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RELATIONSHIP BETWEEN EDUCATIONAL STYLES (INTERVENTIONAL, INTERACTIVE, NON-INTERVENTIONAL) WITH TEST ANXIETY FOR SECONDARY SCHOOL STUDENTS IN GORGAN CITY, IRAN

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ABSTRACT

Test anxiety is a negative emotion that affects the student's performance in the test position. The role of educational styles in expressing this feeling has attracted the attention of researchers. Therefore, the purpose of this study was to investigate the relationship between educational styles (interventional, interactive and non-interventional) with test anxiety for secondary school students. The statistical population of the study included all secondary school students in Gorgan city. The sampling method is a randomized sampling method. The sample size is 185 people. Data were collected using the educational styles questionnaire, and the reliability of questionnaires was confirmed by Cronbach's alpha test. Data analysis was performed by SPSS® software using the Pearson correlation coefficient. The results of the research showed that there is no significant relationship between the educational styles of intervention with test anxiety. But there is a significant relationship between non-interactive and intervention educational styles with test anxiety.

1. INTRODUCTION

Since improving the quality of education and investing in educational and human resources is one of the factors affecting the comprehensive development of countries, academic achievement is one of the main goals of educational programs. Therefore, finding effective factors on academic achievement has been one of the topics of interest to researchers and scholars of educational sciences [1]. One of the common emotions in contemporary education systems is test anxiety and one of the most important causes of failure or lack of success of learners in learning and achieving academic achievement programs is the prevalence of anxiety in schools and disturbing achievement of educational goals and creating different educational problems, creating a negative effect on self-esteem, success, efficiency and academic performance of students, necessitates research in the field of test anxiety in order to treat and prevent its occurrence [2]

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Anxiety is a sign of danger to oneself and can affect student admission, which means that unacceptable motivation is about self-awareness. When this mark is self-evident, it takes action to deal with anxiety. Two examples of these defensive measures of repression and Denial is that the endeavor of both mechanisms is to overcome something unconscious [3]. Test anxiety is a common problem among students [4].

The progress and advancement of any society are in light of the type and quality of activities undertaken in schools. One cannot ignore the role of a teacher as a person who has close links with students. The education of the current generation of the community is among the other needs of particular priority and the preparation of the teacher for the classroom and how it deals with the students, the teaching method requires special attention. Teachers in classes are faced with students of different family, social, economic, cultural and psychological backgrounds who imitate their teachers in their deeds and sayings and even invoke their teachers to justify their actions. That is why it seemed that a teacher should have all the good qualities of a perfect person, but the reality is that the teacher, like other people in the community, is in some of the most prominent features, and in others the average and in some others is weak. Therefore, the teacher must always evaluate himself and by knowing his weaknesses, in order to add to the prominent features, he transforms himself. Therefore, the present research attempts to examine the teaching methods of teachers in terms of gender, teaching discipline and teaching history, highlights the relevance to the student's academic success, in order to provide educational, especially labor-intensive teachers, with little or no service in providing information to educators [1].

In general, according to the materials and researches mentioned, is there a significant relationship between educational styles (interventional, interactive and non-interventional) with test anxiety in secondary school students or not?

The work [3] examined the role of the relationship between learning styles and test anxiety among female students of Hazrat Zeinab School of Andimeshk city for the academic year 2015-16. The population of this study is all elementary school students including all female students of Hazrat Zeinab School. Total of 200 students was randomly selected to answer the questionnaire questions. Results showed that there was a significant relationship between learning styles and test anxiety.

In [5], the study found a relationship between cognitive styles and learning styles with mental anxiety in students. The statistical population included all female students of the first grade of the second-grade secondary school of public education in Kermanshah city. The sample size was 357 people based on Morgan's table. A multi-stage cluster sampling method was used. The participants completed the Whit kin Cognitive Styles Questionnaire, Kolbe's Learning Styles, and Pocket and Parker Math Anxiety, which had good validity and reliability. The results showed that there is a significant correlation between learning styles and non-related cognitive style with math anxiety as well as learning styles and cognitive styles related to the ability to predict math anxiety. the work found the variation in cognitive structures and learning styles that were institutionalized in students' mind affect math learning and can be one of the reasons for math anxiety.

The study [1] investigated the effect of different teaching styles (interventional, interactive and non-interventional) on self-efficacy of secondary school students in the second physics lesson. The

research method is semi-experimental with design (pre-test-post-test with the control group). The statistical population consists of all 2nd grade female students of the second year of mathematics in physics, with a total of 420 students. The statistical sample of this study was 60 people selected by cluster random sampling from the target population. The tool is a standard self-efficacy questionnaire. The validity of this questionnaire was reported to be acceptable in previous studies. In this research, Cronbach's alpha method was used to measure reliability and its rate was calculated 0.78. The method of statistical analysis in this research is descriptive statistics and inferential statistics test of one-way analysis of variance and LSD post-test. Findings showed that there was a significant difference between the self-efficacy of students in experimental and control groups and the self-efficacy of students through interactive and interactive training styles increased. In addition, different teaching styles have different effects on self-efficacy components, including a focus on purpose, goal mediation, internal motivation, problem-solving ability and self-evaluation of students.

In [6] examined the effect of awareness of educational styles on academic performance in students. The statistical population included 185 students using a questionnaire of educational styles and academic performance for data collection. The results showed that the cooperative educational style had the most effect on academic performance.

The study [7] explored the relationship between the styles of education and the success of nursing students that this research was an applied and correlation study and a questionnaire were used to collect data. The results of the research showed that the interactive educational style affects students' academic achievement.

2. RESEARCH METHODOLOGY

This research is applied research taking advantages of statistical analysis. The statistical population of the study includes all secondary school students in Gorgan city. The sampling method is a randomized sampling method and the sample size is determined by using Cochran's sample size formula of 185 people. The research data were collected using the educational styles questionnaire (Text in Persian) [1]. The validity of the questionnaires was checked, and their reliability was confirmed by Cronbach's alpha coefficient. Data analysis was performed by SPSS® software.

Table 1: Kolmogorov-Smirnov (KS) Test (confirmation for normality of data) (N = 185)

	KS statistic	p-value
Non-interventional	0.383	0.044
Interventional	0.632	0.241
Interactive	0.383	0.320
Test anxiety	0.425	0.150

3. FINDINGS

3.1 KOLMOGOROV-SMIRNOV TEST

The first step to initiating the analysis process is to examine the normality of the variables. Normality of variables is the prerequisite for performing all of the parametric tests. Kolmogorov-Smirnov test (KS) was used to test the normal variables. In Table 1, if the significance level is less than 5% (<0.05), the assumption zero is rejected at the 95% confidence level. In the case of abnormal variables, regression models will be void and should use appropriate methods such as conversions for

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normalization of data.

From Table 1, the data have normal distributions, so we will examine the research hypotheses. According to the above, the significance level (p-value) is more than 0.05, at 95% confidence level. The null hypotheses are accepted, i.e., the assumption of normalization of indicators is accepted based on Kolmogorov-Smirnov statistics. In other words, at the confidence level of 95%, the assumption of the normalization of dependent variables is accepted based on this statistic.

3.2 FIRST HYPOTHESIS

The first hypothesis investigates if there is a significant relationship between the interventional educational style and the test anxiety of second-grade high school students in Gorgan city.

Table 2: Testing the first hypothesis

		Test anxiety
Non-interventional educational style	Pearson correlation coefficient	0.153
	Sig	0.009
	N	185

To test this hypothesis, Pearson's significance test was used, the results are explained as follows: There is no significant relationship between the educational styles of intervention and academic test anxiety in secondary school students of Gorgan city, because the obtained significance level (Sig = 0.009) is less than the research alpha ($\alpha = 0.05$), therefore the overall result is that the level 95%, there is not a significant relationship between the interventional learning style and the reduction of test anxiety in secondary school students.

3.3 SECOND HYPOTHESIS

The second hypothesis examines if there is a significant relationship between the interactive learning styles and the test anxiety of secondary school students in Gorgan city.

Table 3. Testing the second hypothesis

		Test anxiety
Interactive educational style	Pearson correlation coefficient	0.356
	Sig	<0.001
	N	185

To test this hypothesis, Pearson's significance test was used, the results are explained as follows: There is a significant relationship between the interactive educational styles and the academic test anxiety of second-grade high school students in Gorgan city. Because the obtained significance level (Sig = <0.001) is less than the research alpha ($\alpha = 0.05$), the overall result is that the level 95%, there is a significant relationship between the interactive learning styles and the test anxiety of secondary school students in Gorgan city. The correlation between the two variables is linear and direct, i.e., both increases and decrease together, the intensity of the correlation between the two variables is relatively strong. Therefore, the research hypothesis is verified.

3.4 THIRD HYPOTHESIS

The third hypothesis checks if there is a significant relationship between non-interventional educational styles and test anxiety in secondary school students in Gorgan city.

To test this hypothesis, Pearson's significance test was used. Table 4, there is a significant relationship between non-interventional educational styles and academic test anxiety in secondary school students in Gorgan city, because the obtained significance level (Sig = <0.001) is lower than

the research alpha ($\alpha = 0.05$). Therefore, the overall result is that at the level 95%, there is a significant relationship between non-interventional educational styles and test anxiety among secondary school students in Gorgan city. The correlation between the two variables is 40.1% which is relatively strong.

Table 4. Testing the third hypothesis

		Test anxiety
Non-interventional educational styles	Pearson correlation coefficient	0.401
	Sig	<0.001
	N	185

3.5 GENDER EFFECT

The supplemental hypothesis of gender effect on attitude toward research indicators: There is a significant difference between attitudes towards research indicators by gender of respondents.

In other words, the average of the opinions of male and female respondents in the attitude to the research indicators are not the same. If μ_1 is the mean of male responses and μ_2 is the average of women's responses, Ho and H1 hypotheses are written as:

H_0: $\mu_1 = \mu_2$,

H_1: $\mu_1 \neq \mu_2$.

Table 5: t-test to determine the difference in attitude to gender-based research indicators.

Indicators	t statistic	Significance level
Non-interventional	-1.12	0.028
Interventional	-0.89	0.037
Interactive	1.32	0.021
Test anxiety	0.116	0.092

Table 5 shows that based on the quantity t and the significant levels for all indicators of the research are less than 5% error, the zero assumption is not rejected. Thus, the attitude towards the research indicators among the respondents of the boy and the girl is the same. It can be said that the gender of the respondents does not affect the attitude to research indicators [8].

4. CONCLUSION

This study investigated the relationship between educational styles (interventional, interactive and non-interventional) with test anxiety of secondary school students. The results of the research showed that there was no significant relationship between the educational styles of intervention with test anxiety. In other words, if the teacher uses an interventionist approach to non-perpetrators. Based on the basic assumption of this approach, the external environment shapes growth. Therefore, this view increases students' test anxiety. The results are consistent with the findings of [5] but there is a significant relationship between non-interactive and interactive learning styles with test anxiety. In other words, if the teacher uses an interactive approach so that part of the teaching process lies with the teacher and part of the student. Test anxiety learners are reduced. The results are consistent with the research [5]. On the other hand, if teachers use a non-interactive approach based on humanistic beliefs that the child has an intrinsic motive for realizing the real world and does not need external stimulation, he or she will use lower test anxiety. The results are consistent with [5].

The advice can be given e.g., teachers create a friendly relationship with the students, and there

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should be participation in the education of teachers and students.

From the study, the non-interventional style of education reduces students' anxiety in secondary school students. It is suggested that teachers give students the opportunity to teach and allow students to engage in the curriculum.

5. DATA AVAILABILITY STATEMENT

The used or generated data and the result of this study are available upon request to the corresponding author.

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