

## Emotional Intelligence and job performance: Evidence from railroad industry

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### CHRONICLE

### ABSTRACT

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This paper presents an empirical investigation to study the relationship between emotional intelligence and job performance in railroad industry. The study uses two questionnaires, one for measuring emotional intelligence adopted from Salovey and Mayer (1989) [Salovey, P., & Mayer, J. D. (1989). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.] and the other one for measuring job performance. The study selects 300 full time employees who work for railroad industry in city of Tehran, Iran, distributes two questionnaires among the employees and managed to collect all filled ones. Using Spearman correlation, the study has determined a positive and meaningful relationship between emotional intelligence and job performance ( $r = 0.796$ , Sig. = 0.000). In addition, there were positive and meaningful relationships between four components of emotional intelligence, namely consciousness ( $r = 0.642$ , Sig. = 0.000), self-regulation ( $r = 0.41$ , Sig. = 0.000), self-awareness ( $r = 0.552$ , Sig. = 0.000) and social skills ( $r = 0.524$ , Sig. = 0.000).

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## 1. Introduction

The role of human resources for development of a society is very important and it is considered as the most effective pillars of economic, social, and cultural development. Economic and social development make indispensable, equipping qualified, skilled, and continuously enhance skills of human resources. While skilled, knowledgeable, and experienced employees who have spent years of training cannot be replaced easily in a short time in an organization, by their absence, any organization will be in great loss. For maintaining human resources to achieve a superior performance and to gain efficiency and effectiveness results we need to have, a program developed in the form of an integrated system, that could be implemented to achieve organizational goals and promoted productivity. Over the past few decades, the concept of emotional intelligence has been increasingly introduced as a component of the environment associated with human multiple behaviors in different environments (Carmeli, 2003). Emotional intelligence includes the ability to enhance the quality of

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life and society. In fact, we can say that emotional intelligence involves the ability to perceive and to express emotion accurately and their use to facilitate understanding of the thoughts and emotions management for emotional growth (Lopes et al., 2006; Kafetsios & Zampetakis, 2008). However, a number of concepts including emotional competence, emotional creativity, accurate empathy, as well as relative experts and researchers have been used for the description of these structures. Emotional intelligence consists of several components, including self-awareness, self-regulation, empathy and social skills.

## **2. The proposed study**

This paper concentrates on the interaction between emotional intelligence and job performance for a case study of railroad industry in city of Tehran, Iran to achieve excellence. The research hypothesis is as follows:

*The main hypothesis:* There is a meaningful interaction between employees' emotional intelligence and their performance.

*First hypothesis:* There is a meaningful interaction between self-awareness and performance of Railroad employees of the Islamic Republic of Iran - Tehran.

*Second hypothesis:* There is a meaningful interaction between the self-regulation and performance of the Railroad employees of the Islamic Republic of Iran – Tehran.

*Third hypothesis:* There is a meaningful interaction between the social consciousness and the Railroad employees of Iran - Tehran.

*Fourth hypothesis:* There is a meaningful interaction between the social management and operation of the Railroad employees of the Islamic Republic of Iran – Tehran.

### *The definition of Emotional Intelligence*

Two different fields of “Thriller” and “intelligence” make the structure of emotional intelligence. Emotional intelligence includes the ability of awareness toward the emotion to use them to improve employee performance. In fact, we can say that emotional intelligence involves the ability to perceive and to express emotion accurately and use them to facilitate understanding management's thoughts and emotions for emotional growth. However, a number of concepts including emotional competence, emotional creativity, accurate empathy, as well as relative experts and researchers have been used for the description of these structures. Despite various theories and patterns for measuring emotional intelligence, most theorists in recent years have agreed, at least on one thing, that emotional intelligence turns to a central subject for researchers and educational and psychological management counselor.

Emotional Intelligence is composed of four main skills: 1 - consciousness: the ability to accurately identify their emotions and their knowledge of the existence of this emotion. Consciousness also be included, control people's desires in reacting to various people and situation. A person who has a high degree of Emotional Intelligence has immediate and uninterrupted knowledge toward his/her feelings. Self- management means the ability to control one's emotional reactions in the face of all people and different situations. Social awareness is the ability to accurately recognize emotions in others and understand exactly what is happening. Empathy means that people understand others' thinking and feelings, even when there are not common feelings or thoughts. Finally, social management is the ability to apply others' emotions to succeed in controlling and managing interactions, and this ability includes clear communication and control effectively various conflicts. Performance is a combination of structures, according to which employees are able to identify a set of behaviors (Spector & Fox, 2010). Therefore, job performance is a multiple and extensive career in which all behaviors that are more narrowly determined is used to define performance (MacKenzie et

al., 1993; Cote & Miners, 2006). Tabatabaei et al. (2013) studied the relationship between Emotional Intelligence (EI) and Self-Efficacy (SE) with demographic variables among employees who worked for Bahman Motor Company in Tehran. They reported that there was a significant relationship between E.I. and S.E ( $r=0.78$ ) positively. However, there were not any significant differences between operational and administrative; and trained and untrained staff in Emotional Intelligence and Self-Efficacy. Nevertheless, Emotional Intelligence was forecasted by demographic variables and Self-Efficacy and vice versa. Finally, they reported that EI and SE had mutual relationship with each other. Çekmecelioğlu et al. (2012) investigated the effect of EI on job satisfaction by considering EI as a multidimensional construct. They compared the effects of these dimensions on job satisfaction and job performance on some data collected from 147 call center employees in Istanbul. The results of their survey indicated significant positive relationship emotional intelligence and internal satisfaction. Specifically the findings indicated that employees with high emotional recognition were more likely to have higher levels of internal job satisfaction. Sy et al. (2006) investigated the relationship of employee and manager' EI on their job satisfaction and performance. They reported that employees' emotional intelligence was positively associated with job satisfaction and performance. Moreover, manager's emotional intelligence had a more positive correlation with job satisfaction for employees with low emotional intelligence than for those with high emotional intelligence.

The main hypothesis of this survey is to investigate the relationship between emotional intelligence and job performance. This study has already accomplished in other organizations. Shamsuddin and Abdul Rahman (2014) investigated the relationship between emotional intelligence and job performance of call center agents and found some positive relationship between these two components. The statistical population includes all employees of Islamic Republic of Iran Railroad - Tehran. It should be noted that the number of branches in Tehran is 30 branches with 736 employees. Therefore, the sample size is calculated as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where  $N$  is the population size,  $p=1-q$  represents the yes/no categories,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. Since we have  $p=0.5$ ,  $z_{\alpha/2}=1.96$  and  $N=736$ , the number of sample size is calculated as  $n=300$ . There are two questionnaires, one for measuring emotional intelligence consists of 12 questions and the other for employee performance consists of 18 questions.

### 2.1. Personal characteristics

In our survey, 37% of the participants were female and 67% of them were male. Fig. 1 shows other personal characteristics of the participants.

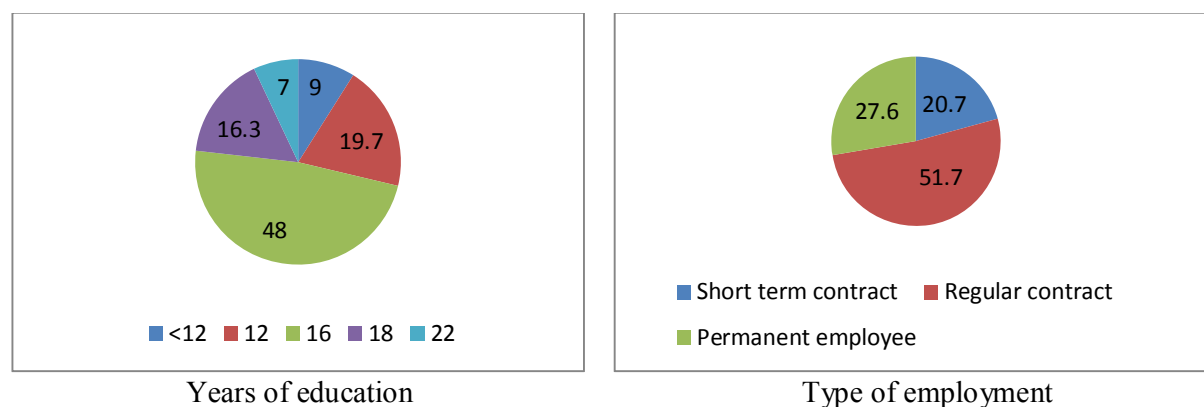


Fig. 1. Personal characteristics of the participants

Cronbach alpha has been used to measure the reliability of the questionnaire and it was well above the minimum desirable level of 0.70, for two questionnaires. In addition, the implementation of Kolmogorov-Smirnov test has revealed data were not normally distributed. Therefore, we have used Spearman correlation ratio to examine different hypotheses of the survey.

### 3. The results

In this section, we present the results of testing various hypotheses of the survey.

#### 3.1. *The main hypothesis: Relationship between employees' emotional intelligence and their performance*

The first hypothesis of the survey examines the relationship between employees' emotional intelligence and their performance. Based on the results of correlation coefficient test for Spearman, the first hypothesis has been confirmed and we can conclude that there was a meaningful interaction between employees' emotional intelligence and employees' performance. The calculated correlation coefficient was 0.796, and the sign is positive and it can be concluded that the relationship between the two variables was positive.

##### 3.1.1. *The relationship between consciousness and employee performance*

The first sub-hypothesis of the survey investigates the relationship between consciousness and employee performance. In our survey, Spearman correlation ratio was equal to 0.642, which was positive and meaningful and it indicates that an increase of employees' consciousness will increase employees' performance.

##### 3.1.2. *The relationship between self-regulation and employee performance*

The second hypothesis of the survey studies the relationship between employees' self-regulation and employee performance. Once again, the implementation of Spearman correlation yields a positive and meaningful value equal to 0.41, which means an increase on self-management will also influence on employee performance, positively.

##### 3.1.3. *The relationship between self-awareness and employee performance*

The third hypothesis of the survey investigates the relationship between self-awareness and employee performance. In our survey, Spearman correlation was calculated as 0.552, which is a positive and meaningful value and confirms the third hypothesis.

##### 3.1.4. *The relationship between social skills and employee performance*

Finally, the last hypothesis of the survey looks at the relationship between social skills and employee performance. In our survey, the Spearman correlation ratio was 0.524 and statistically significant. Therefore, the last hypothesis of the survey has also been confirmed.

### 4. Conclusion

In this survey, we have performed an empirical investigation to study the relationship between emotional intelligence and employee performance in an Iranian railroad industry. The study has used some standard questionnaires to measure job performance and emotional intelligence. The implementation of Spearman correlation has indicated that there was a positive and meaningful relationship between the two variables ( $r = 0.796$ ,  $\text{Sig.} = 0.000$ ). In addition, there were positive and meaningful relationships between four components of emotional intelligence, namely consciousness ( $r = 0.642$ ,  $\text{Sig.} = 0.000$ ), self-regulation ( $r = 0.41$ ,  $\text{Sig.} = 0.000$ ), self-awareness ( $r = 0.552$ ,  $\text{Sig.} = 0.000$ ) and social skills ( $r = 0.524$ ,  $\text{Sig.} = 0.000$ ).

The results of our study are consistent with similar studies such as the one accomplished on call centers (Shamsuddin & Abdul Rahman, 2014), Lindebaum (2013), Tabatabaei et al. (2013), Jordan & Troth (2011), O'Boyle et al. (2011), Jordan et al. (2002), Feyerherm and Rice (2002) and Mandell and Pherwani (2003).

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