The effects of teaching contrastive skills of Islam and cognitive-behavioral for coping on anxiety

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C H R O N I C L E	A B S T R A C T
	This paper presents an empirical investigation to study the effects of teaching contrastive skills of Islam originated from versus of holly book of Quran and cognitive-behavioral for coping on anxiety among some high school students in city of Tehran, Iran. The study uses a standard method developed by Cattell and Scheier (1963) [Cattell, R. B., & Scheier, I. H. (1963). *Handbook for the IPAT Anxiety Scale Questionnaire: Self Analysis Form*. Institute for Personality & Ability Testing.] to measure the anxiety. The results have indicated that both methods, contrastive skills and cognitive-behavioral, not only could reduce anxiety in short term but also it could reduce the anxiety over the long term period.

1. Introduction

During the past two decades, there has been a growing competition among high schools students who wish to enter higher levels of academic achievements (Spielberger, 2010). One of the primary concerns is an increase anxiety among students who try to compete with their colleagues and the consequences of anxiety might harm students' healthcare although they are generally occasional and short-lived, and do not cause serious problems (Wachelka & Katz, 1999). Holahan et al. (2005) investigated the role of avoidance coping in prospectively generating both chronic and acute life stressors. They also studied the stress-generating role of avoidance coping as a prospective link to future depressive symptoms. They reported that baseline avoidance coping was associated with both more chronic and more acute life stressors 4 years later. In addition, these intervening life stressors could link baseline avoidance coping and depressive symptoms 10 years later, controlling for the influence of initial depressive symptoms. Na (2007) investigated anxiety among 115 students from a high school in Shandong Province, China who attended in English language training programs. They reported that students maintained comparatively high anxiety in English learning and male students had higher anxiety of English classes than females did. In addition, they reported that high anxiety played a somewhat debilitative role in high school students' language learning.

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Wigfield and Meece (1988) evaluated math anxiety in 6th- through 12th-grade children as part of a longitudinal investigation of children's beliefs, attitudes, and values concerning mathematics. They provided some evidence for two components of math anxiety, a negative affective reactions component and a cognitive component. The affective component of math anxiety was associated appeared more negatively than did the worry component to children's ability perceptions, performance perceptions, and math performance. The worry component issues were more strongly and positively than did the affective component to the importance that children attach to math and their reported actual effort in math.

In a survey accomplished by Aysan et al. (2001) a group of high school juniors and a group of high school seniors in Izmir, Turkey completed measures of test anxiety, coping skills, and perceived health status both before and after a major exam period. According to their survey, students with high test anxiety had less effective coping mechanisms and appeared to have poorer perceptions of their health. Before to the exams, juniors presented higher test anxiety and applied less effective coping mechanisms than seniors did. After the exam cycles, improvements were observed for both age groups on perceived health, but scores of younger students stayed substantially higher than scores of seniors on one of the key measures of test anxiety.

Germeijs et al. (2006) studied how indecisiveness could be associated with adolescents' process of choosing a study in higher education, using a longitudinal design based on a sample of 281 students taking part in the beginning, middle, and end of Grade 12. They reported that indecisiveness was a risk factor for future levels of coping with the career decisional tasks of broad and in-depth environmental exploration, amount of self-information, decisional status, and commitment. Nevertheless, indecisiveness, in their survey, was not associated with the degree of change in decisional tasks during Grade 12. In addition, they reported some linkage of indecisiveness with the amount of in-depth environmental information, the amount of self-information, decisional status, and commitment mediated by adolescents' career choice anxiety.

2. The proposed study

This paper presents an empirical investigation to study the effects of teaching contrastive skills of Islam originated from versus of holly book of Quran and cognitive-behavioral for coping on anxiety among some high school students in city of Tehran, Iran. The study has used a standard method developed by Cattell and Scheier (1963), which consists of 40 questions to perform the study. The population of the study consists of 48 high school female students in region five at city of Tehran, Iran. All students were divided into three groups, two experiment groups and one control group. First, we tried to select some students whose levels of anxiety was more than average and distributed them among three groups uniformly. Next, students were gone under training to learn how to cope with anxiety for about a month and the survey has accomplished among them, accordingly. Table 1 demonstrates the summary of some personal characteristics of the participants.

Table 1
Personal characteristics of the participants

Characteristics		Cognitive-behavioral		Contrastive skills of Islam		No experiment	
		Freq.	%	Freq.	%	Freq.	%
Financial	Average	5	31.3	6	37.5	7	43.8
	Good	11	68.8	10	62.5	9	56.3
Fathers' educations	Bachelor	6	37.5	6	37.5	7	43.8
	Masters	9	56.3	8	50	8	50
	PhD	1	6.3	2	12.5	1	6.3
Mothers' educations	College	2	12.5	2	12.5	2	12.5
	Bachelor	12	75	9	56.3	11	68.8
	Masters	2	12.5	5	31.3	3	18.8

As we can observe from the results of Table 1, over two-third of the people who attended in our survey were financially categorized as relatively rich people. In addition, all of them were from highly educated families. The proposed study of this paper has used some training programs which were given in different sessions of 60 minute programs. Table 2 demonstrates the description of the programs.
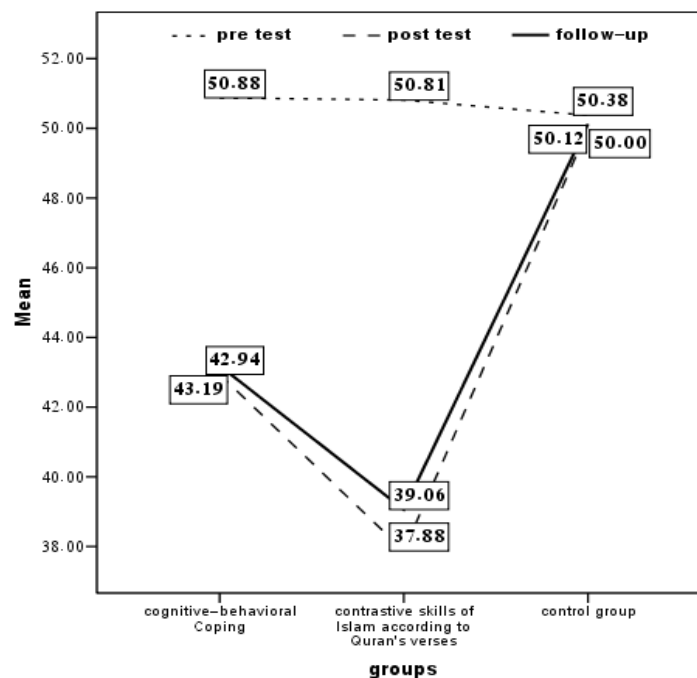
Table 2
The summary of training programs

Session	Cognitive-behavioral	Contrastive skills of Islam
1	Initial evaluation	Discussing anxiety from Quran's point of view
2	Evaluation of behavioral, emotional and cognitive anxiety	Treatment of anxiety through the Quran
3	Work on hypothyroidism and weaknesses	Expanding the role of religious faith in companions of the Prophet Mohammad
4	Work on emotional symptoms	The effect of faith and trust in anxiety
5	Fighting negative thoughts, thoughts registration skills, work on cognitive errors	The role of patience on handling challenges
6	Identifying self-negative symptoms	Prayer strategy for reducing anxiety
7	Teaching problem solving	The role patience, faith, prayer on reducing anxiety
8	Modified myths	Repent and conditions and its relation to mental health
9	Preparation for complete treatment	The role of human will to change and learn from the past
10	Conclusions skills to cope with anxiety	The relative proportion of the solution and the ability of each individual assignment

3. The results

In this section, we present the results of survey on implementation of two methods for coping on anxiety. Fig. 1 demonstrates some basic statistics among three groups in three stages of pre-test, post-test and follow up.

Fig. 1. The summary of basic statistics

Table 3 shows the results of examining the difference between anxieties of two groups before accomplishing the test.

Table 3

The summary of anxiety in pre-test stage

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.
Cognitive-behavioral Coping	contrastive skills of Islam according to Quran's verses	.06250	2.56793	1.000
	control group	.50000	2.56793	.979
Contrastive skills of Islam according to Quran's verses	cognitive-behavioral Coping	-.06250	2.56793	1.000
	control group	.43750	2.56793	.984
Control group	cognitive-behavioral Coping	-.50000	2.56793	.979
	contrastive skills of Islam according to Quran's verses	-.43750	2.56793	.984

As we can observe from the results of Table 3, there is no meaningful difference between two groups before performing any program using one-way test (F-value = 0.023, P-value = 0.978). Table 4 demonstrates the results of the survey after the programs were executed.

Table 4

The summary of anxiety in post-test stage

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.(a)
Cognitive-behavioral Coping	Contrastive skills of Islam according to Quran's verses	5.006	.829	.000
	control group	-7.511	.830	.000
Contrastive skills of Islam according to Quran's verses	Cognitive-behavioral Coping	-5.006	.829	.000
	control group	-12.517	.829	.000
Control group	Cognitive-behavioral Coping	7.511	.830	.000
	contrastive skills of Islam according to Quran's verses	12.517	.829	.000

As we can see from the results of Table 4, there is a meaningful difference between two groups after performing any program using one-way test (F-value = 115.361, P-value < 0.001, df = 44, 2). Further investigation has indicated that about 84% of anxiety could be controlled by using two tests. Pairwise Comparisons using Tukey test between control and experiment groups has also indicated that the control group maintained relatively higher level of stress compared with experiment group. Table 5 demonstrates the results of measuring anxiety among two groups of control and experiment.

Table 5

The level of anxiety in post test

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.(a)
Cognitive-behavioral Coping	Contrastive skills of Islam according to Quran's verses	5.006	.829	.000
	control group	-7.511	.830	.000
Contrastive skills of Islam according to Quran's verses	Cognitive-behavioral coping	-5.006	.829	.000
	control group	-12.517	.829	.000
Control group	Cognitive-behavioral coping	7.511	.830	.000
	Contrastive skills of Islam according to Quran's verses	12.517	.829	.000

Finally, in this survey, we have tried to measure the effects of two methods on reducing the level of anxiety after one month and Table 6 shows the results of our survey.

Table 6
The results of the level of anxiety after follow up

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.(a)
Cognitive-behavioral Coping	Contrastive skills of Islam according to Quran's verses	-1.038	.426	.019
	Control group	.265	.443	.553
Contrastive skills of Islam according to Quran's verses	Cognitive-behavioral Coping	1.038	.426	.019
	Control group	1.303	.506	.014
Control group	Cognitive-behavioral Coping	-.265	.443	.553
	Contrastive skills of Islam according to Quran's verses	-1.303	.506	.014

The results of basic statistics yields F-value = 4.032, df=44,2, P<0.05 and this means that students who were enrolled in two extensive programs have managed to keep the levels of anxiety low, which means both programs have been able to reduce anxiety.

4. Conclusion

This paper has presented an empirical investigation on measuring the effects of different programs on reducing anxiety among high school students. The study has used a standard questionnaire for measuring the level of anxiety and using some statistical tests, it has shown that we could reduce the level of anxiety using either cognitive-behavioral or religious based methods. The results of this study is consistent with findings reported by Moarefzadeh et al. (2010) who did similar survey among high school students in city of Ahvaz, Iran. The results are somewhat consistent with findings of Wigfield and Meece (1988) who provided some evidence for two components of math anxiety, a negative affective reactions component and a cognitive component. Finally, there are several studies, which emphasize on stress reduction to improve the quality education (Wachelka & Katz, 1999) and we recommend to have such programs executed more often in high schools.

Acknowledgement

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