Full Length Research Paper

An investigation of the relationship between employees’ emotional intelligence and performance

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This paper examines the relationship between employees’ emotional intelligence and their performance. A total of 444 employees working in privately owned organizations were selected conveniently for this study. Emotional intelligence was measured through a scale consisting of 33 items and employee performance through a 16 items scale that measured their organizational citizenship behavior. These were self reported measures asking for responses on a five point Likert scale. Pearson correlation and linear regression analyses were applied to assess the association and prediction relation between independent and dependent variables. The results revealed a moderately high correlation between emotional intelligence and organizational citizenship behavior. It was also established that employees’ job performance can be predicted significantly based upon their emotional intelligence scores. The predictive power of emotional intelligence for performance suggests the use of emotional intelligence measure as a selection tool by human resource managers.

Key words: Organizational behavior, human resource management, emotional intelligence, organizational citizenship behavior, employee selection.

INTRODUCTION

Besides the five senses that receive external stimuli, human bodies respond internally by receiving and understanding information through emotions and feelings. Accessing internal reactions and combining them with intellect makes one more engaged and authentic. So, people are more confident to take decisions because they are not relying solely on judgment, intellectual ability or memory (Fuimano, 2004). At workplace, emotions like anger and jealousy often push aside logic and rationality. Managers use fear, pride and other emotions to both treat and motivate their subordinates (Kreitner and Kinicki, 2004, p. 171). Myers and Tucker (2005) concluded that as a theoretical model emotional intelligence (EI) promotes both intrapersonal and interpersonal communication skills to understand the role of emotions in the workplace. Generally, people can solve technical problems far easier than human problems they face in home as well as professional life (Mayer and Ciarrochi, 2006, p. 8). Human resource managers have started assessing employee performance not only by the outputs delivered but also how effectively they deal with colleagues and staff. It may be common for managers to have ‘what’ but not ‘how’ skills (Wong and Snell, 2003).

An organization can reap the benefits of having emotionally intelligent employees in two ways. The managers will have a workforce willing to work with passion and employees will have managers very receptive and open to their needs (Johnson and Indvik, 1999). Besides this, organizations require employees to be emotionally intelligent to serve customers in a better way and to create and maintain a lively work environment. Employers can also opt to reduce employees’ occupational stress by enhancing their EI; this suggests that emotional intelligence is an important construct to be studied in relation to performance. Hence, the current study investigates the relationship of employees’ emotional intelligence and their performance. The objectives of the study are:

1. assess the nature of relationship between employee EI and performance
2. To predict employee performance based upon their
scores of EI.

**Literature review**

**Emotional intelligence**

Research has substantiated the importance of emotional intelligence for every day life (Ciarochi and Scott, 2006), marital life (Brackett, Warner and Bosco, 2005; Fitness, 2006), language learning (Aki, 2006) and academic life (Farooq, 2004; Jaeger, 2003; Liff, 2003).

Dulewicz, Higgs and Slaski (2003) found managers' emotional intelligence correlated positively with quality of work life and morale. Brackett, Mayer and Warner (2004) concluded that low scores on EI were associated with poor quality peer relations. Suliman and Al-Shaikh (2007) revealed that employees with higher levels of EI were found to report higher levels of readiness to create and innovate. Carmeli (2003) indicated that emotionally intelligent managers tend to develop high commitment towards their careers and high affective commitment for the organizations where they work. Employees with higher levels of EI tended to report lower levels of intra-individual conflict (Suliman and Al-Shaikh). So, employees' emotional intelligence affects the behavior and attitude they usually hold within their organizations.

Being capable of participating effectively in a team environment is an important consideration for success in work life. Sue-Chan and Latham's (2004) study indicated a high positive correlation between emotional intelligence and team playing behavior. Rapisarda (2002) indicated that EI competencies are positively correlated with team cohesiveness. According to Sardo (2004), a workforce in touch with the emotional world of others was more able to achieve organizational outcomes through high level workplace relationships. Welch (2003) proposed that teams high on EI are likely to have far more initiative in dealing with organizational challenges and are sensitive to change. Langhorn's (2004) research showed that managers' emotional intelligence was able to predict team satisfaction with a reasonable degree of accuracy. The impact of employees' emotional intelligence can be observed even on their job stress, job satisfaction and the satisfaction of customers they serve. Oginska-Bulik (2005) indicated a significant negative relationship between emotional intelligence and perceived stress in the workplace. Dulewicz et al. (2003) also found strong negative correlation of managers' emotional intelligence with stress and distress at work. Research has implied that employees' emotional intelligence can predict their job satisfaction (Carmeli, 2003; Sy, Tram and O'Hara, 2006). Kernbach and Schutte's (2005) study revealed that higher emotional intelligence in service providers lead to greater customer satisfaction. Carmeli (2003) asserted that emotional intelligence was negatively related to withdrawal intentions from the organization.

To sum it up, employees’ EI was found to be positively related to work behavior, career commitment, team playing behavior, job satisfaction, and customer satisfaction; and negatively related to employees’ withdrawal intentions and occupational stress. Hence it ca be claimed that, in their work lives employees’ emotional intelligence confers traits, attitudes and behaviors that help them to be high performers.

**Job performance**

Studies have revealed that performance in the workplace is influenced by a number of variables like motivation (Suh and Shin, 2005), satisfaction with job security (Yousef, 1998), personality (Berry, Page, and Sackett, 2007), general intelligence (Dulewicz and Higgs, 2000), and emotional intelligence (Higgs, 2004; Langhorn, 2004). However, EI is responsible for greater variance in performance than any other factor. According to Goleman (1995, p. 36) research indicates that at best general intelligence contributes about 20 percent of the factors that determine success in life. Dulewicz and Higgs (2000) indicated that 16% variance in individual success in organizational setting is explained through managerial intelligence, 27% by IQ, and an even higher 36% by emotional intelligence. The relationship between emotional intelligence and job performance also seems logical, because, increasingly the employers are considering the EI of the applicants during the recruitment and selection process (Cadman and Brewer, 2001) and employee development programs.

According to Bagshaw (2000), emotional intelligence is being able to harness emotions effectively; hence it plays a significant role in business success. Cherniss (2000) suggested that a person’s ability to perceive, identify and manage emotions provides the basis for the kinds of social and emotional competencies that are important for success in almost any job. It implies that job performance is determined largely by the competencies pertaining to emotional intelligence.

Traditionally, cognition and emotion have been considered as two distinct and separate abilities having their own intelligences and areas of influence. Cognitive based performance that was thought to be a function of general intelligence only, is influenced by emotional intelligence. Research has indicated that, overall emotional intelligence and its sub-components namely perceiving emotions and regulating emotions all contributed positively to individual cognitive-based performance (Lam and Kirby, 2002). Rosete and Ciarrochi's (2005) study found that EI was related to a leader’s effectiveness in being able to achieve organizational goals. Additionally, it was revealed that EI may be useful in identifying who is and is not likely to deal effectively with colleagues and staff. Dulewicz et al. (2003) found that emotional intelligence was positively correlated with managerial performance.
Langhorn (2004) proved that managers’ emotional intelligence scores can be used to predict their performance.

Research revealed that emotional intelligence contributes to employee performance measured through their goal achievements in respective functional departments like sales, accounts, and customer service. Deeter-Schmelz and Sozka (2003) suggested that emotional intelligence might be an important characteristic for sales success. Rozell et al. (2006) indicated that mean emotional intelligence scores of salespeople in the highest performance category were significantly greater than scores of sales people in the lowest performance category. Bachman, Stein, Campbel and Sitarenios (2000) suggested that higher levels of emotional intelligence of accounts officers show an increase in their cash goal attainment. In another study, Higgs (2004) indicated that emotional intelligence was significantly related to call center agents’ performance.

According to Sy et al. (2006) employees’ EI positively predicted their job performance. A meta-analytic study (Rooy and Viswesvaran, 2004) showed that emotional intelligence measures have an operational validity of 0.24, 0.10 and 0.24, for predicting performance in employment, academic and life settings, respectively. Deshpande, Joseph, and Shu (2005) observed a significant difference in aggregate counterproductive behavior between high and low emotional intelligence groups; thus, suggesting that high emotionally intelligent people tend to be better corporate citizens and hold better ethical attitudes toward their firm and work.

The current study employs organizational citizenship behavior (OCB) as a measure of employee performance, so subsequent paragraph highlights only the studies that used OCB as a measure of performance. The research revealed that organizational citizenship behavior was positively correlated with emotional intelligence (Carmeli, 2003; Carson, Carson, Fontenot and Burdin, 2005). Additionally, it was found that emotional intelligence dimensions of empathy and internal motivation were significantly correlated with organizational citizenship behavior. Study by Cote and Miners (2006) asserted that employees having a low cognitive intelligence score perform tasks correctly and engage in organizational citizenship behavior directed at the organization repeatedly if they are emotionally intelligent. The extant literature emphasizes that emotional intelligence is associated with success in every-day life, marital relations, academics and work life. It is quite obvious that emotional intelligence contributes positively to performance especially in the work place.

In the light of preceding literature review, the following hypotheses have been formulated:

**H1:** Employees’ emotional intelligence (EI) is positively related with their job performance

**H2:** Employees’ scores on EI significantly predict their job performance

### METHODOLOGY

#### Sample

To generate relevant data, a total of 1200 questionnaires were distributed conveniently to employees in various private sector organizations, out of which 481 questionnaires were returned. A total of 17 questionnaires were excluded from the study due to incompleteness and 20 respondents were discarded because of univariate and multivariate outliers. So the data from the remaining 444 respondents was used for analysis. Age of the participants ranged from 21 to 62 years with a mean age of 30 years and standard deviation of 6.6 years. Table 1 summarizes frequency distribution of some demographic variables.

#### Instruments

Emotional intelligence was assessed through a scale developed by

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>374</td>
<td>84.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>68</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Missing Value</td>
<td>2</td>
<td>.5</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>223</td>
<td>50.2</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>210</td>
<td>47.3</td>
</tr>
<tr>
<td></td>
<td>Missing Value</td>
<td>11</td>
<td>2.5</td>
</tr>
<tr>
<td>Education</td>
<td>Intermediate</td>
<td>12</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>72</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>301</td>
<td>67.8</td>
</tr>
<tr>
<td></td>
<td>Ms And Above</td>
<td>10</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>Missing Value</td>
<td>49</td>
<td>11.0</td>
</tr>
</tbody>
</table>
Table 2. Descriptive statistics for emotional intelligence and organizational citizenship behavior.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>444</td>
<td>2.73</td>
<td>4.88</td>
<td>3.8145</td>
<td>0.34778</td>
</tr>
<tr>
<td>OCB</td>
<td>444</td>
<td>2.50</td>
<td>5.00</td>
<td>3.9605</td>
<td>0.44391</td>
</tr>
</tbody>
</table>

Table 3. Showing Correlations between Dependent and Independent Variable.

<table>
<thead>
<tr>
<th>Emotional Intelligence</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCB</td>
<td>0.635(**)</td>
<td>0.000</td>
<td>444</td>
</tr>
</tbody>
</table>

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

Schutte et al. (1998). The tool contains 33 items using a 5-point Likert scale, where 1 represents 'strongly disagree' and 5 'strongly agree'. Total score may range from 33 to 165. The high scores indicate employees’ higher ability to recognize and manage emotions. Organizational citizenship behavior was measured by employing a service-oriented OCB scale (Bettercourt et al., 2001). It is a 16-item scale that used the same 5-point Likert scale. The total score may range from 16 to 80. The high scores indicate the higher levels of employees’ organizational citizenship behavior.

Procedure

Participants were approached in their respective organizations/offices. After having established rapport with the participants, they were asked to respond to each statement in the questionnaire about the way they feel, think or act in their lives or organizations by encircling the number that most appropriately matched their answer. They were requested to fill the questionnaire on the spot or on their convenience and return it to the researchers.

Statistical techniques

To check the association between EI and OCB, Pearson Correlation test was applied and to measure the prediction power of independent variable for dependent variable, linear regression was calculated.

RESULTS

The internal reliabilities of the measures employed were checked by calculating their alpha reliability coefficients. For emotional intelligence, the consistency reliability of 0.82 was slightly lower than 0.90 reported by Schutte et al. (1998), while for OCB overall reliability was 0.78. The alpha scores secured for these variables are quite acceptable for research in social sciences. Table 2 indicates the descriptive statistics for the measures used.

Hypothesis 1

To test the first hypothesis that employees’ EI is positively related with performance as measured through organizational citizenship behavior, Pearson correlation analysis was applied as both variables are measured on interval level. Table 3 indicates the presence of a significant positive correlation between total EI scores and OCB (p < 0.01). Employees’ scores on emotional intelligence exhibit a moderately high positive association (r = 0.63) with their organizational citizenship behavior. The results of the current research support the first hypothesis.

Hypothesis 2

The presence of a strong positive association between employees’ EI and performance suggested that employees’ future performance could be predicted on the basis of their EI scores. The second hypothesis of the study implies that employees’ EI scores significantly predict their organizational citizenship behavior (OCB). A simple linear regression analysis was applied, because, OCB as a single continuous dependent variable and EI as a single continuous independent variable are involved in this case. The test produced the significance values for hypothesis testing regarding individual regression parameters. Results in Table 4 show a significant F value (less than 0.05) for the prediction relation between EI and OCB. Thus, the hypothesis asserting that employees’ scores on emotional intelligence significantly predict the future performance measured through organizational citizenship behavior is supported.

Table 4 proves only the presence of a prediction relation between EI and the dependent variable (OCB). The strength of the relationship is shown in Table 5 with the help of the values of intercept (0.86) and slope for EI regression line (0.81). This suggests that for a one unit increase in emotional intelligence, the respective manager can significantly predict a 0.81 increase in employee’s organizational citizenship behavior, whereas a slope of 0.63 for EI is produced when the test utilizes standardized independent and dependent variables.

To measure the strength of a prediction relation
Table 4. Showing Prediction of OCB through Scores on EI.

<table>
<thead>
<tr>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>35.220</td>
<td>1</td>
<td>35.220</td>
<td>298.928</td>
</tr>
<tr>
<td>Residual</td>
<td>52.077</td>
<td>442</td>
<td>0.118</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87.297</td>
<td>443</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), Emotional intelligence.

Table 5. Regression coefficients (a).

<table>
<thead>
<tr>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.868</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>0.811</td>
</tr>
</tbody>
</table>

a Dependent variable: Organizational citizenship behavior.

Table 6. Model summary showing simple regression for EI and performance.

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. error of estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.635(a)</td>
<td>0.403</td>
<td>0.402</td>
<td>0.34325</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Emotional Intelligence

through ‘Beta’ may indicate some inflated results. Consequently a conservative measure ‘coefficient of determination’ was calculated. Table 6 indicates an ‘R²’ value of 0.40 that asserts that 40% of the variance in OCB can be accounted for by employee’s score on EI. This result supports the second hypothesis of the study that employees’ EI score significantly predict their job performance (OCB).

DISCUSSION

Based on the findings of previous research, a significant positive correlation was expected between EI and performance. The results indicated a moderately high positive correlation (r = 0.635) between the independent (EI) and dependent (OCB) variables. Nearly, similar results were found by Harmer’s (n.d.) study that indicated the value for the correlation coefficient as 0.53 between emotional intelligence and organizational citizenship behavior. However, some previous studies had shown weak EI-performance relationships. Carmell’s (2003) study showed a correlation coefficient of 0.38, a figure considerably less than reported by current study. EI was measured through Schutte et al.’s (1998) research tool and OCB by using three items only. The low correlation in previous research might be the result of using a single aspect of OCB (altruistic behavior) that measure employees’ behavior towards coworkers only whereas the current study measures OCB on three factors: loyalty behavior, employee participation and conscientious behavior. Carson et al. (2005) reported a correlation coefficient of 0.33 between emotional intelligence and OCB. Their study measured EI through a 15-item scale and OCB through a 13-item scale. The weak correlation in their study might have resulted because the measures employed were different, short and less used by other researchers. Bastian (2005) found the majority of correlations between the life skills much higher for self-report EI measures than for ability-based measures. Hence, the high association found in the current study (r = 0.635) may be attributed to its reliance on self-report scales for the independent and dependent variables; that might have led to a more common method variance.

The second hypothesis in this study implies that employees’ score on EI significantly predicts their job performance. The results proved that the slope value for EI to predict OCB was 0.81, and the coefficient of determination was 0.40. Previous research had reported somewhat less predictability power of emotional intelligence for OCB than was established by the current study. According to Harmer (n.d.), only 28% of the variance in OCB was found to be accountable due to emotional intelligence. EI was measured through Schutte
et al.’s self-report inventory and OCB through a 34 item scale having subcomponents of loyalty, obedience, social participation, advocacy participation and functional participation. Possible reasons for the low R² value might be due to different culture and environment (Harmer’s study was conducted in Australia) and potentially different aspects of the OCB measure being employed. Rosete (2007, p. 144) asserted that ability based EI measure significantly predicted the performance of interpersonal behaviors (R² change = 0.18) and business outcomes achieved (R² change = 0.05). Less predictive power may be attributed to use of ability-based measure of EI and actual performance measures for managers/leaders. Chia (2005) revealed that recruiters look for applicants’ soft skills and competencies to select candidates for further interview as well as for final job offer. This orientation of recruiters also validated the prediction result of the current study.

Conclusion

In a slowed economy, get smart techniques like quality management, re-engineering and customer relationship management have reached a maximum effectiveness. Careers that rose solely on the use of logical and analytical skills are having a difficult time in this volatile business environment (James and LaMotta, 2002). According to Slaski and Cartwright (2003), emotional intelligence can be taught and learnt. McQueen (2004) proposed that EI should be included in nursing education to enable them for better patient care.

The current study proves a moderately high positive correlation between employees’ EI and performance. It was also established that employees’ performance can be significantly predicted based upon their EI scores. So, it can be argued that a clear understanding of the importance of EI in work setting may help managers to develop human resources into a more positive and committed work force by developing and enhancing their emotional intelligence abilities. Human resource managers may base their decisions to select, promote, transfer and retain employees on the basis of their EI scores.

Contribution of the study

On theoretical side, the reliability coefficients for the scales employed provide the basis for future research. The establishment and measurement of the association between EI and OCB extends its validity to the business environment of a developing country like Pakistan. The predictive power of EI to explain the corresponding change of OCB is an important contribution of the study to the existing body of knowledge.

On practical front, the current study has proved that employees’ performance can be predicted on the basis of their scores on EI, which also has suggested the use of emotional intelligence measures as a selection tool by human resource managers (Cadman and Brewer, 2001; Fatt, 2002). Dulewicz and Higgs (2004) have shown that emotional competencies can be increased and developed through training courses. Fatt (2002) recommended that managers should consider the contributions of EI as an important factor for the development of staff. This study indicated a high and positive association of EI with employee performance. Hence, organizations can design EI interventions to train and develop human resources to get work performance improved.

Limitations and future research

The very first limitation of the study is its reliance on the self-report questionnaire as compared to ability based measure. As the study was done in private sector organizations, where emphasis remains on efficiency/productivity and job insecurity prevails pervasively, so the respondents may go for impression management. Another shortcoming of self-report data is that subjects may choose to respond in a socially desirable way thus distorting the mean values for variables. For the current study, data for the both measures have been sought from the same source - employees - so any inefficiency in the source may pollute the measures and give rise to imprecise results for the study. Another limitation might be the assessment of performance because it measured only one aspect of performance; that is, organizational citizenship behavior and ignored job specific/task performance and counterproductive behavior. The reliance of the study on convenience sampling limits the generalizability of results to a wider population.

The current research leaves certain areas unexplored. The study relates and predicts performance only on the basis of emotional intelligence. Future research may investigate as to why EI leads to higher performance. The study conceives an EI-performance relationship where EI was taken as an independent variable and OCB as a dependent variable. In order to study such a phenomenon further, longitudinal studies using OCB as an independent variable and EI as dependent variable can be undertaken.

REFERENCES


