

The effect of mindfulness on the mental health in derelict and unsupervised adolescents in Gorgan city

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Abstract

Introduction: Mental health is one of the development and advance components of every country and mental health is a state of psychological puberty. The current study aimed to examine mindfulness on mental health of derelict and unsupervised adolescents in Gorgan city.

Materials and Methods: The present study has been done on 30 derelict and unsupervised girls. Sampling was convenient among adolescents residing in well-being boarding centers. The experimental group received 8 two-hour sessions of mindfulness. Research instruments were mindfulness questionnaire and general health questionnaire. Data were analyzed by software SPSS-22 and by applying descriptive and inferential statistics (covariance analysis and Kolmogrove-Smirnov test).

Results: Findings of the research showed that the effect of mindfulness on mental health is statistically significant ($P=0.001$) and increased awareness of mind increases mental health.

Conclusion: Regarding findings of the research it can be stated that mindfulness had significant positive effect on mental health, also results of the research show that mindfulness had positive effect on reducing Physical symptoms, improving social activism and stopping the cycle of experiences and negative thoughts.

Keywords: Adolescents, Mental health, Mindfulness

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Introduction

Chahen interprets mental health as a state of psychological puberty that includes: maximum effectiveness and satisfaction obtained from personal and social interactions, which includes positive feelings and feedback towards oneself and others. He states five behavioral patterns in relation to mental health: Sense of responsibility, sense of self-confidence, goal orientation, personal values, individuality and unity (1). One of the necessary conditions for achieving mental health is to have a value system and as Chahen says: Utilizing a series of personal and philosophical values based on beliefs, aspirations and aspirations that are closely related to the happiness of one's individual and his associates, is a prerequisite for mental health (2).

Vantiz considers mental health depending on seven criteria including proper social behavior, freedom from fear and guilt, lack of psychological disorders, personal accomplishment and self-control, self-sustainability and self-actualization, unity orientation and organization of personality, open minded and flexibility (2). Teenage years are considered as an important stage of growth and social and mental evolution of individual. This period needs a emotional balance between mind and feelings, understanding value of the self, self-awareness (understanding gifts, abilities and motivation), selecting real goals in life, emotional independence from parents and establishing healthy relationships with others, acquiring necessary social skills, understanding healthy and effective life are the most important needs of teenagers (3).

Life of every child and teenager accompany with a coordinated interaction with their parents at one home, a usual and acceptable expectation. Deviation from the norm and depriving children of parental and family and living in boarding institutions for those who lost their parents for some reasons and there is no living conditions with family for them and

necessarily they are kept and protected in centers, institutes and day cares that are less similar to family, and it will face children and young children with problems including: Lack of respect for nature, higher risk of physical and mental disorders, especially depression and etc. Derelict and unsupervised teenagers are exposed to danger more than other teenagers (4).

Generally achieving physical, mental, social and spiritual health is the main need of every human being, toady for reducing tension and anxiety and even curing diseases different methods are used such as relaxation and Meditation (5). Cognitive psychologists use different explanation for explaining effective factors on awareness and improving awareness status. In this regard recently the concept of "Mindfulness" was raised.

Brown and Ryan defined awareness to the moment or live in the moment as a certain quality of awareness and attention to the experience of every moment of life (6). Mindfulness is a form of meditation that originated in Eastern religious teachings and rituals, especially the Buddha (7). Mindfulness, clear awareness on the current reality and awareness of personal emotions in which awareness is promoted actively (8). Lack of extreme preoccupation to the past or future, awareness of personal emotions, optimal performance of short-term memory in following current events, ability to concentrate on tasks, lack of acceleration in eating food and automatically perform the life affairs are of the most important examples of mindfulness to the moment that provide cognitive conditions favorable to deal effectively with issues of life (9).

Several studies show that training awareness to patients with mood and anxiety disorders causes to improve mental health significantly. Also its usefulness has been shown as a treatment method for a range of chronic mental disorders (10). Generally Mindfulness-based therapy has been widely considered as effective for people with mood disorders,

stress, eating disorders treatment and prevention of recurrence of depression (11).

In addition awareness to the moment is negatively associated with complaints of physical symptoms (12). From Islam view point awareness to the moment are considered as mental health criterion, basically conscious humans are constantly breathing at the moment and unhealthy man drowns in the past or future (13). Lack of control and engagement to negative thoughts that a person thinks obsessively affects the mental health. Because of having cognitive mechanism consistent with negative emotions, mental health causes the person against events and failure show less preoccupation, better logical thinking and correct interpretation of what occurs in the moment (14).

Various approaches were applied in treatment of psychological problems and mindfulness has shown its effect in different aspects as an effective treatment method. Regarding mindfulness to the moment that can have an effective role in awareness with well-being, the current research aimed to examine the effect of mindfulness on mental health of derelict and unsupervised teens.

Materials and Methods

This research is empirical and it used two groups of control and experimental groups and pre- and post-test for examination of the effect of independent variable on dependent variable. Samples were obtained from available sampling among society of derelict (orphan) and unsupervised (like-family) teens that live in welfare boarding centers. The method was that we initially went to the day care centers in Gorgan that keep unsupervised and orphaned girls and 30 of them were selected and were given the questionnaire then they divided into 2 groups: control and experiment. Then sessions of mindfulness was performed for experimental group. After performing and training mindfulness, at the end post-test was performed for both control and experimental groups. Mindfulness based on cognitive treatment sessions is preformed

including 8 2-hour sessions weekly (one session every week).

Research instrument

A) Mind awareness questionnaire (MAAS):

This test is a 15-question scale that was designed by Brown and Ryan 2003 for the purpose of measuring consciousness toward events and experiences of the life. Questions determine the mind-consciousness structure based on the Likert scale of 6 degrees that its range varies from 15 to 90 points. The greater degree shows the greater mindfulness. Validity and reliability of this scale has been done by Abdi in Iran. The reliability test of this scale has also been reported within a one-month fixed period. The internal consistency of the test questions based on the Cronbach's alpha coefficient was reported from 80% to 87%. Cronbach's alpha for its Persian sample is reported in a sample of 723 students (81%).

B) Mental Health questionnaire (GHQ): This test consists of 28 materials that were provided by Goldberg and Hiller in 1979, it examines the health status of the person in 4 scales of physical symptoms, anxiety and insomnia, social acuity, and depression. Each scale has 7 questions. This test has a high reliability and Cronbach's alpha of 83%.

This questionnaire was validated by Dr Norbala et al. in 1380. The coefficient of validity of the Persian version of the 28-item general health questionnaire with a retest method, with an interval of 7 to 10 days, was estimated at 91% on a group of 80 that at a level of one thousandth error is significant. Data were analyzed using descriptive statistics, standard deviation and inferential statistics of Kolmogorov-Smirnov test and covariance analysis and by using SPSS-22 software.

Intervention

Session 1: Getting a pre-test of setting general policy, taking into account the privacy and personal life aspects of individuals; raisins eating exercise, Physical checkout exercise, Homework, Discussion and Determination of Weekly Sessions, Distribution of tapes and

Leaflets of the First Session; Session 2: Physical checkout exercise, rehearsal exercise, homework review, practice of thoughts and feelings, recording pleasant events, sitting meditation for 1 to 10 minutes; Session 3: reading or listening practice, 30 to 40 minutes meditation, task review, 3 minute breathing exercise and revision, Walking with the presence of the mind. Fourth session: A five-minute walk or listening exercise, 40-minute meditation, breathing, body, mind and body awareness, revision exercise, homework, homework assignment; Session five: 40-minute sitting meditation, review exercise, homework, breathing space and revising it; Session 6: 40-minute sitting meditation, awareness of body breathing, sounds and then reflection of thoughts,

homework review, preparation for completion of the course; Seventh session: 40-minute meditating sessions, awareness of body breathing, sounds, and then thoughts on rehearsing exercises, reviewing homework, exercising the relationship between activity and mood; session 8: Reviewing past content, summarizing and taking post-tests (15).

Results

Findings based on Table 1 shows that in the case of mental health scale pre-test mean score of the experimental group was 8.31 and 4.35 in the control group and these scores in post-test, experimental group has reached 16.8 and control group reached 36.3. In the following chart these differences are observed.

Table 1. Mean and standard deviation of the pre-test and post-test score of studied variables

Control group				Experimental group				variable
Post-test		Pre-test		Post-test		Pre-test		
SD	MD	SD	MD	SD	MD	SD	MD	
4.2	36.3	4.5	35.4	2.3	16.8	8.9	31.8	Mental health

Findings based on table 2 about mental health scale shows that with considering cut-off point 6 in General Health Questionnaire subscales, scores in both groups higher were

greater than 6 and it was at the clinical and pathological level. These scores reduced after the education to experimental group and it reached to normal health level but score of the control group stayed at the clinical level.

Table 2. Mean and standard deviation of the pre-test and post-test score of mental health components

Control group				Experimental group				variable
Posttest		Pretest		Post-test		Pretest		
SD	MD	SD	MD	SD	MD	SD	MD	
2.3	8.8	2.6	8.8	1.6	3.4	2.9	6.7	Physical symptoms
2.3	10.2	2.2	10.07	1.8	3.9	4.4	7.2	Anxiety and insomnia
1.7	9.7	1.6	9.6	1.2	4.9	3.4	8.07	Social Performance
1.9	7.6	1.2	7	1.06	4.5	1.2	7	depression

Obtained results of table 3 by using Kolmogorov - Smirnov and variance analysis is as the following. The effect of training mind awareness on mental health is

statistically significant. ($p \leq 0.001$, $F=115.67$). ETA coefficient shows that .81 of changes in the dependent variables were due to mindfulness training.

Table 3. Obtained results from dependent variables based on Kolmogorov – Smirnov test

ETA coefficient	sig	f	ms	df	ss	Dependent variable
0.81	0.00	115.67	2591.9	1	2591.9	Mental health

And about the scales of mental health based on obtained data of table are as the following: The effect of training mind awareness on physical symptoms and anxiety is statistically significant ($p \leq 0.001$, $F = 40.54$). The effect of mindfulness training on anxiety and insomnia is statistically significant ($p \leq .001$, $F = 50.84$). The effect of mind awareness training on social performance is statistically significant

($p \leq 0.001$, $F = 65.3$). The effect of training awareness of mind on depression is statistically significant ($p \leq 0.001$, $F = 28.31$). Familiarity of participants to answer the questions of the questionnaire in pre-test and post-test was not effective and this issue regarding the rate of effect of pretest is observable. Given the significant role of education, hypotheses of the research are confirmed.

Table 4. Obtained results of mental health components based on Kolmogorov – Smirnov test

Sig	F	MS	DF	SS	components
0.00	40.54	149.06	1	169.06	Physical symptoms
0.00	50.84	212.9	1	212.9	Anxiety and insomnia
0.00	65.3	152.58	1	152.58	Social functioning
0.00	28.31	68.01	1	68.01	depression

Discussion

Regarding the effect of mind awareness that could have on related variables, we can say that this method due to using various techniques and having subjective and cognitive principles can be an effective treatment method. Regarding that orphan and unsupervised people may face many problems, in the current study related variables were reduced and actually this research shows that the effect of training mind awareness on mental health was significant and training mind awareness is an effective method in increasing mental health components. Regarding mental health components and considering related scales in general explanation of this hypothesis we can say that subjective and cognitive states of the individual affects severely on the physical and mental health of individuals, a person that shows pathologic somatic symptoms, anxiety, depression, insomnia and problems in personal and social life indicates existence of problems in thought and view of individual toward himself, life and world. Existence of inconsistent schemes, dysfunctional thoughts and wrong cognitive structures cause that the individual cannot interpret or understand the events correctly, in contrast, this way of

thinking leads to problems in various fields of bio - psychosocial difficulties, this issue develops the negative cycle back to the problems. Regarding the given definition of mind awareness by considering various techniques n cognitive, subjective and exercise fields used in it can have positive effect on reducing pathologic mental health scales. Obtained results of this research is consistent with results of previous research. The results of Ahmadvand et al research (16) done for the purpose of examining the explanation of psychological well-being based on the components of mindfulness showed that mind awareness is a strong predictor for psychological well-being. Also in Orkey et al research the results showed that Mindfulness-based (17) cognitive therapy intervention had a positive effect on the mental health treatment seekers. Results of the research show that mind awareness had a positive effect on reducing physical symptoms. Results of this research are consistent with Mehrabizadeh Honramanand et al (18), Zare et al (19), Nasimifard et al (20). The research showed that in the case of continuation of practices, MBSR can be effective in reduction of intensity of pain and reduction of daily function disorder and in

explanation of results we can say that physical symptoms are the first mental health scale. First that people become nervous they can better express their discomfort in the form of physical symptoms reactions, in fact we can say that it roots in depression.

It is possible to prevent these physical problems with the process of thought control that comes into mind. Mindfulness due to diverse techniques of meditation, relaxation, body scan exercises that pay particular attention to the organs of the body also, attention to breathing or attention to five senses and life at the moment and the relationship between mood, thoughts, feelings and body sensations causes one to get rid of physical signs and reduce the warning signs, and with the study of Golpour and Mohammad Amini (22) showed that mindfulness is effective in improving mood and anxiety and consistent.

Anxiety has a great influence on the psyche and the body of people. The first effects of anxiety can be called insomnia and restlessness. Anxious person cannot sleep because of anxiety and restlessness. This insomnia causes a person to be irritated on a day and cannot show a good reaction to events. Due to the fact that Mindfulness considers both physical and mental aspects and keeps the individual in the moment, and can relax the muscles of the body and eliminate muscle tensions as well as relax in the mind. Based on the present research, mindfulness education can have a positive effect on social activism and is consistent with the results of Dave et al. (23), which shows a positive effect on the concentration of attention, diminished rumination and

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symptoms of depression. Depressed people constantly suffer from ineffective thoughts and misconceptions, and their thoughts are more of a failure and loss of the past, which itself creates a negative mood and disappointment, Mindfulness through various techniques can stop the cycle of experiences and negative thoughts, In fact, based on the principle of acceptance that is based on the principles of mind-consciousness, one is flexible in accepting life's problems, even if it is negative, and can easily be confronted with problems. In this way, one even challenges his own beliefs because during the process of mind-consciousness one realizes that his thoughts are overcome in a set of thoughts. Depressed people with their constant thinking and rumination want to solve their problems. Depressed people do not properly process the issues. Consequently, the result of the processing of thoughts is not logical, which itself produces negative emotions, negative thoughts in the individual, that the mind can prevent the cycle of negative thoughts.

Conclusion

Considering the effect that mindfulness can have on the relevant variables, it can be said that this method can be an effective therapeutic method due to the variety of techniques used and the cognitive and mental principles in itself. According to the findings of the research, it can be stated that in general, mindfulness has a significant positive effect on mental health. The results also show that mindfulness has a positive effect on reducing physical symptoms, improving social activism and stopping the cycle of experiences and negative thoughts.

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