Original Article

The prediction of psychological well-being according to family function and basic psychological needs of students

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Abstract

Introduction: This research studies the prediction of psychological well-being according to family functioning and essential psychological needs among the students of high school in the second grade of Tehran city.

Materials and Methods: The research population of the study consisted of the whole female student of the second grade of high school in Tehran during the academic year 2014-2015. 254 female students were selected according to random sampling method from the district 3, 8, 15 and 18 in Tehran and Reef psychological well-being questionnaire including 54 questions, family functioning questionnaire including 45 questions (FADI) and essential psychological needs questionnaire were distributed among them and in order to identify the ration of each variable’s functionality i.e. psychological well-being, family functioning and essential psychological needs the students completed the questionnaires. The data collected from the questionnaires were analyzed via hierarchical and multiple regression and correlation tests.

Results: The findings showed that there were significant relationships among family functioning and essential psychological needs and psychological well-being.

Conclusion: The factor emotion expression from the family functioning variable and the aspects autonomy and competence from the essential psychological needs can be regarded as good predictions for the psychological well-being.

Keywords: Family function, Basic psychological needs, Psychological well-being

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Introduction

Nowadays human beings facing a great deal of challenges due to the complexities of life and the range and the speed of changes during life and all these challenges will be much more evident in the next century. These challenges can include the confusion between globalization and remaining indigenous, population crisis, health and nutrition crisis, technological revolutionary changes, increasing psychological and mental tensions and pressures … and each of these factors force a number of troubles on the quality of personal and social relationships of the individuals (1).

The recent studies indicate that the factors mentioned above can have a range of devastating effects on human’s physical and mental health. When the entanglement due to the daily life problems are intense or the person perceives the problems in a negative way because of various reasons, his/ her health and performance will be affected in many ways (2).

Human beings have physical, social and psychological needs which bring them satisfaction.

In 1908 MacDougall for the for the first time studied the needs of human beings and the studies continued by Freud, Murray and Hull and then it became operational in psychology by Maslow (3).

In initial theories regarding human needs such as derive theory by Hull (1943) the needs were divided into two categories including primary and secondary needs which were mostly based on hereditary biological needs. But the various studies regarding psychological needs were done in order to determine the essential psychological needs including independence, competence and relationship (4).

These essential psychological needs consist of the hygiene and mental and physical health. Well-being is actually mental health and the ability of the person to adapt to his/her surroundings (5).
They have a variety of different scales and are affected by all these scales, the scales are as such character, family, school, culture, temper and personal differences. None of social harms are effective without the effect of family therefore no society can claim to be healthy unless it has made of healthy families (6).

Family is one of the most natural groups which can obviates the spiritual, psychological and physical needs of its members (7).

Due to the population structure of Iran and the fact that the majority of the population is young, paying specific attention to the quality of teenagers’ requirements is of great importance (8).

The finding of the longitudinal study about the quality of the parental relationship done by Berenji showed that the less the quality of the parental relationship with their children the more the evolving symptoms of depression (9).

Decua in his research emphasizes on the contribution of family functioning in students’ psychological well-being. Therefore, what makes the study more considerable and important is studying the factors which play a vital role in students’ (teenagers’) psychological well-being (10). In recent years a group of mental health researchers inspired by the positive attitude psychology have adopted a different approach to study the subject. They have associated mental health as the equivalent of positive functioning of psychology and conceptualized it as “psychological well-being”. Because they believe that this term reveals more positive aspects of the mind (11).

The group believe that the concept of health is multidimensional which in addition to not being unhealthy and disabled includes the feeling of happiness and well-being (12).

There are a lot of evident research which indicate that unfavorable incidences in life can affect psychological well-being and demolish it and lead to depression, anxiety and other psychological disorders (13).

Psychological well-being necessitates the perception of existential challenges of life. Well-being feeling has either cognitive factor or emotional factor. Individuals with high levels of well-being feelings experience positive excitement and evaluate their surroundings or incidences in a positive way, but persons with low levels of well-being feelings evaluate their life and experiences unfavorably and mostly experience negative emotions such as depression, anxiety and rage (14).

The research findings done by Rahiminejad and Paknejad indicate that there is a negative relationship between the low level of family functioning and the satisfaction of essential needs of their children (15).

Other research also aim to find and determine the relationship between the favorable family functioning and adolescents’ self-regulation (16), resiliency for drug abuse (17), accountability (18), self-concept, religious affiliation and hope for the future children obstinacy (19).

In a study conducted by Bashardoust also the role of mediator variable of essential psychological needs in the aspects of idealism and emotions are determined (20). In another research the role of essential psychological needs as the mediator variable with the aspects of idealism in athletes was completely approved and matched the final model (21).

One of the research which seems to be very important regarding family problems is examining the family functioning and essential psychological needs and in this study their relationship with psychological well-being have been examined and from this point of view the study is quite innovative and aims at the followings:

- The prediction of psychological well-being based on the aspects of essential psychological needs among the students
- The prediction of psychological well-being based on the aspects of family functioning among the students

Materials and Methods

The statistical population of the current study is the female high school student in second grade in the academic year 2014-2015 in Tehran and according to the reports of education administration of Tehran city their number is equal to 165142. The sample size based on identity and Kramer translated by Sharifi (22) and according to the levels of predictive variables and the calculation of pre-estimation was equal to 260. The mentioned sample size, among the educational districts of Tehran city was selected according to random sampling method. In such a way that at first 4 districts from all the educational districts of Tehran city (districts 3, 8, 13 and 15) were selected and in the next level two schools of each district were chosen and in the final level from each school two classes were selected and were studied as the statistical sample for the research.

Research instruments

- Family Functioning Questionnaire (FADI)
- Psychological Well-being Scale: Reef and Keys

1 Miler
2 Myeris
proposed the psychological well-being pattern in the previous decade which were examined by a lot of researchers extensively. Psychological well-being is a multi-dimensional concept and include the factors such as self-acceptance, sharing positive relationships with others, autonomy, environmental mastery, purpose driven life and personal development. The terms regarding each sub-scale are as follows:

- Self-acceptance subscale: 51-48 -43 -31 -28 -23 -14 -9 -4
- Autonomy subscale: -44 -40 -35 -32 -24 -15 -10 -6 -52
- Environment mastery subscale: 53 -49 -36 -29 -20 -17 -12 -7 -2
- Personal development subscale: 54 -50 -45 -41 -37 -26 -21 -18 -3

The family assessment scale based on McMaster model was codified by Ayshtayn Bishop and Baldwin in 1983 in order to describe the organizational and structural characteristics of family. Scale (FAD-I) in order to distinct between healthy and disordered families measures the exchange patterns among the family members. The reliability of the test was reported 0.93 which is significant at the level of P <0.001.

In order to verify the validity of the test he applied factor analysis and achieved three factor structures. The total materials of FADI are 45 in which 20 items are related to “roles” questions (2- 5 -9 -10 -12 -15 -14 -16 -20 -21 -23 -24 -27 -28 -29 -30 -34 -38 -44 -45) and 17 items are related to “problem solving” questions (1-3-5-6-13-17-18-26-32-33-35-36-39-40-41-42-43) and 8 items are related to “emotion expression” questions (4-7-8-11-19-22-31-37).

The correlation of the psychological well-being subscales with a number of assessment tools indicated the validity of the questionnaire. The essential psychological needs questionnaire: - Basic general Needs Satisfaction Scale (BNSG-S): It is composed of 21 items measures the essential psychological needs satisfaction generally. The psychometric characteristic of basic general needs satisfaction scale has been confirmed in the external research primarily.

In order to determine the structural validity of the above tool in Iran Houman, Bashardoust, Ketabi (23) applied exploratory factor analysis method. The collected Cronbach alpha is 0.805 which indicates high levels of reliability of the mentioned tool.

Besharat and Ranjbar (24) also examined the reliability and validity of the questionnaire and the convergent and diagnostic validity confirms the basic psychological needs satisfaction scale also test-retest reliability of basic psychological needs satisfaction scale according to the findings of the research was confirmed as 0.67 to 0.77 for the different subscales.

Results
In order to test the hypotheses of the research the multiple hierarchical regression analysis method was applied. The participants of the study were the female high school students in the second grade.

Table 2. Mean, standard deviation and Cronbach alpha coefficients of the aspects of family functioning, basic psychological needs and psychological well-being

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Cronbach alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family functioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem solving</td>
<td>21.43</td>
<td>5.64</td>
<td>0.781</td>
</tr>
<tr>
<td>Emotion expression</td>
<td>19.96</td>
<td>7.14</td>
<td>0.626</td>
</tr>
<tr>
<td>Role functioning</td>
<td>23.11</td>
<td>4.33</td>
<td>0.683</td>
</tr>
<tr>
<td>Basic psychological needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>33.91</td>
<td>6.67</td>
<td>0.706</td>
</tr>
<tr>
<td>Autonomy</td>
<td>28.93</td>
<td>5.32</td>
<td>0.750</td>
</tr>
<tr>
<td>Relationships</td>
<td>18.79</td>
<td>4.09</td>
<td>0.572</td>
</tr>
<tr>
<td>Psychological well-being</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological well-being</td>
<td>206.14</td>
<td>30.64</td>
<td>0.896</td>
</tr>
</tbody>
</table>

The above table has calculated and reported the internal consistency of the research variables via cronbach alpha coefficient. Also it seems in the above table that cronbach alpha regarding the basic psychological needs are rather low (although two questions related to Cronbach alpha coefficients of
these two aspects which had negative effect were omitted). Table 3 shows the Pearson correlation coefficients among family functioning, basic psychological needs and psychological well-being.

Table 3. Correlation coefficients among family functioning, basic psychological needs and psychological well-being

<table>
<thead>
<tr>
<th>Research variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Functioning</td>
<td>1. problem solving</td>
<td>0.688**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2. emotion expression</td>
<td>0.572**</td>
<td>0.485**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>3. role functioning</td>
<td>0.453**</td>
<td>0.397**</td>
<td>0.395***</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Basic psychological needs</td>
<td>4. competence</td>
<td>0.314**</td>
<td>0.275**</td>
<td>0.252**</td>
<td>0.467**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>5. autonomy</td>
<td>0.468**</td>
<td>0.361**</td>
<td>0.313**</td>
<td>0.677**</td>
<td>0.449*</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>6. relationships</td>
<td>0.441**</td>
<td>0.437**</td>
<td>0.353**</td>
<td>0.593**</td>
<td>0.512</td>
<td>0.483</td>
</tr>
<tr>
<td>7. psychological well-being</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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**P<0.01 and *P<0.05

Table-3 shows that all the three aspects of family functioning have positive and significant correlation with psychological well-being at the level equal to 0.01. Also all the three aspects of basic psychological needs have positive and significant correlation with psychological well-being at the level equal to 0.01. It is necessary to mention that correlation coefficients between family functioning, basic psychological needs and psychological well-being are more than 0.3. This is important because Cohen (1988) considers correlation coefficients less than 0.3 as weak, the coefficients between 0.3 and 0.5 as average and the coefficients more than 0.5 as strong.

Thus it was concluded that among the aspects of basic psychological needs, two aspects including competence and autonomy can predict psychological well-being significantly. Adding the aspects of family functioning (emotion expression, problem solving and role functioning) to the equation of psychological well-being prediction in the next step the value of R^2 reached 0.463. The findings mean that adding the family functioning aspects (emotion expression, problem solving and role functioning) to the equation of psychological well-being prediction has caused to explain 46.3 percent Variance.

It is necessary to mention that regression coefficients regarding two other aspects of family functioning (problem solving and role functioning) were not significant at the level 0.05. Therefore, in the testing of the second research hypothesis it was concluded that among the aspects of family functioning (problem solving and role functioning) only emotion expression has significant and positive relationship with the prediction of psychological well-being.

Discussion

The findings of the research showed that the aspects including competence and autonomy in basic psychological needs satisfaction are pretty significant in the prediction of psychological well-being. Multiple correlation of the variables revealed that the basic psychological needs explain 46.3 percent variance of psychological well-being. Also examining regression coefficients showed that the competence and autonomy aspects predict psychological well-being positively and significantly, but the relationship aspect was not an appropriate prediction for it. The findings matches the results of the research done by Ahmadi et al (25). Also the results of the research done by Wilson et al (26) showed that the environment or activities which lead to the satisfaction of basic needs will boost the psychological well-being. Patrick et al (27) found out the satisfaction of the need competence predicts psychological well-being including self-esteem, positive emotions and general health. The inability of prediction of psychological well-being by the relationship aspect can be originated from the mental condition of puberty. Puberty according to the identity theory of Erickson (1999) is the stage of identity consistency and the possibility of making close relationships with others has a direct relationship with identity consistency and it seems that this aspect of basic psychological needs in this age is affected by other factors as well. Another point to be examined is that family functioning only predicts 3.7 percent of psychological well-being. Regression coefficient regarding the aspects of family functioning shows that only emotion expression aspect is significant at the level of 0.05.

According to research done by Kahrizeh, Ghamari and Barazian (28) family is one of the most important institutions of the society and forms human’s personality. This finding is matching the results collected from the research done by Tabrizchi and Vahidi (29), Rahiminejad and Paknejad (15), Boreshan et al (30), Mirzaei...
Alaviche et al (31), Ahadi et al (32), Ghamari (33), Sharifi, arizi and Namdari (19) and Zargar et al (34). With the approved role of emotion expression in the prediction of psychological well-being it can be concluded that the lower the ability of family functioning in emotion expression, psychological well-being which plays a vital role in progress of adolescents will be less. On the other hand the inability to predict psychological well-being by the other aspects of family functioning (roles and problem solving) can be explained by the intense effects of peers and media. Therefore, the female student in this age will focus more on her functioning in the group of peers instead of family and for solving her problems they mostly follow the innovations made by their friends (35).

The prominent point that seems to be important to be taken into consideration in the next research controlling the role of gender and the tools such as interview, completing family functioning questionnaires by the parents in order to decrease the effects of biases felt by the adolescents towards their families. Given that increasing awareness regarding family functioning and basic psychological needs aspects’ development are among the effective factors of psychological well-being researchers and experts must consider it strongly in order to have a healthy society.

Conclusion
Results showed that there is a significant positive correlation between variable performance family functioning and basic psychological needs with psychological well-being. Express emotions component of family functioning as well as the dimensions of autonomy and competence of basic psychological needs, can be a good predictor of psychological well-being.

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