An Investigation of the relationship between hardiness and mental disorders of payame-noor university students

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ABSTRACT

The purpose of this research was to study the relationship between hardiness and mental disorders among male and female payame-noor university students. Forty one students (19 male and 21 female) were selected randomly. Ahwaz Hardiness Scale (AHS) and SCL-90-R questionnaire were used to carry out the study. The results of the study showed that there is a negative correlation between hardiness subscales and mental disorders. Regression analysis also showed that subscales commitment and control can predict 62% mental disorders. Challenge subscale and total hardiness have no power of prediction on mental disorders.

Keywords: hardiness, mental health, university students.

INTRODUCTION

In the past three decades, there has been a great deal of research interest in the concept of “hardiness”. Hardiness is a combination of attitudes that provides the necessary courage, motivation and capability to turn developmental and environmental stressors into opportunities for growth and many positive outcomes have been found to relate to measures of hardiness, such as improved psychological and physical health in the face of work and life stress, and improved sporting performance [16]. Hardiness was first proposed by Kobasa [8]. He proposed that hardiness is a healthy personality disposition comprising three components: commitment, control, and challenge. A hardy individual is one who views events that could be potentially stressful as interesting and meaningful (i.e., commitment), sees oneself as capable of changing events (i.e., control), and perceives change as normal and as an opportunity for growth (i.e., challenge).
Much research evidence has supported Kobasa's argument that hardiness is a healthy personality disposition [4,16,10,13]. Research has also shown that hardiness plays a positive role, not only in people's physical and psychological wellbeing [14, 11,1], but also in students' learning motivation, learning outcomes, and educational plans [2, 3].

Researches has supported that hardiness have effect on mental health [5, 11, 7]. Researchers have indicated [eg. 6] that it : (a) positively related to other personality traits that are expected to protect people from stress, (b) negatively related to personality traits that are expected to exacerbate the effects of stress, (c) negatively related to stressors, strains, and regressive coping, and (d) positively related to social support, active coping, and performance.

MATERIALS AND METHODS

Participants
The method of this research was a correlation one. Participants were 41 students(22 university female and 19 male students) were randomly selected. SCL 90-R Mental Disorder Questionnaire and Ahwaz Hardiness Inventory(AHI) were used in order to measure the variables and collect the data. The reliability questions according to Alfa Cronbach for SCL 90-R was 0.73, and for Ahwaz Hardiness Inventory was 0.84.

Statistical procedures involved in analyzing questionnaires included Pearson's correlation coefficient, and regression analyses were conducted to assess the relationship between Hardiness and mental disorders. Analysis of research data was performed using SPSS.

Materials
Hardiness- Hardiness was assessed by the use of the Ahwaz Hardiness Inventory. The AHI is a 27-item scale that yields a total hardiness score. Scores were recorded on a 4-point likert scale anchored at 0 = not at all true and 3 = very true. Studies have shown the AHI to have acceptable internal consistency (.84 - .85 for boys and girls Najarian et al., 1999).

Procedure
All participants were asked to complete AHI and SCL90-R.

RESULTS AND DISCUSSION

The results of Pearson's correlation showed that there is a significant negative correlation between the scores of hardiness subscales and the total score of SCL90-R, as follows (r = -.76, P = 0.01 for mental disorders; r = -.66 , P =.01 for control; r = -.34, P =.05 for challenge; r= -.74 for total hardiness, p=.01).

Then relationship commitment, control, challenge, and total hardiness of students’ were analyzed as predictor variables and their total score of SCL90-R as criterion variable in Regression equation. The results of analysis of regression between total score of SCL90-R with commitment, control, challenge, and total hardiness are presented in table 1and 2. According to these results, the amount of observed F is significant (p < 0.001) and 62% the variance of mental disorders is explained by hardiness variables.
The coefficients of the effect of commitment in model 1 is \( \beta = .756 \), and in model 2, commitment is \( \beta = .570 \) and control \( \beta = .281 \), according to t statistics show that two variables of hardiness can predict the changes of mental disorders with 99% and 95% confidence; meaning that the increase of any of subscales of hardiness will result in the decrease of mental disorders.

### Table 1. Results of the regression analysis(model summary)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.756*</td>
<td>.572</td>
<td>.561</td>
<td>42.29357</td>
<td>.572</td>
<td>52.117</td>
<td>1</td>
<td>39</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.785*</td>
<td>.616</td>
<td>.596</td>
<td>40.56647</td>
<td>.044</td>
<td>4.391</td>
<td>1</td>
<td>38</td>
<td>.043</td>
<td></td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), commitment*  
*b. Predictors: (Constant), commitment, control*

### Table2. coefficients of predictor variables with dependent variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>13.211</td>
<td>15.488</td>
<td>.853</td>
</tr>
<tr>
<td></td>
<td>commitment</td>
<td>7.484</td>
<td>1.037</td>
<td>.756</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>-2.507</td>
<td>16.641</td>
<td>-.151</td>
</tr>
<tr>
<td></td>
<td>commitment</td>
<td>5.638</td>
<td>1.329</td>
<td>.570</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>3.525</td>
<td>1.682</td>
<td>.281</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: mental disorders*

### DISCUSSION

The results of the research showed that there is negative correlation between hardiness components including Commitment and Control with mental disorders, and these variables can predict the changes of mental disorders significantly. These results, which are same with the published findings about hardiness and mental disorders [4, 15,9] are analyzed according to some probabilities:

A hardy person views events that could be potentially stressful as interesting and meaningful. This means that hardiness relate to healthy personality. It was negatively associated with such maladaptive personality conditions as depression, anxiety and guilt [1,12]. The present study as well as previous studies of the relationship between hardiness and mental disorders, suggests that hardiness could be strengthened through developing positive traits such as extraversion, resilience, optimism and encountering with events.

A hardy people, sees oneself as capable of changing events. This characteristic, led to person feel he/she is dominant to the situation and can be determinant. The feeling of dominance to situation makes the belief that his / her effort can change the circumstances and dominate the result of the outcomes. This belief improves his / her performance and increases the success probability.

Psychologically, Kobasa [8] found that hardiness is a buffer of the association between stress and illness. Ostensibly, hardiness entails maximizing existing circumstances and minimizing difficulties [17].
REFERENCES