

The impact of Emotional Intelligence on job outcomes and turnover intention in Health Care

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Abstract: *Nursing turnover threatens the performance of health care organizations. This paper examines the influence of Emotional Intelligence (EI), on job outcomes (Job Satisfaction (JS) and Organizational Commitment (OC)) on Turnover Intention (TI) of nursing staff working in the health care sector. Although in the relevant literature several studies have examined the direct relationships between any two of these factors, there is lack of an approach which investigates the combined relationships among all these factors. This paper presents a field survey conducted in five private health care organizations which operate in the city of Larisa, Greece. The statistical analysis based on 145 valid questionnaires, confirmed strong association among EI and TI as well as significant relationship between JS and TI. In contrast with the results of other scholars, OC has not been found to be associated with TI.*

Keywords: *Emotional Intelligence, Job Satisfaction, Organizational Commitment, Turnover Intention, Health Care.*

I. INTRODUCTION

Human resources are, without doubt, the core of the health care industry and an effective health care system depends mainly on their adequacy, quality and their right distribution (Firth et al., 2004). Nursing shortages are proved to be related with adverse incidents and aspects of hospital inefficiency (Sellgren, Ekvall and Tomson, 2007). In Greece, except from a plethora of doctors, the health care sector presents human resources' shortages. Therefore, it comes of high importance to study turnover intention and its antecedents in the health care sector.

High turnover turns out to be a global phenomenon (Rana et al., 2009). Many studies have shown that the intention of quitting a job stems from factors such as leadership support, organization commitment, and job satisfaction (Price, 2001; Chiu et al., 2005). In addition, many researchers (Wong and Law, 2002; Carmeli, 2003; Vakola et al., 2004; Goleman, 1998; Kooker, Shoultz and Codier, 2007) provided evidence of a negative relation between turnover intention and Emotional intelligence.

Despite the fact that job satisfaction, emotional exhaustion and stress of nursing staff have been investigated thoroughly, there is limited research upon turnover issues and particularly turnover intention of nursing staff. As illustrated in figure 1, this study investi-

gates the direct relationships between emotional Intelligence (EI) and job outcomes (organizational commitment (OC), job satisfaction (JS) and turnover intention (TI)).

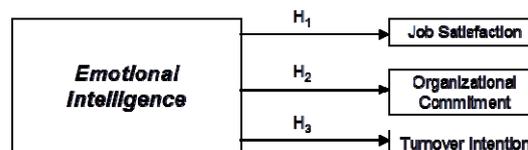


Figure 1. Conceptual Framework.

II. RESEARCH BACKGROUND

A. Emotional Intelligence in Health Care

Emotion research in health care is categorized into two major areas: research related to emotional labor (Larson and Yao, 2005) and research related to emotional intelligence (Goleman, 1998). Referring to the latter, the importance of emotional Intelligence has been widely recognized for the case of nursing staff working in health-care (Larson and Yao, 2005; Kooker, Shoultz and Codier, 2007).

Emotion is central within health care organizations. Every member of a hospital's staff has to deal, in a daily basis, with events highly related to emotions such as birth, illness, death. Thus, the work climate becomes stressful for the nursing staff, which, at the same time is obliged to perform in the most effective way. High responsibility upon patients is of utmost importance, as if not existing, may even cost their life. Moreover, it is one of the most stressful factors within a health care organization; as any other stressor usually moderates staff's job satisfaction and creates turnover intentions (Kooker, Shoultz, & Codier, 2007; Chiu et al., 2005). This is indeed not just a commonly accepted rational theory but it has been proved by many researchers, especially in the last decade (Firth et al., 2004; Sellgren, Ekvall and Tomson, 2007).

Concluding, there is evidence that EI plays a significant role upon turnover intention -that will possibly lead to the actual quitting (Chiu and Francesco, 2003) – and, therefore, EI should be further examined as a predictor of such a behavior. The previous argument becomes of a greater importance, under the consideration that health care departments try to prevent intentions of quitting because the results are higher costs and poor quality of services provided to patients (Schyns, Torca and Gossling, 2007; Sellgren, Ekvall and Tomson, 2007).

B. Emotional Intelligence and JS

According to Goleman (1998), individuals that present a high level of EI tend to experience more positive moods and emotions in contrast to those with a lower overall EI. This means that the latter usually translate their feelings to disappointment, anger and in fulfillment and by this way their total satisfaction is reduced. In health care sector, Guleryuz et al (2008) examined the effect of emotional intelligence on job satisfaction and organizational commitment of nurses working in seven university hospitals in Turkey. Their findings demonstrated that Emotional intelligence had a strong positive relation to job satisfaction. By considering these results, the first hypothesis of the research is defined as follows:

H1: EI is positively related to JS

C. Emotional Intelligence and OC

The associations between EI and Organizational Commitment has been examined in the relevant literature and in most cases has been found to be significantly and positively related with it (Lee and Liu, 2007, Guleryuz et al., 2008; Zeidner, Matthews and Roberts, 2004; Wong and Low, 2002; Goleman, 1998; Mayer and Salovey, 1997). This can be explained from the fact that people with high emotional intelligence have the tendency to put themselves into positive emotional states that will probably lead to positive affection towards their organization (Wong and Law, 2002). Consequently, the second hypothesis in this research is stated as follows:

H2: EI is positively related to OC.

D. Emotional Intelligence and TI

Staff turnover is defined as “the number of employees that have quit within a given time period, usually one year, in relation to the total number of employees” (Newman et al., 2002, the HSM Group 2002 cited in Sellgren, Ekvall and Tomson, 2007, p.172). Employee’s intention to quit is a situation that all managers try to eliminate within their organization as the actual quitting not only leads to higher costs as, for example, recruiting new employees (Firth 2004; Schyns, Torca and Gossling 2007) but also has negative consequences on the quality of services provided. In the case of a health-care industry this sometimes means the undermining of the patients’ safety (Sellgren, Ekvall and Tomson, 2007).

According to past findings, turnover intention’ relationship with EI has been proved to be negative (Wong and Law, 2002; Goleman, 1998; Kooker, Shoultz and Codier, 2007; Carmeli, 2003; Lee and Liu, 2007; Falkenburg and Schyns, 2007; Firth et al., 2004). Particularly, Wong and Law (2002) have supported this argument and through their study they have highlighted the fact that the higher the emotional labor in a particular job, the stronger EI is negatively related to turnover intention. By considering that health care sector is a workplace with high emotional labor, the third hypothesis in this study is stated as follows:

H3: EI is negatively related to TI.

III. RESEARCH METHODOLOGY

A. Sample

The field research was conducted in five private general hospitals in the area of Thessaly, Greece. Structured questionnaires were distributed to 266 nurses and 145 valid questionnaires were returned. Response rate was 54.5%. Most nurses were female (86.2%) and their mean age was 34.3 years (SD=9.6). The average number of years of nursing experience was 12.3 (SD=7.3) while mean organizational tenure was 9.4 years (SD=4.2).

B. Questionnaire design

Emotional Intelligence was measured with the Meyer, Salovey and Caruso (2002) Emotional Intelligence Test, (MSCEIT), which has been proved to provide high validity (Brackett and Mayer, 2003; Brackett et al., 2006; Rode et al., 2008). It was adopted a short version of 16 items from the 141 items of the MSCEIT instrument - four items for each aspect of EI - to test identifying emotions, understanding emotions, using emotions and managing emotions, respectively.

Allen and Meyer’s (1990a,b) Organizational Commitment scale is used to measure the aspects of OC. In total, 12 items were adopted, related with two of the three factors of Allen and Meyer’s model, that of Affective (AC) and Continuance Commitment (CC).

Job Satisfaction is measured using Melia and Peiro’s S20/23 questionnaire (Melia and Peiro, 1989). It consists of 23 items and assesses various specific factors of satisfaction, such as intrinsic job characteristics, supervision, participation and physical environment which are highly matched with the different dimensions of the nursing job satisfaction. The questionnaire presents high-level of validity, high internal consistency and adapts adequately to different organizational contexts (Saura et al., 2005; Gil et al., 2005). We adopted 16 items from this tool, which are relevant to our case.

Intention to quit was measured by using the three item questionnaire of Kim et al. (1996) that is also considered to provide high validity. The instrument was selected because it is a simple measure and very understandable for the respondents (Price, 2003). To ensure the validity of the item translation, a (English/Greek) translate/back translate procedure (Brisles, 1970; Laroche et al., 2003) was used. Responses were assessed on 5-point Likert scales.

C. Data Analysis

Initially, Principal Component Analysis (PCA) has been conducted to examine the underlying factors of Emotional Intelligence, Job Satisfaction, Organizational Commitment and Turnover Intention scales. All scales were proved to be one-dimensional. Cronbach’s Alpha (Cronbach, 1960) has been calculated to assure internal reliability and consistency. All scales exhibited well over the minimum acceptable reliability level for alpha

coefficients of 0.7. Finally, multiple regression analyses applied to test the hypotheses and provide conclusions.

D. Results

To test the hypotheses multiple regression analyses were conducted. Demographic data (age, working experience, education level and marital status) were treated as control variables. In the following tables, the reciprocal of the tolerance known as the Variance Inflation Factor (VIF) has been used to show how much the variance of the coefficient estimate is being inflated by multi-collinearity (i.e., to ensure that multi-collinearity among independent variables is not an issue during regression analyses). VIF coefficients of above 5 points indicate a multi-collinearity problem (O'Brien, 2007).

The first regression model has tested if Emotional Intelligence is related to Job Satisfaction (hypothesis H1). In Table 1, the values of the standardized coefficients beta show that EI has a positive and significant relation to job satisfaction (Std. beta=0.706, p<0.001). Additionally, EI is positively and significantly related to the demographic variable marital status (Std. beta =0.199, p<0.05). Therefore, findings have demonstrated that married nurses seem to have a greater level of EI. The independent variables explain the 48.3 of the total variation of nurses' job satisfaction.

Both dimensions of Organizational Commitment (affective-continuance) have been examined in regard to their relationship with EI (hypothesis H2), and they have not been found to be statistically significant (p>0.05).

Table 1 presents the statistical analysis results for testing hypothesis H3, also. EI has been proved to exert a direct, strong and negative relation with turnover intention (Std. beta=0.666, p<0.001). This means that employees with a higher degree of EI seem to present a lower intention to leave their organization. The independent variables explain the 43.7 of the total variation of nurses' turnover intentions.

	JS		TI	
	Std. Beta	VIF	Std. Beta	VIF
Age	-0.136	4.357	0.082	4.357
tenure	0.155	2.029	-0.189*	2.029
Education level	0.089	1.728	0.010	1.728
Marital status	0.199*	2.664	-0.050	2.664
EI	0.706***	1.044	-0.666***	1.044
R square	0.483***		0.437***	

* Significant at the 0.05 level, ** significant at the 0.01 level, *** significant at the 0.001 level, N=145

Table 1. Results of multiple regression analyses.

IV. DISCUSSION

This study has examined the impact of EI upon job outcomes, such as organizational commitment, job satisfaction and turnover intention.

Past literature has proven significant relationships between EI and these outcomes (Sy, Tram and O'Hara, 2006; Chiva and Alegre, 2008; Guleryuz, G□ney, Aydin, and Asan, 2008; Chena, Chuc, Wange and Linf, 2008; Wong and Law, 2002; Carmeli, 2003). However, in our study some of the hypothesized relationships have been confirmed. Particularly, EI was found to have significant and positive relationship with JS (H1) and significant and negative relationship with turnover intention (H3), as literature suggests. That means that nurses presented a higher degree of EI tend to be more satisfied with their work and also had a lower intention to leave their jobs.

However, EI was not found to have any significant relationship with neither of the two dimensions of OC. In a relative study, Guleryuz et al. (2008) have examined the relations among emotional intelligence, job satisfaction and organizational commitment of nurses and also the mediating impact of job satisfaction between emotional intelligence and organizational commitment. Questionnaires were distributed to 550 nurses working at different departments of a hospital and from these 267 questionnaires were analyzed. Their results presented job satisfaction as a mediator between emotional intelligence and organizational commitment while OC had a direct, significant and positive relationship with EI, contrary to the present study that has not resulted in such a relationship.

To conclude, our research findings indicate strong relationships between EI and TI as well as between EI and JS, while OC was not found to be related with any of the above variables.

REFERENCES

- Allen, N. J. and Meyer, J. P., "The measurement and antecedents of affective, continuance, and normative commitment," *Journal of Occupational Psychology*, **63**, 1-18 (1990b).
- Allen, N.J. and Meyer, J.P., "Affective, continuance and normative commitment: an examination of construct validity," *Journal of Vocational Behavior*, **49**, 252-276 (1990a).
- Bar-On, R., Parker, J.D.A, *the Handbook of Emotional Intelligence*, Jossey-Bass, San Francisco (2000).
- Brackett, M. A., & Mayer, J. D., "Convergent, discriminant, and incremental validity of competing measures of emotional intelligence." *Personality and Social Psychology Bulletin*, **29**, 1147-1158 (2003).
- Brackett, M.A., Rivers, S.E., Shiffman, S., Lerner, N., & Salovey, P., "Relating emotional abilities to social functioning: A comparison of self-report and performance measures of emotional intelligence," *Journal of Personality and Social Psychology*, **91**, 780-795(2006).

- Brisles, R. W. (1970). Back translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216.
- Carmeli, A., “The relationship between emotional intelligence and work attitudes, behavior and outcomes,” *Journal of Managerial Psychology*, **18**, 788-813 (2003).
- Chiu, C. K., Chien, S.C., Lin, P.C. and Hsiao, Y.C., “Understanding hospital employee job stress and turnover intentions in a practical setting: The moderating role of locus of control,” *Journal of Management Development*, 24, 837-855 (2005).
- Chiu, C.K. and Francesco, M.A., “Dispositional traits and turnover intention: Examining the mediating role of job satisfaction and affective commitment,” *International Journal of Manpower*, **24**,284-298 (2003).
- Chiva, R. and Alegre, J., “Emotional intelligence and job satisfaction: the role of organizational learning capability,” *Personnel Review*, **37**,680-701 (2008).
- Cronbach, R.G., *Essentials of Psychological Testing*, Harper and Row Company, New York (1960).
- Falkenburg, K. and Schyns, B., “Work satisfaction, organizational commitment and withdrawal behaviours,” *Management Research News*, **30**,708-723 (2007).
- Firth, L. Mellor D.J., Moore K.A., Loquet C., “How can managers reduce employee intention to quit?,” *J. of Managerial Psychology*, **19**(2),170-187 (2004).
- Gil, I. G., Berenguer, A., Cervera, K. and Moliner B., “Relationships among customer orientation, service orientation and job satisfaction in financial services”, *International Journal of Service Industry Management*, 16, 497–525(2005).
- Goleman, D., *Working with emotional intelligence*, Bloosbury Publishing, London(1998).
- Guleryuz, G. Guney, S., Aydin, M.E. and Asan, O., “The mediating effect of job satisfaction between emotional intelligence and organizational commitment of nurses: A questionnaire survey,” *Int. J. of Nursing Studies*, **45**,1625–1635 (2008).
- Kim, M. and Hunter, J.E., “Relationships among attitudes, behavioral intentions, and behavior,” *Communication Research*, **20**, 331-64 (1983).
- Kim, S. W., Price, J. L., Mueller, C. W., & Watson, T. W., ”The determinants of career intent among physicians at a U.S. Air Force hospital,” *Human Relations*, **49**, 947-976 (1996).
- Kooker, B. M., Shoultz, J. and Codier, E., “Identifying emotional intelligence in professional nursing practice,” *J. of Professional Nursing*, 23, 30–36 (2007).
- Laroche, M., Papadopoulos, N., Heslop, L., & Bergeron, J. (2003). Effects of subcultural differences on country and product evaluations. *Journal of Consumer Behavior*, 2(3), 232–247 mar.
- Larson, E.B. and Yao, X., “Clinical empathy as emotional labor in the patient-physician Relationship”, *JAMA*, **293**, 1100-1106 (2005).
- Lee, H. and Liu, C., “An examination of factors affecting repatriates’ turnover intentions”. *International Journal of Manpower*, **28**, 122-134(2007).
- Mayer, J. D., and Salovey, P., *What is emotional intelligence? Emotional development and emotional intelligence: Educational implications*, Basic Books, New York (1997).
- Meliá, J.L. and Peiró J.M., “La medida de la satisfacción laboral en contextos organizacionales: el cuestionario de satisfacción,” *Psicologemas*, **5**, 59–74(1989).
- O'Brien, Robert M. A. , “Caution Regarding Rules of Thumb for Variance Inflation Factors,” *Quality and Quantity*,**41**, 673-690 (2007).
- Price, L.J., “Reflections on the determinants of voluntary turnover”, *International Journal of Manpower*, **22**, 600-624 (2001).
- Rana, M.T., Salaria, M.R., Herani, G.M. and Amin, M.A., “Identifying Factors Playing Important Role in the Increasing Employee Turnover Rate: A Case of Telecom Industry in Pakistan”, *Industrial J. of Management & Social Sciences*, **3**, 80-89(2009).
- Rode, C. J., Mooney, H.C. , Marne, L., Arthaud, L. M. ,Near, P. J., Rubin, S.R. and Baldwin, T.A., “An examination of the structural, discriminant, nomological, and incremental predictive validity of the MSCEIT© V2.0 Intelligence”,**36**,350–366 (2008).
- Saura, G. I. Contrí G.B., Taulat A.C., Velázquez B.M. “Relationships among customer orientation, service orientation and job satisfaction in financial services,” *International Journal of Service*, **16**, 497-525 (2005).
- Schyns, B., Torca, N. and Gossling, T., “Turnover intention and preparedness for change: exploring leader- member exchange and occupational self-efficacy as antecedents of two employability predictors,” *Career Development International*, **12**, 660-679 (2007).
- Sellgren, S., Ekvall, G. and Tomson, G., “Nursing staff turnover: Does leadership matter? *Leadership in Health Services*,” **20**, 169-183 (2007).
- Sy, T. ,Tram, S. and O’Hara, L., “Relation of employee and manager emotional intelligence to job satisfaction and performance,” *Journal of Vocational Behavior*, **68**,461–473 (2006).
- Vocola, M., Tsaousis, I. and Nicolaou, I., “The role of emotional intelligence and personality variables on attitudes towards organizational change,” *Journal of Managerial Psychology*, **19**, 88-110 (2004).
- Wong, C. and Law, K., “The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study,” *The Leadership Quarterly*,**13**, 243–274(2002).
- Zeidner, M., Matthews, G. and Roberts, R., “Emotional intelligence in the workplace: A critical review. *Applied Psychology: An International Review*”, **53**, 371–399. (2004).