The intermediary role of resilience in the relationship between emotional self-organization and mental health in male and female students

1Rozita Mazhari, 2Masoud Mohammadi, 3Ghasem Naziri

1M.A., Department of General psychology, Islamic Azad university, Science and Research Branch, Fars Branch, Fars, Iran.
2Assistant Professor, Department of General psychology, Islamic Azad University, Science and Research Branch, Fars Branch, Fars, Iran.
3Assistant Professor, Department of General psychology, Islamic Azad University, Science and Research Branch, Fars Branch, Fars, Iran.

ARTICLE INFO
Received 14 November 2013
Received in revised form 24 December 2013
Accepted 28 December 2013
Available online 18 January 2014

KEYWORDS:
mental health, cognitive emotional organization, resilience

ABSTRACT
The present study looks for comparing the cognitive resilience of excitement and mental health among boys and girls. The present study is a scientific-practical research and since it is looking for studying the relationship between cognitive resilience and mental health, it is correlational too. The goal of the present study is to determine the relationship between the organizational styles of excitement and mental health and defining the difference between resilience, mental health and defining the difference between the male and female students.

INTRODUCTION

One of the axes of studying the mental health of different societies is the mental health of the people in the society. It is obvious that mental health has a significant role in guaranteeing the efficiency and mobility of the society. Since students are the talented and selected class of the society, so their mental health is of a high importance (Saki and Keykhani, 2003).

Giving a comprehensive definition of mental health due to lack of correct and acceptable definition is hard and each of the psychological schools have different definitions of mental health. In the third conference of mental health a two part definition is introduced: 1. mental health is a type of physical, mental and emotional mood that is same as the mental health of others and provide proper development for the person, 2. A good society is a society that provides development condition for its member and at the same time guarantees its development (Ganji, 2004). One of the important topics in psychology is resilience. Resilience has a special place in psychological areas of family and mental health (Campbell and others, 2006). Resilience is a favorite area of study in the recent years and tries to study and discovers the personal abilities which cause resilience in hard condition (Richardson, 2002). Resilience is not a passive reaction in hard condition but it is an active and participating action in front of risky condition and is a type of healing with positive emotional and cognitive consequences (Muston, 2001).

Research hypothesis:
1. Compatible cognitive and emotional components are positive indicators of resilience.
2. Incompatible cognitive and emotional components are negative indicators of resilience.
3. Compatible cognitive and emotional components are positive indicators of mental health.
4. Incompatible cognitive and emotional components are negative indicators of mental health.
5. Resilience components are positive indicators of mental health.

Research Questions:
1. Is there any significant difference between the scores of emotional cognitive modification among the boys and girls?
2. Is there any significant difference between the scores of resilience among the boys and girls?
Fig. 1: conceptual model of the research

Background:
Sternberg (1994, quoted by Mikailei and others) emphasized on the learning aspect of the resilience skills and believes that by teaching these skills to the young people can improve their mental health and creates satisfaction of life in them.
Rio (2004) showed that resilience has significant relationship with positive emotions and negative relationship with negative emotions such as aggression and sadness.
Zouater, Davis and Johnson (2005) believe that people who experience more positive emotions are more probable to resist against the events and are more resilient.
In addition Pazhouheshkar (2005) showed that higher levels of resilience help a person to use positive experiences to pass the bad experiences and going back to positive condition. In fact, hope and resilience have positive relationship with better mental health.
Findings of the study by Narimani, Arianpour and Abulghasemi and Ahadi (2011) shows that the average of mental health scores in the under studied group is more than control group. In addition, the findings show that the average of the scores of physical signs, anxiety, depression and weak social performance had significant decrease compared to control group.
The results of the study by Mikaieli and others (2013) show that there is a significant difference between children and parents in terms of mental health, life satisfaction and resilience.

Data Collection:
The data gathering method was generally two types of library and field study. In other words, literature review was done through library research and data was collected through field method. It should be mentioned that in order to collect the field information after asking for permission the questionnaires were completed in group and in the presence.

Participants:
The population of the present study includes all the students of science and research university of Fars. Sample includes 200 male and female students (100 in each group) which were selected according to accessibility.

Demographic features:
Table 1 indicates the demographic features of age, educational level and educational course of the sample at the age range of 20-30 at bachelor level. Human science major devoted most of the participants.
Table 1: demographic information of participants

<table>
<thead>
<tr>
<th>Age group</th>
<th>number</th>
<th>major</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>44</td>
<td>college</td>
<td>52</td>
</tr>
<tr>
<td>Over 30</td>
<td>46</td>
<td>Master</td>
<td>48</td>
</tr>
<tr>
<td>20-30</td>
<td>110</td>
<td>bachelor</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>basic</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>human</td>
<td>72</td>
</tr>
</tbody>
</table>

Findings:

Descriptive Findings:
The descriptive indexes of the research include the mean and standard deviation in male and female students. Table 2 shows the data:

Table 2: the mean and standard deviation of research variables

<table>
<thead>
<tr>
<th>group</th>
<th>Variable index</th>
<th>Emotional regulation strategies compatible</th>
<th>cognitive resilience</th>
<th>mental health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>mean</td>
<td>60/10</td>
<td>14/2</td>
<td>32/60</td>
</tr>
<tr>
<td></td>
<td>Sd</td>
<td>12/31</td>
<td>24/8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Male</td>
<td>mean</td>
<td>58/31</td>
<td>49/23</td>
<td>133/84</td>
</tr>
<tr>
<td></td>
<td>Sd</td>
<td>14/67</td>
<td>27/67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Inductive Findings:

Distribution normality of the research variables:

In this research the normality of the data distribution is evaluated by Shapiro Wilk and the results are shown in table below:

Table 3: the results of Shapiro Wilk test

<table>
<thead>
<tr>
<th>Index/group Variable</th>
<th>Shapiro Wilk girls</th>
<th>df boys</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive strategies</td>
<td>compatible</td>
<td>0/964</td>
<td>0/974</td>
</tr>
<tr>
<td></td>
<td>incompatible</td>
<td>0/98</td>
<td>0/983</td>
</tr>
<tr>
<td>Resilience</td>
<td>compatible</td>
<td>0/975</td>
<td>0/981</td>
</tr>
<tr>
<td></td>
<td>incompatible</td>
<td>0/974</td>
<td>0/977</td>
</tr>
</tbody>
</table>

As can be seen the variables of the research have been normal.

Comparing the strategies for cognitive emotional organization, resilience and mental health among the male and female students:

In order to compare the strategies of excitement, resilience and mental health among male and female students, the multivariate ANOVA is performed. It should be mentioned that the normality of the data in the research is confirmed.

Table 4: the results of M Box test for measuring the Matrices equality

<table>
<thead>
<tr>
<th>M Box test</th>
<th>F</th>
<th>df Hypothesis</th>
<th>df error</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/34</td>
<td>3/69</td>
<td>10</td>
<td>58/87/25</td>
<td>0.24</td>
</tr>
</tbody>
</table>

The index of the Box test is calculated as 20.34 and since the significance level of F is higher than 0.05, the covariance of dependent variables are same in two groups.

Results of table 5 show the Levene test of error variance for research variables.

Table 5: Levene test

| compatible strategy of the cognitive emotional regulation | 0.043 | 1 | 198 | 0.96 |
| incompatible strategy of the cognitive emotional regulation | 0.22  | 1 | 198 | 0.71 |
| Resilience | 0.51  | 1 | 198 | 0.34 |
| Mental health | 1.25  | 1 | 198 | 0.14 |

Due to non-significance of F at the error level of 0.05, it can be concluded that the error variance of the variables in two groups is same.
As can be seen in Table 7, level of significance of all the tests indicates that male and female students are different at least in one variable. In order to find that which variable is different, the table of effects between the subjects is given below:

### Table 7: the test of between subjects effect

<table>
<thead>
<tr>
<th>compatible strategy of the cognitive emotional regulation</th>
<th>1.7</th>
<th>1</th>
<th>0.78</th>
<th>0.135</th>
</tr>
</thead>
<tbody>
<tr>
<td>incompatible strategy of the cognitive emotional regulation</td>
<td>2.22</td>
<td>1</td>
<td>0.92</td>
<td>0.106</td>
</tr>
<tr>
<td>resilience</td>
<td>2.95</td>
<td>1</td>
<td>0.85</td>
<td>0.083</td>
</tr>
<tr>
<td>mental health</td>
<td>8.09</td>
<td>1</td>
<td>0.88</td>
<td>0.032</td>
</tr>
</tbody>
</table>

The results of Table 7 indicates that:
- There is no difference between male and female students in terms of cognitive emotional compatibility
- There is no difference between male and female students in terms of cognitive emotional incompatibility
- There is no difference between male and female students in terms of resilience
- There is a difference between male and female students in terms mental health and female students are better than males.

**Conclusion:**

The goal of doing the present research is to study the relationships between resilience, cognitive and mental health style and resilience. The population of the present study includes all the students of science and research university of Fars. Sample includes 200 male and female students (100 in each group) which were selected according to accessibility. The field information was collected by the resilience index of the Fribourg, Martinoucen and Rouzenvick (2001). The questionnaire of the cognitive motional style f Geranovski and others (2002) and test of general health (SCL 90-R). Validity of the questionnaire was determined through construct validity and reliability was determined by Cronbach alpha. The modeling technique of the construct was used to study the relationship among the variables. In addition, the results of the MANOVA showed that there is no meaningful difference between the scores of compatible and incompatible strategies and resilience. However, mental health of the female students is better.

**Suggestions:**
The present research can have uses for consultation centers of students at universities and it is suggested that resilience and mental health and the cognitive strategies of local and non-local male and female students is studied, too.

**REFERENCE**


Kumpfeler, K.L., 1999. Factor and processes contributing to resilience: The resilience


