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Enhancing Staff Health and Job Performance through Emotional Intelligence and Self-Efficacy

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Abstract

The purpose of the research was to study the relationship between Emotional Intelligence (E.I.) and Self-Efficacy (S.E.) with demographic variables in the staff of Bahman Motor Company in Tehran. This study was descriptive. The population consisted of 2,000 staff in 2011 and the sample was 120 who were randomly selected. Emotional Intelligence Inventory (Bar-Ann) was employed as a tool. Correlation, t- test and regression were used to analysis of data. Results showed that there was significant relationship between E.I. and S.E (r=0.78) positively. There were not found significant differences between operational and administrative; and trained and untrained staff in Emotional Intelligence and Self-Efficacy. Besides, Emotional Intelligence was predicted by demographic variables and Self-Efficacy and vice versa. Emotional Intelligence and Self-Efficacy have mutual relationship with each other.

1. Introduction

Emotional intelligence is one of the most important psychological factors that can increase employees' ability and enhance their job performance. Employees who have a higher emotional intelligence are able to produce higher quality products and services in their work environment. At the same time, enhance emotional intelligence can lead to increase efficiency and productivity of employees. Some researches revealed that those emotions have properly directed, can lead to greater commitment and increasing self-efficacy and efficiency of organization. Emotional intelligence can affect on work atmosphere, job satisfaction, efficient management and organizational development (Porter, 2004, quoted by Jain and Sinha, 2005). Constitutions of organizations require interactions among individuals. These interactions have relationship with the performance of job duties such as providing services to clients, receive instructions and report to the heads, cooperation and coordination with colleagues. Jordan et al (2002) assumed that the emotional commitment of the people is a necessary component of social interactions. They

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showed that success at work associated with positive emotions in which it represents the teaching emotional intelligence in the workplace is essential.

Emotional intelligence can be a significant impact on various human activities such as education, training, leadership and guidance of others, personal life, mental health and well-being (Siaruchi et al, 2004). Since emotional intelligence can be improved by training, so, training will be very useful in the organization (Bar-On, 1997). Social communication, problem solving skills, general health and self-efficacy can be effective variables to enhance the emotional intelligence of employees (Kar, 2006, Jain and Sinha, 2005).

1.1. Background

According to Bar-On, emotional intelligence is a set of capabilities, qualification and non-cognitive skills that affect person's ability to be successful in dealing with environmental requirements and pressures. It includes five internal components (emotional self-awareness, assertiveness, self-respect, self-actualization and independence), three personal components (empathy, social responsibility and interpersonal relationships), two compatibility components (problem solving, reality and flexibility assessment quality), two components of tension control (stress tolerance and impulse control), and two components of general mood (happiness and self-prediction). In other words, emotional intelligence refers to skills and capabilities that include the ability of individual and others emotion control, the distinction between them and utilization of information to guide thoughts and actions. Therefore, it is one of the important factors determining the success of person that will be used for effective adaptation (Mayer and Salovey, 1993). In point of social cognitive view, self-efficacy refers to beliefs and judgments of a person about his ability in performing duties and responsibilities (Albert Bandura, 1997). Also, emotional intelligence combined with other important determinants such as conditions (a person's ability to succeed in coping with environmental requirements), a biological-natural preparation, cognitive talent, knowledge, facts and constraints of the environment variable (Aminiha 2005). Zahraei (2008) reported that emotional intelligence training had significant and positive impact on job satisfaction of employees of Iranian Engineering and Manufacturing Marine Installation Company. Abdolmaleki (2010) found that there are relationships between emotional intelligence factors and quality of work life with productivity. Mashhadi and colleagues (2010) concluded that emotional intelligence has a negative relationship with the symptoms of borderline personality disorder. Farzadnia (2011) found that there is significant and positive relationship between head nurses' emotional intelligence and conflict management styles in Milad Hospital,. Moreover, there is a significant and positive relationship between cooperation styles and self-consciousness. Barsad (2000) in his studies about emotional cognition understood that developing positive emotions within groups facilitate cooperation between members, decrease conflict, and improve efficiency. Nelis et al (2009) showed that emotional intelligence training for employees has a significant effect on increasing emotional identity and ability to manage their emotions. Salami (2010) studied about the role of emotional intelligence, self-efficacy, and psychological well-being on student's behaviors and attitudes and found that these variables improve the quality of graduate education. Yazic et al (2011) investigated about emotional intelligence and self-efficacy as predictors of academic achievement showed that age, sex, and self-efficacy are significant predictors of students' academic achievements. Furthermore, statistical results revealed that there is interactive effect between age, academic achievement and socio - economic status of students. In other words, the scientific advancement of women was significantly higher than men. Mentioned researches clearly have shown the importance of emotional intelligence and self-efficacy but there are a few studies which emphasis on affection of emotional intelligence and self-efficacy with job performance and staff efficacy.

1.2. Aims

The aims of this study were:
1. To determine the relationship between emotional intelligence and self-efficacy of staff.
2. To predict emotional intelligence by self-efficacy.
3. To probe differences between emotional intelligence and self-efficacy of staff in operational and administrative sections.
4. To explore differences between emotional intelligence and self-efficacy of trained and untrained staff.

5. To predict emotional intelligence by demographic variables and self-efficacy.
6. To predict self-efficacy by demographic variables and emotional intelligence.

1.3. Hypotheses
Research hypothesis are as follows:
1. There is relationship between emotional intelligence and self-efficacy.
2. Emotional intelligence can be predicted by self-efficacy.
3. There is difference between emotional intelligence and self-efficacy of staff in operational and administrative.
4. There is difference between emotional intelligence and self-efficacy of trained and untrained staff.
5. Employees' emotional intelligence can be predicted by demographic variables and self - efficacy.
6. Employees' self-efficacy can be predictable by demographic variables and emotional intelligence.

2. Method

2.1. Data
This study was descriptive and explored the relationship between emotional intelligence and self - efficacy with selected demographic variables in Bahman Motor Company staff in 2011. The study population included 2000 male and female employees. Sample of 120 were randomly selected out of 280 staff who were working in chassis manufacturing section. Before completing the questionnaire, the subjects were assured that the information contained in the questionnaire would remain completely confidential.

2.2. Tools

1. **Questionnaire of Individual-Occupational Information:** This questionnaire was consisted of 14 questions.
2. **Questionnaire of Emotional Intelligence:** This questionnaire was concluded of 90 questions and was prepared by Bar-On (1997). It has 5 scales (intrapersonal skill, interpersonal skill, adaptability, stress management, and general mood) and 15 sub scales. Its validity coefficient was estimated by Cronbach's Alpha as 0.95 and its reliability was confirmed by a few psychologists. Each subject obtained a total score of questionnaire.
3. **Self-Efficacy Inventory:** This inventory was provided by Schroder et al in 1982. The original version was consisted of 36 questions. In the present study its validity coefficient by Cronbach's Alpha was 0.86 and its reliability was confirmed by a few psychologists. Each staff obtained a total score of the inventory.

2.3. Statistical Method
Descriptive and inferential statistics (t-test, Person correlation, and multi variable regression) were employed to analysis of data. By the help of SPSS software.

3. Results

Majority of the sample group (34.2 %) were at the range of 26-30 years; 88.3% men; 77.5 % married; 62.5% with B.Sc. degree or higher; 54.16% experts; 54.17% administrative and 45.83% operational staff, and 66.7% trained staff.

Table 1: Statistical indicators related to Emotional Intelligence and Self-Efficacy

Variables	Central Tendency Measures			Dispersion Measures			Distribution Measures		
	Mode	Median	Mean	Range	Variance	Standard Deviation	Standard Error	Coefficient of Skewness	Coefficient of Kurtosis
Emotional Intelligence	345	348	348.28	159	10.01	31.64	2.88	-1.26	0.222
Self Efficacy	68	67	67.98	36	61.05	7.81	0.71	0.09	0.073

Table No. 1 showed that there was a slight difference among mode, median and mean, since the rate of skewness and kurtosis index were less than 1, therefore, the above distribution supported the assumption of normality and mean could be used as the representative of the index of central inclination and also the models of parametric statistics.

Table 2: Correlation between Emotional Intelligence and Self- Efficacy

Correlation	Number	Pearson Coefficient	Significance Level
	120	0.78	0.001

As Table No. 2 has shown that there is positive and significant correlation between emotional intelligence and self-efficacy. So the first and second hypotheses were accepted.

Table 3: Mean differences between Emotional Intelligence and Self- Efficacy of staff with respect to the departments and the training status

Variables	Departments & Training Status	Mean	Standard Deviation	t	Degree of Freedom	Significance Level
Emotional Intelligence	Operational	350.06	31.30	0.64	116	0.71
	Administrative	347.89	31.39			
Self Efficacy	Operational	67.64	7.49	-0.56	116	0.57
	Administrative	68.44	7.91			
Emotional Intelligence	Trained	351.74	29.78	1.16	118	0.249
	Untrained	345.05	33.20			
Self Efficacy	Trained	68.75	7.38	1.05	118	0.295
	Untrained	76.25	8.18			

t values in Table No. 3 (t-0.64, t=-0.56, t=1.16, t=1.05) revealed that there are not found significant differences between emotional intelligence and self–efficacy of staff in different departments(operational and administrative) and different training status. Therefore, the third and fourth hypotheses were rejected.

Table 4: Multivariate regression, prediction of emotional intelligence by age, sex, marital status, education level, job title, income, and self - efficacy

	Sum of Squares	Degree of Freedom	Mean of Squares	F	Level of Significance
Regression	759770.53	7	10852.934	28.14	0.001
Residual	43191.829	112	385.641		
Total	119162.367	119			

With respect to F value (28.14) cited in Table No 4 that is significant ($\propto = 0.001$) it could be said that emotional intelligence can be predicted generally by age, sex, marital status, education level, job title, income, and self-efficacy. Thus, the fifth hypothesis was accepted.

Table 4-a: Regression coefficient in related to table No 4; prediction of emotional intelligence by age, sex, marital status, education level, job title, income, and self - efficacy

Predicted Variable	Independent variable	B	Beta	t	Significance Level
Emotional Intelligence	Age	-0.719	-0.144	-1.916	0.58
	Sex	-1.517	0.015	-0.263	0.79
	Marital Status	0.894	0.012	0.173	0.86

Education	-7.424	-0.211	-2.427	0.015*
Job Title	-3.053	-0.109	-1.335	0.18
Income	3.766	0.131	1.737	0.08
Self Efficacy	3.194	0.789	13.56	0.001*

Table 4- a showed that there is significant and negative relationship between education and emotional intelligence. Besides, significant relationship is found between self- efficacy and emotional intelligence positively.

Table 5: Multivariate regression, prediction of self - efficacy by age, sex, marital status, education level, job title, income, and emotional intelligence

	Sum of Squares	Degree of Freedom	Mean of Squares	F	Level of Significance
Regression	4634.228	7	4634.228	28.17	0.001
Residual	2631.738	112	23.498		
Total	7265.96	119			

F value (28.17) cited in Table No. 5, indicated that there is significant relationship ($\alpha = 0.001$) between self-efficacy and selected demographic variables. So, self-efficacy can be predicted by age, sex, marital status, education level, job title, income, and emotional intelligence. Therefore, the sixth hypothesis was accepted.

Table 5-a: Regression coefficient in related to Table No 5; prediction of self-efficacy by age, sex, marital status, education level, job title, income, and emotional intelligence

Predicted Variable	Independent Variable	B	Beta	t	Significance Level
	Age	0.111	0.09	1.186	0.238
	Sex	0.681	0.028	0.476	0.633
	Marital Status	1.000	0.054	0.786	0.433
Self-Efficacy	Education	2.059	0.273	2.798	0.006*
	Job Title	1.119	0.162	2.001	0.048*
	Income	0.685	0.096	-1.272	0.206
	Emotional Intelligence	0.195	0.78	13.56	0.001*

Figures in Table 5-a indicated that there are significant and positive relationships between education, job title, emotional intelligence and self-efficacy.

4. Discussion and Conclusion

Overall, there are no significant differences between trained or untrained, and also operational or administrative staff in emotional intelligence and self-efficacy. There is a positive and significant correlation between emotional intelligence and self-efficacy. Emotional intelligence can be predicted by age, sex, education, marital status, payment, and self-efficacy. It is found significant and negative relationship between emotional intelligence and education. It means that a person with a higher education has a lower emotional intelligence. Self-efficacy is predicted by age, sex, education, marital status, income, and emotional intelligence. Self-efficacy has a significant and positive relationship with education. It can be concluded that a person with higher education has a higher self-efficacy. Conversely, it has a significant and negative relationship with income. It means higher income comes with lower self- efficacy.

The obtained results of research are similar to the results of fallowing studies; Jamshinejhad (2001), about productivity and emotional intelligence, Zahraei (2008) regarding emotional intelligence and job satisfaction in Iranian Engineering and Manufacturing Marine Installation Company employees, Mashhadi et al (2010), in the field of relationship between emotional intelligence and borderline personality, Farzadnia (2011), in the field of emotional intelligence and conflict management styles, Barsad (2000), regarding relationship between positive emotion and increasing cooperation, Nelis et al (2009), about emotional intelligence training and ability to management, Salami (2010), relevant to the role of emotional intelligence, self- efficacy, and well-being in

employees' behavior and attitude, Hure et al (2011), about emotional intelligence and leadership, and Yazic et al (2011) in the field of emotional intelligence and self -efficacy. However, the results of Yazic (2011) about emotional intelligence related to the age and sex was different with the results of this study.

It can be concluded that there are not significant differences among staff due to department and training status. Beside, emotional intelligence and self-efficacy are two integrated variables which are very important factors in order to enhance health and promote job performance of employees. Education as one of the selected demographic variables has significant and negative relationship with emotional intelligence of staff, that is, a person with a higher education has a lower emotional intelligence. It seems higher educated employees in this factory had low motivation to achieve job promotion. Maybe, they were working in the not job positions adjusted with their educations or specific majors. Therefore, employers can provide training facilities for middle and high education level staff in order to enhance their emotional intelligence and self-efficacy. Generally, one of the important reasons behind these results can be explained by being low levels of   staff motivation and interest relevant to their job duties. Education and job title as two selected demographic variables have shown significant and positive relationship with self-efficacy. Thus, staff with higher education level had higher self-efficacy. Also, staff with higher job titles has higher self-efficacy. Obviously, it can be said that job title/job position can help to the staff to show more self-efficacy in the work place. Emotional intelligence can be shown in group interaction while self-efficacy will be observed in individuals' activities and sometimes in interpersonal relationship in the work environment.

Acknowledgements

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