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**THE PREDICTIVE ROLE OF PSYCHOLOGICAL HARDINESS AND OPTIMISM –  
PESSIMISM IN RELATED TO GENERAL HEALTH OF CORONARY HEART  
DISEASES**

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**ABSTRACT**

The aim of this study was investigation the predictive role of psychological hardiness and optimism – pessimism in general health of coronary heart diseases. This survey with considering to subject and purpose of the study was done by descriptive and correlation method. The sample size was 200 coronary heart diseases (100 man and 100 woman) referring to seeking medical advice in different parts of Kousar heart hospital of Shiraz that was selected in available sampling. The subjects completed Ahvaz psychological hardiness, Life orientation test – revised, Goldberg general health and demographic inventories. In order to investigating the reliability of these instruments, chorunbakh alpha, split – half method and Gottman coefficient were used. The instruments showed desirable reliability and validity. The pearson correlation statistical methods monovariate and multivariate regression were used in this study. The results showed that psychological hardiness variable can predict coronary heart diseases general health ( $p=0/0001$ ). Also in investigation predict general health according to optimism and pessimism shows that variant of optimism with ( $p=0/0001$ ) can predict a part of general health and also Psychological hardiness and optimism – pessimism can predict general health in coronary heart diseases

**Key words: Psychological hardiness, optimism – pessimism, general health, coronary heart diseases**

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**INTRODUCTION**

Mental health issues and their impact on performance, something that the majority of psychologists to focus on its importance and no doubt excellence and progress of society also requires a healthy and joyful (Hallahan & Kauffman, 1962; quoted the Abedini, 2011). From the moment they enter the earth's people are always faced with the events that it could not escape And anyone in the course of his life, possibly with one or more of these events have been painful. Sometimes these events so sudden for the man, shake hard and that he will undergo a fundamental change. The occurrence of these events is common natural and bitter, and anyone may be things like death, of a car accident, earthquake, flood, war, disease and so hard to be exposed. But what makes the difference between one's own reaction to the events. In the last decade, evidence has been found showing that psychosocial factors associated with physical health. The idea of mental health and physical health can be improved (Adler & Matios, 1994). Researchers and physicians to the importance of considering the disease as a whole, rather than separate components, and have sought to emphasize that there is

interdependence between physical and mental health. Coronary heart disease a leading cause of death in the world. 50 percent of deaths in developing countries each year, or 5 million of the 12 million deaths due to the disease. Deaths in developing countries are increasing and the leading cause of deaths from heart disease is 15 to 20% (Bexendale, 2000; quoted Afzali, 2009). Compatibility problems have been reported in those patients with heart disease who have social problems and more stress, not necessarily those who have more severe disease. Anxiety and depression or deny excessive delays the recovery process. As well as those heart patients who are suffering from anxiety and depression in many previous problems such as arrhythmias, with higher rates of disease and risk of death in the first month, more than those who have less stress (Sarafino , Edward, 1940). Compatibility problems have been reported in those patients with heart disease who have social problems and more stress, not necessarily those who have more severe disease. Anxiety and depression or deny excessive delays the recovery process. As well as those heart patients who are suffering from anxiety and depression

in many previous problems such as arrhythmias, with higher rates of disease and risk of death in the first month, more than those who have less stress (Sarafino, Edward, 1940). Psychology has always been subject to the charge, and the charge of one-dimensional look at the disease, fear, aggression between humans and societies. Especially the psychology of performance that people stay away from this concept and link it to their particular circumstances. Positive psychology flourished again with the birth of the word and the world will again occupied. People with an optimistic view of life and the events that look better results than those who are less frustrated and mental health will be threatened expect (Object Pierre and Carver, 1987; quoted Kivimaki, Vahtra, Elovainio, Helenius, Singh - Manoux&Pentti, 2005). Because of the importance of positive psychology perspective has proven to be expected that this kind of psychological influence on the health of a person's life and mental health as an important aspect of general health will be. As tenacity can have a substantial impact on overall health. It is expected that the impact on public health is coronary heart disease. As optimism - pessimism with regard to

the positive and negative aspects in its place can be considered a factor affecting the health of coronary heart disease.

### **Expression problems**

Public health is defined as the consistent performance of the individual in his environment that could be affected by various factors, physical, psychological and social. From all the stress factors can have negative effects on health strong. Those who are affected by stress than other people are likely to suffer common diseases. However, stress can make a person more vulnerable to physical illness, and in the long run lead to death. Stress through changes in physiological responses of the body including the nervous and endocrine responses can continue to increase their risk of heart disease (Van Dixhoorn and White, 2005).

### **A review of studies**

Studies on the relationship between psychological hardiness and public health

Klag and Bradley (2004) in their study showed a significant positive relationship between physical and mental health and their tenacity and stubbornness is as a source of inner strength, to reduce the negative impact

of stress and physical and mental disorders before the decision.- Amiri (2010) in a study of "role overload investigate the relationship between hardiness and mental health staff Shiraz Petrochemical Complex" came to the conclusion that a significant relationship between psychological hardiness and mental health is positive.- A study RahimianBoger and Asghar race (2008) did it concluded that the strong psychological and physical complaints - there is a significant negative psychological. In other words, people would have a strong psychological and physical complaints - fewer physical and mental health have more to report.Research carried out in connection with optimism - pessimism and public health

- Results Debbiej *et al* (2010) as "the relationship between health-related quality of life, coping, optimism, anxiety and depression ((as a component of general

health 2)) in cancer patients "showed that low levels of optimism, with high levels of anxiety and depression and high levels of optimism associated with low levels of anxiety and depression.Mannix and Margaret (2009) as well as the optimism, health-related quality of life and coping with cancer, and the students found that optimism with mental health and physical function and quality of life, better health and a positive relationship .

### Methods

According to the object and purpose of the study was descriptive and correlational study.

### Population

The study sample included all patients with coronary heart disease (CHD) are admitted to hospital Kowsar heart in Shiraz.

### Sample and sampling

The sample included 200 patients with CHD in different parts of the heart in the heart of Kosar hospital in Shiraz were selected by sampling.

**Table 1: Number and percentage of different age groups and career of coronary artery disease**

Percent	Count		
2	4	Less than 20 years	Age groups
13	26	Between 20 and 30 years	
23	46	30 to 40 years	
29	58	Between 40 and 50 years	
33	66	50 to 65 years	
30	60	Employee	Job Categories
7/5	15	Lecturer	
25	50	Free	

31	62	Housekeeper	
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**Table 2: Number and percentage of blood sugar (diabetes) and marital situation of patients with coronary artery disease**

Percent	Count		
85/5	171	Married	Marital status
12	24	Single	
2/5	5	Divorced	
23	46	Diabetes	The blood sugar
77	154	Non-diabetic	

**Research Tools**

In the present study tenacity psychological questionnaires, review of life and health for as follows.

Inventory psychological hardiness

Self-report questionnaires, psychological hardiness scale pencil - is paper that has 27 articles.

The revised questionnaire to measure life (LOT-R)

General Health Questionnaire (28 questions)

The questionnaire for the first time by Goldberg (1972) was set up to detect mental

disorders has been used in different situations.

Information analysis

Analysis and information in addition to descriptive statistics, inferential statistics is useful to test the Pearson correlation, multiple regression, is a one-way ANOVA and Tukey test. Public health is the dependent variable and independent variables included psychological hardiness and good are pessimistic.

**RESULTS**

**Table 1: Total amount of scores, mean, standard deviation, minimum and maximum three variables psychological tenacity, optimism and pessimism, public health and relevant subscales for the total sample**

Max	At least	Standard Deviation	Average	Total	Variable name	Row
76	18	12/268	49/155	9831	Psychological Hardiness	1
12	0	2/555	8/32	1664	Optimism	2
12	0	2/334	5/145	1029	Pessimism	3
56	3	9/67	21/925	4385	Public health (all)	4
16	0	2/87	5/735	1147	Physical symptoms	5

16	0	3/46	3/455	691	<b>Anxiety</b>	6
23	0	5/293	11/25	2250	<b>Social dysfunction</b>	7
20	0	2/56	1/485	297	<b>Depression</b>	8

**Table 2: Total amount of scores, mean, standard deviation, minimum and maximum three variables psychological tenacity, optimism and pessimism, public health and relevant subscales for the total sample**

<b>Max</b>	<b>At least</b>	<b>Deviation Standard</b>	<b>Average</b>	<b>Total</b>	<b>Variable name</b>	<b>Sex</b>
76	18	11/973	49/01	4901	<b>Psychological Hardiness</b>	<b>Man</b>
12	0	2/494	8/20	820	<b>Optimism</b>	
12	0	2/211	5/24	524	<b>Pessimism</b>	
56	3	10/003	22/57	2257	<b>Public health (all)</b>	
16	0	3/162	5/91	591	<b>Physical symptoms</b>	
16	0	3/736	3/76	376	<b>Anxiety</b>	
21	0	4/813	11/32	1132	<b>Social dysfunction</b>	
20	0	2/771	1/58	158	<b>Depression</b>	
76	18	12/615	49/30	4930	<b>Psychological Hardiness</b>	
12	0	2/622	8/44	844	<b>Optimism</b>	
12	0	2/46	5/05	505	<b>Pessimism</b>	
43	3	9/33	21/28	2128	<b>Public health (all)</b>	
14	0	2/547	5/56	556	<b>Physical symptoms</b>	
12	0	3/151	3/15	315	<b>Anxiety</b>	
23	0	5/756	11/18	1118	<b>Social dysfunction</b>	
15	0	2/112	1/39	139	<b>Depression</b>	

**Table 3: Total amount of the means of psychological hardiness in Jobs**

No response	Housekeeper	Free	Lecturer	Employee	Job
531	3094	2280	762	3164	<b>Total</b>
40/84	49/9	45/6	50/8	52/73	<b>Average</b>
13	62	50	15	60	<b>Count</b>

**Table 4: Total amount and average scores for general health investigated among Group Jobs**

No response	Housekeeper	Free	Lecturer	Employee	Job
361	1317	1259	283	1166	<b>Total</b>
27/77	21/24	25/28	18/8	19/43	<b>Average</b>
13	62	50	15	60	<b>Count</b>

**Table 5: Pearson's correlation matrix to examine the relationship between variables**

8	7	6	5	4	3	2	1	Variable name	Row
							1	<b>Public health</b>	1
						1	0/ 661**	<b>Physical symptoms</b>	2
					1	0/ 639**	0/ 744**	<b>Anxiety</b>	3
				1	0/192**	0/ 145**	0/ 716**	<b>Social dysfunction</b>	4
			1	0/224**	0/361**	0/ 222**	0/ 572**	<b>Depression</b>	5
		1	-0/311**	-0/725*	-0/351**	-0/ 271**	-0/ 682**	<b>Psychological Hardiness</b>	6
	1	0/603**	-0/205**	-0/587**	-0/201**	-0/ 106	-0/ 477**	<b>Optimism</b>	7
1	-0/375**	0/ 047	-0/ 081	-0/ 042	-0/ 092	-0/ 202**	-0/ 137	<b>Pessimism</b>	8

\* : P < 0/05 , \*\* : P < 0/01

**Hypothesis 1: psychological hardiness able to predict coronary artery disease is public health.**

**Table 6: Univariate linear regression test**

dF	F	R <sup>2</sup>	P (Sig)	T	B	Predictor variables	Changing criterion
1	172/51	0/466	0/0001	23/316	48/361	<b>Constant</b>	<b>Public health</b>
			0/0001	-13/134	-0/538	<b>Psychological Hardiness</b>	

**Hypothesis 2: Optimism and pessimism are able to predict coronary artery Mvmydrbymar health.**

**Table 7: Univariate linear regression test**

<b>dF</b>	<b>F</b>	<b>R<sup>2</sup></b>	<b>P (Sig)</b>	<b>T</b>	<b>B</b>	<b>Predictor variables</b>	<b>Changing criterion</b>
1	58/164	0/227	0/0001	17/95	36/927	<b>Constant</b>	<b>Public health</b>
			0/0001	-7/627	-1/803	<b>Optimism</b>	

**Hypothesis 3: hardiness and productivity of optimism that define general health.**

**Table 8: Linear regression testing multiple simultaneous inter**

<b>dF</b>	<b>F</b>	<b>R<sup>2</sup></b>	<b>P (Sig)</b>	<b>T</b>	<b>B</b>	<b>Predictor variables</b>	<b>Changing criterion</b>
2	88/130	0/472	0/0001	23/066	49/188	<b>Constant</b>	<b>Public health</b>
			0/0001	-9/566	-0/489	<b>The psychological difficulty</b>	
			0/118	-1/571	-0/386	<b>Optimism</b>	

**Table 9: Results of ANOVA**

<b>P</b>	<b>F</b>	<b>MS</b>	<b>df</b>	<b>SS</b>	
0/003	4/194	593/238	4	2372/95	<b>The psychological difficulty</b>
		141/442	195	27581/245	<b>Error</b>
			199	29954/195	<b>Total</b>

**CONCLUSIONS**

First hypothesis: the psychological hardiness able to predict coronary artery disease is public health.

According to the research results Avylyny (1992) and Rahimiyan, Boogar and Asgharnejad (2008), a psychological hardiness features will ensure that people with physical complaints - less psychological report. Existence Tenacity components will ensure that positive events can be evaluated and this evaluation will help control the problems of patients with

Decentralization and chaos due and effective strategies to deal with them more suitable to operate and convert them into a positive experience. In addition, as observed hardiness and components of general health investigated among patients with coronary artery negative and significant, indicating that it is also in place in line with the findings of previous research confirmed the hypothesis, as well as Medicare and Kvbasia (1984 ), Kellogg and Bradley (2004), Sheriff (1998), Verdi (2001) and

Sudanese villages and ShyrymShafi (2008) is. Therefore, it is concluded that patients who are suffering from low psychological hardiness in Mvmykh health components include: anxiety, physical disorders, social dysfunction and depression, which may deal with stressful events going back strategies for example, their use may turn to passivity or resignation of cognitive and behavioral generally inclined Them. The disadvantage of this type of strategies that not only are not able to change the situation and problem solving conflicts and emotional problems too.

The second hypothesis: optimism - pessimism can predict coronary artery health.

The most recent findings by Dubai and colleagues (2010) provided also shows that optimism, anxiety and depression as a public health component was negative. The results The study conducted by Bhrdad, Kalantari Molavi (2010) also showed that optimism with scores of mental health, anxiety, social dysfunction, depression, negative physical symptoms but no significant differences between the results obtained from the research findings this is in line and this suggests that coronary artery disease who are more optimistic about

the general health are more minimal When people are faced with hardships and difficulties experienced different emotions that range from fury and passion and anger, anxiety and depression. The balance between these feelings seem to be related to the degree of optimism and pessimism. Welcome, successes and failures, and the failure of their defined happy to see something You like to change it and make the next steps to success. But pessimists fail to attribute their long legs are not able to change that.

The third hypothesis: psychological hardiness and productivity of general health investigated among patients with coronary artery is optimism. The results of testing the hypothesis that psychological tenacity and optimism can predict coronary artery disease or public health. So that the percentage of acceptable public health changes coronary heart disease explained by variables of psychological hardiness and optimism Is. According to research found in connection with the assumption, based on research that has been done on the psychological hardiness could be Said psychological hardiness could be a predictor variable for public health. The findings of the study conducted by the Sudanese

Shyrbym (2008) is now in line. According to research conducted by Kvbasa (1979) and other researchers such as Medicare (1990, clock, 2004; quoted Hassan Shahi and Finance, 2005), the tenacity of a source of inner strength harmful effects of stress on the introduction century Health reduced. We can say that our results are consistent with the findings of this study, so the recent hypothesis is confirmed.

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