The Effectiveness of Encouragement Training in Academic Anxiety and Sense of Belonging to School in Students

Lida Nemati Chalavi[1], Mohammad Ellahi[2*], Elham Pakdel[3], Pari Daneshvar[4], Kadijeh Yari[5]

1- M.A. Counseling and Guidance, Roudhen Central Branch, Islamic Azad University, Roudhen, Iran

2- Assistant Professor, Department of Islamic Studies, University of Medical Sciences, Fasa, Fasa, Iran

3- M.A, General Psychology, South Tehran Branch, Islamic Azad University, Tehran, Iran

4- M.A. Counseling, South Tehran Branch, Islamic Azad University, Tehran, Iran

5- M.A. Clinical Psychology, Ilam Research Sciences Unit, Islamic Azad University, Ilam, Iran

* Corresponding author's Email: mohammad.amirabaf@yahoo.com

Abstract: Encouragement is an important concept of Adlerian psychology and refers to the expression of confirmation through language or other symbolic illustration to instill courage in a person within the context of addressing a challenging situation or recognizing a potential. Receiving encouragement would enhance social connectedness, academic performance, motivation and self-efficacy in students. The present study aimed to investigate the effectiveness of encouragement training on academic anxiety and school connectedness in female high school students. The study was a pretest-posttest control group quasi-experimental design. Statistical population included all female students of the 10th grade of high school in Baharestan Education District 1 (Iran) in 2022. Participants were 30 female students were selected by accessible sampling and randomly assigned to in experimental and control groups (15 people in each group). Participants responded to Beatty and Brew student sense of connectedness with school scale (2005) and Abolghasemi et al.'s academic anxiety scale (1996). The experimental group received eight one-hour sessions of self-encouragement training and the control group did not receive any training. Data were analyzed by univariate and multivariate analysis of covariance. The results indicated that encouragement training decreased academic anxiety and increased students' school connectedness (p<.01). Therefore, providing this training is considered useful strategy for improving the motivational and social outcomes in students.

Keywords: Encouragement training, Academic Anxiety, School connectedness, High school students

Introduction

Educational planners consider several factors effective in increasing productivity and efficiency during education, and academic anxiety is considered one of the most important factors (Yosefi et al., 2022). Academic anxiety is also a set of physiological and behavioral cognitive phenomenological responses that are associated with worrying about the negative social consequences of failing an exam with a similar assessment situation (le Roux & Parry, 2021). Academic anxiety during education is the main type of anxiety in students that disturbs their mental health and affects their efficiency, personality, talent and social identity (Mardazad et al., 2021). The fear of getting a poor grade and being blamed by the family, ridicule by peers, fear of not being able to continue studying and especially entering the university always involves students, especially high school students, and has caused academic anxiety (Moreira de Sousa et al., 2018). Regarding academic anxiety, emphasis is placed on five anxiety-

causing factors (failures, conflicts, pressures, changes and self-imposed anxiety) and four reactions (physiological, behavioral, cognitive and emotional) to these factors (Deb et al., 2015).

Karcher et al. (2008) believe that the feeling of belonging to the school increases the feeling of comfort, well-being and reduces anxiety in the student's academic environment. Belonging to school means the quality of communication and feeling of solidarity of students with their classmates and teachers and shows the feeling of acceptance, respect and support of the school for students (Lee & Huang, 2021). The sense of belonging to the school is defined as actions that make students adapt to a specific activity or place, followed by a sense of belonging to different people, subjects and environments (Pendergast et al., 2018). The feeling of belonging to the school has six subscales, including the feeling of belonging to peers, teacher support, feeling of respect and justice in school, participation in the community, the person's relationship with the school, and academic participation (Brooms, 2019). Students with a sense of belonging to the school participate in school activities, consider themselves committed to complying with school rules and regulations, and have a high motivation to achieve the school's goals (Li & Jiang, 2018). The feeling of belonging to the school is one of the concepts that plays an important role in the psychological well-being, academic success and growth of students' academic functions (Kuang et al., 2019).

People who suffer from academic anxiety have defects in social skills, communication, self-efficacy, mental abilities, self-confidence; therefore, if the educational system can teach the students the necessary training in the form of mentioned abilities, to better adapt to the educational environment and it has achieved its goals. With these abilities, students can better adapt to various educational conditions and new educational situations, and they will also have a greater sense of belonging to the educational environment (Mardazad et al., 2021). In this regard, one of the trainings is encouraging training. In encouragement, people learn behaviors that include positive and pleasant feelings and plan more effectively for upcoming problems. It also increases a person's self-confidence. In this approach, a sense of belonging is created in the person, which helps the person feel satisfied with being useful in the society. In encouraging, there is the fact that although there are many positive and negative emotions in our world, it is a person's perception of these emotions that shows his approach in life (Mosayebi et al., 2021). In the process of encouragement, people are taught to learn how to energize themselves in order to move towards improving the situation, as well as valuing themselves as human beings, emphasizing their strengths and valuing their efforts (Salimi Bajestani et al., 2015).

Encouragement increases a person's courage and courage to accept his imperfection and helps him to find effective ways to deal with physical and mental problems and tensions. It also leads to the improvement of interpersonal relationships and the increase of positive interactions (Alisofi et al., 2018). Encouragement makes people feel pleasant and act effectively in life and plan more intelligently to solve problems. Encouragement leads to pleasant feeling, optimism and hope (Caspaner et al., 2010). Self-encouragement training increases alertness, social activity, optimism, well-being and positive changes in the subjects' health and behavior (Greaves & Farbus, 2006).

The feeling of belonging to school is an important psychological characteristic that affects other components related to education, including academic anxiety. On the one hand, due to the importance of encouragement training and the its role in the empowerment of students and learners, and the existence of a research gap in this field, the present study aims to determine the effectiveness of encouragement training in academic anxiety and students' sense of belonging to school in high school students and looking for an answer to the question of whether the encouragement training is effective in the academic anxiety and sense of belonging to the school in high school students?

Materials and Methods

The present study was a quasi-experimental pre-test-post-test type with a control group. The statistical population included all female students of the 10th grade of high school in the 1st district of Baharestan in 2022. Participants were 30 students that randomly assigned in experimental and control groups (15 people in each group). The inclusion criteria included being in the 10th grade of high school, informed consent of parents and students, volunteering to participate in the research and not undergoing other psychotherapy. Exclusion criteria included lack of informed consent, non-cooperation in assignments and absence of more than two sessions in treatment sessions. The data collection tools included the following questionnaires:

Questionnaire of feeling of belonging to school: This questionnaire was developed by (Brew et al., 2004), which has 27 questions and six subscales including students' sense of belonging with peers; teacher support; fairness and safety; academic engagement; engagement in the broader community; and relatedness of self with school. Participants rate the response on a Likert scale (from strongly disagree: score 1 to strongly agree: score 5). The range of scores is between 27 and 135, and higher scores indicate greater belonging. In the study of Brew and Beatty (2005), the content validity and reliability of the questionnaire was verified through Cronbach's alpha for the entire questionnaire (0.75). Makian and Kelantarkoosheh (2015), in order to determine the divergent validity, calculated the correlation of this scale with the academic burnout questionnaire as -0.567, which indicated a negative and significant correlation. In addition, the correlation of the sense of belonging to school scale and the scale of achievement motivation is equal to 0.44, which confirms the convergent validity of the sense of belonging to school scale. The results of exploratory factor analysis have confirmed the existence of six subscales include students' sense of belonging with peers; teacher support; fairness and safety; academic engagement; engagement in the broader community; and relatedness of self with school. In the present study, Cronbach's alpha of the whole scale was equal to 0.88, which indicates the good reliability of this scale.

Academic Anxiety Questionnaire: This 25-question questionnaire was developed by Aboighasemi et al. (1997); which is measured on a four-point Likert scale. The range of scores for this scale is 0 to 75, and a high score in this test indicates high academic anxiety. Through test-retest, Aboighasemi et al. (1997) calculated the reliability of academic anxiety scale 0.78, 0.88 and 0.67 for all subjects, female subjects and male subjects, respectively. Also, in order to measure validity, they used Cooper Smith's

self-esteem scale. The correlation coefficients of the total scores of the subjects, female subjects and male subjects in the self-esteem scale with the academic anxiety scale were, 0.57, 0.68 and 0.43 respectively.

After selecting the participants in order to comply with ethical considerations, the research participants were given brief information about the topic of the research and the purpose of the research. The participants allowed not participating in the research and withdrawing from the research at any stage they want. The pre-test was conducted in 1st session and all subjects (experimental and control groups) answered the research questionnaires. Then, the subjects of the experimental group received 8 one-hour sessions of self-encouragement training developed by Bahlmann and Dinter (2001), but the control group did not receive any training. After the sessions completion, a post-test was conducted for both groups. The summary of the training sessions was according to Table 1.

Table 1. Summary of self-encouragement training sessions

Session	Title	Content
1	Introducing the concept of encouragement and teaching behaviors and characteristics that are encouraging.	Describe five encouraging behaviors in relation to others.
2	Teaching the concept of goal orientation of human behavior	Find at least 5 false goals of your behavior and describe your behavior and the feelings of others and your mutual reaction.
3	Teaching encouragement, accepting mistakes and having the courage to accept being imperfect.	Participants should encourage 3 people (in their family or friends) who are more capable than them.
4	Learning to think lovingly and encouragingly	Practicing at home 2 times in an empty chair and once in real life with a family member and friends
5	Expressing the effect of backbiting in the absence of others and keeping silent on people's relationships with each other	Each of you should write your strengths and positive points on a sheet and then ask others about their strengths and positive points and write them on their sheet.
6	How to build positive relationships	Discuss the impact of positive relationships
7	Examining your role in difficult situations	Write down three enjoyable memories of your childhood and the following topics
8	Examining one's perception of love and sense of belonging to others	Empty chair technique

After collecting data, in order to analyze them, descriptive statistics (mean and standard deviation) and inferential statistics (covariance analysis test) were used. Data were analyzed by SPSS version 22 software. After establishing the statistical assumptions (Kolmogorov-Smirnov test, homogeneity of covariance matrix using M-box test and homogeneity of variances using Levine's test), the use of univariate and multivariate analysis of covariance test was unimpeded in order to adjust the pre-test effect.

Results

Table 2 shows the descriptive findings of the research variables.

Table 2. Mean and standard deviation of academic anxiety scores and belonging to school scores in experimental and control groups in pretest-posttest

Group	Variable	Pretest		Posttest	
		Mean	SD	Mean	SD
Experimental	Positive feeling towards school	19.13	5.38	22.13	5.80
	Teacher support	10.14	2.99	13.20	3.40
	A sense of respect and justice	9.80	3.05	13	3.44
	Participation in society	9.86	2.85	13.06	3,26
	Individual communication in school	12.06	2.60	14.80	2.75
	Scientific participation	27.80	6.60	31.46	7.21
	Total score of belonging to the school	88.80	23.23	107.66	5.74
Control	Positive feeling towards school	20.13	5.27	20.73	5.35
	Teacher support	10.06	3.86	10.40	3.94
	A sense of respect and justice	11.40	2.87	11.73	3.08
	Participation in society	11.60	2.82	12.20	2.93
	Individual communication in school	11.87	2.94	12.33	3.15
	Scientific participation	28.60	6.93	29.40	6.97
	Total score of belonging to the school	93.66	4.53	96.80	5.21
Experimental	academic anxiety	34.06	6.21	30.13	5.51
Control	academic anxiety	33.93	6.52	30.13	5.32

Table 3. The results of covariance analysis to compare the academic anxiety of students in the experimental group and the control group

Source	SS	DF	MS	F	p
Pretest	7174.32	1	7174.32	4965.42	0.01
Group	86.54	1	86.54	59.90	0.01
Error	39.01	27	1.44		
Total	7293.36	29			

In Table 3, the obtained F value is equal to 59.90 and its significance level is equal to 0.01. Based on this and considering the higher average scores of the experimental group in the post-test, it can be concluded that the encouragement training was effective and reduced the academic anxiety of the students.

Table 4. Results of multivariate covariance analysis to compare belonging to school in experimental and control groups

Effect	Test	Value	F	DF1	DF2	p
Group	Pillai's trace	0.877	20.26	6	17	0.01
	Wilks' lambda	0.113	20.26	6	17	0.01
	Hotelling's trace	7.85	20.26	6	17	0.01
	Roy's largest root	7.85	20.26	6	17	0.01

As can be seen in Table 4, the significance level of all four relevant multivariate statistics, namely Pillai's trace, Wilks's lambda, Hotelling's trace and the Roy's largest root are significant ($p<0.01$). In

this way, the statistical null hypothesis is rejected and it is determined that there is a significant difference between the two experimental and control groups in the grades related to belonging to the school in the post-test. Based on this, it can be said that encouragement training has been effective in increasing students' belonging to school. In order to investigate the difference between the two experimental and control groups in each of the components of belonging to the school, the between-subjects test was used and the its results are presented in table 5.

Table 5. The test of between subject effects to compare the components of belonging to the school in the experimental and control groups in the post-test

Variable	Source	SS	DF	MS	F	p
Positive feeling towards school	Between group	15.67	1	15.67	35.36	0.01
	Within group	9.75	22	0.44		
Teacher support	Between group	13.99	1	13.99	43.11	0.01
	Within group	7.13	22	0.32		
A sense of respect and justice	Between group	6.30	1	6.30	22.34	0.01
	Within group	6.20	22	0.28		
Participation in society	Between group	7.65	1	7.65	19.39	0.01
	Within group	8.68	22	0.39		
Individual communication in school	Between group	12.22	1	12.22	36.52	001
	Within group	7.36	22	0.33		
Scientific participation	Between group	17.45	1	17.45	43.39	0.01
	Within group	8.85	22	0.40		

In Table 5, the obtained F value is significant at the 0.01 level for all components; therefore, according to the higher average scores of the experimental group in the post-test stage, it is concluded that the encouragement training was effective and increased the belongingness of the students to the school.

Discussion

The present study was conducted with the aim of determining the effectiveness of encouragement training in academic anxiety and sense of belonging to the school in high school students. The first finding of the research showed that encouragement training was effective and reduced students' academic anxiety. The result obtained is in line with the results of similar studies in this field, for example, the findings of Asali and Salimibajestani (2013) showed that self-encouragement training reduces exam anxiety and perfectionism in first-year high school female students. Also, Blalock (2008) showed that changing the behavior of students in the direction of encouragement increases their social interest and reduces their anxiety in academic performance. Overall, encouragement makes a person have a different view of life. He knows his abilities and weaknesses and then with this knowledge, he relies on his abilities and sets goals for his work and strives to achieve the goals. In this case, he does not pay much attention to the result of the work. Rather, the process and work flow are important to him. Encouragement increases a person's self-esteem and self-confidence, and this issue make a person know his strengths and weaknesses. If we are in a position to encourage ourselves, we will enjoy life more. When we value our strengths, we send a more positive message to ourselves.

Self-encouragement teaches a person positive self-talk and helps a person to replace logical beliefs with irrational beliefs; And in this way, let's take steps to reduce academic anxiety.

Another finding of the research showed that encouragement training was effective and increased students' belonging to the school. The obtained finding is in line with similar and related results in this field. For example, the study of Tuckman and Sexton (1991) investigated the effect of teacher encouragement on student self-efficacy and motivation for self-regulated performance and indicated teacher encouragement was effective on student self-efficacy and motivation. Pounemat et al. (2019) in their study found that the parents encouragement training program for teenagers with emotional-behavioral disorders is effective on social interest. The study of Mu et al. (2021) showed that encouragement training was effective in improving the academic status of students. In justifying the obtained result, it can be said that self-encouragement training makes people believe that they can master a situation, become aware of their capabilities, believe in themselves and their abilities, and act more effectively and confidently in overcoming problems by strengthening their self-esteem.

In self-encouragement, people gain self-awareness about their capabilities and also become aware of their goals. By determining the goal and how to achieve it and planning to achieve it, we actually revive hope in them; help them believe in themselves and their abilities. By identifying their weaknesses and strengthening their self-esteem, they can act more effectively and confidently in overcoming problems. By establishing effective communication and establishing social relations, show more enthusiasm to participate in the health of others and society. Controlling emotions and mastering emotions in self-encouragement training makes people participating in meetings to act effectively in life and act smarter to solve their problems; Therefore, it can be concluded that self-encouragement education probably increases school belonging in students by creating control of emotions and mastery of emotions, positive relationships with other people, creating a goal in life.

Among the limitations of the present research, it can be mentioned that the research tool is self-reported, as well as the research results are limited to the female student population and the lack of a follow-up period, so caution should be observed in generalizing the results.

In order to generalize the results, it is suggested to conduct research on the opposite sex and different groups of students with long-term follow-up periods. Considering the effectiveness of encouragement in reducing academic anxiety and increasing belonging to school, counseling centers and psychologists are suggested to provide encouragement and take steps to reduce society's problems and increase the health of society's people.

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