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The Effect of Training Self-Management, Attention Behaviors, and Motivational Behaviors on Reducing Anxiety and Stress of Selecting a University Major in Students

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ABSTRACT

Purpose: Choosing to pursue further education and selecting a specific field of study after completing high school is a crucial decision that can bring about a significant amount of stress and anxiety for individuals. The main objective of this study is to explore how training self-management techniques for attention and motivation can help reduce the anxiety and stress associated with choosing a university major among students.

Methods and Materials: The purpose of the current study was to apply semi-experimental methods, including pre-test, post-test, follow-up, control group, and two experimental groups. The research focused on male and female students majoring in mathematics, experimental sciences, and humanities in Tehran in 2023. The initial sample size was 37 individuals chosen through purposive sampling. Educational programs were conducted for a total of four sessions in one week, with each session lasting 45 minutes. The study utilized Beck Anxiety Inventory (BAI) and Perceived Stress Questionnaire (PSQ) as measurement tools. Data analysis was conducted with SPSS version 27 and JASP version 0.18.1.0 software, utilizing the Kruskal-Wallis H test, repeated measure ANCOVA, and Bonferroni's Post Hoc Test at a P-value of 0.05.

Findings: During the follow-up and post-test phases of the study, there was a significant difference in stress levels between the group that focused on self-management of attentional behaviors and the control group ($P < 0.001$). Similarly, there was a significant variation in the Stress variable between the Self-management of motivational behaviors group and the Control group across all phases ($P < 0.05$). A noticeable distinction was found in the level of Anxiety between the experimental groups (Self-management of attentional behaviors and motivational behaviors) and the control group ($P < 0.001$), with no significant difference observed within the experimental groups at different stages ($P > 0.05$).

Conclusion: The findings of this study demonstrated that utilizing attention self-management training and motivational behavior self-management training could be effective in helping students alleviate anxiety and stress.

Keywords: Self-Management Training, Attention Behaviors, Motivational Behaviors, Anxiety, Stress, Students

1. Introduction

Choosing a field of study is a crucial decision for students as it marks the beginning of their journey toward acquiring expertise and competence, and it is considered one of the most significant choices they make in their academic career. This decision has become a cardinal concern for students as they believe it can impact their future careers and quality of life (Ashouri et al., 2023). Factors such as guidance and counseling, career expectations, understanding of the profession, and personal characteristics play a vital role in influencing the choice of study field (Mennati & Mohammadi, 2022). Students often choose their paths guided by their family's wishes, potential career opportunities, personal strengths, passions, and other factors from their background (Rabani & Rabiei, 2023). A study indicates that school counselors and psychologists can help students make decisions by offering guidance on planning and focusing on their interests and abilities (Ashouri et al., 2023). Psychological factors have been discovered to be important in affecting students' decisions and can create difficulties in selecting the appropriate academic field. "Students may face obstacles related to personal and mental health factors that can prevent them from making well-informed choices about their academic goals (Naeimi et al., 2023)."

"Psychological factors can negatively impact students who are entering university. As candidates are highly influenced and exposed to various stress-inducing factors when choosing their major, they often experience elevated levels of stress and anxiety (Rabani & Rabiei, 2023). Research from numerous developed and developing countries over the past few decades has indicated that university students tend to experience higher levels of stress and anxiety compared to the general population (Mofatteh, 2021). Anxiety is often defined as a sense of discomfort caused by unaddressed stress (Hsu & Goldsmith, 2021). A study has noted a significant connection between symptoms of anxiety and family dynamics, social support, and students' ability to cope (Shao et al., 2020). Additionally, the findings of the study revealed elevated levels of depression, anxiety, and stress among university students (Rabby et al., 2023)."

"When students are deciding on a major, stressors like academic demands, money worries, lack of sleep, and disruptions in personal life can all contribute to feelings of stress (Shao et al., 2020)." During a critical phase in their lives, students face various stressors like tough academic courses, challenging assignments and projects, and adapting to living in dorms when selecting a major and getting ready for university (Asif et al., 2020)." "Stress is defined as an individual's interpretation of a circumstance that surpasses their capacity to handle and puts their health at risk (Hsu &

Goldsmith, 2021)." According to research, stress is identified as a cardinal element leading to both confusion and a decline in mental well-being, ultimately impacting students' academic performance detrimentally (Yazdanpanah & Marashian, 2023). Research findings revealed that the majority of students cited academic stressors (48%) and parents (39%) as sources of stress, personal (8%) and environmental (5%) stressors included factors such as the pressure of entrance exams (Mann et al., 2021)."

Self-management is a concept that can assist students in managing stress and anxiety by controlling their physiological responses to stressors (Hasaninasab & Shahsavan Markadeh, 2023). Within the field of education, self-management entails students assuming responsibility for their academic and social behavior both in and out of the classroom, including tasks such as homework. This concept is related to characteristics like self-control and self-discipline and involves actions such as creating goals, self-monitoring, self-motivating, self-reflection, and self-assessment (Smolkowski et al., 2023). Students who engage in self-management set personal objectives and strive to regulate and oversee their comprehension, motivation, and behavior to achieve those goals (Moradi et al., 2020). Training students self-management attention behaviors is crucial as attention behaviors play a key role in successful social interactions. Attention behaviors involve more than just focusing on something; they also include actively involving and keeping the focus of others (Johanson et al., 2019). Attentional performance involves efficiently processing goal-relevant information, allowing for selective focus on specific details while disregarding non-task-related information (Liu et al., 2022).

Self-management of motivational behaviors is essential in guiding and maintaining students' actions, as motivation plays a key role in helping individuals achieve their goals. The motivational framework of individuals significantly impacts their goal-directed behaviors (Lavasanian et al., 2022). Manjarmoe et al. (2023) noted that training self-management skills enhances academic involvement (Manjarmoe & Nikdel, 2023). The findings of a research study indicated that self-management training has a notable impact on enhancing motivational beliefs and self-regulation strategies among male students (Moradi et al., 2020). Additionally, research outcomes highlighted the importance of self-management in attention behaviors and verbal self-learning in reducing symptoms of attention deficit disorder (Hashemi Nosrat Abad et al., 2007).

Selecting a major is a critical process that impacts students' future. It marks a pivotal moment in specialized education and significantly influences their professional life and future success, leading to a high level of stress and anxiety

(Ashouri et al., 2023). Recognizing the significance of this decision and its effect on students and their families, as well as acknowledging that choosing a major without stress and anxiety can result in specialized human resources, further research in this area appears essential. Upon reviewing existing research on students' anxiety and stress related to choosing a major, both locally and internationally, it becomes evident that only a few studies have been conducted. Therefore, this study aims to investigate the impact of training self-management of attentional behaviors and self-management of motivational behaviors on reducing anxiety and stress in selecting a university major for students. The study seeks to determine whether training in self-management of attention and motivation can alleviate students' stress and anxiety.

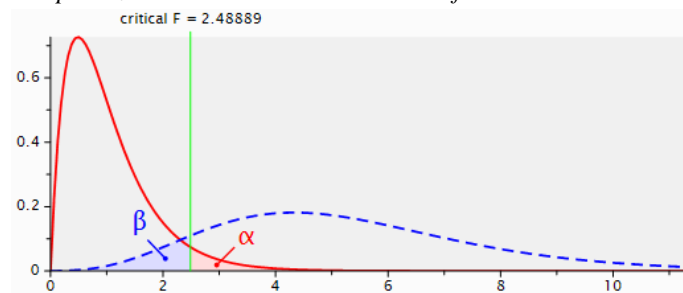
2. Methods and Materials

2.1. Study Design and Participants

The current study was classified as applied and semi-experimental, utilizing pre-test-post-test and follow-up stages, a control group, and two experimental groups: one focusing on self-management training for attention behaviors and the other on motivational behaviors. The statistical population for this research consisted of male and female students in the fields of mathematics, experimental sciences, and humanities in Tehran in the academic year 2023. The initial sample size included 45 pre-university students (with 15 in each of the experimental and control groups), selected through purposive and random sampling techniques. The adequacy of the sample size was determined using G-Power software with parameters set at $\alpha = 0.05$, effect size = 0.20, and power = 0.90, based on the MANOVA test (Kang, 2021). According to the calculation, the sample size should have been 42 individuals, but to account for potential attrition during the study, the researcher decided on a final sample size of 45 participants.

Figure 1

*Sample size calculation with G*Power software*



The inclusion criteria in the study are being over 18 years old, taking part in the national entrance exams, having

consent from both the students and their parents, possessing the necessary understanding to engage in the research, seeking guidance from counseling centers for entrance exams and university majors, and not having participated in similar educational programs previously. The criteria for exclusion from the study are being in fields unrelated to math and experimental sciences or humanities, experiencing any physical conditions that impede participation, failing to answer at least ten questions on the questionnaires, being engaged in other educational programs simultaneously, missing more than one in-person training session, or withdrawing from the study.

The research methodology involved obtaining permits from the researcher's university, followed by visits to 5 counseling centers in Tehran specializing in university majors and entrance exams. The names of the centers were undisclosed. The centers were selected using a convenient method, and two centers were omitted because they did not cooperate. The researcher made specific commitments to the remaining centers, including maintaining the confidentiality of student information and providing free services to students. After coordinating with the centers, an announcement was made on social media for students to participate. Some students had previous experience with these centers for entrance exams, while others sought advice on choosing a major.

Then, from the pool of individuals who submitted their information, the researchers targeted and selected students who met the necessary criteria to participate in the study. The researchers specifically chose 52 students for the study. During the initial face-to-face interview at the center's offices, the researchers explained the research goals and ethical guidelines to the students and their parents, addressing any questions they may have had. This screening process also eliminated students who did not meet the requirements for the research, such as time constraints for attending training sessions. Additionally, some individuals chose not to continue with the study. Ultimately, the researchers finalized a group of 45 participants. Next, the researchers administered a pre-test to the students using their research tools. During the pre-test phase, data was collected from all 45 participants. They were then randomly assigned to groups and prepared for the training sessions.

According to research by Hashemi Nosrat Abad et al., educational interventions have been developed to target the enhancement of ADHD symptoms through training in self-management of attention, motivational behaviors, and verbal self-learning (Hashemi Nosrat Abad, 2007). Similarly, interventions based on research by Dubuc-Charbonneau et al. aimed to assess the effects of self-management intervention on stress, job burnout, well-being, and students' self-management capacity levels (Dubuc-Charbonneau & Durand-Bush, 2015). Both training groups underwent four

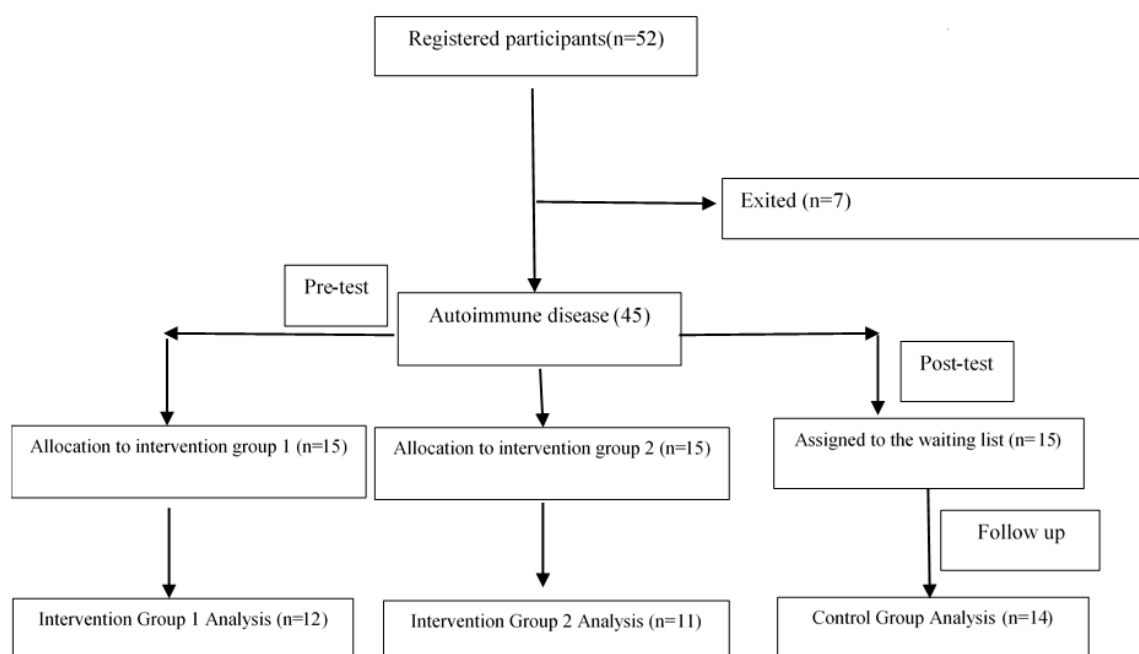
sessions lasting 45 minutes each in a week. The limited number of sessions in a week was due to the immediate need for training and field selection. Students had to choose their fields after the entrance exam results. As a result, they could not participate in additional sessions. The sessions took place in an office at the counseling centers for the experimental group, while the control group did not receive any program.

At the end of this period of meetings, all three groups were given a post-test. Two weeks later, following the training implementation, the researcher evaluated the research variables once more and compared the results of the pre-test, post-test, and follow-up assessments among the three groups. To adhere to ethical guidelines, the control group

students also received training for one session after the research concluded. Throughout the study, three participants from the self-management of attention behaviors experimental group, four participants from the motivational behaviors experimental group, and one participant from the control group withdrew from the research, leading to the exclusion of their data. The ethical considerations in this study included obtaining informed consent from participants and ensuring information confidentiality. All subjects had their anxiety and stress levels related to field selection measured. Table 1 contains the self-management sessions focused on attention and motivation behaviors. Additionally, Figure 2 shows the CONSORT flow diagram.

Figure 2

The flow diagram of the study



2.2. Data Collection Tools

Beck Anxiety Inventory (BAI): Beck, Steer, and Brown (2000) developed a questionnaire to assess anxiety symptoms in individuals, confirming its reliability through internal consistency analysis (Beck et al., 1997). The Beck Anxiety Inventory (BAI) consists of 21 items where respondents choose one of four options to indicate the severity of their anxiety over the past week. Responses are scored on a Likert scale ranging from 0 to 3, with a total score potential of 0 to 63. In reality, based on this range of numbers, the anxiety level of individuals is assessed, with the resulting number signifying the following:

- The lowest level of anxiety: between 0 and 7
- Mild anxiety: between 8 and 15
- Moderate anxiety: between 16 and 25

- Severe anxiety: between 26 and 63

An individual's elevated score on this scale suggests increased levels of anxiety, while a lower score suggests lower levels of anxiety. Research conducted in Iran found that the Cronbach's alpha coefficient of this scale was 0.91 (Besharat et al., 2016). The researcher in this study discovered that the Cronbach's alpha coefficient of this scale was 0.72.

Perceived Stress Questionnaire (PSQ): The Cohen et al. questionnaire, created in 1983, is a self-report tool used to assess stress and has been proven reliable (Cohen et al., 1983). It consists of 16 items measured on a 5-point Likert scale, with the total score ranging from 16 to 80. The survey inquires about feelings connected to stress, anxiety, and decreased efficiency in the past month, as well as the

frequency of feeling overwhelmed by obstacles and bothered by situations outside of one's control. The survey developers achieved a Cronbach's alpha score of 0.87, whereas, in Iran, the reliability was 0.72 using the identical approach (Khalili

et al., 2017). The researcher conducting this study calculated the Cronbach's alpha coefficient for the scale to be 0.74.

Table 1

Summary of training sessions

Session	
Training self-management of attention behaviors	
First	<ul style="list-style-type: none"> Familiarizing students with the self-management approach Training self-awareness and cognitive regulation skills and attention Introducing self-management skills and their strategies
Second	<ul style="list-style-type: none"> Assess the Factors Affecting Attention and preventing distractions about oneself and one's skills, Training cognitive and behavioral management skills including attention and control, inhibition, delay, and relaxation.
Third	<ul style="list-style-type: none"> Training in attentional self-management, Training cognitive self-management skills, Training planning, Training Targeting Training monitoring, control, and self-evaluation, Practicing the learned skills in cognitive management of attention.
Fourth	<ul style="list-style-type: none"> Training Planning Training Targeting Training Monitoring Training self-control and self-evaluation Practicing previous skills Post-test implementation
Training self-management of motivational behaviors	
First	<ul style="list-style-type: none"> Familiarizing students with the self-management approach Training motivational self-awareness skills regarding future work and selecting a major and job
Second	<ul style="list-style-type: none"> Initial review of the previous session Training self-management skills including individual motivations controlling these motivations and reviewing them
Third	<ul style="list-style-type: none"> Training emotional regulation skills Training immediate and momentary emotion and anger management skills Examining individual motivations Recognizing individuals in them Targeting, Monitoring
Fourth	<ul style="list-style-type: none"> Training in Emotional distress management Training Targeting Training Monitoring Training self-control and self-evaluation Practice previous skills Post-test implementation

2.3. Data Analysis

Descriptive statistics in this study involved using mean and standard deviation as descriptive criteria, while

inferential statistics involved covariance analysis with repeated measures. The data collected was analyzed using the Kruskal-Wallis H method, repeated measure ANCOVA, and Bonferroni's post hoc test at a p-value of 0.05. The

statistical software used for all analyses was SPSS version 27 and JASP version 0.18.1.0. "The Kolmogorov-Smirnov test was used to evaluate normal distribution, while Levene's test was utilized to assess the homogeneity of variances."

3. Findings and Results

The study gathered information from students in three stages - pre-test, post-test, and follow-up - from different groups focusing on self-management of attentional behaviors, motivational behaviors, and control groups. Initially, the researcher examined the participants'

demographic variables, such as field of study, which included mathematics, experimental, and humanities. The participants were also categorized based on their history of receiving academic counseling, separating them into groups with and without such a history for choosing a major. "Furthermore, the participants were segregated into cohorts according to their gender. The outcomes of the Kruskal Wallis Test revealed no notable distinction among the participants regarding demographic factors ($P>0.05$), suggesting that the groups were comparable in this regard."

Table 2

Demographic characteristics in the experimental and control groups

Variables	Demographic information	Self-management of attentional behaviors		Self-management of motivational behaviors		Control		Total		Kruskal-Wallis H	P-value
		N	%	N	%	N	%	N	%		
Field of Study	Mathematics	7	58.3%	7	63.6%	8	57.1%	22	59.5%	0.101	0.951
	Experimental	3	25.0%	2	18.2%	3	21.4%	8	21.6%		
	Humanities	2	16.7%	2	18.2%	3	21.4%	7	18.9%		
History of receiving academic counseling	Yes	5	41.7%	3	27.3%	6	42.9%	14	37.8%	0.727	0.695
	No	7	58.3%	8	72.7%	8	57.1%	23	62.2%		
Gender	Man	5	41.7%	5	45.5%	5	35.7%	15	40.5%	0.245	0.885
	Female	7	58.3%	6	54.5%	9	64.3%	22	59.5%		

The researcher also examined the mean and standard deviation of the research variables in the research groups in Table 3.

Table 3

Description of research variables

Variable	TIME	Groups	N	Mean	SD	Min	Max
Anxiety	Pre-test	Self-management of attentional behaviors	12	46.50	2.93	41	50
		Self-management of motivational behaviors	11	45.72	2.97	41	50
		Control	14	47.64	1.69	44	50
	Post-test	Self-management of attentional behaviors	12	40.50	1.83	38	44
		Self-management of motivational behaviors	11	40.00	2.36	38	43
		Control	14	46.64	2.46	42	50
	Follow up	Self-management of attentional behaviors	12	37.25	2.34	32	41
		Self-management of motivational behaviors	11	36.45	3.32	32	42
		Control	14	45.21	2.57	41	50
Stress	Pre-test	Self-management of attentional behaviors	12	50.00	2.82	45	54
		Self-management of motivational behaviors	11	49.00	3.03	45	54

Post-test	Control	14	50.78	2.39	47	54
	Self- management of attentional behaviors	12	46.16	1.52	44	48
	Self-management of motivational behaviors	11	45.36	0.92	44	47
Follow up	Control	14	47.92	2.30	45	53
	Self-management of attentional behaviors	12	40.25	1.21	38	42
	Self-management of motivational behaviors	11	40.00	2.49	38	47
	Control	14	48.50	2.73	45	54

Table 4 displays the mean and standard deviation of the participant's scores in the research variables. It is evident from this table that the mean of the Anxiety variable in the Self-management of attentional behaviors, motivational behaviors, and control groups during the Pre-test phase were similar. Nevertheless, the mean scores of the Anxiety variable decreased in the experimental groups during the Post-test and Follow-up stages compared to the control group, while no changes were observed in the control group.

Table 4

Covariance Analysis Test

Variable	Source	SS	MS	F	P-value	(η^2)
Anxiety	TIME	16.922	16.922	2.262	0.143	0.070
	TIME * Pre-test	21.087	21.087	2.819	0.104	0.086
	TIME * Gender	5.181	5.181	0.693	0.412	0.023
	TIME * Group	23.737	11.868	1.587	0.221	0.096
	TIME * Gender * Group	22.051	11.026	1.474	0.245	0.089
	Pre-test	0.174	0.174	0.032	0.859	0.001
	Gender	0.354	0.354	0.065	0.800	0.002
	Group	759.330	379.665	69.981	< 0.001	0.823
	Gender * Group	2.152	1.076	0.198	0.821	0.013
Stress	TIME	4.120	4.120	1.584	0.218	0.050
	TIME * Pre-test	1.937	1.937	0.745	0.395	0.024
	TIME * Gender	4.224	4.224	1.624	0.212	0.051
	TIME * Group	135.761	67.880	26.101	< 0.001	0.635
	TIME * Gender * Group	0.156	0.078	0.030	0.971	0.002
	Pre-test	6.451	6.451	1.288	0.265	0.041
	Gender	9.283	9.283	1.854	0.183	0.058
	Group	417.031	208.516	41.636	< 0.001	0.735
	Gender * Group	6.807	3.403	0.680	0.514	0.043

Based on the findings of the covariance analysis presented in Table 4, there was a significant P-value in the Between-Subjects Effects between the test and control groups in the Anxiety variable ($p < 0.001$). This indicates that a notable

Similarly, there were no significant differences in the Stress variable among the three groups during the Pre-test phase. However, the mean scores of the Anxiety variable decreased in the experimental groups during the Post-test and Follow-up stages compared to the control group, with no changes observed in the control group. The researcher also analyzed the results of the repeated measure analysis of the covariance test in Table 4.

difference was observed in the research groups while controlling for the effects of the pre-test stage. Similarly, a significant P-value was found in the Between-Subjects Effects between the test and control groups in the Stress variable ($p < 0.001$), showing a notable difference in the

research groups when accounting for the effects of the pre-test phase. Moreover, the Within Subjects Effects for the Stress variable showed significance in the interactive effects between time and group ($p=0.000$). In Table 5, the researcher

also examined how the Stress variable was affected by the interaction between stages and groups.

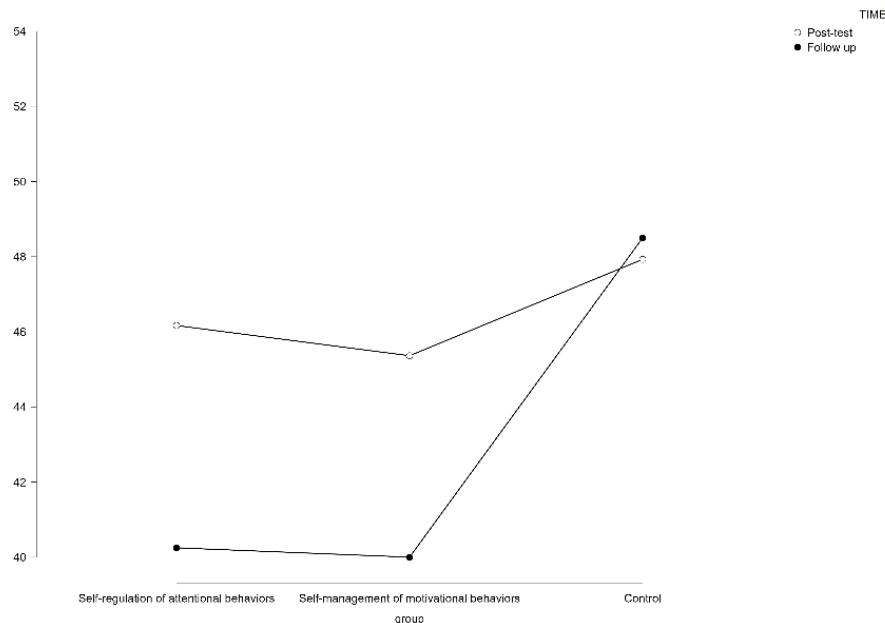
Table 5

*Post Hoc Comparisons - Group * TIME For Stress*

Variable		MD	SE	t	PBonf
Stress	Self-management of motivational behaviors, Post-test	0.949	0.839	1.131	1.000
	Control, Post-test	-1.837	0.798	-2.302	0.378
	Self- management of attentional behaviors, Post-test	6.002	0.670	8.962	< 0.001
	Self-management of motivational behaviors, Follow up	6.223	0.834	7.459	< 0.001
	Control, Follow up	-2.115	0.804	-2.630	0.166
	Control, Post-test	-2.786	0.854	-3.263	0.029
	Self-management of attentional behaviors, Follow-up	5.053	0.834	6.057	< 0.001
	Self-management of motivational behaviors, Follow up	5.274	0.706	7.472	< 0.001
	Control, Follow up	-3.064	0.837	-3.660	0.009
	Self-management of attentional behaviors, Follow-up	7.839	0.804	9.749	< 0.001
	Self-management of motivational behaviors, Follow up	8.059	0.837	9.629	< 0.001
	Control, Follow up	-0.278	0.665	-0.418	1.000
	Self-management of attentional behaviors, Follow-up	0.221	0.839	0.263	1.000
	Control, Follow up	-8.117	0.798	-10.174	< 0.001
	Self-management of motivational behaviors, Follow up	-8.337	0.854	-9.767	< .001

Figure 3

Pairwise analysis of the interaction effects between TIME and Groups for the Stress variable



According to Table 5 and Figure 2, a significant variation in Stress levels was observed between the Self-management of attentional behaviors group during the Follow-up phase and the Control group during the Follow-up and Post-test phases ($P < 0.001$). The negative significant difference indicates a decrease in stress levels over time compared to the control group, confirming the effectiveness of the self-management of attentional behaviors in stress reduction, though the impact occurred over time. Stress levels were noteworthy different between the Self-management of motivational behaviors group and the Control group at all stages ($P < 0.05$). The negative significant difference suggests a decrease in

stress levels over time compared to the control group, demonstrating the effectiveness of self-management of motivational behaviors in reducing stress, with a lasting effect. There was no significant difference in stress levels between the Self-management of attentional behaviors and the motivational behaviors group ($P = 1.000$), indicating no variance in efficacy between intervention methods. Table 6 compares the different research groups through pairwise analysis.

Table 6

Bonferroni's post hoc test to examine differences between three groups

Variables	TIME	(I) group	(J) group	MD	Std. Error	P-value
Anxiety	Post-test	Self-management of attentional behaviors	Self-management of motivational behaviors	0.341	0.935	1.000
			Control	-5.908*	0.891	$p < 0.001$
		Self-management of motivational behaviors	Control	-6.250*	0.940	$p < 0.001$
	Follow-up	Self-management of attentional behaviors	Self-management of motivational behaviors	0.911	1.163	1.000
			Control	-8.136*	1.109	$p < 0.001$
		Self-management of motivational behaviors	Control	-9.047*	1.170	$p < 0.001$

Table 6 illustrates a notable variance in the Anxiety variable among the test groups comprising Self-management of attentional behaviors and motivational behaviors compared to the control group ($P < 0.001$). The decrease in average scores within this variable during both the Post-test and Follow-up stages in the experimental groups, in contrast to the control group, signifies the effectiveness of both

intervention methods in the study on the Anxiety variable. This impact has proven to be consistent over time. No significant difference was found between the test groups ($P > 0.05$).

4. Discussion and Conclusion

The main objective of this study was to explore how training self-management techniques for attention and motivation can help decrease anxiety and stress related to choosing a university major among students. The findings revealed that both methods of training self-management for attention and motivation led to a decline in stress and anxiety, with no notable difference between the two groups.

According to this research, it was discovered that individuals can reduce stress and anxiety by training self-management of attention and motivational behavior. The study presents novel ideas regarding independent and dependent variables, which can be directly compared to current programs. Past programs did not specifically address stress and anxiety related to choosing a career, but the alignment of findings with relevant therapeutic backgrounds can be explained and justified. A study on youth with anxiety and depression issues found that self-management empowers teenagers to take responsibility and make decisions that support their recovery (Gaudreau et al., 2023). Manjarmoe et al.'s research in 2023 also demonstrated that training self-management skills boosts academic engagement (Manjarmoe & Nikdel, 2023). Moreover, the research found that training self-management skills improves motivation and self-regulation techniques among male students (Moradi et al., 2020). Another study highlighted the importance of self-management attention behaviors and verbal self-learning in reducing symptoms of attention deficit disorder (Hashemi Nosrat Abad et al., 2007).

Self-management is essential for individuals to direct their emotions, thoughts, and behavior to achieve personal objectives. It involves an active process where individuals strive to monitor and regulate their motivation, cognition, and behavior. Through self-management, individuals utilize introspection, self-evaluation, and self-reinforcement, making it an effective strategy for controlling anxiety and stress. Students can efficiently control their emotions by assessing their behavior based on predetermined goals, standards, and criteria (Hasani et al., 2023). Developing self-management skills improves students' capacity to make good choices and avoid stress and anxiety, ultimately leading to academic achievement and minimizing negative emotions (Smolkowski et al., 2023).

"Both attention and motivational behaviors are important factors in reducing stress and anxiety in students, as evidenced by the lack of a notable difference between the two groups." Motivation can impact the timing, content, and approach to tasks, leading to heightened engagement in activities perceived as beneficial. "Motivated Students tend to be more prepared to pursue their goals and tend to have reduced anxiety levels as they develop self-management skills and receive recognition and rewards from others

(Balali et al., 2021)." Conversely, attention, a cognitive process, is closely connected to learning and is instrumental in assimilating new information. Encouraging students to exhibit attentive behaviors can prevent distractions and improve their ability to focus, leading to lower levels of stress and anxiety during learning activities. This approach can yield favorable outcomes for student well-being (Durães et al., 2018).

One of the limitations of the current study is the lack of available Iranian and foreign research on the topic, with only one Iranian study found relevant to the current research. This limited the ability to compare findings with previous studies. Another constraint was the difficulty in carrying out homework and coordinating with the school's administrative system, as well as the lack of supervision outside of meetings, hindering the implementation of some behavioral exercises. There was also a limitation in controlling variables such as teacher presence, movement of other students, social and cultural family factors, personality, and psychological factors. Suggestions for future research include better control of these variables and creating environments free from interfering factors. The researcher also faced limitations in accessing the statistical population due to transportation and space constraints in schools. Some students' lack of cooperation further delayed the study process. Recommendations for future research include improving access to the population and educational facilities, as well as conducting similar studies in different regions and age groups for broader generalization of results.

The results of the latest study suggest that training self-management of attention and motivational behavior can effectively help reduce anxiety and stress levels in students. The results suggest organizing educational workshops to educate students on behaviors that can help them manage their anxiety and stress better. Education departments and counseling clinics should provide self-management training to students. Authorities should also organize briefing sessions, distribute pamphlets, and implement educational programs to help reduce anxiety and stress among students. Additionally, training students to stress and anxiety reduction techniques through mass media with the guidance of experienced professionals is recommended.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Each participant received an informed consent form to understand the study's objectives.

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