WCPCG 2014

A Study on the Personality Aspects of Adaptive performance Among Governmental Hospitals Nurses: A Conceptual Model

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Abstract

Job performance as an organizational behaviour is defined in the two categories of task performance and organizational citizenship behavior. To improve job performance concept, particularly in servicing jobs such as nursing, the construct of adaptive performance has been recently raised. The main aim of this study was to define the concept of adaptive performance and the second aim was to recognize the role of three important personality traits of self-efficacy, neuroticism, and openness to experience in predicting adaptive performance. Survey respondents include 210 hospital nurses that were selected by simple random sampling method. All the participants were asked to complete adaptive performance scale, NEO-Five Factor Inventory developed by Costa and McCrae, and self-efficacy scale. Results using correlation and regression modeling showed that there are positive and significant relationship between two personality traits of self-efficacy and openness to experience with adaptive performance. Moreover, the results of multiple regressions showed that openness to experience had the maximum portion in explaining adaptive performance variance. On the basis of the obtained results, we propose organizations to hold training programs and familiarize workers with adaptive performance concept, and provide a suitable context in order to actualize the adaptive behaviours.

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Keywords: Adaptive performance, nurse, self-efficacy, neuroticism, openness to experience;

1. Introduction

Adaptive performance, as the newest excluded construct of job performance, has gained special attention. Basically, increasing the effectiveness, efficiency and productivity are closely related to job performance (Krischer & Witt, 2010). Such as other organizational concepts, job performance has had different models and dimensions during its appearance. In a traditional approach, job performance is defined as a set of tasks and duties, which is

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called the task performance (Campell et.al, 1993). Recently organizational researchers have defined another job performance named adaptive performance, which considering that nature of today's organizations can play an important role in increasing the effectiveness and productivity of organizations and employees. This is because one important feature of today's organizations is facing a dynamic and changing environment. For example, with the constant changes in technology, integration and restructuring of organizations, employees are required to learn new skills and increase their adaptability and flexibility (Ilgen & Pulakos, 1999). In this condition the role of adaptive performance as a facilitator of this process could be highlighted.

2. The present study and hypotheses

Research has shown that adaptive performance is a kind of job performance that is different from task performance and organizational citizenship behaviour (Han & Williams, 2008). Johnson (2001) has defined adaptive performance as the ability to adjust one's behaviour with the requirements of the environment in a new situation. Allworth and Hesketh (1999) argue that the adaptive performance includes behaviours that help the individuals to face with change, knowledge transfer from one task to another, and job requirements. Recently, Krischer and Witt (2010) have defined adaptive performance as the recognition of need or opportunities to actively increase the competence and good behaviour in response to existing or anticipated changes and development of qualifications and ability to adapt effectively in the workplace. Charbonnie -Voirin et.al (2010) argue that adaptive performance is composed of five domains including coping with emergencies and unexpected situations, work stress management, creative problem solving, learning, and interpersonal compatibility. The first area focuses on rapid response and effective alternatives in the face of problems and new situations. The key function here is to extent that which worker can easily coordinate with such situations and, if needed, can change his/her orientation and focus using an effective and appropriate method, despite the ambiguities of situation. In addition, appropriate response to the risks, threats and emergencies, ability to focus in thinking, maintaining emotional control, and taking actions to control risk and emergency are the other features of this area. In the second area, it is described how to deal with the job stresses and how to apply individual abilities and experiences to solve them effectively such as keeping calm and composure when dealing with problems, direct trying to solve problems other than blaming the others, and preservation of self-confidence in stressful situations another. The important matter in third area is the application of new techniques and use of information in solving problems. The fourth area of adaptive performance is learning new ways to do a job or to learn different skills related to a new job. This dimension of adaptive performance is of particular importance, because of the rapid advances in technology and emphasis on continuous learning in organizations. The fifth area focuses on the way of adapting and communicating with other members of the organization. Using the views of employees and their participation in the work are from the main features of this area. Today, since the tasks are done by teams and the nature of jobs has changed to the service, this feature is very important (Kozlowski et.al, 1996).

In the present study the first predictive variable is self-efficacy, which is defined as self-assessment of their individual skills and abilities to perform a task or to reach a desired outcome (Bandura, 1986). Researchers such as Shunk (1983) have suggested that self-efficacy, a useful predictor of performance in new, unpredictable or stressful situations. Therefore we expect to:

H1: Self-efficacy will be positively related to adaptive performance.

The second predictive variable is neuroticism. Neuroticism reflects the readiness of the individual to negative experiences of life, poor control over emotions, non-tolerance of frustration and the sense of jealousy and paranoia (Furnham & Fudge, 2008). Lack of positive psychological adjustment, fear, anxiety, and depression are among other symptoms of this personality trait (Furnham, 2002). Researchers such as Lepine, Lepine and Jackson (2004) showed that high scores on neuroticism are associated with emotional exhaustion and feelings of low self-advancement. In addition, research has shown that this personality trait has a negative impact on performance at workplace (Smillie, 2006). Thus we establish the following hypothesis:

H2: Neuroticism will be negatively related to adaptive performance.
The third predictive variable is openness to experience, which is trying to learn something valuable from the experience that has failed. Basically these people have a sense of self-consciousness, prefer diversity in life, and are rather curious (Costa & McCrae, 1993). This personality trait has a positive relationship with the intelligence and creativity (Zhao, 2006). These people are willing to use other people's views, prefer variety in their life. High scores on this personality dimension leads to better decisions in unexpected job situations (Lepine et al, 2000). Moreover, Pulakos et al (2002) showed that openness to experience increases adaptive performance.

**H3: Openness to experience will be positively related to adaptive performance.**

Considering all the above, the main objective of this study is to determine the individual and collective role of personality variables in predicting adaptive performance in nurses community. Figure 1 is displaying the proposed model.

![Proposed model of the relationship between research variables.](image)

**3. Methods**

**1.3. Participants**

Participants include 210 nurses of medical universities hospitals of southwest in Iran, who were selected by simple random sampling method. For this sample 89.5% were female, 10.5% were male and the average age was 33 years.

**2.3. Measures**

**Adaptive performance scale.** This scale was made by Charbonnie–Voirin, et.al (2010) and includes 5 areas and 19 items. They are divided into dealing with emergencies and unexpected situations (4 items), work stress management (3 items), creative problem solving (4 items), learning (4 items) and interpersonal adjustment (4 items) the measures. They validated the scale by using confirmatory factor analysis. The results showed that RMSEA=0.57 and CFI = 0.95, adaptive performance five-factor model was approved. Coefficient alpha in this sample is 0.84 to 0.89. In the present study, reliability coefficients were between 0.70 and 0.80.

**NEO Personality scale.** To assess the personality traits of neuroticism and openness to experience Neo Personality scale Short Form (McCrae and Costa, 1985) was used. Each of these personality traits are measured with 12 items. In this study reliability coefficient of neuroticism and openness to experience were 0.89 and 0.91 respectively.

**General self-efficacy scale.** General Self-Efficacy Scale of Schwarzer, Jerusalem and Schwarzer (1995) was used to measure self-efficacy. This scale has 10 items and measures perceived self-efficacy. Test reliability on composite samples from 23 ethnic groups with Cronbach's alpha has been reported between 0.76 and 0.90.
4. Results

4.1. Descriptive statistics

Means, standard deviations, and correlations among the variables are presented in Table 1. The results for correlations showed that all variables were significantly related to each other.

Table 1. Means, standard deviations and simple correlations among study variables

<table>
<thead>
<tr>
<th></th>
<th>Adaptive performance</th>
<th>Mean</th>
<th>SD</th>
<th>Cope with stressful situations</th>
<th>Stress Management</th>
<th>Solving problems creatively</th>
<th>Learning</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>0.34*</td>
<td>27.31</td>
<td>3/34</td>
<td>0.40*</td>
<td>0.23*</td>
<td>0.18*</td>
<td>0.27*</td>
<td>0.25*</td>
</tr>
<tr>
<td>Opening the experience</td>
<td>0.35*</td>
<td>40.04</td>
<td>4/49</td>
<td>0.23*</td>
<td>0.27*</td>
<td>0.30*</td>
<td>0.30*</td>
<td>0.30*</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.18*</td>
<td>33.45</td>
<td>5/94</td>
<td>-0.17*</td>
<td>-0.23*</td>
<td>-0.11</td>
<td>-0.15*</td>
<td>0.04</td>
</tr>
<tr>
<td>Adaptive performance</td>
<td>1.00</td>
<td>72.77</td>
<td>9/64</td>
<td>--</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*P< 0.01

4.2. Regression model.

Table 4 shows that when adaptive performance as criterion variables in the regression equation is considered, these three personality traits remain in the regression equation. The three variables have a multiple correlation equal to 0.40. They explained that 16 percent of the adaptive performance variance. In addition, the results show that openness to experience (β = 0.35), neuroticism (β = -0.16) and efficacy (β = 0.16) generally have the highest role in explaining adaptive performance. The total adaptive performance the results were similar to the results of multiple regression analysis with entry methods.

Table 2. Results of entry multiple regression of predictive variables with adaptive performance

<table>
<thead>
<tr>
<th></th>
<th>Multiple correlation</th>
<th>$R^2$</th>
<th>β</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>0.35</td>
<td>0.12</td>
<td>0.75</td>
<td>0.35</td>
<td>5.03</td>
</tr>
<tr>
<td>Opening the experience</td>
<td>0.37</td>
<td>0.13</td>
<td>-0.27</td>
<td>-0.16</td>
<td>-2.43</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.40</td>
<td>0.16</td>
<td>0.46</td>
<td>0.16</td>
<td>2.32</td>
</tr>
</tbody>
</table>

P< 0.01

Table 3. Result of stepwise regression analysis predictive variables with adaptive performance dimensions

<table>
<thead>
<tr>
<th>criterion variables</th>
<th>predictive variables</th>
<th>multiple correlation</th>
<th>$R^2$</th>
<th>β</th>
<th>t</th>
<th>sig</th>
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</thead>
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</tbody>
</table>

*P< 0.01

5. Discussion

Using personality to predict job performance has a long history. The relationship between the personality dimensions, job performance, organizational citizenship behaviour, and non-productive behaviours have been studied (Berry et.al, 2007). The purpose of this study was to determine the role of personality traits in predicting adaptive performance. The results showed a significant positive relationship between the self-efficacy, openness to experience and adaptive performance ($H1$ & $H3$). Relationship between neuroticism and adaptive performance was negative and significant ($H2$). Another aim of the study was to determine the most important factors to predict
adaptive performance. Research findings indicate that among the three predictive variables, openness to experience had a greater role in predicting the adaptive performance than others. Self-efficacy can increase adaptive performance through increasing confidence in one’s ability to succeed job-related duties (Luthans, 2002). In addition, self-efficacy enhances adaptive performance through increasing job efforts, increasing the resistance against occupation problems, and creating positive thought patterns (O’Brien, 2003). To explain the relationship between openness to experience and adaptive performance it can be mentioned that the people who have this trait, have a high tolerance in the face of new situations, and see new things as an opportunity to satisfy their curiosity. Thus, in their views the changes will not be as stressful events and this enables them to adapt more effectively facing unpredictable situations. This is along with the finding of Barrick and Mount (1991) and Judge et.al (1999) that showed openness to experience can increase compatibility with organizational change. In addition, about the relationship between neuroticism and adaptive performance, it can be said that people with neuroticism tend to have negative way to look at all aspects of the world, due to negative emotions such as anxiety or depression. Thus, it is likely that they fail to comply with changing and dynamic environmental conditions (Moyle, 1995). Research suggests that individuals suffering from neuroticism have very poor adaptive performance in occupations that require mental ability to deal with stress (Spector, 2006) and show a very strong emotional reaction to stressful (Van Heck, 1997). According to the results obtained in this study, it is suggested that organizations familiarize their employees with adaptive performance through educational programs, and create a desirable context for adaptive behaviours.

References


