

Research Article

THE INVESTIGATION OF THE RATE OF OUTBREAK OF DEPRESSION AND ANXIETY IN JUVENILES BETWEEN 14-19 YEARS OLD IN THE EAST OF GILAN PROVINCE

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Abstract

The aim of the present research is the investigation of the outbreak of depression and anxiety in juveniles between 14-19 years old in the east of Gilan province. The method has been descriptive research and its statistical universe contains as many as 10500 juveniles between 14-19 years old in cities and villages in the east of Gilan province. The population under study has been chosen as many as 370 individuals by class random sampling method from Morgan's table. In order to collect information, the following tools have been used: 1- Bech depression inventory, 2- Cattle anxiety inventory, and for information analysis, besides descriptive statistical indices, correlated t inferential test has also been used. The results show that considering the calculated t, $t = -0.7459$ in comparison with table, $t = -10115$, the rate of anxiety in juveniles has been lower than the average limit and thru rate of depression has been higher than the average limit.

Key Words: *Depression, Anxiety, Juveniles*

INTRODUCTION

According to the estimates of the world health organization, the rate of the outbreak of mental disorders in the developing countries has been increasing (Perlick *et al.*, 2005). This organization estimates the top of the mental disorders with a statistics of 400 millions afflicted populations in the world. Therefore, among mental disorders, anxiety disorders are perhaps the most widespread disorders (Struening *et al.*, 1995). According to the anxiety statistics, as many as 420 millions of the world population are afflicted with depression, and all individuals experience depression in their lives (Dyck *et al.*, 1999) This feeling that is established usually following the lack of frustration, in eliminated after some hours or days in natural situation, but any time the state of frustration continues and influences the health of individual significantly, in that case therapeutic intervention and professional help will be necessary (Boye *et al.*, 2001). The exact mechanism about affliction with depression is still unknown (Alison *et al.*, 2002). Nevertheless, these several biochemical and psychological factors have been known to cause depression (Walter and Menninger, 2005). The biochemical and genetic structure of some men and women is such that in the office environments with equal environmental and social factors, they show more vulnerability towards depression (Ghassani and Ghassani, 2004). Depression is a state that in which the individual feels sadness and despair (Olatunji *et al.*, 2006). Anxiety is the state of concern and worry of an individual towards an unknown situation

Hamed Bermas (2009) concluded in a research that the rate of the outbreak of depression and anxiety between male juveniles in third grade and secondary education is 46% and 57% respectively, which in comparison with first and second grade is higher. As a whole in comparison with the number of the depressed girls and boys of the first, second and third grade with the total of girls and boys students of secondary grade, the rate of the outbreak of depression in girls and in boys is 14.36% and 16.41% respectively. Therefore we can conclude that the rate of the outbreak of depression and anxiety in boy

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students of the secondary grade is higher than the girl students in secondary grades. Ahmadi (2005) in a research under the title of the investigation of the dispersion of depression of students in Isfahan concluded that depression and anxiety between students are high and this figure reaches the limit of 78%, and one of its main seasons is staying away from one's family which needs a new compromise and university competitions, taking money for expenses from family and in turn, feeling of guilt and etc. He also has said that the rate of the outbreak of depression and anxiety are high in boys and its reason is considered as the dominant situation on society and the dependence of human on men and the lack of their ability in meaning their needs and others' needs (Moral Serrano *et al.*, 2003).

Considering the above mentioned definitions and theories and the researches which have been carried out on anxiety and depression, we have addressed in present research the rate of the outbreak of depression and anxiety on juveniles between 14-19 years old in the east of Gilan provinc. Therefore these hypotheses were configured:

- How much is the rate of the outbreak of depression in girl juveniles between 14-19 years old in the east of Gilan province?
- How much is the rate of the outbreak of anxiety in girl juveniles between 14-19 years old in the east of Gilan province?
- There are differences between the rate of the outbreak of depression in girl juveniles between 14-19 years old in cities and villages.

MATERIALS AND METHODS

Statistical universe of this research contains as many as 105000 juveniles between 14-19 years old in cities and villages in the east of Gilan province. The population under study as many as 170 individuals was chosen by the class random sampling method from Morgan's table. In this method, society is divided in consistent groups. Then the relation of the two groups in the society is calculated and in the next stage, it is multiplied by the volume of sample to this relation in each group. So the number of each group in relation to society is determined, then the sampling has been carried out randomly to the number of the calculated sample from each group.

Tools

In order to collect the necessary information, Cattell anxiety inventory and Bech depression inventory were used.

Bech Depression Inventory for the First Time in the Year of 1961 (BDI):

Bech depression inventory was introduced by Bech *et al.*; and was reviewed later in the year of 1971; and was published in the year 1987. This questionnaire has been compiled by the form of self-examination and in takes between 5 to 10 minutes to complete it. Bech depression inventory since the compilation up to date has been under widespread psychometric evaluation. The findings indicate the high level of the internal consistency in the researches with average of 0 up to 92 which are different. Based on the anxiety reports, the obtained coefficients from 0.86, 73 (1988) have been different.

Anxiety and stress scale is a tool which was made by Cattell. This questionnaire contains 40 questions and this scale has two sections. The section of latent anxiety with 20 matters and the section of evident anxiety with 20 matters. The subjects on the basis of three options answer to it (yes, between these two, no, or often, sometimes and never). These options are numbered in order from 0 or 1 or 2. Koronbach alpha coefficient of this questionnaire is reported as $\alpha = 0.884$.

Table 1: Results Urban – Rural

Valid	Frequency	Percent	Valid percent	Cumulative percent
City	279	75.4	75.4	75.4
Village	91	24.6	24.6	100.0
Total	370	100.0	100.0	

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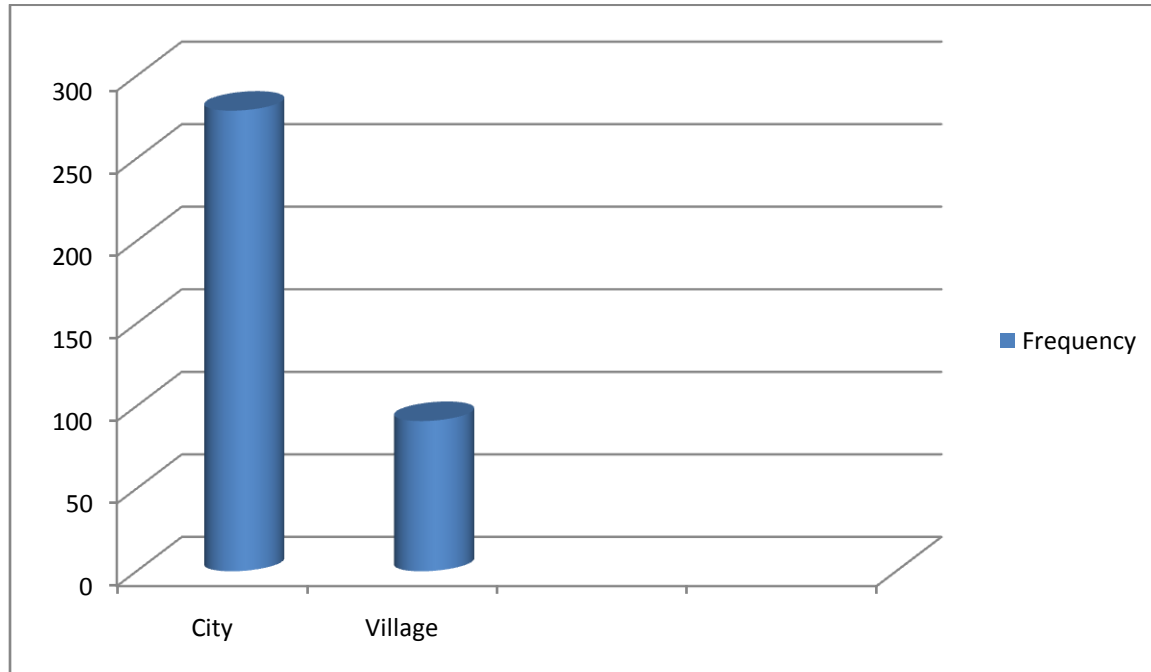


Figure 1: Local

Table 2: Statistical Summery

		Depression	Anxiety
N	Valid	370	370
	Missing	0	0
Mean		52.1595	51.9973
Median		54.5000	53.0000
Mode		68.00	68.00
Std.Deviation		11.64604	11.54219
Variance		135.630	133.222
Range		40.00	55.00
Minimum		30.00	30.00
Maximum		70.00	85.00

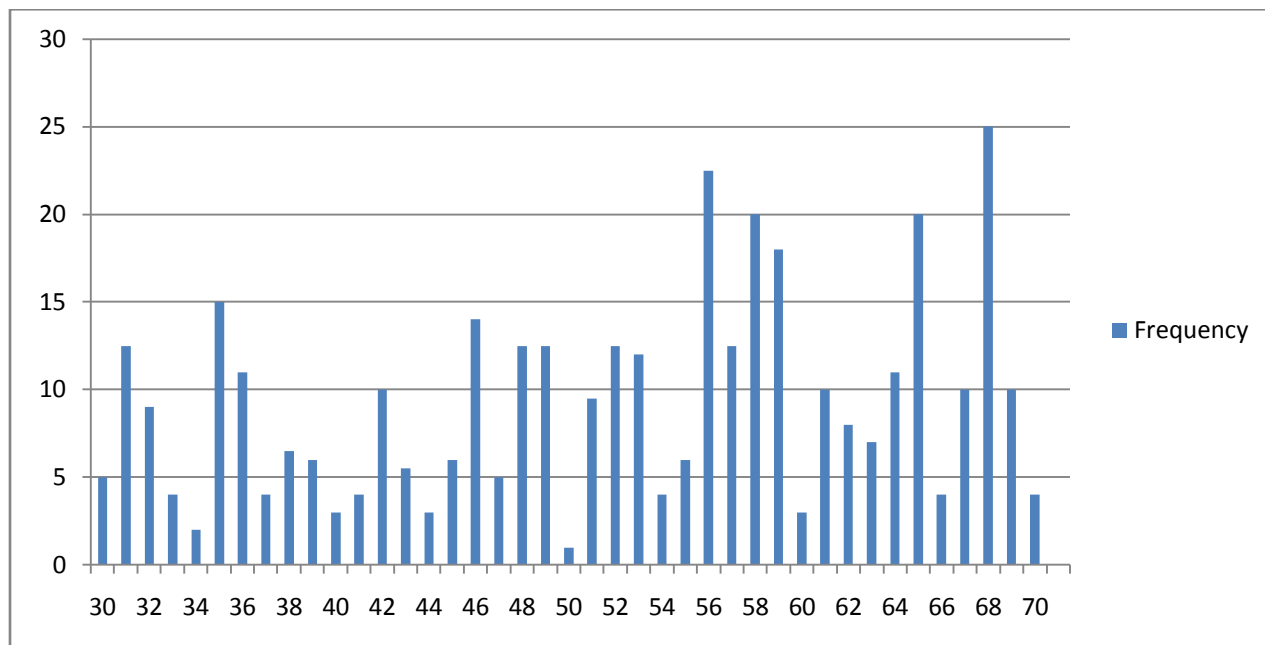


Figure 2: Frequency

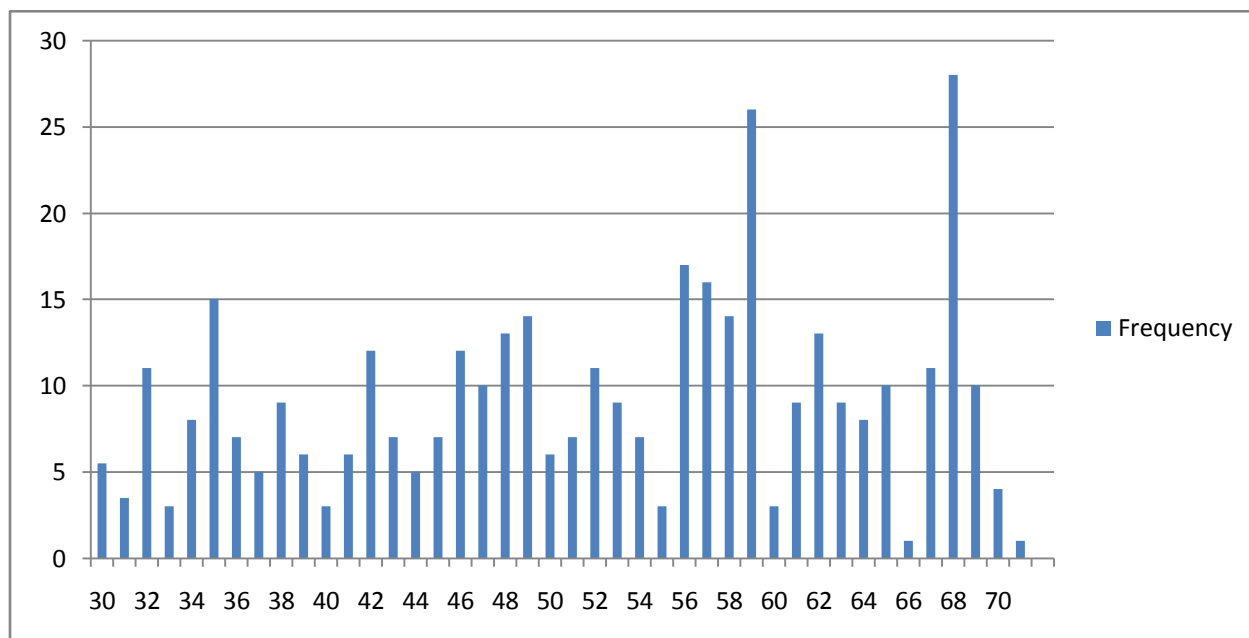


Figure 2: Katel

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Table 3: One- Sample Statistic

	N	Mean	Std. Deviation	Std. Error Mean
Katel	370	1.2984	0.28862	0.01500

Table 4: One- Sample Test

	Test value = 2					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Katel	-49.761	369	0.000	-70162	-7311	-6721

There is difference between the mean of Cattell test scores and the mean option of the questionnaire (Struening *et al.*, 1995), namely the rate of the anxiety is underestimated the average.

Table 5: One- Sample Statistics

	N	Mean	Std. Deviation	Std. Error mean
Beck	370	2.4838	0.55457	0.02883

Table 6: One- Sample Test

	Test value = 2					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Beck	16.780	369	0.000	0.48378	0.4271	0.5405

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Table 7: One- Sample Statistics

	N	Mean	Std. Deviation	Std. Error mean
Beck	370	2.4838	0.55457	0.02883

Table 8: One- Sample Test

	Test value = 2					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Beck	-17.905	369	0.000	-0.51622	-0.5729	-0.4595

There is difference between the mean of Beck test score and the mean of option of the questionnaire (Struening *et al.*, 1995). Also there is difference with option 3, namely if we consider the options of questionnaire in order as low, moderate, high and very high, this group lies between option 2 and 3 and is higher than the average, but the rate of the depression doesn't reach a high limit (because the questions have four options and the analysis is like this, and this is why that they are usually set as odds).

Table 9: T- Test

	Local	N	Mean	Std. Deviation	Std. Error Mean
Beck	City	279	2.4654	0.56125	0.03360
	Village	91	2.5400	0.53264	0.05584
Katel	City	279	1.2933	0.28269	0.01692
	Village	91	1.3140	0.30719	0.03220

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Table 10: Independent Sample Test

		Levene's Test for Equality of Variance		t- Test for Equality of Means						
		F	Sig.	t	df	Sig.(2-tailed)	Mean difference	Std. Error Difference	95% Confidence interval of the difference	
									Lower	Upper
Beck	Equal Variances Assumed	0.894	0.345	-1.115	368	0.266	-0.07459	0.06693	-0.020620	0.05701
	Equal Variances Not Assumed			-1.145	160.187	0.254	-0.07459	0.06517	-0.20329	0.05410
Katel	Equal Variances Assumed	0.945	0.332	-0.594	368	0.553	-0.02073	0.03487	-0.08931	0.04784
	Equal Variances Not Assumed			-0.570	143.051	0.570	-0.02073	0.03638	-0.09264	0.05118

There is not seen difference between the score of anxiety in individuals in cities and villages. There is not seen difference between the score of depression between individuals in cities and villages.

DISCUSSION

The results of this research showed that there is difference between the mean of Cattell test scores and the mean of option of questionnaire, namely the rate of anxiety in juveniles is underestimated the mean and there is difference between the mean of Beck depression test and mean option (Struening *et al.*, 1995). Of questionnaire, and also there is difference with option 3, namely if the options of questionnaire are in order of low, middle, high and very high, this group lies between option 2 and 3 and are higher than average, but the rate of the depression doesn't reach a high level. Also it is not seen difference between the score of the anxiety and depression in individuals in cities and villages. The results of this research is different from the results of Ahmadi, because in Ahmadi's research, the rate of the students' depression has been very high, while in this research, the rate of the depression is less, and the results of this research is in consistent with the Bermas's results, because the rate of the anxiety and depression has been lower.

This research has limitations like the other researches which are as follows:

- In the direction of the execution of this research, the first limitation was the lack of juveniles' knowledge from the aim of this research and the like. A number of juveniles which were chosen in a sample society did not take the matter serious.
- There was the deficiency of scientific resources and also deficiency of centers for providing necessary books in small province-wide.
- The lack of the existence of the centers for the execution of the statistical analysis and the lack of the knowledge from individuals who will be able to help in this issue which finally left much expenses on the shoulder of the researchers.

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Suggestions

There is a hope that we can get a help from the results of this research and the like for reducing juveniles' difficulties in our countries and could revive the role of the counseling of teachers, executors and those who are involved in the issues of the education in our countries and make use of them for reducing the difficulties of juveniles and we also recommend the researchers to execute the similar researches in their schools.

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