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# INTEGRATED INFORMATION

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# Preface: Proceedings of the International Conference on Integrated Information (IC-ININFO 2011)

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## Aims and Scope of the Conference

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

## Topics of general Interest

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

## Symposia

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Rrepositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

## Paper Peer Review

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

## Thanks

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDc Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

# CONFERENCE DETAILS

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Dionysis Kokkinos, National Technical University of Athens

## KEYNOTE SPEAKER

Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

# 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, 1999; 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 investigates the direct relationships between emotional Intelligence (EI) and job outcomes (organizational commitment (OC), job satisfaction (JS) and turnover intention (TI)).

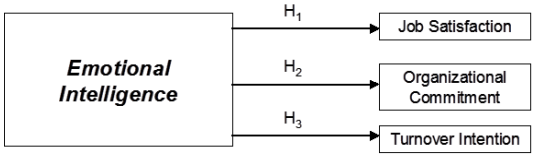


**Figure 1.** Conceptual Framework.

## 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, 1999). 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 heath 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 (1999), 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 infullfilment 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, 1999; 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, 1999; 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 (1990;1996) 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 (Brislin, 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 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, Güney, Aydın, 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.

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