

Research Article

THE RELATIONSHIP BETWEEN OPTIMISM AND MENTAL HEALTH IN A NON-PROFIT STUDENT BRANCH OF TONEKABON

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ABSTRACT

Objective: Overall objective of this study is to examine the relation between optimism and mental health in students by using correlation method. Statistical population consists of Rudaki non-profit University (Tonekabon) students. (A total of 1,000) Sampling method: 110 students (57 male, 53 female) from Rudaki university where selected by accessible and randomly method. Research tools: 1-Revised Life Orientation Test: This test measures individual differences in optimism - pessimism (Scheier *et al.*, 1994) which is the shortened version of (Scheier and Carver 1985) life orientation test.

2-SCL-25 test which has provided by Najarian and Davoodi 1380. Research method in this study is correlation method which optimism is dependent variable and mental health is independent variable. Results showed that optimism has a positive direct relationship with mental health. Result of this study shows the more pessimistic someone is, the more he has mental health.

Key Words: *Optimism, Mental Health*

INTRODUCTION

The life, the main gift to any living has such importance and magnitude that effort to maintain its continuation is the most basic instincts. But the wonder is that at the time when man's creative mind everyday makes novelty, the more man has undergone despair and depression. On the other hand optimism with the physical health and mental: Low levels of depression, No anxiety, no weak immune system and Public Welfare is correlated. (Seligman and *et al.*, 1998) (Segerstrom *et al.*, 1998) Optimism is considered as an effective generalized request on all learning included psychological processes. (Scheier *et al.*, 1994)

According to researchers conducted in other countries, this study seeks to examine the relationship between optimism and mental health of the students at Tonekabon University.

Tahmasebian *et al.*, (1390) in the study on Razi students which 117 were selected randomly, they realized that optimism is related to welfare and healthiness. Noori and Laghabi (1388) studied on students and staffs by using LOT and SSW questionnaire to examine the relationship between optimism and life satisfaction. Results indicated the positive and significance relationship between these two variables.

According to Mr. Movahed survey (1382) in about the relationship between religious attitude - optimism and physical health among Cham university students the positive significance relationship between these variable became clear.

Optimists believe that the odds can be successfully managed. But pessimists are expecting misfortune. (Snider and Loopez 2002) This difference in attitude toward odds, Affects the way people deal with stress.

Carver and Colleagues (1993) examined the consistency with the treatment in early stages of breast cancer as a traumatic experience. Study with patient in diagnosis time, a day after surgery, 7 to 10 days after surgery, 3, 6 and 12 month after surgery, beyond the medical variables effect, predicted the optimism vice versa with pain and sadness. In other words, anticipating discomfort 3, 6 and 12 months after surgery was significant. So optimism not only anticipated the early discomfort, but also anticipated the resistance against discomfort over a year after surgery. Optimism is associated with the use of active coping strategies. Optimism, attitude and positive tendencies to scheduling for recovery, anticipates the searching information and recovering bad situation in terms of their most positive aspects. Optimists

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lesser apply the determinism, blame and escape, they don't focus on negative aspect of situation or do not effort to suppress their signs and they accept impossible situations instead of escaping. Also Optimists are distinguished from pessimist due to coping with severe diseases and concern related to health threatens. Generally Optimists more than pessimisms are likely to use strategies that are problem oriented. Merkula (2002) in his research concluded that pessimisms associated high level anger and anxiety. Mriota *et al.*, (2002) by referring to 447 patients' medical record learned about their mark which they earned over past 30 years in the MMPI questionnaire. Then they began to perform two questionnaires about pessimism-optimism and public health. Result show that Pessimistic he fewer mental health compared to Optimists. In the study (Begly *et al.*, 2000) found that there is a positive relationship between optimism and job performance as well as educational performance (Nanis and Right 2003).

The Research Hypotheses

- There is a relationship between optimism and mental health in female students.
- There is a relationship between optimism and mental health in male students.
- There is a relationship between optimism and mental health in students.

MATERIALS AND METHODS

This research is a correlation research which represents the relation between two variables to which the Pearson correlation coefficient method and Rigson coefficient have been used to show this relation.

Statistical Population

Statistical population consists of Tonekabon Rudaki (A total of 1,000) Institute of Higher Education students of which 110 were selected as examples. Sampling method used in this study is as follows: randomly sampling method, In this way that first available students from 10 different courses (Accounting, Banking, Insurance, Tourism, Fisheries, Food, Animal Products, Translation, Language Teaching and Electronic) were selected and after giving necessary explanation, they were asked to fill up the questionnaire.

Research Tools

Employed tools in this research are:

Scale SCL-25:

This scale is the shortened revised version of Symptom Checklist SCL-90-R which developed by Davoodi and Najarian. SCL-90-R is the common self-report tools to mental pathology measurement. (Davoodi and Najarian 1380)

These tools have been created specially to measure those physically and mentally discomforts which have been recently experienced. The original version of SCL-90 were created by using main clauses in symptom checklist and adding some new clauses to it and also manipulating in rating method and implementation method by Dragatis *et al.*

(Davoodi and Najarian 1380)Based on clinical experience and analysis of psychometrics which done on SCL-90, some correction were applied and so named SCL-90-R. (Davoodi and Najarian 1380)

They developed SCL-25 based on SCL-90-R which is the single factor scale. It is also a self-report tool to measure general mental pathology. This scale include 25 clauses which the grading system for each question is on a continuum from 1 (No) to 5 (most times). (Davoodi and Najarian 1380)

Stability: The stability of this scale were examined by Najarian and Sudan's research through calculating internal consistency and retest analysis coefficient on of Izeh Payame Nour university students. Validity coefficient has reported 75% via retest and ($\alpha = 0.97$) through calculating the internal consistency. (Davoodi and Najarian 1380)

Also in this study final coefficient in this scale has been calculated by methods of Krombakh's alpha 5, Spearman 6, Bravon 7 and Gatman 8. These coefficients respectively were equal to 90 84 86 which are indicate relatively good reliability test.

Justifiability: Some studies have been done to examine the justifiability of this test. in these correlated studies SCL-25 with General anxiety scale ANQ9 equal to 69% and depression questionnaire equal to

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49% ,with perfectionism scale equal to 69% and with Hardiness Scale equal to 56% has been reported, which all has been reported in level 1 equal to 97%. (Davoodi and Najarian 1380)

2-LOT scale:

Revised life orientation test: it is the test (Sheir *et al.*, 1994) (LOT) which examines the Individual differences in optimism-Pessimism, which is the shortened version of Life orientation test (Sheir and Carver 1994). (For example: In the unspecified case, I always expect the best thing). Respondents are asked to rate their differences for each clause based on Likret 5 point scale and domain is absolutely disagree (0) to absolutely agree (4).

This scale has 3 clauses for optimism, 3 clauses for Pessimism and 4 "filler" clauses (the clauses in a test which their examination is not the test objective, but to avoid test subject getting sensitive to main clauses).After reversing the scores obtained from Pessimism questions, total scores of optimism and Pessimism clauses are calculated as an overall optimism score.

Highest scores in LOT-R indicate more tendencies to positive result expectation against negative result. They reported Krombakh alpha coefficient 76% and Retest reliability coefficient 79% for group of students.

Alpha reliability coefficient in sample including 59 women with breast cancer has been 87% and retest reliability with 2 months gap has been 74% (Carver and Colleagues 1993).

Also convergent justifiability and differential of this test has been approved through LOT-R comparison method with source control scale and self-esteem scale of Rozenburge. (Poska *et al.*, 1999) To determine convergent justifiability test in Iran, 1 obtained for correlation coefficient LOT-R with 5 Disappointment scale factor. (Goudarzi 1380)

First correlation factor, fourth and fifth and over Disappointment scale 1 with optimism-Pessimism scale demonstrated the acceptable validity of this questionnaire.

Retest reliability of this questionnaire on 27 precollege students with 10 days interval was 70%; also Krombakh Alpha coefficient for current test was calculated 54%. (Moosavi 1384)

Methods of Data Collection

Regression Coefficient, Variance Analysis, Correlation Coefficient.

RESULTS

To analyze below hypothesis we use correlation test and regression analysis.

First hypothesis: relationship between optimism and mental health in female students.

Table 1:Correlations

		Women mental health	Women optimism
Women mental health	Pearson Correlation	1	-.305*
	Sig. (2-tailed)		.025
	N	54	54

According to above Pearson correlation test and due to the P value or SIG which is equal to 0.025, we conclude that there is a correlation between optimism and mental health in female students. According to the questionnaire grading which inversely has been graded, negative value is not the sign of inverse relation between optimism and mental health. But increase in optimism reflects the increase in female students' mental health. We use linear regression analysis to obtain linear relation between them. We use linear regression analysis to examine relationship optimism and mental health in female students. We consider female students mental health as a dependent variable (Answer) and female students' optimism as an independent variable (Anticipant).

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Table 2: coefficient and Standard Error

Model	Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Std.error estimation
1	.305 ^a	.093	.075	14.00048

In the above table values for correlation coefficient and determination coefficient, adjusted determination coefficient and Standard Error Estimate has been given.

Table 3: ANOVA^b

Model	Squares summation	Freedom degree	Squares average	F statistic	P value
1 regression	1043.174	1	1043.174	5.322	.025 ^a
residual	10192.696	52	196.013		
total	11235.870	53			

Above table is for variance analysis table and according to value of P or SIG which is equal to 0.025 and less than 5%, we conclude that our research Regression model is suitable.

Table 4: Coefficients^a

Model		Non Std.Coefficient		Std.Coefficient	T statistic	P value
		B	Std. Error	Beta		
1	constant	82.914	11.291		7.344	.000
	Female's optimism	-1.709	.741	-.305	-2.307	.025

Above table is for regression coefficient table. The first number 82.914 is for constant value or Intercept of regression model. Second number -1.709 is for Regression coefficient of independent variable namely optimism. Std. Error is for Standard Error Estimate. T is for statistical test of coefficient presence in Regression model and according to its value P or sig which is less than 0.5 for both coefficient, we conclude that Regression coefficients are present in above Regression model.

So according to above results Regression model is as follows:

$$Y=82.914 -1.709X$$

In the above equation X is for anticipant variable namely optimism of female students and Y is for dependent variable namely mental health of female students.

Second hypothesis: relationship between optimism and mental health in male students.

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Table 5: Correlations

		Male's mental health	Male's optimism
	Pearson Correlation	1	-.367**
	Sig. (2-tailed)		.005
Male's mental health	N	56	56

According to above correlation test and due to the P value or SIG which is equal to (0.005) and less than 0.05, we conclude that there is a correlation between optimism and mental health in male students. Negative correlation value (-.367) is not sign of inverse relationship between optimism and mental health. But the increase in optimism reflects the increase in male students' mental health.

We use linear regression analysis to obtain linear relation between them. We use linear regression analysis to examine relationship optimism and mental health in female students. We consider female students mental health as a dependent variable and female student's optimism as an independent variable (Anticpant).

Table 6: Model Summary

model	Correlation coefficient	Determination coefficient	Adjusted coefficient determination	Std.Error Est
1	.367 ^a	.135	.119	11.13769

Analysis of above table is same as last analysis.

Table 7: ANOVA^b

Model	Squares summation	Freedom degree	Squares average	F Statistic	P value
regression	1044.385	1	1044.385	8.419	.005 ^a
reminder	6698.598	54	124.048		
total	7742.982	55			

Above table is for variance analysis table and according to value of P or sig which is equal to .005, we conclude that our research Regression model is suitable.

Table 8: Coefficients^a

Model		Non Std. Coefficient		Std .Coefficient	T statistic	P value
		B	Std. Error	Beta		
1	Constant	74.796	8.583		8.714	.000
	Male's optimism	-1.721	.593	-.367	-2.902	.005

Above table is for regression coefficient table. The first number 74.796 is for constant value or Intercept of regression model. Second number -1.721 is for Regression coefficient of independent variable namely

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optimism. According to its value P or sig which is less than 0.5 for both coefficients, we conclude that Regression coefficients are present in above Regression model. So according to above results Regression model is as follows:

$$Y=74.796-1.721 X$$

In the above equation X is for anticipant variable namely optimism of male students and Y is for dependent variable namely mental health of male students.

Third hypothesis: relationship between optimism and mental health in students.

Table 9: Correlations

		Overall mental health	Optimism
Overall mental health	Pearson Correlation	1	-.279**
	Sig. (2-tailed)		.003
	N	110	110

According to Pearson correlation coefficient test and due to the P value which is equal to 0.003 and less than 5%, we conclude that there is a relationship between dependent and independent variable. we use Linear regression analysis to obtain linear relation between them.

We use linear regression analysis to examine relationship optimism and mental health in students. We consider students mental health as a dependent variable and student's optimism as a independent variable (Anticipant).

Table 10: Model Summary

model	Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Std.error estimation
1	.279 ^a	.078	.069	13.17224

Analysis of above table is same as last analysis.

Table 11: ANOVA^b

model	Squares summation	Freedom degree	Squares average	F statistic	P value
1 regression	1576.645	1	1576.645	9.087	.003 ^a
reminder	18738.846	108	173.508		
total	20315.491	109			

Above table is for variance analysis table and according to value of P or sig which is equal to 0.003, we conclude that our research Regression model is suitable.

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Table 12: Coefficients^a

Model		Non Std. Coefficient		Std. coefficient	T statistic	P value
		B	Std. Error	Beta		
1	Constant	75.251	7.262		10.363	.000
	Students' Optimism	-1.474	.489	-.279	-3.014	.003

Above table is for regression coefficient table. 75.251 is for constant value or Intercept of regression model. -1.474 is for Regression coefficient of independent variable (students' optimism). According to its value P or sig which is less than 0.05 for coefficients, we conclude that Regression coefficients are present in above Regression model. So according to above results Regression model is as follows:

$$Y = 75.251 - 1.474X$$

In the above equation X is for anticipant variable namely optimism of students and Y is for dependent variable namely mental health of students.

Discussion and Conclusion

Obtained results is matched with Carver and Shier's results that pessimism have more tendency to negative emotions like anxiety, guilty, anger and sadness or despair.

Also obtained results are consistence with research () that Optimists believe that the odds can be successfully managed But pessimists are expecting misfortune.

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