher score indicates greater self-control, and vice versa helps to avoid errors when answering the scale., note the following items need to be reversed score: 1, 3, 5, 6, 10, 11, 12, 13, 14, and 15.

The total score was calculated and classified as follows:

- Low self-control = less than 50%.
- Moderate self-control = 50–75%.
- High self-control = more than 75 - %.

Tool II: Suicidal Ideation Scale (SIS):

It was developed by **Morey (1991)**⁽²⁷⁾ to identify students at risk for suicide. It consists of 12 items every item is scaled in a four-point Likert scale from 0=strongly disagree to 3=strongly agree, with a total score ranging between '0' and '36.' A higher score reflects a higher risk for suicide and vice versa. the following items must be scored in reverse order in order to avoid errors when answering the scale: 10 and 12, Following is a breakdown of the overall score and its classification:

- Low risk for suicide = less than 60%.
- Moderate risk for suicide = 60–75%.
- High risk for suicide = more than 75 %.

Tool III: Adaptation Scale (AS): It was developed by (Melal, 2017)⁽²⁸⁾ to identify students adaptation level. It consists of 41 items consist of six subscales:

psychological adaptation includes 9 items, family adaptation includes 10 items, social adaptation includes 7 items, academic adaptation includes 8 items, emotional adaptation

includes 4 items, healthy adaptation includes 3 items. Every item is scaled scored in a five-point Likert scale type from 0= never to 4= always, with a total score ranging between '0' and '164.' A higher score reflects a higher level of adaptation and vice versa. The following items must be scored in reverse order in order to avoid errors when answering the scale.: 2,3,4,5,6,7,9,8,11,13,14,17,24,26,27,28, 29,30,31,32,34,35,36,37,38,39,40, and 41.

The total score was calculated and classified as follows:

-Weak adaptation = 0-54

-Average adaptation =55-109

-High adaptation = 110-164

Methods:

- Official approval from the relevant authorities was sought in order to perform the study.
- Ethical Considerations:
- Students' consent was gained after being informed of the study's purpose
- Privacy and confidentiality were guaranteed. The fact that the information was acquired was private and would only be used for the study's objectives was reassuring to the students.
- It was respected for the student to leave the study at any time.
- Each instrument's content validity was assessed by a jury of five and psychiatric nursing experts.
- Tools of the study were translated into Arabic language and designed by forms of a questionnaire.
- All tools passed the Cornbrash's Alpha test for reliability, which yielded results of ($r=0.875, 0.85, 0.63$ respectively).

- A pilot study was conducted with 10% of the study participants to assess the applicability, viability, and clarity of the early instruments. all questions were clear, simple, and understood) These students were later dropped from the study.

- The actual research was broken down into four phases.

Assessment phase:

During this phase, all students informed about the aim of study in order to get their cooperation. The researchers provide the respondents the study tools and instruct them on how to complete a questionnaire.

Planning Phase:

Based on the assessment phase and a thorough literature research, this phase was developed. Planning the educational strategies included taking into account objectives and expected outcome criteria. Ten students were included in each of the subgroups made up of the studied students. Six sessions were attended by each subgroup in total. For a total of two weeks, these sessions were organized as three weekly meetings. Each session was around an hour long **the researchers were used the following learning materials:**

- Images.
- Videos.
- Films
- Audiovisual materials
- Handouts

Implementing Phase:

In this phase, the researchers were meeting the study subjects in their faculties

The content of the adaption strategies program was presented in the following sequences:

The first session:

An initial session was emphasized establishing rapport between the researchers and the participating students in the study and description of the purpose of the program.

The second session:

In the beginning of the session the researchers made open discussion about the different factors cause of suicide ideation or attempt, then they informed about definition forms of adaptation strategies (as relaxation technique, mantra, a mantra, deep breathing exercise, yoga, listening to music, meditation) and its benefits, its consequence, and its effect on enhancing self-control.

The third session:

Includes education about clues of suicide, people high risk for suicide, best strategies in preventing suicidal ideation and students become self-aware with their any symptoms or risk for suicide.

The fourth session:

It composed of concept of self- esteem, self-control, and importance of health self-control.in addition how to develop positive thought and hope in the futures.

The fifth session:

It consists of signs of low self-control, techniques to increase self-control as group discussion, enlarge one's experience, make list of advantage and disadvantages. Self-disclosure.

The sixth session:

The subjects were given a summary of the program and study questionnaires to

complete and submit as an immediate evaluation of the program.

Statistical Analysis

Using the SPSS program, the gathered data were arranged, tabulated, and statistically examined (Statistical Package for the Social Sciences, version 16, SPSS Inc. Chicago, IL, USA). The range, mean, and standard deviation were computed for quantitative data. For comparison between means of two related groups (before and post education program data) of parametric data for qualitative data, which represent a categorical collection of data by frequency, percentage or proportion of each category, paired t-test was utilized. The F value of the ANOVA test was generated to compare parametric data that had more than two means. $P < 0.05$ was chosen as the level of significance, and $P < 0.001$ was chosen as the extremely significant level.

Results:

Table 1 illustrated distribution of the studied students according to their socio-demographic characteristics that, the more than half of the studied students 58% were female and age of 66% of them range from (18 – 20 years) with Mean SD: 20.0600 ± 3.08657 and also, 52% of them were in medical faculty, about two third of them 70% were in first academic years. Additionally, 62% of them live in urban. Regarding income about more than half of studied students 58% have not enough income and 46% of them don't have support system.

Table 2 demonstrates that the studied students mean score of Suicidal ideations before program were (2.1000

$\pm .73540$) while this mean became $(1.3800 \pm .63535)$ after program. These results revealed that, there were statistically significant differences between students' level of Suicidal ideations pre and post implementation of the educational program at $P\text{-value} = 0.000$.

Table 3 demonstrates that the studied students mean score of Self-control before program were $(1.4400 \pm .67491)$ while this level became $(2.4000 \pm .63888)$ after program. These results revealed that, there were statistically significant differences between students' level of Self-control pre and post implementation of the educational program at $P\text{-value} = 0.000$.

Table 4, Demonstrates distribution of students in relation to their total mean score of self-control subscale pre and post implementation of the educational program. It shows that, the studied students mean score of procrastination self-control, attentional control and emotional control subscales improved after program than before it, were $((1.4600 \pm .64555), (1.3600 \pm .59796)$ and $(1.5800 \pm .64175)$ respectively, then become $((2.6400 \pm .59796), (2.5200 \pm .61412)$ and $(2.5000 \pm .64681)$ respectively(after program. It was observed that all subscale of self-control were illustrated statistically significant differences between students' level of Self-control subscales pre and post implementation of the educational program at $P\text{-value} = 0.000$.

Table 5 demonstrates that the studied students mean score of adaptation before program were $(1.4200 \pm .64175)$ while this level became $(2.5600 \pm .61146)$ after program. These results

revealed that, there were statistically significant differences between students' level of adaptation pre and post implementation of the educational program at $P\text{-value} = 0.000$.

Table 6 demonstrates the total mean score of student's adaptation subscales pre and post implementation of the educational program. It displays that the studied students mean score of family adaptation, psychological adaptation and healthy adaptation subscale enhanced before program were $((1.3800 \pm .63535), (1.5400 \pm .67643)$ and $(1.4000 \pm .63888)$ respectively, while this level became $((2.6000 \pm .49487), (2.5600 \pm .67491)$ and $(2.5800 \pm .60911)$ respectively(after implementation of the program. Adaptation subscales results exposed that, there were statistically significant differences between students' level of adaptation subscales pre and post implementation of the educational program while $P\text{-value} = 0.000$.

Table 7 Revealed that, there were a statistically significant negative correlation between students' level of Suicidal ideation, Self-control, where $r = -.483$, $P\text{-value} = 0.000$, and a statistically significant negative correlation between students' level of Suicidal ideation, Adaptation where $r = -.282$, $P\text{-value} = 0.048$. On the other side the result revealed that, there were a negative correlation between students' level of Self-control, Adaptation but this correlation was not statistically significant where $r = -.10$, $P\text{-value} = 0.943$.

Table 8: The result revealed that, there were statistically significant relationship between students' level of

suicidal ideation and their sex, ,and age, faculty, level of education, and Support system, (F= 19.817 & P-value = 0.000), (F= 6.420 & P-value = .000), (F= 7.818& P-value = 0.007), (F= 9.392 & P-value = 0.000), (F= 15.480 & P-value = 0.000) respectively.

Table 9 The result revealed that, there were statistically significant relationship between students' level of self-control and there, age, faculty, level of education, and income, (F= 4.160 & P-value = 0.04), (F= 4.446 & P-value = .001), (F= 6.966 & P-value = 0.01), (F= 4.144 & P-value = 0.047) respectively.

Table 10 The result revealed that, there were statistically significant relationship between students' level of level of adaptation and there, age, faculty, level of education, and income, (F= 8.033& P-value = 0.000), (F= 45.702 & P-value = .000), (F= 3.009 & P-value = .040), (F= 6.735 & P-value = 0.013) respectively.

Table 1: - Distribution of the studied students according to their socio-demographic characteristics.

Studied students (n =50)			
Socio-demographic criteria		N	%
Sex	Male	21	42
	Female	29	58
Age	18 – 20	33	66
	20 –	17	34
	Mean SD: 20.0600 ± 3.08657		
Faculty	Medical	26	52
	Non-Medical	24	48
Residence	Urban	31	62
	Rural	19	38
Academic level	1 st level	35	70.0
	2 nd level	5	10.0
	3 rd level	3	6.0
	4 th level	7	14.0
Income	Enough	21	42
	Not enough	29	58
Support system	Present	27	54
	Absent	23	46

Table 2: Distribution of the studied students in relation to their total mean score of Suicidal ideations pre and post implementation of the educational program

	Pre		Post		Difference		Paired T-test	
	Mean	SD	Mean	SD	Mean	SD	T	P-value
Suicidal ideation	2.1000	.73540	1.3800	.63535	.72000	1.12558	4.523	.000

Table 3: Distribution of the studied students in relation to their total mean score of Self-control pre and post implementation of the educational program

	Pre		Post		Difference		Paired T-test	
	Mean	SD	Mean	SD	Mean	SD	T	P-value
Self-control	1.4400	.67491	2.4000	.63888	-.96000	1.80711	-8.411	.000

Table 4: Distribution of the studied students in relation to their total mean score of Self-control subscale pre and post implementation of the educational program

Self-control subscales	Pre		Post		Difference		Paired T-test	
	Mean	SD	Mean	SD	Mean	SD	T	P-value
Procrastination	1.4600	.64555	2.6400	.59796	-1.180	.66055	-12.632-	.000
Attentional Control	1.3600	.59796	2.5200	.61412	-1.1600	.93372	-8.785	.000
Impulse Control	1.5000	.64681	2.2400	.65652	-.74000-	.92162	-5.678-	.000
Emotional Control	1.5800	.64175	2.5000	.64681	-.92000-	.80407	-8.091-	.000
Goal Orientation	1.4000	.63888	2.6200	.63535	-1.220	.88733	-9.722-	.000
Self-Control Strategies	1.5000	.64681	2.7000	.46291	-1.20	.83299	-10.186-	.000

Table 5: Distribution of the studied students in relation to their total mean score Adaptation pre and post implementation of the educational program

	Pre		Post		Difference		Paired T-test	
	Mean	SD	Mean	SD	Mean	SD	T	P-value
Adaptation	1.4200	.64175	2.5600	.61146	-1.1400	1.10675	-7.283-	.000

Table 6: Distribution of the studied students in relation to their total mean score of Adaptation subscales pre and post implementation of the educational program

Adaptation subscales	Pre		Post		Difference		Paired T-test	
	Mean	SD	Mean	SD	Mean	SD	T	P-value
Family adaptation	1.3800	.63535	2.6000	.49487	-1.2200	.86402	-9.984-	.000
Psychological adaptation	1.5400	.67643	2.5600	.67491	-1.0200	.79514	-9.071-	.000
Academic adaptation	1.4600	.64555	2.4800	.50467	-1.0200	.99980	-7.214-	.000
Social adaptation	1.3800	.63535	2.3400	.68839	-.96000-	.96806	-7.012-	.000
Emotional adaptation	1.3600	.59796	2.4400	.64397	-1.0800	1.04667	-7.296-	.000
Healthy adaptation	1.4000	.63888	2.5800	.60911	-1.1800	.66055	-12.632-	.000

Table 7: correlation between studied students' level of Suicidal ideation, Self-control, and Adaptation

Variables	Studied students (N =50)			
	Suicidal ideation		Self-control	
	r.	P value	r.	P value
Suicidal ideation	-	-	-.483	.000**
Adaptation	-.282	.048**	-.010	.943

**Correlation is significant at the 0.05 level.

Table 8 Relation between studied students' level of suicidal ideation and their socio-demographic characteristics.

Studied students (n =50)		suicidal ideation			
Socio-demographic criteria		N	%	F	P-value
Sex	Male	21	42	19.817	.000
	Female	29	58		
Age	18 – 20	33	66	6.420	.000
	20 –	17	34		
	Mean SD: 20.0600 ± 3.08657				
Faculty	Medical	26	52	7.818	.007
	Non-Medical	24	48		
Residence	Urban	31	62	.309	.581
	Rural	19	38		
Education level	1 st level	35	70.0	9.392	.000
	2 nd level	5	10.0		
	3 rd level	3	6.0		
	4 th 3 rd level	7	14.0		
Income	Enough	21	42	.827	.368
	Not enough	29	58		
Support system	Present	27	54	15.480	.000
	Absent	23	46		

Table 9 Relation between studied students' level of self-control and their socio-demographic characteristics

Studied students (n =50)		self-control			
Socio-demographic criteria		N	%	F	P-value
Sex	Male	21	42	3.282	.076
	Female	29	58		
Age	18 – 20	33	66	4.160	.004
	20 –	17	34		
	Mean SD: 20.0600 ± 3.08657				
Faculty	Medical	26	52	4.446	.040
	Non-Medical	24	48		
Residence	Urban	31	62	1.418	.240
	Rural	19	38		
Education level	1 st level	35	70.0	6.966	.001
	2 nd level	5	10.0		
	3 rd level	3	6.0		
	4 th 3 rd level	7	14.0		
Income	Enough	21	42	4.144	.047
	Not enough	29	58		
Support system	Present	27	54	.634	.430
	Absent	23	46		

Table 10: Relation between studied students' level of adaptation and their socio-demographic characteristics.

Studied students (n =50)		adaptation scale			
Socio-demographic criteria		N	%	F	P-value
Sex	Male	21	42	1.964	.168
	Female	29	58		
Age	18 – 20	33	66	8.033	.000
	20 –	17	34		
	Mean SD: 20.0600 ± 3.08657				
Faculty	Medical	26	52	45.702	.000
	Non-Medical	24	48		
Residence	Urban	31	62	2.650	.110
	Rural	19	38		
Education level	1 st level	35	70.0	3.009	.040
	2 nd level	5	10.0		
	3 rd level	3	6.0		
	4 th 3 rd level	7	14.0		
Income	Enough	21	42	6.735	.013
	Not enough	29	58		
Support system	Present	27	54	2.145	.150
	Absent	23	46		

Discussion:

Suicide is a global public health issue that is getting worse' suicidal thoughts are important issues for young people's health. The second largest cause of death for people today is suicide. It defined as a deliberate attempt to end one's life by harming oneself. An attempt at suicide occurs when someone causes harm to them with the intention of ending their life but does not pass away because of their actions. Along with this, the present study conducted to enhance self-control among student risk for suicide through adaptation program The study's findings indicated that the adaptation program has a positive effect on improving self-control in student who are at risk for suicide after program implementation as there were statistically significant differences between students' levels of self-control before and after the educational program's implementation. This result may be attributable to the program's successful development, which included six sessions about self-control and suicide coping strategies and based mostly on the study's participants needs. It may also be attributable to the program's clarity, simplicity, frequent repetition, and method of implementation, which involved using discussion to teach and implement the program. This is consistent with **Tangney's (2020)**.⁽²⁹⁾ study, which demonstrated that using strategies to cope effectively could improve self-control

The key factor and beneficial entry to lowering the student's suicidal ideation score is enhancing self-control with using efficient coping strategies like

yoga, relaxation techniques, praying, mantra a mantra, resilience, thinking in positive thought and exercise. Consistent with this idea, these findings showed that there were statistically significant variations between students' levels of suicidal ideations before to and following the implementation of the educational program. This mean that this educational program has critical role in decrease suicidal ideation level this is in agreement with **Brausch (2019)**.⁽³⁰⁾

Educational program about application of adaptation strategies plays critical role in enhancing self-control for student risky for suicide and decrease suicidal ideation. These results revealed that, there were statistically significant differences between students' level of adaptation pre and post implementation of the educational program. This result may be due to learn students about application of cognitive behavior skills, that help the students teach how change the negative thanking to positive thought, how they find in their self the strong points, additionally the researchers using positive reinforcement and hope in future by using open discussion about their problems by encouraging them express their feeling. In addition, the researchers apply effective adaptation strategies like yoga, relaxation techniques, praying, mantra a mantra, resilience and exercise. This result congruent with **Feigelman (2018)**.⁽³¹⁾

Also, the study reveals that, there were a statistically significant negative correlation between students' level of Suicidal ideation, Self-control, and a statistically significant negative

correlation between students' level of Suicidal ideation, Adaptation. This may be due to the idea of suicide has a serious effect on students whole life as far as students health, poor physical health, and psychiatric issues like anxiety, psychotic symptoms, and depression that have critical role in decreasing self-control .this result is In agreement with **Cox , et al (2017)**⁽³²⁾ & **Tørmoen (2014)**⁽³³⁾ who stated that suicidal ideation have negative effect on student psychological adjustments such as self- control.

Finally, it is important to note that found the level of suicidal thoughts among students was statistically significantly relation with their age, faculty, level of education, and income, this result indicates that student are at a critical age, and a high percentage of suicides occur in this age group, particularly when it comes to low income and low educational achievement. As a result, this research focused totally on those samples in an effort to teach them coping mechanisms that will help them maintain self-control and reduce suicidal ideation. This is a reference to the program's high success rate, which made possible by the researcher's use of straightforward language and cover wide range of knowledge throughout program implementation. This outcome is consistent with **Rowland (2019)**⁽³⁴⁾ & **Asarnow (2015)**.⁽³⁵⁾

Conclusion:

According to the findings of the current study, there was a clearly significant improvement in the total score of suicidal ideations, coping skill, and self-control in the studied

students following the implementation of the coping intervention program. Additionally, there were statistically significant negative correlations between students' levels of suicidal ideation, self-control, and adaptation. On the other hand, the results showed that there was a negative correlation between students' levels of self-control and adaptation, but this correlation was not statistically significant.

Recommendations:

The following suggestions are recommended in light of the study's findings.

- More attention should be forward to community mental health services to early detection individual who high risk for suicide
- Health education about practical ways to enhance psychological well-being should be teach to students in the different levels of school and university
- Evidence-based treatments can be adopted at the community, subpopulation, and individual levels to control in the percentage of individual with attempt to suicide
- Work to build and maintain strong bonds to family/unit members and the community.

References:

1. **National Centers for Injury Prevention and Control**, Centers for Disease Control and Prevention. (2018). Web-based injury statistics query and reporting system (WISQARS). www.cdc.gov/injury/wisqars .
2. **Center for Behavioral Health Statistics and Quality**, Substance

- Abuse and Mental Health Services Administration. (2019). Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health. (HHS Publication No. PEP19-5068, NSDUH Series H-54). <https://www.samhsa.gov/data/>.
3. **Ivey-Stephenson, A. Z., Demissie, Z., Crosby, A. E., Stone, D. M., Gaylor, E., Wilkins, N., Lowry, R., & Brown, M. (2020).** Suicidal Ideation and Behaviors Among High School Students — Student Risk Behavior Survey, United States, 2019. *Morbidity and Mortality Weekly Report*, 68(Suppl 1), 47-55. <https://www.cdc.gov/mmwr/volumes/69/su/su6901a6.htm>
 4. **Cox, G., & Hetrick, S. (2017).** Psychosocial interventions for self-harm, suicidal ideation and suicide attempt in children and young people : What? How? Who? and Where? *Evidence-Based Mental Health*, 20(2), 35-40. <https://doi.org/10.1136/eb2017-102667>
 5. **Brière, F. N., Rohde, P., Seeley, J. R., Klein, D., & Lewinsohn, P. M. (2015).** Adolescent suicide attempts and adult adjustment. *Depression and Anxiety*, 32(4), 270–276. <https://doi.org/10.1002/da.22296>
 6. <https://www.who.int/news/item/09-09-2019-suicide-one-person-dies-every-40-seconds>. (Accessed 13 August 2022).
 7. **WHO.** Age-Standardised Suicide Rates for 2000-2019; 2021. [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/age-standardized-suicide-rates-\(per-100-000-population\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/age-standardized-suicide-rates-(per-100-000-population)) Accessed 19 Oct 2021.
 8. **World Life Expectancy,** Health profile Egypt, n.d, <https://www.worldlifeexpectancy.com/country-health-profile/Egypt> . (Accessed 13 August 2022).
 9. **Suicide worldwide in 2019,** n.d, <https://www.who.int/publications/item/9789240026643>. (Accessed 14 August 2022).
 10. **Annals of Medicine and Surgery (2022).** <https://doi.org/10.1016/j.amsu.2022.104496>.
 11. **Turecki G, Brent D. Suicide and suicidal behavior. Lancet (2016) 387:1227–39.** doi: 10.1016/S0140-6736(15)00234-2 .
 12. **Shain, B.** Suicide and suicide attempts in adolescents. *Pediatrics*, (2016), 138(1), e20161420. <https://doi.org/10.1542/peds.2016-1420>
 13. **Bostwick, J. M., Pabbati, C., Geske, J. R., & McKean, A. J. (2016).** Suicide attempt as a risk factor for completed suicide: Even more lethal than we knew. *American Journal of Psychiatry*, 173(11), 1094-1100. <https://doi.org/10.1176/appi.ajp.2016.15070854>
 14. **Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., Currier, G. W., Melvin, G. A., Greenhill, L., Shen, S., & Mann, J. J.** The Columbia-Suicide Severity Rating Scale: Initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American Journal of Psychiatry*, (2011) .168(12), 1266-1277. <https://doi.org/10.1176/appi.ajp.2011.10111704> .
 15. **Bilsen J. Suicide and Student: Risk Factors. Front. Psychiatry.(2018) 9:540.** doi: 10.3389/fpsy.2018.00540.

16. **Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi R, Allen NB, et al.** Our future: a Lancet commission on adolescent health and wellbeing. *Lancet* (2016) 387:2423–78. doi: 10.1016/S0140-6736(16) 00579-1
17. **Rogers, M. L., Chiurliza, B., Hagan, C. R., Tzoneva, M., Hames, J. L., Michaels, M. S., et al. (2017).** Acute suicidal affective disturbance: factorial structure and initial validation across psychiatric outpatient and inpatient samples. *J. Affect. Disord.* 211, 1–11. doi: 10.1016/j.jad.2016.12.057.
18. **Sisti, D., Mann, J. J., and Oquendo, M. A.** Toward a distinct mental disorder—suicidal behavior. *JAMA Psychiatry*(2020), 77, 661–662. doi: 10.1001/jamapsychiatry.2020.0111
19. **Eskin M, Baydar N, Harlak H, Hamdan M, Mechri A, Isayeva U, et al.** Cultural and interpersonal risk factors for suicide ideation and suicide attempts among Muslim college students from 11 nations. *J Afect Disord.* 2021;294:366–74.
20. **Brokke S., Landr N., Haaland V.** Cognitive Control in Suicide Ideators and Suicide Attempters. *Front. Psychol.*2020, 11:595673. doi: 10.3389/fpsyg.2020.595673 .
21. **Keliat B.,A., TololiuT., A., Daulima N. , Erawati E.** The influence of the training of coping skills for stress on self-control and intensity of depression among adolescents with suicide risk .*International Journal of Advanced Nursing Studies.* (2015), 4 (2) 110-114. [www.sciencepubco.com/index.php /IJANS](http://www.sciencepubco.com/index.php/IJANS) .
22. **Straud, C. L., & McNaughton-Cassill, M. (2019).** Self-blame and stress in undergraduate college students: The mediating role of proactive coping. *Journal of American College Health,* 67(4), 367–373. <https://doi.org/10.1080/07448481.2018.1484360>
23. **Neacsiu, A. D., Fang, C. M., Rodriguez, M., and Rosenthal, M. Z. (2018).** Suicidal behavior and problems with emotion regulation. *Suicide Life Threat. Behav.* 48, 52–74. doi: 10.1111/sltb.12335
24. **Bazrafshan R., Jahangir F., Mansouri A ., Kashfi S.** Coping Strategies in People Attempting Suicide. *Int J High Risk Behav Addict.* 2014;3(1):e16265. DOI: 10.5812/ijhrba.16265
25. **WHO.** Live Life: An implementation guide for suicide prevention in countries; 2021. [https://www.who.int/publications /i/item/9789240026629](https://www.who.int/publications/i/item/9789240026629). Accessed 19 Oct 2021.
26. **Nilsen, F. A., Bang, H., Boe, O., Martinsen, Ø. L., Lang-Ree, O. C., & Røysamb, E. (2020),** The Multidimensional Self-Control Scale (MSCS): Development and Validation. *Psychological Assessment.* Advance online publication. <http://dx.doi.org/10.1037/pas0000950>
27. **Morey, L. (1991),** Personality Assessment Inventory, Odessa, Fl. Psychological Assessment Resources
28. **Melal kh., 2017;** psychological processes and their relationship with the level of adaptation among university students, PhD thesis, university of Chlef
29. **Brausch, A. M., O'Connor, S. S., Powers, J. T., McClay, M. M., Gregory, J. A., & Jobes, D. A. (2019).** Validating the Suicide Status Form for the Collaborative Assessment

- and Management of Suicidality in a psychiatric adolescent sample. *Suicide and Life-Threatening Behavior*, 50(1), 263-276.
<https://doi.org/10.1111/sltb.12587>
30. **Tangney, June P., Baumeister, Roy F. and Boone, Angie Luzio. (2020).** High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success. *Journal of Personality*, Volume 72, Issue 2. April 2020, Pages 271-324. <https://doi.org/10.1111/j.0022-3506.2004.00263.x>
31. **Feigelman, W., & Gorman, B. S. (2018).** Assessing the effects of peer suicide on student suicide. *Suicide and Life-Threatening Behavior*, 38(2),181-194.
<https://doi.org/10.1521/suli.2008.38.2.181>.
32. Cox, G., & Hetrick, S. (2017). Psychosocial interventions for self-harm, suicidal ideation and suicide attempt in children and young people: What? How? Who? and Where? *Evidence-Based Mental Health*, 20(2), 35-40. <https://doi.org/10.1136/eb2017-102667>
33. **Tørmoen, A. J., Grøholt, B., Haga, E., Brager-Larsen, A., Miller, A., Walby, F., Stanley, B., & Mehlum, L. (2014).** Feasibility of dialectical behavior therapy with suicidal and self-harming adolescents with multi-problems: Training, adherence, and retention. *Archives Of Suicide Research*, 18(4), 432-444. <https://doi.org/10.1080/13811118.2013.826156>
34. **Rowland, M. D. (2019).** A psychiatric adaptation of multisystemic therapy for suicidal student. In M. Berk (Ed.), *Evidence-based treatment approaches for suicidal adolescents: Translating science into practice* (pp. 191-228). American Psychiatric Association Publishing
35. **Asarnow, J. R., Berk, M., Hughes, J. L., & Anderson, N. L. (2015).** The SAFETY Program: A treatment-development trial of a cognitive behavioral family treatment for adolescent suicide attempters. *Journal of Clinical Child & Adolescent Psychology*, 44(1), 194-203. <https://doi.org/10.1080/15374416.2014.940624>