Assessing Nurses’ Organizational Health Based on Their Personality Traits and Mental Health

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Abstract
This study aimed to investigate the relationship of organizational health with personality traits and mental health of nurses at Imam Ali hospital in Zahedan. This was a descriptive-correlational study. The population of the study consisted of all nurses (male and female) working at Imam Ali state hospital in Zahedan (N=530). 225 subjects were selected among the population based on Morgan’s table and applying random sampling method. Instruments included the General Health Questionnaire (GHQ-28), NEO-PI-R and Hoy and Tarter’s (1997) Organizational Health Inventory. For data analysis, the Pearson correlation and hierarchical stepwise regression analysis were used. Results of the study indicated that there was a negative significant relationship between organizational health and the dimensions of anxiety, insomnia, and social dysfunction. Given the scoring procedures of the questionnaires (high scores on mental health components indicate lower mental health) it could be argued that as mental health increased, organizational health increased. By examining the priorities of the predictor variables of organizational health, social dysfunction and anxiety were entered respectively into the model. Moreover, results suggested that there was a positive and significant relationship between the dimensions of introversion-extraversion, agreeableness and conscientiousness with organizational health. By examining the priorities of the predictor variables of organizational health, the variables of extraversion, conscientiousness, agreeableness and neuroticism were entered respectively into the prediction model.

Keywords: organizational health, personality traits, mental health

Introduction
Healthy organizations like a healthy individual can survive, reach its goals, know obstacles in its way, plan and provide a pleasant environment to work (Saatchi, 2004). Matthew Miles (1999) is the first theorist of organizational health in the educational environment. In his view, organizational health depends on sustainability and surviving in the environment and refers to the adaptability with the environment, promotion and development of the organization's ability to further adjustment (Wayne & Feldman, 1987). Miles considers characteristics of a healthy organization in providing three main requirements including task needs, survival needs and needs of growth and development of the organization. He also classifies organizational health into ten components of focus on objectives, communication competence, optimal distribution of power, resources support, integrity, morale, innovation, independence and competence for problem solving (Hoy et al., 2006).

Openness of organizational climate closely depends on the current emotional condition, i.e. in organizations with open climate staff shows higher levels of intimacy toward the organization and its environment compared to organizations with closed climate (Alhoseini, 2002). In addition, organizations with open climate have stronger staff who have higher self-esteem, and are more sociable and aware and additionally are more confident of the effectiveness of their organization. They also indicate higher levels of loyalty and commitment. Moreover, their manager is more
inclined toward applying the staff’s recommendations and honestly acknowledging them and respecting their professional competence (Moghimi, 2002). In organizations with open climate, staff have closer relationships with each other and with their clients and experience fewer behavior problems. In contrast, workers in organizations with closed climate have obtained higher scores on humiliation and aggression (Rabins, 2004).

Mental health is among the issues recently being noticed by scholars in different fields. WHO put mental health as a primary principles of health high on the agenda of all the member states. It refers to mental health as a health state when an individual knows his/her ability, can cope with natural life pressure which is useful and effective for the society and also he is able to collectively participate and decide. Accordingly, mental health is the base of welfare and health of the society. In fact, health is a threefold response of physical, mental and social condition to internal and external stimuli in order to maintain stability and comfort (Shariati et al, 2006). Ardalan et al. (2012) investigated the relationship between personality traits and family control and organizational health of staff working at Kurdistan University. They found a positive and significant relationship between the staff’s personality traits and their organizational health, i.e. the higher the level of personality traits, the higher the organizational health. Ferdowsi et al. (2012) examined the relationship of personality traits and organizational commitment with organizational health of Khuzestan General Office of Sports and Youth and found that three components of conscientiousness, extraversion and agreeableness as well as organizational commitment were significantly correlated with organizational health. In addition, it was indicated that among personality traits, conscientiousness, extraversion, and agreeableness as well as organizational commitment as predictor variables can contribute to prediction of organizational health. Mardani et al. (2009) examined the relationship between organizational climate and personality traits among the personnel of Fatemeh Zahra hospital in Najaf Abad. Results indicated that there was no relationship between personality traits in each of the four dimensions and (open and closed) organizational climate. No correlation was observed between personality traits dimensions, except for the non-committed dimension and organizational climate. In addition, a relationship was found between the four dimensions of personality. Roney et al. (2007) examined the relationship between organizational health and achievement of middle school students and reported a positive and significant relationship between organizational health scores and students’ index scores.

Sabanci (2009) found a positive and significant relationship between teachers’ atrophy and organizational health and stated that teachers’ atrophy as an influencing factor can affect organizational health of schools. Snider (2005) studied the relationship between organizational health and organizational effectiveness among high schools in New York City and found that organizational health had a significant correlation with organizational effectiveness. Wilkerson (2009) examined mental health of employees and concluded that an organization is considered healthy when managers and employees work together on a mutual process in order to accept the responsibility of providing a dynamic work environment which will ultimately leads to customer loyalty and common profitability. Saurabh and Mmishara (2008) examined the role of stress and organizational health in predicting organizational commitment of railway staff and stated that work stress was negatively correlated with organizational commitment. In addition, work (organizational) health has a positive correlation with organizational commitment. Pateel (2004) in a study investigated the relationship between organizational health and organizational commitment among industrial workers and indicated a positive and significant relationship between organizational health and organizational commitment. In addition, his research study revealed that 50 skilled workers who considered their organization healthy had greater commitment toward it compared to other workers or ordinary employees.
Accordingly, considering the importance of organizational health and mental health of an organization, the current study aimed to predict nurses’ organizational health based on their personality traits and mental health.

**Research Method**

The descriptive-correlation research method was applied. The population of the study consisted of all nurses (male and female) working at Imam Ali state hospital in Zahedan (N=530). Based on Morgan’s table, applying random sampling method, 225 subjects were selected among the population. Data collection instruments consisted of three standardized questionnaires as follows:

**General Health Questionnaire (GHQ-28)**

General Health Questionnaire was first developed by Goldberg (1972). The original form contains 60 items and the short forms contain 12 to 28 items. It is translated to 38 different languages and psychometric analyses on this tool have been conducted in 70 countries. According to the researchers, the variety of GHQ forms evaluates psychiatric and mental health status form a month prior to the test administration day. This questionnaire is most commonly scored by using a Likert-type scale (Bogle, 1994).

<table>
<thead>
<tr>
<th>Scales</th>
<th>Questions</th>
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<tbody>
<tr>
<td>Somatic symptoms</td>
<td>1-7</td>
</tr>
<tr>
<td>Anxiety and insomnia</td>
<td>8-14</td>
</tr>
<tr>
<td>Social dysfunction</td>
<td>15-21</td>
</tr>
<tr>
<td>Depression</td>
<td>22-28</td>
</tr>
</tbody>
</table>

**NEO-PI-R**

This scale includes 243 questions among which the first 240 items of the NEO-PR-R measure five main types of personality, i.e. neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness and the last three items determine the reliability of the test (Costa & McCrae, 1992). Through examining six subscales or subsidiary factor, each dimension or main factor of this scale provides the opportunity of conducting an extensive study on personality traits. Various studies have confirmed the reliability and validity of this scale (Costa & McCrae, 1992). In a longitudinal study, the reliability coefficients of 51% to 83% were obtained for eighteen subscales of the dimensions of neuroticism, extraversion, openness to experience, and the reliability coefficients of 63% to 83% were obtained for the main five factors among men and women (Costa & McCrae, 1992). Studies on the psychometric properties of this scale in Iranian samples (Haghshenas, 1999, Garoussi Farshi, 1998) reported the reliability coefficient of the main dimensions of the test of 53% to 83%. The short form of the scale containing 60 items was used in the present study. The 60-item NEO Personality Inventory is standardized on humanities students of Tehran University (Kiamehr, 2002).

**Organizational Health Inventory**

Hoy and Tarter’s (1997) Organizational Health Questionnaire is a 44-item inventory. The reliability of the questionnaire was reported about 90% for university employees (Nasiri & Likbany, 2012). For data analysis, the Pearson correlation and (hierarchical) stepwise regression analysis were used.

**Results**

H1: There is a relationship between personality traits and organizational health.

The Pearson correlation coefficient was used to test this hypothesis. The results of descriptive and inferential statistics are presented in the following tables:
Table 2. Correlation coefficients of personality traits and organizational health

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organizational health</th>
</tr>
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<tbody>
<tr>
<td>Neuroticism</td>
<td>r 0.011</td>
</tr>
<tr>
<td></td>
<td>sig. 0.871</td>
</tr>
<tr>
<td>Extraversion</td>
<td>r 0.408**</td>
</tr>
<tr>
<td></td>
<td>sig. 0.000</td>
</tr>
<tr>
<td>Openness</td>
<td>r 0.076</td>
</tr>
<tr>
<td></td>
<td>sig. 0.258</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>r 0.205**</td>
</tr>
<tr>
<td></td>
<td>sig. 0.002</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>r 0.222**</td>
</tr>
<tr>
<td></td>
<td>sig. 0.001</td>
</tr>
</tbody>
</table>

The results indicate that the correlation coefficient between neuroticism and organizational health \((r=0.011)\) is not significant at the 95% level \((P>0.05)\), extraversion and organizational health \((r=0.40)\) is significant at the 99% level \((P<0.01)\), openness and organizational health \((r=0.07)\) is not significant at the 95% level \((P>0.05)\), agreeableness and organizational health \((r=0.002)\) is significant at the 99% level \((P<0.01)\), and conscientiousness and organizational health \((r=0.22)\) is significant at the 99% level \((P<0.01)\).

H2: There is relationship between organizational health and mental health and its dimensions.

The Pearson correlation coefficient was used to test the hypothesis. The results of descriptive and inferential statistics are presented in Table 3:

Table 3. Correlation coefficients of mental and organizational health

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organizational health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>R -0.187**</td>
</tr>
<tr>
<td></td>
<td>Sig. 0.005</td>
</tr>
<tr>
<td>Somatic symptoms</td>
<td>R -0.114</td>
</tr>
<tr>
<td></td>
<td>Sig. 0.088</td>
</tr>
<tr>
<td>Anxiety and insomnia</td>
<td>R -0.133*</td>
</tr>
<tr>
<td></td>
<td>Sig. 0.046</td>
</tr>
<tr>
<td>Social dysfunction</td>
<td>R -0.167*</td>
</tr>
<tr>
<td></td>
<td>Sig. 0.012</td>
</tr>
<tr>
<td>Depression</td>
<td>R -0.004</td>
</tr>
<tr>
<td></td>
<td>Sig. 0.952</td>
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</tbody>
</table>

The results indicate that the correlation coefficient between mental health and organizational health \((r=-0.18)\) is significant at the 99% level \((P<0.01)\), anxiety and insomnia and organizational health \((r=-0.13)\) is significant at the 95% level \((P<0.05)\), somatic symptoms and organizational health \((r=-0.11)\) is not significant at the 95% level \((P>0.05)\), social dysfunction and organizational health \((r=-0.16)\) is significant at the 99% level \((P<0.01)\), and depression and organizational health \((r=-0.004)\) is not significant at the 95% level \((P>0.05)\).

H3: Personality traits can predict the organizational health.
The above table indicates that in the first step, the variable of extraversion predicts 16% of variations in organizational health. In the second step, the variable of conscientiousness entered into the prediction model. The two variables together predict 19% of variations in organizational health, i.e. conscientiousness added 3% to the previous variable. In the third step, the variable of agreeableness entered into the prediction model. These three variables predict 21% of variations in organizational health, i.e. agreeableness added 2% to the previous variables. Finally, in the fourth step, the variable of neuroticism entered into the prediction model. These four variables together predict 23% of variations in organizational health.

H4: Mental health dimensions can predict organizational health.

According to table 5, in the first step, the variable of social dysfunction predicts 2% of variations of organizational health. In the second step, the variable of anxiety entered into the prediction model. These two variables together predict 5% of variations in organizational health, i.e. anxiety adds 3% to the previous variable.

**Discussion and Conclusion**

The results revealed that there was a significant and negative relationship between organizational health and mental health and the dimensions of anxiety, insomnia and social dysfunction. Considering the scoring procedure, high scores on mental health components indicated lower mental health; therefore, it could be argued that as mental health increased organizational health increased. Exploring the priorities of variables to predict organizational health in the first step, the variable of social dysfunction could predict 2% of variations in organizational health. In the second step the variable of anxiety entered into the prediction model. These two variables together predicted 5% of variations in organizational health, i.e. anxiety added 3% to the previous variable. The finding is consistent in some way with Wilkerson’s (2009) who concluded that an organization is considered healthy when managers and employees work together on a mutual process in order to
accept the responsibility of providing a dynamic work environment which will ultimately leads to
customer loyalty and common profitability.

In addition, Hosseini et al. (2010) indicated that the component of individual recovery on
five components (innovation, adaptability, morale, communication competence and integrity),
the component of anxiety control on five components (adaptability, problem-solving competence,
communication competence, resources support, and morale), the component of symptoms of well-
being and mental health on seven components (innovation, adaptability, problem-solving
competence, focus on goals, communication competence, morale and integrity), the component
communicating with others on five components (innovation, adaptability, communication
competence, morale and integrity) and the component of ability to cope with everyday problems and
life stressors on seven components (adaptability, problem-solving competence, focus on goals,
communication competence, morale, independence and integrity) had significant effect on
organizational health.

The science of mental health with four targets of prosperity of potentials, happiness,
coordinated growth and development and effective life attempts to provide a situation where through
training prevention, treatment of mental disorders and sustaining mental health, healthy individuals
and citizens can easily adapt to their home, school, community, workplace and eventually their own.
Increasing mental health can have a direct effect on organizational health. Individuals who are
mentally healthy can be more effective to the organization, especially medical care and health
organizations where organizational commitment and health have high position for both people and
officials. Therefore, it seems necessary that steps taken to improve the situation of nurses’ mental
health which will in turn automatically lead to increased organizational health at hospitals.

Moreover, the results revealed that there was a significant and positive relationship between
extraversion, agreeableness and conscientiousness and organizational health. By examining the
priorities of variables to predict organizational health in the first step, the variable of extraversion
could predict 16% of variations in organizational health. In the second step, the variable of
conscientiousness entered into the prediction model. These two variables together predicted 19% of
variations in organizational health, i.e. conscientiousness added 3% to the previous variable. In the
second step, the variable of agreeableness entered into the prediction model. These three variables
could predict 21% of variations in organizational health, i.e. agreeableness added 2% to the previous
variables. Finally, in the fourth step, the variable of neuroticism was entered into the prediction
model. These four variables could predict 23% of variations in organizational health.

Zhang and Bruning (2011) indicated that personality traits and all aspects of emotional health
are positively correlated with organizational health, job performance and innovation in organization.
Singer et al. (2009) found that there was a relationship between staff’s personality trait and
organizational health. Ardalan et al. (2012) found a positive and significant relationship between
personality traits of the staff at Kurdistan University and their organizational health, i.e. the higher
the level of personality traits, the higher the organizational health. Ferdowsi et al. (2012) found that
three components of conscientiousness, extraversion and agreeableness as well as organizational
commitment were significantly correlated with organizational health. In addition, it was indicated
that among the personality traits, conscientiousness, extraversion, and agreeableness as well as
organizational commitment, as predictor variables can contribute to prediction of organizational
health. Since individuals’ personality traits act as determinants of their behavior, identification of
these traits can be used as behavioral framework.

Knowledge of individuals’ personality can help organization managements to apply
competent individuals for each position which in turn will lead to reduced turnover and increased
job satisfaction (Robins, 1996, as cited in Parsaeian & Arabi, 2005). Every job has its unique

characteristics such as whether the job requires physical or mental work, has a busy or quiet environment, work is done alone or in a group, how the monitoring is and many other issues. However, people also have their own personalities and they like to work alone in the group. Personality is a set of stable mental characteristics which determines behavior and thought. In other words, personality is a combination of mental characteristics used to classify an individual in terms of behavior and attitudes.

Given the results obtained through analyses, it could be argued that personality traits as inseparable factors of human personality influence organizational environments since behavior is a function of personality itself. Organizational commitment as an organizational behavior is directly affected by personality traits and consequently will secure organizational health.

According to the results of the present study and research background, there are factors among personality traits as well as organizational commitment which can predict organizational health. Moreover, the existence of multiple relationships between the variables used in the present study is definite. Thus, the important issue here is that organizations should attend in such relationships in pre-employment interviews for recruiting purposes in order to employ those who can prove higher levels of organizational commitment and health. This holds for all organizations and institutions. Accordingly, organizations may employ those who can better help them achieve their goals and targets.

Reference

Openly accessible at http://www.european-science.com