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The Effect of Mental Health Promotion Program on Psychosocial Adjustment Patterns of Secondary School Students

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ABSTRACT
Mental health is a state of wellbeing in which a person can use his or her own abilities and cope with the normal stresses of life. This study aimed to assess the effect of mental health promotion program for secondary school students on their psychosocial adjustment patterns. This study design was a quasi-experimental, conducted at El Mostakbal Integrated Experimental Language School. The study involved 60 secondary school students, divided into two groups each group consisted of 30 secondary school students. Tools of the study involved, 1) An interview questionnaire to assess socio-demographic characteristics, student's knowledge regarding mental health, students` perception about healthy living and their psychosocial adjustment patterns in their daily life, 2) Tennessee of Adolescents' Scale to measure the level of student's self-concept, 3) Self-Consciousness Scale to measure the level of student's self awareness and 4) Anger Scale to measure anger state and anger trait among students. These tools were used before and after implementation of the program. The main results showed that, the Implementation of mental health promotion program for secondary school students had a positive effect on promoting students` mental health concepts and psychosocial adjustment pattern. There were improvements, with highly statistically significant differences between before and after application of mental health promotion program for secondary school students regarding to their knowledge and perception about mental health and healthy living , level of their self–concept, self awareness, and anger state and trait, their psychosocial adjustment pattern in their daily life. This study recommended that there is a need for developing and implementing continuous mental health promotion programs for secondary school students to acquire psychosocial skills, empower their personality and promote their psychosocial adjustment abilities and positive behaviors that enable them to deal effectively with the demands, challenges, and stress of everyday life. Also, there is a need for increasing school students' awareness especially at adolescent's stages about aspects of healthy lifestyle through mass media
Keywords: Mental health, promotion program, secondary school and psychosocial adjustment

Introduction

The school mental health program (SMHP) is a very important and integral part of the educational system worldwide. It is yet to be recognized and initiated as a part of the health component in schools. In practice, it is restricted to individual work by child mental health professionals focusing on child developmental and mental health issues. Mental health is a broad concept with many synonyms and proxies, including mental or emotional well-being, mental fitness, and subjective well-being. Traditionally, both mental health and well-being have been only implicitly defined in the literature as the absence of mental illness. The World Health Organization (WHO) defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” ***(Smith, 2013)***.

Also, a broad, holistic definition that also incorporates social determinants: “Mental health is the capacity of each individual to feel, think, and act in ways that enhance the ability to enjoy life and deal with the challenges. It is a positive sense of emotional and spiritual well-being that respects the importance of culture, equity, social justice, interconnections and personal dignity” ***(Weare, 2013)*** .

Schools are key settings for promoting the social and emotional health and well-being of children and youth .There is pervasive evidence linking academic achievement to mental health and wellbeing, and this can be used as a powerful argument to promote uptake in a service which may not have health as a priority. The most effective way for school communities to ensure the best possible outcomes in support of children and youth, is to use a comprehensive approach. Schools play an important role in promoting positive mental health. Educators can work to promote positive mental health within the school by providing education to students that works towards increasing protective factors, decreasing risk factors, increasing resiliency and decreasing inequities. Education suggests and supports the schools to implement a health-related activities in order to promote positive mental health by offering a wide range of opportunities for students to learn, practice and promote positive and healthy behaviors ***(Ben & Gravelstein 2012)*** .

Adolescents aged 12-18 years with optimal mental health are frequently exhibiting several signs of positive functioning, regardless of mental illness, they view mental health as encompassing *emotional well-being*

(positive effect, life satisfaction), *psychological well-being* (self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy), and *social well-being* (social contribution, integration, actualization, acceptance, and coherence) ***(Keyes, 2006)*** .

The individual's way of thinking, looking at, and evaluating self is known as self concept. It also signifies individual`s way of thinking, feeling and behaving. Self-concept is one of the dominant factors of personality evaluating abilities and attributes. Self-awareness is one of the first components of the self-concept to emerge. While self-awareness is something that is central to each and every one, it is not something that individual is acutely aware of at every moment of every day. Instead, self-awareness becomes woven into the fabric of individual and emerges at different points depending upon the situation and personality. Students with a positive self-concept tend to be confident and assertive in their judgments and abilities. Students with a negative self-concept are described as quiet, unoriginal, lacking in initiative, withdrawn and so on ***(Rajkot, 2009)*** .

Anger is one of the principle emotions of mankind, which next to fear, it may pose a significant and unnecessary obstacle for students to overcome in the classroom (Kutcher, 2008). Anger is considered as a quite intensive, negative emotion which is felt in situations such as being prevented, attacked, threatened, bereft , restricted and which may result in aggressive behaviors towards the causing thing or person by some means or other, it is used in describing an emotional or sentimental state which ranges from gentle excitement to savage anger or fury and is often revealed when achieving the goals or satisfying the needs of individuals is failed. Meanwhile, improving adolescent students` social skills as self-relaxing, positive self-talking, self-control and feeling self-efficient can help them to acquire proper confronting skills for managing their anger ***(Mohammadi, 2010).***

Mental health programs and services within the school, community and health settings have often focused on addressing concerns related to the psychological well-being of children and youth through the identification of risk-need factors, delivery of timely intervention and support services, and promotional efforts aimed at reducing potential stigma associated with mental health conditions ***(Morrison, 2013)*** .

Significance of the study:

During the transition from childhood to adulthood, many adolescents experience behavior disorders that may affect both their current and future health. Adolescence extends from the age of 10 to 19 years, and adolescent school students always relate to both preparatory and secondary years, from the seventh, to the twelfth grades. Adolescent school students constitute a large proportion of the population worldwide. Specifically in Egypt, the percentage of this age group is estimated by 20% and 15%; from the total population respectively ***(Adolescent and School Health, 2013).***

In Egypt, young people between the ages of 15 and 24 represent 22.54 percent of Egypt's total population. This large and growing group faces problems and challenges that are unique to them and that require interventions and information that address their needs. ***(Central Agency for Public Mobilization and Statistics CAPMAS 2010).***

A school is generally acknowledged to be a key setting for promoting students' health, including mental health. Schools provide access to adolescents for assessment and intervention. Student functioning is tracked regularly, and behavior is assessed by multiple observers or teachers. Preventive interventions designed to target large populations of adolescents are particularly well suited for the school setting ***(Fleming et al, 2010).*** Adolescence is a critical stage of life when physical, psychological and social changes occur. This period of life is a transitional period of development that is foundational but also noticeably malleable and plastic from a neurobiological, behavioral, and psychosocial perspective ***(Steinberg, 2008).***

Aim of the study

This study aims to assess the effect of mental health promotion program for secondary school students on their psychosocial adjustment patterns

This aim was achieved through:

- Assessing the secondary school students` knowledge regarding concepts of mental health and related behaviors
- Assessing self–concept, self awareness, and anger state and trait. of secondary school students and their psychosocial adjustment patterns in their daily life
- Accordingly, developing and implementing mental health promotion program for secondary school students to promote their positive mental health and psychosocial adjustment patterns.
- Evaluating the effect of this program on secondary school students, self concept, self awareness, their anger state and trait and their psychosocial adjustment patterns in their daily life.

Hypothesis:

- Mental health promotion program will have a positive effect on secondary school students` mental health and will enhance their psychosocial adjustment patterns.

Technical Design:

Research design:

A quasi-experimental design was utilized to conduct the study.

Setting:
The study was conducted at El Mostakbal Integrated Experimental Language School (MIELS) affiliated to Nasr City Educational Administration , It is a mixed governmental school for primary , preparatory and secondary grades and having the milieu in which the researcher could apply the promotion program on both boys and girls secondary school students

Subjects:
The subjects of this study included a purposive sample of 60 secondary school students at two classes of first and second grade divided into two groups each group consisted of 30 secondary school students. during the academic year 2014/2015.

Tools:
The tools used in the study for data collection were:

1) An interviewing questionnaire, designed by the researchers, based on the literature review, it consists of:

A. The first part displays sociodemographic data related to personal characteristics as; name, sex, age, social class, number of rooms and items that cover the type of the educational level of parents.

B- The second part is concerned with the secondary school students' knowledge about mental health, such as; definition, indicators and components of mental health, factors affecting mental health in different developmental stages and general characteristics of mental health individual.

C- The third part deals with the secondary school students` perception about healthy living, such as; taking healthy diet, general appearance, performing physical sport activities, taking enough time for sleep, performing social and recreational activity, performing religious and spiritual activities.

D- The fourth part is related to the patterns of students' psychosocial adjustment in their daily life. Questions are as follows: questions 1-4 related to self identity, questions 5-7 related to self awareness, questions 8-10 related to love and belonging, questions 11-13 related to assertiveness, question 14 related to tolerance for frustration, question 15 related to problem solving, questions 16-19 related to decision making and question 20 related to anger management.

Scoring:
For items regarding students` knowledge and perception, a correct response was scored 1 and the incorrect zero. The scores were summed-up and the total divided by the number of the items, giving a mean score for each part. These scores were converted into a percent score. It was considered satisfactory if the percent score was 50% or more and unsatisfactory if less than 50%. For items regarding students` adjustment, each question has 3 levels of answers: “often”, “sometimes”, and “rare.” These were respectively scored 3, 2, and 1. For each group of positive or negative adjustment statements the scores of the items were summed-up and the total divided by the number of the items, giving a mean score. These scores were converted into a percent score. The student was considered to have high positive or negative adjustment if the total percent score was 60% or more in either group.

2- Tennessee of Adolescents' Scale (An Arabic version by *Farag & Hekal, 2004*).
This scale measures self-concept among adolescents. It was designed and prepared by **Tennessee Mental Health in USA in 1955**. It has been modified, upgraded and translated into Arabic by ***Farag & Hekal (2004***) . It contains 100 MCQs to measure:

- Self-satisfaction (questions 1-25)
- Personality satisfaction (questions 26-50)
- Family relation (questions 51-75)
- Social relation (questions 76-100)

Scoring
The Tennessee self-concept scale, scoring was done according to the original tool groupings. The items were scored 5, 4, 3, 2, and 1 for the responses “always true”, “true”, “uncertain”, “false”, and “always false”, respectively. For each area, the scores of the items were summed-up and the total divided by the number of the items. These scores were converted into a percent score. The subject was considered to have a high self-concept if the percent score was 60% or more, and low if less than 60%.

3- Self-Consciousness Scale (SCS-R) It was designed and prepared by ***Scheier, & Carver (2013)*** to measure self awareness , It includes of 22 statements questions regarding private self consciousness, public self consciousness and social anxiety

Scoring
The items were scored 3, 2, 1 and 0 for the responses “lot like”, “somewhat like”, “little like” and “not like”, respectively. For each area, the scores of the items were summed-up and the total divided by the number of the items. These scores were converted into a percent score. The subject was considered to have a high self-awareness if the percent score was 60% or more, and low if less than 60%.

4- Anger scale (An Arabic version by *Abdelrahman & Abdelhamed, 1998*).

It was designed and prepared by Spielberger, S.London. It has been modified and up graded and translated into Arabic by ***Abdelrahman & Abdelhamed (1998***). It includes 30 statements: 15 statements to measure anger state and another 15 statements to measure anger traits.

Scoring

Anger scale: The scoring was done according to the original tool for anger state and traits. The items were scored 4, 3, 2, and 1 for the responses "always", "often", "sometimes", and "never", respectively. For each area, the scores of the items were summed-up and the total divided by the number of the items. The subject was considered to have a high anger state or trait if the score was above the 70th percentile, low anger state or trait if the score was below the 30th percentile and moderate between the 30th percentile and the 70th percentile.

Validity & Reliability:

The developed tools were reviewed by experts in psychiatric mental health and community health nursing for clarity, relevance, comprehensiveness, understanding, applicability and ease for implementation. Validation was done through experts' majority agreement. Testing the Arabic interviewing questionnaire sheet was done using Alpha Cronbach test. The result was 0.87.

Operational Design:

Pilot study:

A pilot study was carried out on 10% of the study sample (6) secondary school students to test the designed assessment tools and their applicability on the sample, to identify obstacles or problems in data collection and to estimate the time needed to fill in the sheets. Accordingly necessary modifications were done. Subjects who shared in the pilot study were excluded from the main study sample.

Administrative Design:

Official letters were issued from the Faculty of Nursing, to the administrator of El Mostakbal Integrated Experimental Language School and to the secondary grade supervisor, explaining the aim of the study and requesting their permission for data collection and participation of secondary school students in the research process.

Ethical considerations:

The researchers emphasized to secondary school students that their participation in the study was voluntary and anonymous and that they have the full right to refuse to participate in the study or to withdraw at any stage without giving any reason.

Field Work:

Data collection was carried out from September 2014 to April 2015. For data collection; subjects were interviewed by the researchers, after explaining the aim of the study that was conducted through four phases:

Phase 1: in this phase the researchers introduced themselves to the students , explained the aim of the study and obtained their oral informed consent to participate in the study. Students were interviewed individually to assess their knowledge regarding mental health, related behaviors and their perception about healthy living, in addition to assessment of their patterns of psychosocial adjustment in their daily life. The researchers used rating scales to assess student's self-concept, self awareness and anger state and traits to obtain baseline measures in a time ranged from 20 to 30 minutes from the first session.

Phase 2: In this phase, the education sessions were done for the two groups. The length of each session was 30-45 minutes at two days/week for each group. The sessions were implemented in the school classrooms at the time of students' break. To ensure exposure of all participants to the same learning experience, all of them received the same content using training methods, demonstration, re-demonstration, role play, pictures, and posters and aided by same booklet. The program sessions emphasized on the concepts and components of mental health, deferent developmental stages and general characteristics of mentally healthy individuals and healthy life, in addition to skills needed for improving patterns of adjustment and self concept, self-awareness and anger management for secondary school students including finding goals and how to achieve them, self-awareness, assertiveness, communication skills, skills for development of positive self concept, problem solving techniques, prevention of frustration and anger management .

Phase 3: An educational Arabic booklet, designed by the researchers, was reviewed and modified by psychiatric and mental health professionals. It was distributed with instructions to guide the students.

Phase 4: The researchers evaluated the students` knowledge regarding mental health and related behaviors, psychosocial adjustment patterns in their daily life, self-concept, self-awareness and their anger state and trait, through interview using the same data collection pre tools.

Statistical Design:

Data entry and statistical analysis were done using Statistical Package for Social Science, (SPSS) version 18. Quality control was done at the stages of coding and data entry. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. Qualitative variables were compared using Chi-square test. Statistical significance was

considered at p-value <0.05, while highly significant difference were obtained at p < 0.00l and non significant difference was obtained at p > 0.05.

Result

Table (1) Shows that the mean age of secondary school students in this study was 17.928±0.706. More than half of them 56.7% were males. As for students ranking, 46.6% of them rank second in their families, and all of them had no previous school failure. In relation to their parents marital status 91.7% were living together. Concerning crowding index 53. 4% were living in families with 3 or more members in room, and most of them 90% had just sufficient family income.

Table (2): reveals that there was highly statistically significant difference between pre and post awareness program implementation regarding to total level of secondary school students' knowledge about positive mental health. As shown 86.6% of students had satisfactory knowledge after program implementation, compared to 13.4% of secondary school students having unsatisfactory knowledge before program, with X^2= 42. 312 and P-value < 0.001.

Table (3): The table shows that, there was a highly statistically significant improvement in the total level of students' perception about healthy living. As indicated 63.4% of students had satisfactory level of perception (50% +) about healthy living after program implementation compared to 36.6% of secondary school students had unsatisfactory level of perception about healthy living, with x^2= 25.28 and P-value < 0.001

Table (4): The table reveals that, there was a highly statistically significant improvement in the total level of students' self concept. As indicated after receiving the awareness program, 63.4% of students had high level of self concept after program implementation, (50% +) while it was for 36.6% of secondary school students a low level of self concept, . with x^2= 25.28 and P-value < 0.001 .

Table (5): The table shows that, there was a highly statistically significant difference between pre and post awareness program regarding the total secondary school students' level of self awareness. As observed 80% of students had high level of self awareness after program implementation (50%+), while it was for 20% of secondary school students a low level of self awareness, with x^2= 22.46 and P-value < 0.001.

Table(6) As noticed from the table, there was a reduction in the percentage of secondary school students' total expression of anger state from 76.7% in pre program to 46.7% in post program. Meanwhile, the total expression of their anger traits was 65% in pre program and improved to be 70% in post program. In addition, there was a highly statistically significant difference between pre and post program regarding to students` total anger state and trait levels, with x^2= 23.83 and 21.63 respectively and P-value < 0.001.

Table (7): The table indicates that, there was a highly statistically significant difference between pre and post awareness program regarding positive adjustment patterns among secondary school students. Their total positive adjustment percentage improved after program implementation from 60% to 86.5% with x^2=10.38 and P-value < 0.001.

Table (8): The table reveals that, there was a highly statistically significant difference between pre and post awareness program regarding negative adjustment patterns among secondary school students. Their total negative adjustment percentage reduced after program implementation from 68% to 27% with x^2=13.45 and P-value < 0.001.

figure (1) : illustrates that there was a highly statistically significant difference between pre and post program regarding students` total negative and positive adjustment levels. There was an improvement in student's total positive level of adjustment pattern. As well, there was a decrease in their total negative level of adjustment pattern after program intervention with x^2= 26.053; p- value = <0.001

Table (9): Distribution of the secondary school students according to their personal characteristics (n=60)

Items	Secondary School students	
	No.	%
Age (years):		
16-<17	28	46.6
17-<19	32	53.4
Range	16.1 - 19.0	
Mean ± SD	17.928±0.706	
Sex:		
Male	34	56.7
Female	26	43.3
Birth rank:		
1st	12	20
2nd	28	46.6
3th +	20	33.4
Previous school failure:		
No	60	100
Yes	0	0
Family type:		
Nuclear	33	55
Extended	27	45
Parents marital status:		
living together	55	91.7
Separated	5	8.3
Crowding index:		
<3	28	46.6
3+	32	53.4
Family income:		
Just sufficient	54	90
Sufficient & save	6	10

Table (2): Comparison between pre-post awareness program regarding to the secondary school students` knowledge about positive mental health (n=60)

Items	Pre- Program		Post-program		X^2 Test	p-value
	No.	%	No.	%		
Definition of mental health	27	45	58	96.7	26.911	<0.001 *
Indicators for mental health	6	10	54	90	51.200	<0.001 *
Components of mental health	30	50	59	98.3	23.309	<0.001 *
Factors affecting mental health	28	46.7	58	96.7	24.918	<0.001 *
Mental health in Developmental stages	15	25	45	75	37.245	<0.001 *
General characteristics of mental health individual	19	31.7	41	68.3	30.162	<0.001 *
Total knowledge:						
Satisfactory (50%+)	12	20	52	86.6		<0.001 *
Unsatisfactory	48	80	8	13.4	42. 312	

(*) Statistically significant at p<0.05

Table (3) Comparison between pre-post awareness program regarding to the secondary school students` perception about healthy living (n=60)

Items	Pre- Program		Post- program		X^2 Test	p-value
	No.	%	No.	%		
Taking healthy diet	30	50	59	98.3	23.309	<0.001*
General appearance	25	41.7	35	58.3	8.63	<0.008*
Performing physical sports activity	21	35	39	65	25.87	<0.001*
Taking enough time for sleep	35	58.3	58	96.5	18.351	0.001*
Performing social and recreational activity	25	41.7	35	58.3	86.3	<0.008*
Performing religious and spiritual activity	35	58.3	58	96.5	18.351	0.001*
Total perception : **Satisfactory(50%+)**	18	30	38	63.4		
Unsatisfactory	42	40	22	36.6	25.28	<0.001*

Table (4): Comparison between pre-post awareness program regarding to the secondary school students` self concept (n=60)

Items	Pre- Program		Post- program		X^2 Test	p-value
	No.	%	No.	%		
Self satisfaction	13	21.7	47	78.3	24.32	<0.001 *
Personality satisfaction	19	31.7	41	68.3	26.95	<0.001 *
Family relation	25	41.7	35	58.3	8.63	<0.008 *
Social relation	21	35	39	65	25.87	<0.001 *
Total self concept **High (50%+)**	18	30	38	63.4		<0.001 *
Low	42	40	22	36.6	25.28	

(*) Statistically significant at p<0.05

Table (5): Comparison between pre-post awareness program regarding to the secondary school students` self awareness (n=60)

Items	Pre- Program		Post- program		X^2 Test	p-value
	No.	%	No.	%		
Private self consciousness	23	38.3	30	50	6.42	<0.005*
Public self consciousness	18	45	42	55	25.42	<0.001*
Social anxiety	43	71.7	17	28.3	24.52	<0.001*
Total self awareness **High (50%+)**	16	26.7	48	80		
Low	44	73.3	12	20	22.46	<0.001*

(*) Statistically significant at p<0.05

Table (6): Comparison between pre-post program regarding to total anger state & trait among secondary school students

Items	Pre- Program		Post- program		X^2 Test	p-value
	No.	%	No.	%		
Anger State						
Anger temperament	43	71.7	17	28.3		
Anger reaction	49	81.7	11	18.3		
Total expression	46	76.7	28	46.7	26.66	<0.001*
Anger Trait						
Anger temperament	37	61.7	23	28.3		
Anger reaction	41	68.3	19	31.7		
Total expression	39	65	42	70	32.54	0.040*
Total anger state						
High (50%+)	35	58.3	25	41.7		
Low	37	61.7	33	55	23.83	<0.001*
Total anger trait						
High (50%+)	31	51.7	20	33.3		
Low	29	48.3	40	66.7	21.63	<0.001*

(*) Statistically significant at p<0.05

Table (7): Comparison between pre-post program regarding to the secondary school students positive adjustment patterns (n=60)

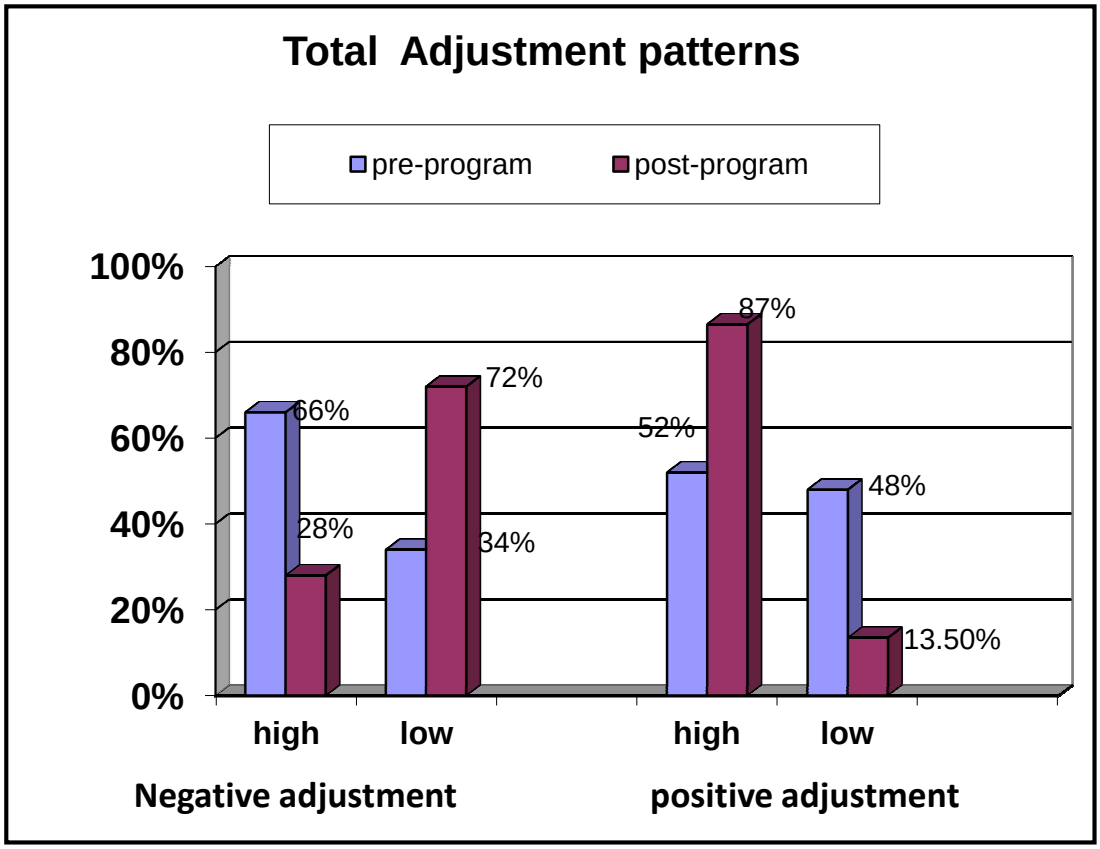
Items	Pre- program		Post- program		Test	p-value
	No.	%	No.	%		
Knowing their goal in life	35	58.3	58	96.5	18.351	0.001*
Achieving the goal	33	55	55	91.5	14.528	0.001*
Knowing their advantages and disadvantages	36	60	58	96.5	16.807	0.001*
Striving to confirm their advantages	33	55	49	81.5	7.040	0.008*
Striving to change their disadvantages	39	65	59	98.3	16.970	0.001*
Belonging to their families and love them	53	88.3	59	98.3	4.211	0.040*
Belonging to their friends and love them	54	90	59	98.3	4.211	0.040*
Belonging to their country and love it	32	53.3	57	95	14.117	0.001*
Knowing their rights	48	80	59	98.3	8.889	0.003*
Knowing their rights without hurting others	33	55	52	86.5	10.313	0.001*
Accepting their problem and completed their life in better mood	21	35	40	67	8.455	0.004*
Trying to solve their problem properly and on time	38	63.3	48	80	2.990	0.084
Knowing to take their decisions properly and on time	30	50	45	75	5.333	0.021*
Trying to control their self without making mistake	23	38.3	45	75	11.429	0.001*
Managing stress feeling through (house work - sport - prayer- recreation)	11	18.3	33	55	12.170	0.001*
Total	36	60	52	86.5	10.38	0.001*

(*) Statistically significant at p<0.05

Table (8): Comparison between pre-post awareness program regarding to the secondary school students` negative adjustment patterns (n=60)

Items	Pre- program		Post- program		Test	p-value
	No.	%	No.	%		
Dissatisfaction with their personal characteristics	48	80	24	40	13.333	0.001*
Despair quickly and fall in pressure	46	77	28	46.6	7.680	0.006*
Fear to take their rights for pleasing others	51	85	35	58.3	7.384	0.007*
Blaming self for others harms	40	67	14	23	24.200	0.001*
Blaming others for their mistakes	45	75	16	26.5	10.141	0.001*
Thought of drinking drug	20	33	4	6.6	8.538	0.003*
Going to others to solve their problems	40	67	19	31.6	9.800	0.002*
Don't analyzing the causes of their problems	35	58	9	15	15.632	0.001*
Sleeping to forget their problem	36	60	6	10	21.978	0.001*
Don't take decisions in their life	36	60	7	11.5	19.527	0.001*
Taking their decisions and not implementing them	51	85	27	45	14.066	0.001*
Insisted on their decision even if wrong	44	73	18	30	8.680	0.008*
Cursing, striking , insulting or hitting others	35	57.5	13	21.5	25.658	0.001*
Talking with loud voice	40	67	23	38.3	7.218	0.007*
Possibly lose others	39	65	19	31.5	8.455	0.004*
Total	41	68	16	27	13.45	0.001*

(*) Statistically significant at p<0.05



(*) Statistically significant at p<0.05 χ^2 = 26.053; p. value = <0.001*

Figure (1): Percentage of total adjustment patterns of secondary school students before and after program implementation

Discussion:

The present study declared that the highest percentage of adolescents had low level of knowledge about mental health pre intervention program, meanwhile, after program implementation there was a highly statistically significant improvement in the total level of students' knowledge about positive mental health. Therefore, it is very important to conduct educational programs because poor mental health can have deleterious effect on a wider health sector`s and development of adolescents and is associated with several health and social outcomes

Mental health is vital to the overall health and well-being of adolescents ***(World Health Organization [WHO], 2007).*** The WHO conceptualized mental health separate from mental ill-health and defined the concept as: a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community. Previous studies are clear on the influence of better mental health versus mental ill-health for the individual and society. Individually, mental health affects our expressive, cognitive, perceptive, relational, and coping abilities, undergirding our general health and wellbeing and capacity to integrate into and become productive members of society.

The present study declared that the highest percentage of adolescents had low level of perception about healthy living pre intervention program, while, after implementation there was a highly statistically significant improvement in the total level of students' perception about healthy living. Therefore, it is very important to conduct educational programs for keeping the adolescents` perception about healthy living

In the same line, findings detected by ***Hanneke and Teunissen (2011)*** revealed that health promoting behaviors are one of the best ways by which people can maintain and control their health. Adolescents usually have a good level of health, while they benefit only from the least health care than the other age groups. Some of lifestyle habits, which can endanger health in future are formed in adolescence attitudes and behaviors, which are formed in adolescence often determine the healthy life style habits of adulthood and this is how a permanent health is formed. Improving adolescents' health to improve society health is a necessary task as clarified by ***Hanneke and Teunissen (2011)***

Despite the enormous health-related behaviors surrounding the age group of adolescents, few researches have simultaneously been conducted on adolescents`dietary behaviors, hygiene, violence, mental health, physical activity, and their experiences at school and at home. Lack of proper recreational and welfare facilities; the influx of immigrants; being away from family members; its status as a coastal and border city; adverse economic conditions of most families and adolescents; small, crowed houses; and limited interactions with other people. Based on the current study findings, the prevalence of mental disorders in the girls was twice that among the boys. This finding was consistent with the findings of earlier research conducted in Iran by ***Roberts et al (2013).***

The present study result revealed that there was a highly statistically significant improvement in the level of students' self concept and self awareness after receiving the awareness program.

This finding is supported by that of ***Taylor et al (2010),*** whose study, on 12 secondary the schools in Los Angeles and Orange state revealed that there was statistically significant difference between pre/post training program implementation about self-concept that was statistically significantly positive after training program implementation. Meanwhile, these findings are contradicting with those of ***Goldberg et al.(2011),*** who conducted a study with secondary school athletes which revealed that self-concept, was not statistically significantly different pre/post training program implementation about self-concept. This increase in positive adjustment pattern and decrease in negative adjustment pattern after program implementation were due to an improvement in self concept.

Enhancing social skills, problem-solving skills, and self confidence can help prevent mental health problems such as conduct disorders, anxiety, depression and eating disorders, as well as, other risk behaviors including those that relate to sexual behavior, substance abuse, and violent behaviour. Health workers need to have the competencies to relate to young people, to detect mental health problems early. ***[WHO], 2016***

The present study finding revealed that there was a statistically significant difference between pre/post program implementation regarding to level of students' positive adjustment pattern. As well, there was a decrease in their negative adjustment pattern after awareness program intervention. On the same line, the research of ***Donaldson et al. (2009)***, done on 142 secondary schools in Los Angeles and San Diego state revealed that slightly more than half of the sample under study had significant increase in their positive adjustment pattern and slightly more than half of sample under study had significant decrease in their negative adjustment pattern in post-training program implementation. This result is also in agreement with that of the study of **Graham (2007),** which revealed that most adolescents under study had significant improvement in their positive adjustment pattern after health education program intervention. It may be due to that the students were in need to change themselves and to be the best.

As prescribed by ***Srikala and Kishore (2010)*** life skills (LS) are abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands, challenges, and stress of everyday life.

Childhood and adolescence are the developmental periods during which one acquires these skills through various methods and people.

The current study result revealed that there was a statistically significant difference between pre and post awareness program implementation as regards the level of students' anger state and trait levels which decreased after implementation in their high degree, while in moderate and low degrees, they increased after program implementation. Contradicting with the previous results of the study, of the ***Schonfeldt (2007)***, revealed that no statistically significant difference was detected between pre and post training program implementations regarding the level of students' anger on the study done on the 300 secondary school students. Also, this result is in agreement with that of ***Steven (2011)***, who conducted a study on 137 American-Indian adolescents from tribal and public schools in two reservation sites in western Washington State. This study revealed that no statistically significant difference was found between pre and post training program implementation regarding the level of students' anger. It may be due to that the students changed their negative behavior due to decrease in anger.

Conclusion:

The study concluded that;

The Implementation of mental health promotion program for secondary school students had a positive effects on promoting students` mental health concepts and psychosocial adjustment pattern. There were improvements, with highly statistically significant differences between before and after application of mental health promotion program for secondary school students regarding to their knowledge and perception about mental health and healthy living , level of their self–concept, self awareness, and anger state and trait and their psychosocial adjustment pattern in their daily life.

Recommendations:

On the light of these findings the study recommended that :

- There is a need for developing and implementing continuous mental health promotion programs for secondary school students to acquire psychosocial skills, empower their personality, and promote their psychosocial adjustment abilities and positive behaviors that enable them to deal effectively with the demands, challenges, and stress of everyday life.
- Providing various educational methods to improve the psychosocial competence and resilience of the adolescents at school as mental health promotional activities and development oriented approach is to be included in the school syllabus as a co-curricular activity over the academic years to enhance students` self awareness, promote psychosocial adjustment and reduce problem behaviors among adolescents.
- Further studies are needed to explain to the eduacators and supervisors how to give more emphasis on establishing psychological and social environments that prevent violence and promote mental health and safety for adolescents in schools.

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