Examining Psychological Well-Being Status among Students in Khomeinishahr, Iran

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Abstract

In this research we aim to investigate the influence of age and gender on psychological well-being and examine the level of students’ psychological well-being. Participants were 376 high school students in Khomeinishahr, Iran. A random stratified sampling technique was used to select the subjects. The findings of the present study showed that there is a statistically significant difference in the status of psychological well-being of different age groups of high school students. As the psychological well-being of students with age ranging from 15 to 16 years old is better than those are 18 years of age. However, there is no statistically significant difference in the status of psychological well-being of male and female of high school students. The result also revealed that students’ psychological well-being is at a moderate level. Therefore, to increase students’ psychological well-being, this research suggests that the conditions of community sources including family, schools, economic and social conditions. Besides that, a template or a model of the ways to improve students’ well-being status should be proposed.

Keywords: Psychological well-being, Ryff scale, Iran, Khomeinishahr

1. Introduction

Over the past decade, studies in the area of psychological well-being (PWB) have greatly interested a number of researchers. Its main aim is to explore individuals’ overall needs and create an overall sense of awareness of their health, happiness and successful achievement. It also aims to probe the conditions and processes that influence the optimization and growth of human potential and function, organizing interpersonal interactions for putting human beings in satisfactory circumstances [1].

During the two upcoming decades, the world will witness major changes in the levels of concerns towards non-communicable diseases in comparison with infectious diseases. Researchers have paid attention to non-communicable diseases including mental illnesses, which will be considered as the first cause of disability and premature death. At the present time, nearly 450 million people all over the world must suffer from psychological problems. Mental disorders account for slightly more than one percent of deaths worldwide. It is also predicted that by 2020, mental and neurological disorders will increase by nearly 15 percent worldwide [2].

Previous studies indicated that there was a growing tendency towards psychological disorders among the youth in Iran [e.g., 3-4-5-6]. These researchers took into account a possible relationship between age and gender with psychological disorder. Some researchers mentioned that the age increase causes the depression and anxiety increase [e.g., 7-6]. By contrast, the age increase slightly increases life satisfaction and positive emotions but decreases negative emotions [8]. In addition, it was concluded that age influences the positive aspects. Nevertheless, the influence of age on negative aspects was not found in some cases. In other cases, it was indicated that the age increase leads to the negative aspect decrease [e.g., 9-10].

Meanwhile, there is this belief that mental disorders are more common among females than
males [e.g., 7-11-4-12]. However, other scholars strongly argue that these disorders were found more among males rather than females [e.g., 13-14-15]. Interestingly, no significant difference in disorders between males and females was found [e.g., 16-5-17]. In other words, the evaluation of previous studies showed a significant growth in psychological problems; while, a noticeable reduction in PWB was found. It was also claimed that there was no clear distinction between individuals’ psychological health and their age or gender. To enhance students’ PWB, it is therefore necessary to explore students’ PWB, which helps understand specific aspects of interaction processes and pave the way for subsequent studies.

1.1 Research objectives

This research aims to investigate the influence of age and gender on students’ psychological well-being and explore psychological well-being level of high school students in Khomeinishahr, Iran.

1.2 Research questions

To achieve research objectives, research questions are addressed as follows:
Q1. What is the level of psychological well-being of high school students in Khomeinishahr, Iran?
Q2. Is there any significant difference in psychological well-being of different age groups of high school students in Khomeinishahr, Iran?
Q3. Is there any significant difference in psychological well-being of male and female high school students in Khomeinishahr, Iran?

2. Methods

Survey method was used to get quantitative data. Age and gender are independent variables. Dependent variable is psychological well-being.

2.1 Method of sampling and subjects

A stratified sampling technique was used to select research subjects. The sample size was selected based on Krejcie and Morgan’s [18] Table. Participants were 376 high school students in Khomeinishahr, Iran. Their age ranges from 15 to 18 years old.

2.2 Data collection instruments

Ryff’s psychological well-being scale was used to measure students’ psychological well-being. The scale comprises 6 components: a. self-acceptance, the ability to notice and accept one’s own strength and weakness, b. autonomy, the ability and power to follow the demands and act according to personal principles even if it is against social mores, custom, and requirements, c. personal growth, feeling that a person’s potential capacities and abilities will become real in life, d. environmental mastery, the ability to adjust and manage life affairs, especially in daily life, e. purpose in life, aims and goals that make a person’s life meaningful and directed, and f. positive relation with others, close and valuable relationship with important people in life [19].

The primary version of the questionnaire consisted of 120 questions [20]. Shorter forms of the scale were later suggested by Ryff (3, 6 and 7 item forms). However, in this study, the researcher applied the seven-item version (42 questions), which was more proper for students at this age range because lengthy questionnaires made students feel tired and reduced their attention span to answer the questions carefully.

In the 42-question form, seven questions were used to assess each element. The responses to the questions were based on a scale ranging from one to seven: strongly disagree (1), slightly disagree (2), disagree (3), neutral (4), agree (5), slightly agree (6), and strongly agree (7). High scores showed a better status of students’ psychological well-being. To avoid biased answers, some items were ranked conversely. To collect the data about age and gender, the respondents were asked to answer the questionnaire developed by the researcher (two questions)

2.3 Validity and reliability

To test the content validity of the questionnaire, the original questionnaire was first translated into Persian and English languages by two bilingual experts. Then, to check the accuracy of the questionnaire, translated questionnaire was translated into the original language by another independent bilingual expert to evaluate and to ensure that two versions had no significant differences. Next, the translated questionnaire was given to four counsellors of Isfahan Consultation Centre.

To find inaccurate and vague items and examine the reliability of the questionnaire, the questionnaire was also given to 67 male and female students. The reliability coefficient of the utilized questionnaire was calculated by Cronbach alpha. The outcome showed that the reliability coefficient was 0.92. Therefore, it can be concluded that in this study, the questionnaire was considered reliable.
3. Results

Table 1 shows descriptive results. As indicated, n=376 (including 50% of female students and 50% of male students in the 15-18 age range) were divided into 4 groups. Each group consisted of 47 students. The total number of each age group was 94 students. The results demonstrated that the sample distribution of male and female groups in the 15-18 age range was completely the same. Both male and female students in different age groups were distributed the same. The ratio of girls in the age groups was equal to boys’ ratio in the relevant groups. The percentage of age groups based on their gender also showed the same distribution.

Table 1: Frequency distribution of students in terms of gender and age

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>Male</td>
<td>Count</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>94</td>
</tr>
</tbody>
</table>

3.1 Students’ psychological well-being level

The results from the descriptive investigation showed that the mean score of students’ PWB was 4.57. The results revealed that 49 percent of students’ score of PWB were lower than the mean score. To categorize the mean score of PWB into 3 levels: low, moderate or high, the technique proposed by Green, Salkind, and Akey [21] was employed. For this purpose, participants’ choice in PWB ranging from 1 to 7 point based on Likert scale were clustered in three sections: low, moderate, and high. Figure 1 shows the procedure of categorizing.

![Figure 1: Determining the range of scores for low, moderate and high for psychological well-being](image)

The mean scores ranging from 1 to 3 showed PWB at low level. The mean scores ranging from 3.1 to 5 showed PWB at moderate level. The mean scores ranging from 5.1 to 7 showed PWB at high level. The mean of the PWB (M = 4.57) and the results in Table 2 indicated that PWB of high school students in Khomenishahr, Iran was at moderate level.

Table 2: Indicator of mean scores for the status of psychological well-being

<table>
<thead>
<tr>
<th>Range</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3</td>
<td>Low</td>
</tr>
<tr>
<td>3.1 to 5</td>
<td>Moderate</td>
</tr>
<tr>
<td>5.1 to 7</td>
<td>High</td>
</tr>
</tbody>
</table>
3.2 The comparison of psychological well-being of different age groups

One-way ANOVA was performed to get the mean scores of PWB of different age groups. Levene’s test of homogeneity of variances was used to observe equal variances of PWB of the different age groups. As indicated in Table 3, the variance of PWB of different age groups was homogenous (P > 0.05).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age groups</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Levene Statistic</th>
<th>Sig</th>
<th>df b</th>
<th>df w</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Well-being</td>
<td>15</td>
<td>4.64</td>
<td>0.743</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>4.70</td>
<td>0.642</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>4.52</td>
<td>0.659</td>
<td>1.123</td>
<td>0.340</td>
<td>3</td>
<td>372</td>
<td>3.250</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4.42</td>
<td>0.660</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-Test was performed to compare the mean scores of PWB of different age groups. The results of F-Test revealed that there was a significant difference in the mean scores of PWB of different age groups (F=3.250; P < 0.05). Then, LSD Test was utilized to compare the mean scores of PWB between those age groups. As presented in Table 4, the results of LSD Test illustrated that there was a significant difference in the confidence interval of 95% (P < 0.05) between the 15-age group (M=4.64), the 16-age group (M=4.70) and the 18-age group (M=4.42).

<table>
<thead>
<tr>
<th>(I) age</th>
<th>(J) age</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>-0.05977</td>
<td>0.09885</td>
<td>0.546</td>
<td>-0.2542</td>
</tr>
<tr>
<td>15</td>
<td>17</td>
<td>0.12690</td>
<td>0.09885</td>
<td>0.200</td>
<td>-0.0675</td>
</tr>
<tr>
<td>15</td>
<td>18</td>
<td>0.22061*</td>
<td>0.09885</td>
<td>0.026</td>
<td>0.0262</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>0.05977</td>
<td>0.09885</td>
<td>0.546</td>
<td>-0.1346</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>0.18667</td>
<td>0.09885</td>
<td>0.060</td>
<td>-0.0077</td>
</tr>
<tr>
<td>16</td>
<td>18</td>
<td>0.28038*</td>
<td>0.09885</td>
<td>0.005</td>
<td>0.0860</td>
</tr>
<tr>
<td>17</td>
<td>15</td>
<td>-0.12690</td>
<td>0.09885</td>
<td>0.200</td>
<td>-0.3213</td>
</tr>
<tr>
<td>17</td>
<td>16</td>
<td>-0.18667</td>
<td>0.09885</td>
<td>0.060</td>
<td>-0.3811</td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>-0.09371</td>
<td>0.09885</td>
<td>0.344</td>
<td>-0.1007</td>
</tr>
<tr>
<td>18</td>
<td>15</td>
<td>-0.22061*</td>
<td>0.09885</td>
<td>0.026</td>
<td>-0.4150</td>
</tr>
<tr>
<td>18</td>
<td>16</td>
<td>-0.28038*</td>
<td>0.09885</td>
<td>0.005</td>
<td>-0.4748</td>
</tr>
<tr>
<td>18</td>
<td>17</td>
<td>-0.09371</td>
<td>0.09885</td>
<td>0.344</td>
<td>-0.2881</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

As shown in Table 3, the mean value of the 15 and 16 age groups was significantly higher than that of the 18 age group. It means that PWB of the 15 and 16 age group was better than that in the 18 age group. Meanwhile, in other age groups, no statistically significant difference was found. Figure 2 shows the comparison of mean scores of PWB of different age groups.
3.3 The comparison of psychological well-being of different gender groups

Independent Samples T-test was used to compare PWB of different gender groups. As indicated in Table 5, the results of Leven’s test showed an inequality of the variance (P<0.05) of PWB between male and female students. The results of T-test showed that there was no statistically significant difference (P>0.05) in the mean scores of PWB of male and female students.

<table>
<thead>
<tr>
<th>Psychological well-being</th>
<th>Leven's Test for Equality of Variances</th>
<th>T-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>18.094</td>
<td>0.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-1.038</td>
<td>342.42</td>
</tr>
</tbody>
</table>

Figure 3 illustrates the comparison of PWB between male and female groups. As can be seen, the mean score of female group ranges from 4.43 to 4.65. However, the mean score of the male group ranges from 4.52 to 4.70. These results cause an overlap between the two lines of the chart. It means the mean values of the two groups seem to be similar. These findings are presented in the error bar chart (Figure 3).
4. Discussions

The main aim of this study was to investigate the influence of gender and age on high school students’ psychological well-being in Khomeinishahr, Iran. As analyzed and reported, the results revealed that the level of psychological well-being was moderate among high school students. This finding is not consistent with that of previous studies. Previous studies in this area showed that students’ mental status in Iran is at risk [e.g. 3-4-5-6].

It was noted that the results of this study indicated that psychological well-being of the 15-16 age range students was better than those were at the age of 18. That means students’ psychological well-being will decrease when they get older. This finding matches with that found by Masoudzadeh et al. [7] and Sadeghian et al. [6]. It was indicated that age has an influence on the depression and anxiety increase.

One explanation could be that at the latest years of high school, teenagers are under great psychological pressure due to several reasons such as physical development, gender differences, identity crisis, emotionalism, and fear of new responsibility or failure in obtaining jobs. These factors cause them to develop as individuals who are very vulnerable to psychological trauma [22]. Likewise, in the final years of high school, teenagers get more stress due to the university entrance exam [23]. However, the result of this research is contrast with that found by Zandypour and Yadegari [8]. It was shown that satisfaction with life and positive emotions slightly increases when there is an age increase. On the contrary, the negative emotions decrease when there is an age increase. This difference in mentioned results could be interpreted by a curvilinear U function. It is likely that in the specific age range (e.g. in the 20-40 age range), psychological well-being decreases, and then it will increase gradually.

The results of this research demonstrated that psychological well-being of female and male students had the same level when there was an age increase. This finding is in accordance with the results of studies conducted by Khairabadi and Yosefi, [16], Hosseininasab et al. [5] and Tavakolizadeh and Khodadadi [17]. It was indicated that there is no statistically significant difference in specific mental disorders between male and female students.

In this setting, a number of researchers found different results. Some studies revealed that gender affects psychological disorders. For example, according to Masoudzadeh et al. [7], mental disorders are more common among females rather than males. Similarly, Farahbaksh, et al. [11] and Saki and Keikhaveni [12] argued that boys are at a high level of happiness in comparison to girls. Moreover, Hosseini et al. [4] reported that females have
psychiatric symptoms, and they need to go to see psychiatrist or go to consultation centres than males.

However, some findings are contrast with those results mentioned. For instance, Akbari et al. [13] Mehri and Seddighi [24] indicated that psychological disorders are found more among males rather than females. In parallel with previous studies, Michaeli [14], Aghayousefi and Sharif [15] confirmed that

5. Conclusions and Recommendations

Iran has a considerable youth population (15-24 age people makes up 31% of the population in Iran). The youth are the assets of the country, and will make a major contribution to economic, social and political affairs. The country will lose assets and face many problems if psychological well-being decreases or the mental disorders spread among the youth population. Therefore, the government of Iran should implement appropriate policies to enhance students’ PWB.

Moreover, it is recommended that policy makers should explore the obstacles and problems in the path of promotion in students’ PWB and conduct entertaining and appropriate programs to cater for students’ psychological needs to enhance students’ psychological well-being.

Acknowledgment

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References