



The effectiveness of mindfulness training on academic adjustment, academic anxiety and academic hope of students

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ABSTRACT

Background and Aim: One of the most common problems that coaches and teachers face in schools and educational environments in relation to students is the issue of adaptation and how to adapt students. Middle school period is the transition period to university level and adaptation in this period plays an essential role in the activities and academic progress of students. Therefore, the main goal of the current research was to increase the level of academic adaptation and academic hope and reduce students' academic anxiety by using mindfulness training. **Methods:** The current research was a semi-experimental design with a pre-test-post-test and a control group. The statistical population of this research included all female students of Bushehr city in the academic year of 2022-2023. In order to select the sample in the first stage, after obtaining the necessary permission from Bushehr Education and choosing a high school, with the available sampling method, 50 students were selected from among the applicants to participate in the training sessions, and from this number, according to the criteria entering and exiting the research as well as other reasons (such as the opinion of administrators, teachers, and counselors regarding the student's academic incompatibility and emphasis on the presence of these students in the meetings, non-cooperation of the participants) out of this number, 40 people remained who were randomly divided into two groups experimental and control groups were placed. The experimental and control groups responded to the research tool questionnaires in three stages: pre-test, post-test and follow-up. The experimental group received 8 45-minute sessions of training. Follow-up answered Sinha and Singh's AISS (1993) academic adjustment questionnaire and Pekrun et al.'s AEQ (2002) academic emotions questionnaire **Results:** The results of multivariate covariance analysis showed that mindfulness training has a significant effect on increasing academic adaptation and educational hope and reducing students' academic anxiety. **Conclusion:** It is concluded that having mindfulness in educational situations causes positive changes in education and educational environments at an optimal level. In relation to these results, it can be said that the training program has been effective because in this program, the participants' awareness and attention without judgment were improved and they faced challenges with self-acceptance and reduced reactivity. By considering this model, school counselors can affect the academic adaptation and educational hope and reduce the academic anxiety of students.



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Introduction

One of the most common problems that educators and teachers face in schools and educational environments in relation to students is the issue of adaptation and how to adapt students (Vareste & Oji, 2020). Considering the importance of the second secondary education period, which is the transition period from high school to university, it is important to identify potential factors that affect students' adaptation (Abdollahi, Darbani, and Parsakia, 2022; Ramler et al., 2016). . At this stage, students need academic adaptation from high school to university (Mettler et al., 2019). Academic adjustment is defined as how students deal with educational requirements and satisfaction with school and educational environment (Lee et al., 2019). Academic adaptability shows the learning capacity of students and includes the motivation and strategies they use to achieve goals (Liran & Miller, 2019). The process of academic adjustment includes psychological and behavioral changes during which the student adjusts himself to the academic environment and adapts to academic demands and responds to his learning needs (Valka, 2015). Academic adaptation is a set of reactions with the help of which a person will provide a coordinated response to school conditions and activities in that environment (Paramo et al., 2020). The lack of academic adaptation can lead to dropping out of school or academic failure (Azizinejad, 2015; Kiskin & Kertel, 2016). Also, adolescence is one of the most stressful periods of life (Yadalehi, Pourhosseini and Sadat, 2020). During this period, especially teenage girls suffer a lot of stress in order to prepare for the next stages of life, which may cause anxiety and despair (Alavi and Mirza, 2018; Karmeni et al., 2015). Some researchers are looking for conditions and factors that can identify different dimensions of adaptation in school environments and promote it (Shenk et al., 2015). Therefore, many factors influence academic adjustment, and because of the many positive consequences of academic adjustment, investigation and research in this field is very important.

Anxiety is accompanied by the feeling of fear of failure and creates unpleasant emotions and feelings during the test or any other evaluation situation in the person. Its signs and symptoms include high heart rate, restlessness, fatigue, insomnia, irritability, shortness of breath, short-

term forgetfulness, impaired concentration and attention, and memory impairment (Lian and Bodin, 2014). Academic anxiety is defined as a set of phenomenological, behavioral, physical and physiological responses that are associated with worry and distress about negative social consequences and inconsistent and inappropriate responses in the academic environment or failing an exam or test and similar situations. (Bandura, 2007; Lim, Lao, & Nee, 2008). Academic anxiety is known as five anxiety-causing factors (pressures, conflicts, failures, self-imposed anxiety and changes) and four reactions (physiological and physical, behavioral, cognitive, emotional) (Dickman, 2017). Academic anxiety includes learning anxiety, class anxiety and test anxiety (Pekrun, 2006). For example, in the excitement of exam anxiety, we observe feelings of anxiety and tension and discomfort (emotional dimension), worries (cognitive dimension), tendency to avoid (motivational dimension) and facial expressions and some physiological and physical reactions (Kadivar et al., 2009). Research has shown that academic failure and poor academic performance along with exam anxiety are the root of many academic problems and incompatibility of students. Also, the research confirms that low levels of mindfulness in teenagers are related to problems related to anxiety. On the other hand, anxiety exists in all people in a normal and moderate level, which causes an adaptive response to the environment. A little anxiety can be beneficial and productive. If the anxiety is permanent and excessive and continuous, not only it will not be useful and effective, but it can be a factor for incompatibility, failure and disappointment, which will keep the person away from the correct and normal functioning, limit the independence and adaptability of the person, and cause anxiety disorders. (Advaz et al., 2019). Anxiety is a reaction to continue survival and life, which causes avoidance of certain situations and tasks (Tash et al., 2015).

Academic hope is defined as a person expecting to achieve positive results in education (Yatsidi et al., 2018). In other words, hope is hope for opportunity, hope for competence, hope for skill (Khormai & Kamari, 2017). In the control-value theory, academic hope is considered to be a forward-looking positive consequence emotion, which motivates a person to evaluate success positively and failure negatively in the path of

progress and goal achievement. (Barani, Fouladchang, and Derakhshan, 2020; Perkrum, 2006). Hope is a process of thinking about a goal and the motivation to move towards that goal, methods and ways to reach that goal. In fact, two types of thinking are necessary for hope; First, strategic thinking and second, agent thinking (Snyder, 2000). Strategic thinking, which is the cognitive component of hope and shows the capacity and power of a person to create a path, and agentive thinking is the motivational component of hope, based on which, a person motivates himself to use these paths (Alexander & Aniogbozi, 2007). Therefore, high levels of hope motivate a person to try (Pekrun, 2006). Research shows that mindfulness training increases academic hope (Galagher, Marquis, & Lopez, 2017; Monaz et al., 2018; Malinoski & Lim, 2015; Aydan & Margalit, 2015; Ghasemi Jobneh et al., 2018). One of the programs that affect academic adaptation is mindfulness training (Porparizi et al., 2018). In positive psychology, academic adjustment, mindfulness, and hope are related constructs and have been mentioned a lot (Sentisi et al., 2020). Also, mindfulness indirectly affects other academic variables of students by influencing stress and anxiety (Teodorzak, Goss, & Du Plessis, 2013). Some consider mindfulness a state of mind, and others consider it a set of techniques and skills (Brown, Ryan, & Creswell, 2007). Mindfulness and the presence of mind is an effective way to reduce anxiety, discomfort and psychological distress, and in recent decades, more use of mindfulness interventions based on anxiety reduction has been seen. Mindfulness improves skills such as presence of mind and creates psychological health and recovery in a person. Mindfulness means paying attention in a specific, purposeful way in the present and without prejudice (Strömeyer, 2020). Mindfulness includes continuous awareness of physical sensations, perceptions, emotions, thoughts and imaginations and includes a receptive and prejudice-free awareness of current life events (Janel et al., 2017). Carl Weisscher (2020) quoting Kabat-Zinn (1994) has defined mindfulness as paying attention in the present without judgment and specifically, intentionally. The concept of mindfulness helps people to accept negative emotions in life and to know that it is not a fixed part of a person's

personality and life. Accepting this issue helps a person to consciously react to stimulating events and emotions instead of involuntarily reacting to them and establish a more efficient relationship (Dehghani et al., 2013). People can face stressful experiences in a positive, adaptive and problem-oriented way by being aware of their activity and accepting their feelings (Kong et al., 2011). In difficult situations, it is possible to find an adaptive and voluntary response and be able to face events with positive thinking and reflection (Bajaj & Pandey, 2015; Kong et al., 2011). Mindfulness training makes a person cope with environmental challenges with more self-confidence than his ability and be more successful in controlling environmental conditions (Monshat et al., 2013). The research background states that mindfulness training can increase students' academic adjustment (Rumler et al., 2016; Metalrojoli, 2019; Sacrogla et al., 2017; Porparizi et al., 2018; Chaz, 2009). Also, through the training of mindfulness, academic anxiety is also reduced. The research results (Hadasard et al., 2022; Dantes et al., 2016; Franco et al., 2010; Samuel, Batt and Warner, 2022) also confirm it.

Academic adjustment, academic anxiety and educational hope and conscious mind are components that have been given a lot of importance and attention in recent researches, and from the articles that are written about this, the increasing importance of this issue among students can be understood. Therefore, dealing with this issue can try to identify more effective factors on students' academic adjustment, which itself causes the increase and success of students. Also, the importance and necessity of this research is from the point of view that the middle school period is the transition period to the university level and adaptation in this period plays an essential role in the activities and academic progress of students. In general, and according to what was stated, the main goal of the current research was to improve the level of academic adaptation and academic hope and reduce the academic anxiety of students using mindfulness training. The hypothesis of the research is that: Mindfulness training is effective on academic adjustment and academic anxiety, academic hope of female students of second secondary school in Bushehr city.

Method

The present study was a quasi-experimental design with pre-test-post-test and control group. The statistical population of this research included all female students of Bushehr city in the academic year 2022-2023. In order to select the sample in the first stage, after obtaining the necessary permission from Bushehr education and choosing a high school, 50 students were selected from among the applicants to participate in the training sessions with the available sampling method. According to the criteria for entering and exiting the research as well as other reasons (such as the opinion of the principal, teachers, and counselor regarding the student's academic incompatibility and emphasizing the presence of these students in the meetings, the lack of cooperation of the participants), 40 people remained among this number; They were randomly placed in two experimental and control groups.

Materials

1. Sinha and Singh AISS high school student adjustment questionnaire (1993): It was developed to obtain the adjustment score of high school students (14 to 18 years old) with good adjustment to poor adjustment in three areas of educational, emotional and social adjustment. This questionnaire has 60 questions (each field contains 20 questions). In the scoring of the questionnaire, a score of one is given for answers that indicate compatibility, and a score of zero is given otherwise; Getting a high score is a sign of better compatibility. The reliability coefficient of the questionnaire has been reported as 0.95 for the whole questionnaire. In Iran, Vaisi and Sajjadi (2014) obtained Cronbach's alpha coefficient of 0.81 for the whole questionnaire. In the present study, the values of X²/df, GFI, CFI, RMSEA and PCLOSE indices were calculated as 1.86, 0.95,

0.97, 0.05, and 0.14, respectively, and Cronbach's alpha coefficients were calculated as 0.74.

2. Pekaran et al.'s AEQ (2002) academic emotions scale: it consists of 8 subscales of pleasure, hope, pride, anger, anxiety, shame, disappointment, and fatigue. In this study, according to the objectives of the study, the academic hope and academic anxiety subscales were used. Answers were set based on a 5-point Likert scale from strongly disagree (1) to strongly agree (5). The reliability of this scale was reported by Pakran et al. (2002) using Cronbach's alpha coefficient method for different subscales from 0.75 to 0.95. The academic hope subscale has 2 factors and 14 items, of which 8 items are related to the classroom hope factor and 6 items are related to the learning hope factor. The lowest and highest scores of this subscale are 14 and 70, respectively. A higher score indicates greater educational hope. The academic anxiety subscale includes 2 factors and 19 items, of which 8 items are related to class anxiety and 11 items are related to learning anxiety factor. Higher scores equal higher academic anxiety.

3. Mindfulness training: The mindfulness training program was based on a theoretical model. In this model, a person focuses on feelings, experiences and events in the present moment and adopts a non-judgmental attitude to accept life experiences in the present moment (Shapiro et al., 2006; quoted by Abedi & Khademi, 2017). The researcher had seen the course and was familiar with mindfulness sessions and implemented the sessions, and after one month after the course, a follow-up session was done.

Table 1. Summary of the content of mindfulness training sessions for the experimental group

Session	Content
1	Conducting the pre-test - introducing and getting to know the group, stating the goals of the research, the need to use mindfulness, explaining about hope, adaptability, anxiety, expressing one's positive and weak points, practicing eating raisins, presenting the task of writing down the weaknesses and strengths in relation to others.
2	Reviewing the previous session and reviewing the assignment, getting to know the calm body and practicing body inspection, experiencing mindfulness practice and examining obstacles, talking about being non-judgmental and practicing being non-judgmental in thoughts and feelings, practicing meditation and focusing on breathing. The task of writing the experiences of the presence of mind and the practice of examining the body
3	Review of the previous session and review of the assignment, meditation practice in different positions, sitting meditation practice focusing on breathing and physical feeling, practice of conscious body movements, meditation technique assignment in different positions

4	Reviewing the previous meeting and homework, sitting meditation and paying attention to breathing, body and surroundings, talking about stress and people's reactions to difficult situations and finding alternative reactions. The task of paying attention to the movement of the body and understanding the difference between the body in a state of tension and relaxation
5	Review of the previous session and review of the assignment, teaching mindfulness in thoughts, practicing meditation and paying attention to the body and conscious body movement exercises, the assignment of challenging irrational thoughts and irrational behaviors.
6	Reviewing the previous session and reviewing the assignment, practicing meditation focused on breathing, continuing the discussions of thoughts, and sometimes they have real content. The task of facing a hypothetical problem and challenging thoughts and presenting a solution
7	Reviewing the previous session and reviewing the assignment, practicing sitting meditation and open awareness, discussing what is the best way to take care of yourself, practicing finding enjoyable and pleasant versus unpleasant daily activities and planning pleasant activities, practicing kindness and self-compassion. The task of finding and doing fun activities
8	Reviewing and summarizing meetings and assignments and conclusions, evaluating meetings, receiving feedback and conducting post-examination

Implementation

The method of conducting the research was such that first the participants were identified during a certain period of time and the participants themselves were asked to introduce if they knew a friend or someone whose parents got divorced. Schools were also helped in this regard. After obtaining their consent and preliminary arrangements, preparations were made to conduct an interview with them. Most of the interviews were conducted in the school environment and some in the park. Questions were asked to the participants without chronological order and they were asked to recount what they experienced during and after the divorce of their parents. The interview time lasted on average 40 minutes and tried to discuss everything that the participants consider important. The interviews continued until theoretical saturation, which happened in interview number 12, and researcher felt that the subsequent interviews did not add anything new to the findings, however, 2 additional interviews were conducted and the work ended with 14 interviews. The text of each interview was immediately analyzed, and wherever there was ambiguity, it was referred back to the original

content, and sometimes the participant was contacted again to provide clearer explanations.

Results

First, before testing the hypothesis, a summary of the demographic characteristics of the sample group is as follows: the age group of all three groups was 15 to 16 years. The experimental and control groups had an average age of 15.6 with a standard deviation of 54.34, the experimental group had an average age of 15.4 with a standard deviation of 59.1, and the control group had an average age of 15.10 with a standard deviation of 0.45.

In order to check the assumptions of multivariate covariance analysis, the Kolmogorov-Smirnov test was used to check the normality of the distribution of scores. Considering the Z-values were not significant at the alpha level of 0.05, it can be concluded that the distribution of scores is normal. Levine's test was also used to check the homogeneity of variances in both experimental and control groups. Considering that the F-values were not significant, the homogeneity of the variances can be assumed. Also, the data were on an interval scale and the participants were selected independently.

Table 2. Descriptive index values of variables

Variable	Group	Pre-test		Post-test		Follow-up	
		Mean	SD	Mean	SD	Mean	SD
Hope	Exp.	53/50	13/66	60/20	12/47	57/95	12/94
	Control	50/00	12/24	51/59	11/50	50/80	11/61
Anxiety	Exp.	42/95	15/89	33/89	13/56	37/10	13/65
	Control	45/30	9/53	43/90	9/18	46/25	10/57
Adjustment	Exp.	37/35	13/14	48/15	9/20	42/95	10/94
	Control	40/35	11/49	40/90	11/45	40/65	10/88

All assumptions of multivariate analysis of covariance are established and the results are included in Table 2. The results showed that according to the Mbox test, the assumption of the homogeneity of the variance-covariance matrices has been met, and considering that the F observed at $p < 0.05$ was not statistically significant, it can be concluded that the homogeneity of the covariance matrix was fulfilled. The implementation of the Mbox test for the assumption of homogeneity of variance-covariance matrices has been established and observed ($p=0.13<0.05$, $F=0.34$, box, $sM=34.12$). Also, for the significance of the group effect for the research variables, the results of the tests were significant and showed that there is a significant difference between the

two experimental groups and the control group in at least one of the research variables.

In the follow-up phase, the results of the Mbox test for the homogeneity of the variance-covariance matrices showed that this assumption was established and respected ($p=0.38<0.05$, $F=1.05$, and box, $sM=6.92$). Also, for the significance of the group effect for the research variables, the results of the tests were significant and showed that there is a significant difference between the two experimental groups and the control group in at least one of the variables. The analysis of the effects among the participants in the pre-test, post-test and follow-up phases is presented in Table 3.

Table 3. Results of multivariate covariance analysis in pre-test, post-test and follow-up stages

	Variable	Stage	SS	Df	MS	F	p	Eta ²	Power
Group	Hope	Post-test	599/244	1	599/244	87/97	0/001	0/715	0/54
		Follow-up	339/780	1	339/780	43/27	0/001	0/553	0/48
	Anxiety	Post-test	882/590	1	882/590	192/301	0/001	0/846	0/96
		Follow-up	469/917	1	496/917	45/832	0/001	0/567	0/65
	Adjustment	Post-test	1065/165	1	1065/165	82/999	0/001	0/703	0/47
		Follow-up	340/039	1	340/039	24/628	0/001	0/413	0/55
Error	Hope	Post-test	238/416	35	6/812				
		Follow-up	274/834	35	7/852				
	Anxiety	Post-test	160/637	35	4/590				
		Follow-up	358/860	35	10/253				
	Adjustment	Post-test	449/173	35	12/834				
		Follow-up	483/242	35	13/807				

According to Table 3, in the post-test phase (experimental group), there is a significant difference between the two experimental and control groups in the average post-test score after removing the effect of the pre-test. academic hope ($p = 0.001$, $F = 87.97$); academic anxiety ($p = 0.001$, $F = 192.301$); Academic compatibility ($p = 0.001$, $F = 82.999$). It can be concluded that the average post-test scores of the experimental group are significantly higher than the control group, and in the experimental group, mindfulness training has significantly ($p < 0.001$) increased or decreased other variables in the post-test phase. According to the table, in

the follow-up phase, there is a significant difference between the average scores of the experimental group and the control group in the variable after removing the pre-test effect: academic hope ($p = 0.001$, $F = 43.27$); academic anxiety ($p = 0.001$, $F = 45.832$); Academic compatibility ($p = 0.001$, $F = 24.628$). The results showed that the mean scores of the follow-up test of the experimental group were significantly ($p < 0.05$) higher than the control group. So, it can be said that in the follow-up phase, in the experimental group, mindfulness training has increased or decreased other variables.

Table 4. Pairwise comparison of groups in the post-test and follow-up stages

Variable	Stage	Group	Adjusted Mean	Mean diff.	SE	p	Lower bound	Upper bound
Hope	Post-test	Exp.	60/20	8/25	0/88	0/001	6/46	10/04
		Control	51/94	-8/25	0/88	0/001	-10/04	-6/46
	Follow-up	Exp.	57/48	6/21	0/94	0/001	4/29	8/13

	up	Control	51/26	-6/21	0/94	0/001	-8/13	-4/29
Anxiety	Post-test	Exp.	33/89	-10/01	0/72	0/001	-11/48	-8/55
		Control	43/90	10/01	0/72	0/001	8/55	11/48
	Follow-up	Exp.	38/02	-7/30	1/08	0/001	-9/50	-5/11
		Control	45/32	7/30	1/08	0/001	5/11	9/50
Adjustment	Post-test	Exp.	49/90	11/00	1/20	0/001	13/45	8/55
		Control	38/89	-11/00	1/20	0/001	-8/55	-13/45
	Follow-up	Exp.	44/90	6/22	1/25	0/001	3/67	8/76
		Control	38/69	-6/22	1/25	0/001	-8/76	-3/67

According to Table 4, the scores of the experimental group in the post-test have a significant difference ($p \geq 0.05$) with the pre-test and post-test scores of the control group: Academic hope (8/25), academic anxiety (10/01), academic adjustment (11). According to this, it can be concluded that in the experimental group, mindfulness is effective on students' academic hope, academic anxiety and academic adjustment.

Based on the same table, in the follow-up phase, the difference between the mean follow-up scores of the experimental group and the control group increased significantly ($p \geq 0.05$). Academic hope (6/21), academic anxiety (7/30), academic adjustment (6/22). Therefore, mindfulness training has a lasting effect on students' academic hope, academic anxiety and academic adjustment.

Conclusion

Academic compatibility is one of the important issues in the field of education, which increases the efficiency and academic efficiency of students. Also, academic emotions such as academic hope and academic anxiety are effective in academic adjustment. The aim of the present study was to investigate mindfulness training on academic adaptation, academic hope and academic anxiety. The findings showed that mindfulness training has a significant effect on academic adjustment. This finding was consistent with previous findings. (Ramler et al., 2016; Metalrojoli, 2019; Sacroglav et al., 2017; Porparizi et al., 2018; Chaz, 2009).

In the explanation, it can be said that a person who acquires the necessary skills to adapt to the educational environment as a result of mindfulness training can also acquire academic adaptation. Sakrogella et al. (2017) consider stress as a complex process in people's reaction to different academic and social situations, which acquires the method of coping with stress and accepting it and adaptability through

mindfulness. When levels of mindfulness increase, so does adaptability. Thompson et al. (2011) believe that mindfulness changes the ability to adapt. Lu et al. (2017) consider the reason for adaptability in gaining mindfulness because a mindful person becomes free of judgment when facing different situations, which makes the person to let go of the past and the future and focus on the present. In this way, stress and anxiety are reduced and a person's adaptability increases. Langer (2000) believes that the desire to change and the ability to be flexible and to have focus is the cause of adaptation. Nemati (2019) believes that mindful people deal with stressful events in the environment in a different way and face problems effectively. It seems that a conscientious person is able to face academic anxiety in academic situations and has academic adaptability. Ghasemi Jobneh et al. (2016) believe that while learning, people improve the awareness of other aspects of life, such as learning. Meditation and practicing mindfulness techniques is a psychological process that helps you learn how to achieve goals and thoughts more consciously and mentally (Singh & Dodender, 2015). According to what was said, the effectiveness of mindfulness on academic adjustment seems reasonable.

According to this finding, in its explanation, it can be said that mindfulness and mind meditation is a psychological and conscious process (Sinaf & Dunder, 2015). During their studies, teenagers come across things that have a negative impact on their education. Adolescents need to be hopeful about their life and the future in order to overcome the anxiety of academic situations with awareness and alertness, and one of the coping methods is the conscious mind (Kahermanlou et al., 2017). The results of the research showed that mindfulness has an inverse and meaningful effect on academic anxiety. This finding was directly

aligned with the results of Parsons, Gardenropari (2021), Bridault et al. (2019), Dantes et al. (2016), Franco et al. (2010) and the research of Ghasemi et al. (2016) indirectly. Mindfulness helps a person to accept thoughts and emotions more easily in difficult and anxiety-provoking situations (Kovski, Segal, and Battista, 2009). Mindfulness reduces the intensity of nervous system arousal that is directly related to thoughts and behaviors related to worry and anxiety (Saz, Early, and Long, 2019) and reduces the level of a person's reaction to negative thoughts, feelings, and emotions. (Qassimi Jobneh et al., 2016). Mindfulness causes the understanding of negative emotions, separate from a person's personality (Rajabi Shamami, 2017). Mindfulness is useful for increasing muscle relaxation and reducing anxiety and reduces anxiety and stress (Kabat-Zinn, 2003). Mindfulness is a non-judgmental state of paying attention to one's inner states and causes appropriate responses to stressful experiences. Physical and cognitive self-awareness is increased and causes a person to have a proper evaluation of himself, physical and mental peace is created for the person, and the person's anxiety is reduced (Desi and Ryan, 2010; Carlson et al., 2001). On the other hand, mindfulness is associated with psychological factors related to anxiety, which includes paying attention to one's thoughts, feelings, and experiences moment by moment with a non-judgmental attitude (Segal & Dine, 2016). Therefore, the relationship between mindfulness and academic anxiety is reasonable.

As Kahramanlu et al. (2017) believe, mindfulness improves hope and hopeful thoughts, facilitates the reaction to the situation and causes a person to behave more adaptively. According to the findings of the research, mindfulness training is effective on academic hope. This finding was in line with the research results of Galagro et al. (2017), Barani et al. (2020), Aidan et al. High levels of academic hope in students lead to moving towards the goal, which is the introduction to planning to achieve the goals. Mindfulness by focusing on the present (Wampold et al., 2010) helps a person to first accept his feelings, emotions, thoughts, and concerns without judgment, regression, and suppression (Bauer et al., 2006). On the other hand, mindfulness adds a motivational component to a person's attention

and behavior by increasing intentionality and purposefulness (Wampold et al., 2010), which is in harmony with the intentionality and planning components of hope. Also, with the component of attention and awareness, understanding the emotions, abilities, needs and weaknesses of the individual creates a state full of hope in the individual (Purvandari, Seryana, Kasman and Yunizar, 2016). Mindfulness has focused on positive psychology and individual characteristics and differences (Brown & Ryan, 2003; Gaylock, 2009). Therefore, mindfulness by fully understanding the situation and accepting the feelings, emotions and states and abilities of the individual creates agent thinking which is the motivational component of hope and based on which the individual motivates himself to use various methods (Alexander and Anioqbozi, 2007). Immediate acceptance of feelings and emotions makes the client able to understand the situation well when faced with different situations, especially academic situations and academic challenges, by understanding and accepting their emotions and thoughts; It also allows them to consider and accept their abilities, consider their feelings and emotions in relation to the goal and challenge, identify obstacles on the way to the goal, and create multiple ways to deal with the challenge. Finally, they can plan to deal with obstacles and challenges. Peng and Rush (2019), Kong et al. (2011) emphasize that mindfulness increases optimism and hope and makes a person hopeful by reducing stress, anxiety and negative thoughts, so the positive relationship between mindfulness and academic hope seems logical.

In general, we can conclude that mindfulness educational intervention is a suitable method for increasing academic adaptation, academic hope, and reducing academic anxiety. By using this method, students can have the necessary hope and adaptability when problems arise in their studies, they can experience less academic anxiety in the academic environment, and they can succeed in their studies by accepting the problems.

One of the limitations of the research was the implementation of mindfulness training on a group of girls in the second secondary school in Bushehr city. Another limitation was the available sampling and the follow-up phase, which was after one month of implementation, which was practically not possible at the end of the academic year. It is suggested that further

researches be conducted on second year high school boys. Also, school counselors should conduct mindfulness training with the aim of increasing academic adaptation and increasing academic hope and reducing students' academic anxiety.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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