Measuring the Impact of Five Personality Traits on Organizational Effectiveness with Moderating Role of Electronic Medical Records

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**ABSTRACT**

The study examines the effect of five traits of personality on organizational effectiveness. The research also scrutinizes the moderating role of electronic medical records between personality traits and organizational effectiveness. Simple random and stratified sampling strategies were used in the study. In the survey, 503 respondents (doctors) were taken as sample size. Statistical tests like cronbach alpha, correlation, descriptive statistics, regression and moderated regression analyses were employed for investigations. The results of the investigation showed that the personality traits (agreeableness, conscientiousness and openness to experience) had positive impact on organizational effectiveness, while the personality trait (neuroticism) had negative influence on organizational effectiveness. The outcomes also supported the impact of moderating role of electronic medical records on the relationship of personality traits (excluding conscientiousness) and organizational effectiveness. The current research is a valuable addition in the existing literature on organizational effectiveness. Duplication of this study in other fields is advised.

**Keywords**: Electronic Medical Records, Organizational Effectiveness, Personality Traits

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**Introduction**

The research study aims to scrutinize the role of five traits of personality on organizational effectiveness in healthcare sector of Pakistan. The personality traits comprise conscientiousness, neuroticism, and openness to experience, agreeableness and extraversion. Electronic Medical Records (EMRs) has been considered as a moderating variable in this inquiry. The sector of healthcare is a collection and blind of various arenas closed by the financial structure of a republic that provides obtainable decent facilities to deal with patients with curative, protective and
rehabilitative considerations. Hospitals play a very significant role in the healthcare structure of a nation.

The sector of medicinal services is battling to increase capability, quality of care and patients’ experiences (Butt, Nawab, & Zahid, 2016), and thus, there is a serious necessity and obligation is required to carry out this responsibility (Leape & Berwick, 2005; Wachter, 2010). Because of the disappointments and terrible acts of medics, the custodian’s time is wasted up to 10 percent; it creates an extraordinary input to care (Butt et al., 2016). Hence, research is required to acquire improved productivity and efficacy of hospitals for tackling such disappointments. Moreover, there are only a few studies available which have methodically inspected the reasons of these failures in the relevant literature (Fredendall, Craig, Fowler, & Damali, 2009). Therefore, there is still some space available to do the research to get better the efficiency and performance of hospitals in the healthcare sector.

Literature Review

The services of health care have shown a vital part in endorsing monetary growth and relevant literature has proved noteworthy connections among fitness and efficiency (Sachs, 2002). In Pakistan, medicinal services are in a catastrophe shape as only 27 percent of the general public acquires facility of comprehensive healthcare coverage (such as state employees, comrades of the armed forces and small number of beneficiaries of government aided insurance arrangements) whereas 73 percent depends on its individual pocket expenses (Nishtar, 2010). High performance workers of a work system increase the effectiveness. Same relationship exists in the healthcare sector as personality has long been linked to performance (Barrick, Mount, & Judge, 2001). The personality of any human being symbolizes its established sum of individuality that shows the identity of each human (Kinicki, 2008). The different aspects of the personality have a strong impact on behaviors (Kinicki, 2008). The traits of a personality within a person are the configurations and tendencies that clarify his or her patterns of behavior, consideration and sentiments (Colquitt, Lepine, & Wesson, 2009). The personality defines what a person can do (Colquitt et al., 2009).

Big-5 Personality Traits

The model of Big-5 personality is perhaps the most extensively utilized structure and widely accepted model in the research of personality (Camps, Stouten, & Euwema, 2016). The model is a complete evaluation of personality, in which persons recognize themselves as well as their associations with others (Izzati, Suhariadi, & Hadi, 2015). This model comprises of neuroticism, extraversion, openness to experience agreeableness and conscientiousness.
Neuroticism

Neuroticism can be defined as an element of usual human beings’ behavior which deals with the common propensity to familiarity with depressing elements like fright, grief, awkwardness, annoyance, blame and revulsion (Judge, Rodell, Klinger, Simon, & Crawford, 2013). Humans with high neuroticism are likely to face some psychiatric problems and those having elevated scores in neuroticism may experience illogical thoughts, not able to control desires and poorly handle the pressure situations. On the other hand, those having low scores in neuroticism, they normally have stable emotional thoughts, have calmness and face tense conditions without taking stress and they are even-tempered (Hough, Eaton, Dunnette, Kamp, & McCloy, 1990). The personality trait of neuroticism is a vital forecaster of job performance in different professions (Hormann & Maschke, 1996). The second vital factor of employability of a candidate is stable emotional thoughts (the contradictory of neuroticism) (Dunn, Mount, Barrick, & Ones, 1995). In some cases, it has also been proved that neuroticism is inversely associated with job performance (Judge, Higgins, Thoresen, & Barrick, 1999).

Extraversion

Extraversion comprises qualities like friendliness, boldness, activity and chattiness. The extroverts are lively and positive (Judge & Long, 2012). Whereas, the introverts are reserved, autonomous and do not follow others; they work with the same pace and are not lethargic. The personality trait extraversion portrays an optimistic approach and understanding and promises to have a bright influence (Clark & Watson, 1995). Extraversion has the ability to predict performance in jobs illustrated by societal relations, like managers and sales personal (Barrick & Mount, 1991; Bing & Lounsbury, 2000; Lowery & Krilowicz, 1994; Vinchur, Schippmann, Switzer III, & Roth, 1998). However, due to high extroverts, some features of extraversion generate functional clashes that subsidize to performance. There is no impact of extraversion on effectiveness and performance for any professions (Colquitt et al., 2009).

Openness to Experience

Openness to experience comprises active feelings, artistic compassion, consideration to internal thoughts, an inclination for diversity, deep thinking and freedom of judgment (McCrae & Sutin, 2009). The human beings having low scores in it have a tendency to be conservative in actions and conventional in attitudes. The high score in openness to experience lead people to become original, eager to query and ready to consider novel, moral, political and societal thoughts. The individuals who tend towards openness are inquisitive to internal and external worlds (McCrae & Costa, 1987). Such people have the tendency to consider new thoughts and unusual standards and they practice both optimistic and pessimistic sentiments more intensely than other individuals who have close personality. Openness is connected to victory in the professions of consultants (Hamilton, 1988), training and
development (Barrick & Mount, 1991; Vinchur et al., 1998) and change management (Raudsepp, 1990).

**Agreeableness**

An agreeable individual is basically unselfish, kind and eager to assist others and expects that other people will also be caring in return. Individuals disagreeable in nature are self-centered, disbelieving of others’ objectives and aggressive (Judge et al., 2013). Agreeableness is a vital forecaster of effectiveness (Tett, Jackson, & Rothstein, 1991), and is connected to success in training and development (Salgado, 1997). The supportive personality of agreeable humans guides them to perform better in professions where joint efforts of teams and services of customer care are significant (Judge et al., 2013).

**Conscientiousness**

It involves self-will and the procedure of arranging, shaping and performing different jobs (Barrick & Mount, 1993). The people who are conscientious, they become focused, decisive and gritty. It is apparent in the achievement of orientation (careful and constant), reliability (accountable and cautious) and neatness (prepared and organized) (Judge et al., 2013). On the pessimistic side, elevated conscientiousness guides towards irritation, meticulousness, obsessive tidiness or workaholic performance. It is not necessary that weak scorers may lead towards lack of ethical values, but individuals are interested in applying them. Correlation score of 0.80 is observed among consistency (a feature of conscientiousness) and job performance (Borman, White, Pulakos, & Oppler, 1991). A number of studies presents strong relationship between conscientiousness and performance of job (Barrick & Mount, 1991; Barrick, Mount, & Strauss, 1993; Frink & Ferris, 1999; Ones, Viswesvaran, & Reiss, 1996; Sackett & Wanek, 1996).

**Electronic Medical Records**

IT is being used in almost all the aspects of life like education, transportation, manufacturing, media, health etc., (Thor, 2003). An EMR is an official patient record that is shaped in digital design in hospitals and ambulatory settings. An EMRs may contain a diversity of individual and clinical data (Alpert, 2016). The system of EMR retains information including medical operations, medicinal imageries, behaviors of patients and actions from healthcare suppliers in a diversity of formats (Mao & Sun, 2017). EMRs promise to enhance superiority and efficiency of healthcare organizations (Yanamadala, Morrison, Curtin, McDonald, & Hernandez-Boussard, 2016). EMRs have the prospective to get better patient adherence to approved drug treatment (Park, Howie-Esquivel, & Dracup, 2015).

The use of IT in medical field has increased medicine related investigations and deadly disease analysis lessening the risks due to advising wrong medicine which takes to undesirable medicine effect (Fortescue et al., 2003), and EMRs make
sure an enhanced superiority of life for patients (Balas et al., 2004). Currently, the infrastructure of healthcare information systems is lacking regarding finances and assets in order to fulfill the requirements of growing inhabitants in developing countries. According to a majority of doctors, adoption of EMRs is more expected to influence largely negative on their efficiency.

**Organizational Effectiveness**

The meaning of organizational effectiveness is that whether an organization is achieving its desired outcome in an effective manner. Normally the organizational effectiveness for a business is expressed in the following manner: Net profitability of a business and its comparison with intended productivity. Organizational effectiveness tells how efficiently a business is getting objectives; it plans to attain and it is normally utilized to state goal accomplishment (Jain, 2013). Organizational effectiveness is a significant factor for all types of organizations and similarly healthcare sector has no exception. There is no exact definition of organizational effectiveness due to which many writers faced problems (Cameron & Whetten, 1983). As per objectives of research, capabilities and definitions were developed. For the sake of this current research, organizational effectiveness can be termed as “the degree to which the goals of the organization are accomplished” (Quarterman, 2003).

Personality has been linked with organizational effectiveness. The personality has a statistical noteworthy impact on organizational effectiveness (Barrick & Mount, 1991). The practice of EMRs in healthcare industry has improved medicine related inquiries and dread disease analysis decreasing the risks due to recommending incorrect medicine which takes to unwanted medicine effect (Fortescue et al., 2003), which eventually increases organizational effectiveness of hospitals (Balas et al., 2004). Different doctors have different traits of personality and EMRs can moderate the relationship between personality traits and organizational effectiveness.

**Material and Methods**

This is a quantitative study and it focuses on testing of hypotheses based on a conceptual framework. The target population for the study consisted of medical doctors working in different public and private hospitals of Pakistan. According to the records of Pakistan Medical and Dental Council (PMDC), there are 232,986 registered doctors in Pakistan till 28th February 2018. The total number of 503 doctors was taken as sample size for the research. In order to take sample size, following procedure was adopted.

1. A complete directory of various hospitals recognized by PMDC accepted for the use of internship/house job along with teaching hospitals connected to medical institutions/postgraduate medical colleges were taken from PMDC website. Other than this, some private leading hospitals were also considered to gather the data.
II. A sample frame of 13 hospitals, which were easily approachable, was taken.

III. The number of questionnaires was distributed to hospitals according to their workforce of doctors.

IV. The distributed questionnaires were 710.

Most of the hospitals selected were geographically located in the central and northern region of Pakistan. Within this area, hospitals which were most accessible or most likely to respond, due to their prestige and commitment to respond, were chosen. The building of the questionnaire of survey for existing study was largely built on and acquired from three survey questionnaires used in former studies. The entire questionnaires consisted of close-ended questions, which were utilized in this study. To quantity variables, Likert Scale of seven points was employed in the study. The subsequent instruments of measurement were utilized in the present research.

Big Five Inventory (BFI) instrument was offered by John and Srivastava in 1999 (John & Srivastava, 1999). BFI is considered as a benchmark tool for assessing personality traits of individuals working in diverse environments. The scale for measuring EMRs was taken from the research of Joseph Kerollos (Kerollos, 2012). The study was “The Management and Sustainability of Organizational Change in Primary Care Adoption of Electronic Medical Record Systems”. Measuring scale for organizational effectiveness was taken from the study of Andrew Gold, Arvind Malhotra and Albert Segras (Gold & Arvind Malhotra, 2001). The study title was “Knowledge Management: An Organizational Capabilities Perspective”.

In the existing study, 710 questionnaires were distributed in nominated hospitals. Out of which 524 questionnaires were obtained. The turnout rate was 73.80%. Further, it was recognized that there was a problem of missing data in 21 questionnaires; the figure was very small; so, it was acknowledged that there would be no impact on generalizability; so, remaining 503 questionnaires were engaged for the investigation. All the statistical investigations were done by using Statistical Package of Social Sciences (SPSS) 20th edition. The right of individuals to confidentiality and secrecy was the main concern. It had been clarified to every participator that the answers given by them, in the questionnaire, would stay a private record in the custody of the researchers. Involvement in the investigation was entirely voluntary.
Theoretical Framework

<table>
<thead>
<tr>
<th>Personality Traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Agreeableness</td>
</tr>
<tr>
<td>• Conscientiousness</td>
</tr>
<tr>
<td>• Extraversion</td>
</tr>
<tr>
<td>• Openness to Experience</td>
</tr>
<tr>
<td>• Neuroticism</td>
</tr>
</tbody>
</table>

![Figure 1: Research Model](image)

Hypotheses of the Study

H1: Agreeableness influences organizational effectiveness.

H2: Conscientiousness is associated with organizational effectiveness.

H3: Extraversion is associated with organizational effectiveness.

H4: Openness to experience is associated with organizational effectiveness.

H5: Neuroticism is associated with organizational effectiveness.

H6a: EMRs moderate the association among agreeableness and organizational effectiveness.

H6b: EMRs moderate the association among conscientiousness and organizational effectiveness.

H6c: EMRs moderate the relationship between extraversion and organizational effectiveness.

H6d: EMRs moderate the connection among openness to experience and organizational effectiveness.

H6e: EMRs moderate the relationship between neuroticism and organizational effectiveness.

Results and Discussions

The following sections are designed for inclusive clarification and statistical inquiry of data to make this investigation a pure academic endeavor.
Alpha Test for Assessing Reliability for Variables

Though procedures were well authenticated, investigators also required to perform the further investigation of the constructs by performing the alpha test in order to get insurance that all items have consistency and inter-item reliability against the collected sample. Therefore, coefficients of cronbach alpha values were envisioned in order to verify the reliability of measures and core constancy planned for different scales. The values of cronbach alpha near to and greater than 0.7 are considered acceptable for reliability of scale questionnaires (Feng-mei, Shi-hua, & Yong, 2007). The value of all scales varies from 0.68 to 0.91 for coefficient of Cronbach’s alpha as shown in Table 1.

<table>
<thead>
<tr>
<th>Constructs/Variables</th>
<th>Number of Items</th>
<th>Cronbach's Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality Traits</td>
<td>44</td>
<td>0.68</td>
</tr>
<tr>
<td>Organizational Effectiveness</td>
<td>14</td>
<td>0.91</td>
</tr>
<tr>
<td>EMRs</td>
<td>16</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Descriptive Statistics

A suggestive investigation is a plan that tries to increase additional knowledge about a detailed attribute inside a particular field of study. Supported expressive statistics are significant in unfolding a set of figures (Triola, 2003). The descriptive statistics which include score for mean and standard deviations are revealed in Table 2. The mean value for neuroticism is 3.37 which principally explains that the majority of the respondents have showed moderately disagree reply for neuroticism. The standard deviation score for neuroticism is 0.75 which indicates that the divergence of data from mean of neuroticism. All the other values of mean and standard deviation are satisfactory.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>3.37</td>
<td>0.75</td>
</tr>
<tr>
<td>Extraversion</td>
<td>4.28</td>
<td>0.60</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>4.77</td>
<td>0.57</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>4.67</td>
<td>0.64</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4.73</td>
<td>0.73</td>
</tr>
<tr>
<td>Organizational Effectiveness</td>
<td>5.06</td>
<td>0.71</td>
</tr>
<tr>
<td>EMRs</td>
<td>4.16</td>
<td>0.86</td>
</tr>
</tbody>
</table>
**Bivariate Relationships**

The analysis of correlation is the reflection of behavior of data and is utilized to show association among diverse variables used in the study. Correlation results are used to drop the scope of indecisiveness. The predictions backed by analysis of correlation are reliable and near to practicality. It is employed to gauge the associations among two or more than two variables. *Table 3* indicates the correlation amongst the variables of research. The correlation among organizational effectiveness and openness to experience is 0.185. The correlation between EMRs and openness to experience is 0.194. All other correlation values are satisfactory for the study. All the details are provided in *Table 3* below.

<table>
<thead>
<tr>
<th>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>Neutrocism</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.277**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to</td>
<td>-0.143**</td>
<td>0.048</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-0.244**</td>
<td>0.267*</td>
<td>0.176**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientious</td>
<td>-0.389**</td>
<td>0.255*</td>
<td>0.289**</td>
<td>0.481</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Org. effectiveness</td>
<td>0.007</td>
<td>-0.028</td>
<td>0.185**</td>
<td>0.037</td>
<td>0.095*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EMR</td>
<td>-0.001</td>
<td>0.064</td>
<td>0.194**</td>
<td>0.084</td>
<td>0.142**</td>
<td>0.374**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at 0.01 level (2-tailed)**

*Correlation is significant at 0.05 level (2-tailed)*

**Interpretation of Demographics**

Demographics indicate a quantifiable viewpoint of a population, generally includes age, sex, income, occupation and so on. In this research, subsequent demographic variables were calculated: gender, age, experience and highest qualification. *Table 4* displays that most of the participants were male, age between 46-50 years, job experience between 0-5 years and having the degree of Bachelor of Medicine and Bachelor of Surgery. *Table 4* epitomizes current data about demographic characteristics of respondents.

<table>
<thead>
<tr>
<th>Demographic Characteristics of Respondents (N=503)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Variable</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>20-25</td>
</tr>
<tr>
<td>26-30</td>
</tr>
<tr>
<td>31-35</td>
</tr>
</tbody>
</table>
Regression Analysis

Regression analysis is broadly utilized for forecasting and prediction. Results of regression in Table 5 depict the outcome of five personality traits on organizational effectiveness. Organizational effectiveness is the dependent variable; whereas, the five personality traits (agreeableness, conscientiousness, extraversion, openness to experience and neuroticism) are independent variables. The results reveal that the model is statistically significant ($F=13.130$ and $p<0.05$). The factors involved in the model appear to acquire explained variance of about 11.7 percent in the reliant variable i.e., organizational effectiveness. Between autonomous factors, agreeableness appears to acquire superior result on organizational effectiveness with the worth of $beta=0.240$; $t$ value$=1.939$ and the value of $p$ is $<0.05$. The worth of $beta=0.240$; so, one unit of rise or fall in the sovereign variable will carry around 0.240 unit rise or fall in the dependent variable. The value of $p$ is $<0.05$; hence, this offers an indication for acceptance of hypothesis H1 i.e., agreeableness influences organizational effectiveness and the effect is positive.

Conscientiousness is the second variable which has an impact on organizational effectiveness with beta value = 0.120; $t$ value = 4.243 at 95 percent confidence level. The value of $p$ is $<0.05$; so, hypothesis H2 is accepted, which frames that conscientiousness is associated with organizational effectiveness. For extraversion, beta value is 0.178; $t$ value is 3.837 and $p$ value is 0.200; therefore, the hypothesis H3 is not accepted, which frames that extraversion is associated with organizational effectiveness. In case of openness to experience, $p$ value is $<0.05$; so, the hypothesis H4 is also accepted, which articulates that openness to experience
is associated with organizational effectiveness. The effect of openness to experience is positive. For neuroticism, beta value is negative and p value is 0.001; so, the hypothesis H5 is accepted, which frames that neuroticism is associated with organizational effectiveness.

<table>
<thead>
<tr>
<th>IV</th>
<th>DV</th>
<th>$R^2$</th>
<th>F- value</th>
<th>Sig</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>Organizational Effectiveness</td>
<td>0.117</td>
<td>13.130</td>
<td>0.000</td>
<td>0.240</td>
<td>1.939</td>
<td>0.040</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Organizational Effectiveness</td>
<td>0.120</td>
<td>4.243</td>
<td>0.001</td>
<td>0.178</td>
<td>3.837</td>
<td>0.200</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Organizational Effectiveness</td>
<td>0.178</td>
<td>3.837</td>
<td>0.001</td>
<td>0.193</td>
<td>4.197</td>
<td>0.001</td>
</tr>
<tr>
<td>Openness to Neuroticism</td>
<td>Organizational Effectiveness</td>
<td>0.250</td>
<td>-3.250</td>
<td>0.001</td>
<td>-0.250</td>
<td>-3.250</td>
<td>0.001</td>
</tr>
</tbody>
</table>

IV stands for Independent Variables
DV stands for Dependent Variables

**Moderation Regression Analysis of Electronic Medical Records between Personality Traits and Organizational Effectiveness**

With a precise aim to see the influence of moderator between the dependent and independent variables, the moderation regression examination has been applied (Cohen, Cohen, West, & Aiken, 2013). Baron and Kenny’s estimation method is used in moderation regression analysis. To get the multiplicative term, moderating and the independent variables were multiplied together.

Table 6 demonstrates the association among agreeableness and organizational effectiveness moderated by EMRs. The analysis of moderation was completed in 3 steps. The model is significant statistically ($F=24.519$ with sig $< 0.05$) at step 1. The value of $R^2$ is 11.5 percent; the worth of beta is 0.325 and t value is 6.810. These values are reasonable and within desired limits. At step 2, the worth of $R^2$ has been improved and now it is 15 percent. Beta value for agreeableness and EMRs are 0.132 and 0.311 respectively. The model is again statistically significant at step 3. The worth of $R^2$ has more amplified to 28.5 percent and it specifies that 28.5 percent of variance can be enlightened by agreeableness and EMRs. The interaction term has been introduced at step 3. The outcomes demonstrate that beta value is 0.960 and p is $< 0.05$ confirming that EMRs moderate the association among agreeableness and organizational effectiveness. This moderation has a positive impact and so, our hypothesis H6a is accepted, which articulates that EMRs moderate the association among agreeableness and organizational effectiveness.
The connection among conscientiousness and organizational effectiveness moderated by EMRs is revealed in Table 7. The models are statistically significant at all the three steps. From interaction term, it has been established that beta value is -0.598 but p is > 0.05. So, it verifies that EMRs do not moderate the relationship between conscientiousness and organizational effectiveness and therefore, our hypothesis 6b is rejected, which articulates that EMRs moderate the association among conscientiousness and organizational effectiveness.

The association between extraversion and organizational effectiveness moderated by EMRs was shown in Table 8. The results of interaction terms how that beta value is 0.775 and p is < 0.05 confirming that EMRs moderate the relationship between extraversion and organizational effectiveness. So, hypothesis 6c is accepted, which articulates that EMRs moderate the relationship between extraversion and organizational effectiveness.
Table 9 displays the connection between openness to experience and organizational effectiveness moderated by EMRs. From the interaction term, it has been established that beta value is 0.327; t value is 2.807 and p value is < 0.05 endorsing that EMRs moderate the connection among openness to experience and organizational effectiveness; so, our hypothesis 6d is accepted, which articulates that EMRs moderate the connection between openness to experience and organizational effectiveness.

Table 9
Regression between Openness to Experience and Organizational Effectiveness (Org. Eff.) moderated by EMRs (N=503)

<table>
<thead>
<tr>
<th>Step</th>
<th>IV</th>
<th>DV</th>
<th>R²</th>
<th>ΔR²</th>
<th>F-value</th>
<th>Sig</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Openness to Experience</td>
<td>Org. Eff.</td>
<td>0.760</td>
<td></td>
<td>41.040</td>
<td>0.000</td>
<td>0.276</td>
<td>6.345</td>
<td>0.001</td>
</tr>
<tr>
<td>2</td>
<td>Openness to Experience</td>
<td>Org. Eff.</td>
<td>0.155</td>
<td>-0.605</td>
<td>45.725</td>
<td>0.000</td>
<td>0.214</td>
<td>5.093</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>EMRS</td>
<td></td>
<td>0.287</td>
<td></td>
<td>6.804</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Openness to Experience</td>
<td>Org. Eff.</td>
<td>0.156</td>
<td>0.001</td>
<td>30.769</td>
<td>0.000</td>
<td>0.408</td>
<td>3.223</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>EMRS</td>
<td></td>
<td>0.410</td>
<td></td>
<td>2.134</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td></td>
<td>0.327</td>
<td></td>
<td>2.807</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10 shows the relationship between neuroticism and organizational effectiveness moderated by EMRs. The interaction term illustrates that beta value is -0.998; t value is -4.296 and p value is < 0.05 settling that EMRs moderate the association among neuroticism and organizational effectiveness; so, hypothesis 6e is accepted i.e., EMRs moderate the relationship between neuroticism and organizational effectiveness. This moderation has a negative influence.

Table 10
Regression between Neuroticism and Organizational Effectiveness (Org. Eff.) moderated by EMR(N=503)

<table>
<thead>
<tr>
<th>Step</th>
<th>IV</th>
<th>DV</th>
<th>R²</th>
<th>ΔR²</th>
<th>F-value</th>
<th>Sig</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neuroticism</td>
<td>Org. Eff.</td>
<td>0.140</td>
<td></td>
<td>17.773</td>
<td>0.000</td>
<td>0.591</td>
<td>2.332</td>
<td>0.001</td>
</tr>
<tr>
<td>2</td>
<td>Neuroticism</td>
<td>Org. Eff.</td>
<td>0.161</td>
<td>0.021</td>
<td>31.158</td>
<td>0.000</td>
<td>0.601</td>
<td>2.788</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>EMRs</td>
<td></td>
<td>0.704</td>
<td></td>
<td>7.767</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Neuroticism</td>
<td>Org. Eff.</td>
<td>0.181</td>
<td>0.020</td>
<td>27.648</td>
<td>0.000</td>
<td>0.824</td>
<td>4.234</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>EMRS</td>
<td></td>
<td>0.992</td>
<td></td>
<td>6.224</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td></td>
<td>-0.998</td>
<td>0.029</td>
<td>-4.296</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of current investigation are assessed to the consequences of previous studies. The identified relationship between agreeableness and organizational effectiveness was almost nonexistent in the previous research. Nevertheless, the results of this study are in agreement with the results of (Witt, Burke, Barrick, & Mount, 2002). So, agreeableness is an important forecaster of
organizational effectiveness and it has a positive impact on increasing hospital effectiveness.

In case of conscientiousness, results of the research are in line with the study of (Colbert, Barrick, & Bradley, 2014). So, conscientiousness has a direct influence on enhancing organizational effectiveness. Hence, organizational effectiveness of hospitals will be high when doctors’ conscientiousness is elevated so they can plan, organize and carrying out their tasks in an excellent manner.

In case of extraversion, outcomes of the study are in line with the study of (Davis Mkoji & Sikalieh, 2012). So, extraversion is not related to organizational effectiveness. The outcomes also confirm the results of (Colquitt et al., 2009) which state that extraversion is not the forecaster of organizational performance.

The results of openness to experience also get support from the study of (Amir, Naz, Hafeez, Ashfaq, & Dogar, 2014). So, openness to experience has a direct effect on increasing organizational effectiveness. The outcomes of neuroticism also match with the studies of (Amir et al., 2014) and (Biswas, 2008). Neuroticism is negatively contributing towards organizational effectiveness but it has a significant impact.

As far as the moderation outcomes are concerned, it has been proved that EMRs moderate the association among (agreeableness, extraversion, openness to experience and neuroticism) with organizational effectiveness. EMRs do not moderate the association among conscientiousness and organizational effectiveness. The personality of people impacts the adoption and implementation of EMRs (Rahman, 2017). Furthermore, there is a relationship between EMRs and organizational effectiveness (Plantier et al., 2017).

This research is expected to be one of the most important contributions in the field of effectiveness. The current research findings add to remove the empirical openings in the area of organizational effectiveness. The present study has been carried out in the organizational context; so, this context has given soundness of the outcomes of the investigation.

Conclusion

The research findings provide a deep understanding into several factors which have noteworthy effects on the organizational effectiveness in the area of healthcare of Pakistan. As per findings of this research, following conclusions could be drawn. It was a quantitative study which was conducted to examine and investigate the connection among personality traits and organizational effectiveness. Agreeableness, conscientiousness, openness to experience and neuroticism has an association with organizational effectiveness. Neuroticism is a personality trait which contributes negatively towards organizational effectiveness. The association among extraversion and organizational effectiveness is irrelevant. Besides, the
investigation also evaluated whether EMRs moderate the association among five personalities traits and organizational effectiveness through moderated regression analysis. Except conscientiousness, all other personality traits carry an important influence on organizational effectiveness. Thus EMRs moderate the association among traits of personality and organizational effectiveness excluding conscientiousness.

So, the doctors, having the characteristics of agreeableness, conscientiousness and open to experience, allow collaborations to be shaped, that permit for greater heights of organizational effectiveness and performance at hospitals. The doctors who are neurotic in nature, they don’t perform well and also affect the general organizational effectiveness. The study is of great importance for hospital management i.e., they may focus on different personality traits of doctors before hiring them and some psychological tests may be conducted in order to hire the doctors.

Recommendations

The following are some recommendations and suggestions which can be applied in future researches.

I. The current research was surrounded to examine the direct and moderate connections between the constructs; mediating investigations are suggested to fill the study gap.

II. The researchers also recommend that the current research may be replicated in some other organizations to increase the generalizability of the study.

III. The present study is solely quantitative. So, there is a requirement of carrying out a qualitative study with the identical variables to obtain further subtle results.
References


