The present study mainly aims to examine the effects of job stress on turnover intention with the mediating role of affective commitment and job satisfaction of nurses in Mashhad’s public hospitals. A sample of 242 individuals with more than \%80 for Cronbach's alpha is collected. Chi-square test and gamma test are applied to evaluate the research hypotheses and to measure the relationship intensity between study variables respectively. While study results comply a direct and positive relationship between Affective commitment and job satisfaction, turnover intention was negatively correlated with turnover intention.

**Keyword:** Job Stress, Job Satisfaction, Affective Commitment, Turnover Intention

1. Introduction

Repeated strikes by nurses in western nations demonstrate a common fact that the nursing profession is exposed to arising levels of psychological stress and stressful situations where the disparate nature of the job makes the investigation of this phenomenon even more difficult (Stora, 2001).

As this study reviews this phenomenon, also tries to make a better sense about stress. Precisely, we discuss how job stress affects the employee's turnover intention, and whether job satisfaction and organizational commitment may moderate this relationship. Studying stress in different occupations provide a deeper understanding of the phenomenon as a whole, willing to minimizes its impact on productivity, job satisfaction and commitment (Michael, Court and Petal, 2009). A healthy organization should pay careful attention to the physical and mental health of its staff, since no effective performance is achieved if workers’ health is disregarded. Stress has an impact on individual and organizational performance, because stress leads to apathy, a laid down perspective toward job duties and decreased job values (Lawrence, 1997).

2. Literature Review

**Job Stress:** One of the consequences of the industrial revolution is the emergence of the phenomenon of job stress. This phenomenon is increasingly affecting workers health. Savery and Luks (2001) believes that stress is a physical and mental state of an individual that directly and negatively influences efficiency, effectiveness, personal health and the quality of organizational staff. Generally, stress is rooted in different accumulating factors. One of the stressful work-related situations that employees are daily exposed to is the highly work pressures coupled with tight schedules. In these situations, it is natural for managers to face errors and successive protests. In other words, job stress is a specific individual facing stress in a specific job. The study of stress in different jobs can provide scholars with a deeper understanding of the phenomenon as a whole, in order
to keep its negative impacts on productivity, job satisfaction and commitment of the staff to a minimum level. Several factors are causing this phenomenon to the workers. For example, the changes and innovations that employees are facing, which increase mental demands, can result in job stress (Cowan, Sanditov and Weehuizen, 2011).

The high demand in job market, low job controls and decreased freedom in decision-making levels have caused high levels of stress (Kan and Parry, 2004). Although, individual differences may also causes a lower level of tolerance toward stress. Glazer, Stetz and Izso (2004) suggest that the locus of control (internal or external) as well as character type (A or B) also affects job stress. They surveyed nurses from different countries and came to the conclusion that the A character and external locus of control are the most common and yet most harmful characteristic combination affecting stress. Moreover, it is worth noticing that being in an active social relationship like a social support group of friends, spouses, partners or family members can help reduce job stress and mental tensions. However, sometimes these relationships can be a source of stress.

An individual’s stress level impacts stress in different ways, as the lack of a clear and complete separation between the miscellaneous personal roles; so what happens in one area affects other areas (Cowan et al., 2011). Stress leads to apathy towards work and lowered career values. Studies reveal that job stress is associated with psychological health, meaning that the more stress, the more vulnerable person will be to stress. On the other hand, the psychological consequences of occur in terms of issues such as family problems, sleep disorders and depression (cooper and Sutherlan, 1987).

**Affective Commitment:** Organizational commitment can be defined as employees’ sense of attachment toward the organization, through which they find an identity (Mathieu and Zajac, 1990). In the commitment literature, various types are and their impacts on other variables are identified. Meyer and Allen (1984) recognized two types of commitment: affective commitment and continuous commitment. While Mathieu and Zajac (1990) through a meta-analysis distinguished two different types: attitudinal commitment and calculative commitment. Later, Allen and Meyer (1990) categorized types of commitment as affective, normative and continuous. Attitudinal commitment (i.e., affective commitment) reveals the loyalty of an individual toward the organization. This type of personal commitment focuses on identity and personal involvement in an organization (Allen and Meyer 2000). Normative commitment is based on the cost that people have to pay in case of turnover, where continuance commitment refers to employees’ feelings of obligation to stay in the organization (Iverson and Buttigieg, 1999). In other words, individuals with strong affective commitment stay with the organization because they want to. Individuals with higher levels of normative commitment stay with the organization because they feel like to do it, while people with high continuous commitment as they sense a need toward organization, they make no effort to leave the organization. The volition of staying in organization in affective commitment is originated from affective commitment and interest through an honorary sense of membership (Kelloway and Barling, 2000). Continuous commitment is caused by constant worries and fears due to external factors. Not getting a proper job for example and the normative commitment of staying with the organization is rooted in a value or morality.

**Job Satisfaction:** In studies on the turnover intention, job satisfaction research and measurement has always been the focus. Job satisfaction is defined as the positive psychological or work-related outcomes or achievements that a person accumulates as a result of work experiences (Judge et al., 1995). Higher levels of job satisfaction is important for managers as they believe that the organization has a responsibility to educate employees highly satisfied with their jobs (Nadiri and Tanova, 2010). The difference between individuals' demands and expectations about their job status may result in dissatisfaction and negative thoughts. (Bovey and Hede, 2001). According to Bovey and Hede (2001), job satisfaction affects all types of organizational commitment through job stress, except continuous commitment. Job satisfaction is considered as a positive emotional response to a particular work. Nadiri and Tanva (2010) suggest that employees with higher levels of confidence are more likely to achieve higher levels of job satisfaction and also job satisfaction reduces turnover intention (Nadiri and Tanova, 2010).

**Turnover intention:** Turnover intention refers to the tendency of people to be part of the organization. The formation of this tendency depends on two factors, first, the availability of an alternative, and Second, other
financial, social, and psychological related costs. In case of a contrary, employees are likely to leave the job (Bellou, 2008).

Since the turnover of employees, especially knowledge workers, is considered as a both negative and costly outcome for the organization, several studies have been conducted to provide effective methods in reducing turnover rate. Reducing work-life conflicts (Jones et al, 2007 and Andres et al, 2012) and establishing organizational justice (Nadiri and Tanova, 2010), are among them. Moreover, making jobs more meaningful is suggested as one of the most essential ways to reduce turnover. This can be achieved through professional development, adding new aspects to the job, build a strong belief, which can result in a situation where an individual's current job is a considered more valuable comparing to other alternatives (Hall and Smith, 2009).

The relationship between job stress, affective commitment, job satisfaction and turnover intention: Meyer et al (2002) conducted a meta-analysis in the area of organizational commitment its effects on job stress, job satisfaction and turnover intention and confirmed a strong and positive correlation between affective commitment and job satisfaction and also a significant negative relationship between each types of commitment with turnover intention. Moreover, affective and continuous commitment were positively and negatively related to job stress, respectively. Also, Boyas, Wind and Kang (2012) revealed that increased job stress can increases turnover thoughts. Karsh et al (2005) surveyed 6584 nurses at 76 nursing homes in order to examine the relationship between work-related and environmental attributes with job satisfaction and organizational commitment. They expressed that work-related and environmental attributes influences the formation of organizational commitment, directly and also, job satisfaction and organizational commitment affects turnover intention negatively. It also should be noted that not all types of commitment yield same results. Jaros (1997) studied the effects of all three types of organizational commitment on turnover intentions and concluded that they differs in this aspect significantly. Vandenberghe and Tremblay (2008) suggest that while pay satisfaction affects turnover intention through mediating variables of affective and perceived sacrifice commitment, there is no significant correlation between normative commitment and turnover intention. Lum et al (1998) and Hall and Smith (2009), studied turnover intention among nurses and came to a conclusion that there is a strong and direct relationship between organizational commitment and turnover intentions. Furthermore, as Schwepker (2001) investigated ethical climate and its effects on job satisfaction, organizational commitment and turnover intention, confirmed a negative relationship between organizational commitment and turnover intentions. Finally, Blue (2008) assessed 1054 employees at 69 Greek restaurants where a strong negative relationship between organizational commitment and turnover intention was accepted. Lambert and Hogan (2009) reviewed the importance of job satisfaction and organizational commitment and their role toward turnover intention. According to their results obtained, However, age, job satisfaction and organizational commitment and turnover intention influences turnover intention directly, organizational, role ambiguity and role conflict have all negative correlation with turnover intention.

According to a survey among 244 employees by Bovey and Hede (2001), he concluded that an increase in job satisfaction can result in reduced turnover intention and increased performance. This also has been confirmed by other scholars (i.e. Sánchez, Sanz Valle and Aragón, 2007, who examined 81 Spanish directors). Moreover, Collins (2010) conducted a study on 328 restaurant manager in the United States and concluded that there is a strong negative relationship between job satisfaction and turnover intention. Furthermore, Nadiri and Tanova, 2010, surveyed 208 employees and 40 managers within 4 to 5 star hotels in Cyprus and acknowledged that enhancing job satisfaction can reduce turnover intention, as well as the perceptions of distributive and procedural justice. However, in another study Bisvas investigated the inverse relationship between turnover intention and job satisfaction, where there were no evidence confirming that increase in employee turnover intention can reduce job satisfaction. Aghdasi, Kiamaneshb and Naveh (2011) conducted a study on 234 employees in the Ministry of Science, Research and Technology of Iran and stated that stress not only has a negative effect on job satisfaction, but also has an indirect negative effect on organizational commitment. In another study in 2012 on 209 employees in an English institute for children welfare in the United States, researcher suggest that job stress will predict the variance in turnover intention, where an increase in job stress can level up thoughts of turnover (Boyas et al, 2012). Following the above statements, study hypotheses are as follows:
H1: Job stress has a direct and negative correlation with affective commitment.
H2: Job stress has a direct and positive correlation with turnover intention.
H3: Affective commitment has a direct and negative correlation with turnover intention.
H4: Job stress has a direct and negative correlation with job satisfaction.
H5: Job satisfaction has a direct and negative correlation with turnover intention.

![Study conceptual framework](image)

3. Methodology

Measurement of variables: Casimir et al (2012) questionnaire in order to measure affective commitment consisting of 6 items and the questionnaire presented in Kang chiu et al (2005) consists of 5 items about job satisfaction, have been used. Moreover, 1 and 4 items presented in Mulki et al. (2012) are applied to measure turnover intention and job stress respectively. For reliability analysis, a Cronbach's alpha of 0.8 is calculated for derived items. A sample of 242 nurses employed in Mashhad's public hospitals has been investigated.

4. Data analysis

First, in order to identify the overall correlation between each pair of study variables, a Pearson correlation table is provided (table 1). Afterwards, Chi-Square Test in applied to test study hypotheses (Table 2). To measure and examine the exact intensity of each effect, a Gamma test is conducted to provide with the exact strength and direction measures of each impact (Table 3).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Job stress</th>
<th>Affective commitment</th>
<th>Job Satisfaction</th>
<th>Turnover Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stress</td>
<td>1.000</td>
<td>-.158*</td>
<td>-.023</td>
<td>.030</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>-.158*</td>
<td>1.000</td>
<td>------</td>
<td>-.656**</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>-.023</td>
<td>------</td>
<td>1.000</td>
<td>-.656**</td>
</tr>
<tr>
<td>Turnover Intention</td>
<td>.030</td>
<td>-.656**</td>
<td>-.656**</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Table 2- Pearson Chi-Square Test results

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Chi-Square Test Value</th>
<th>Df</th>
<th>Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 JST ⇔ AC</td>
<td>47.300</td>
<td>9</td>
<td>.000</td>
</tr>
<tr>
<td>H2 JST ⇔ TI</td>
<td>36.829a</td>
<td>12</td>
<td>.000</td>
</tr>
<tr>
<td>H3 AC ⇔ TI</td>
<td>1.525E2a</td>
<td>12</td>
<td>.000</td>
</tr>
<tr>
<td>H4 JST ⇔ JSA</td>
<td>79.913a</td>
<td>12</td>
<td>.000</td>
</tr>
<tr>
<td>H5 JSA ⇔ TI</td>
<td>2.605E2a</td>
<td>16</td>
<td>.000</td>
</tr>
</tbody>
</table>

* Significant at the 0.05 level, ** Significant at the 0.01 level

Table 3- Gamma Test Symmetric Measures

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Gamma Test Value</th>
<th>Asymp. Std. Error</th>
<th>Approx. Tb</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 JST ⇔ AC</td>
<td>-.094</td>
<td>.098</td>
<td>-951</td>
<td>.342</td>
</tr>
<tr>
<td>H2 JST ⇔ TI</td>
<td>.000</td>
<td>.094</td>
<td>.999</td>
<td>.999</td>
</tr>
<tr>
<td>H3 AC ⇔ TI</td>
<td>-.710</td>
<td>.049</td>
<td>-13.067</td>
<td>.000</td>
</tr>
<tr>
<td>H4 JST ⇔ JSA</td>
<td>-.012</td>
<td>.098</td>
<td>-1.23</td>
<td>.902</td>
</tr>
<tr>
<td>H5 JSA ⇔ TI</td>
<td>-.837</td>
<td>.032</td>
<td>-19.579</td>
<td>.000</td>
</tr>
</tbody>
</table>

* Significant at the 0.05 level, ** Significant at the 0.01 level

As seen, for the first study hypothesis, the Chi-square test statistic is 47.3 with a p-value of 0.00 and degree of freedom equals to 9, which indicate that there is a significant relationship between job stress and affective commitment. In order to indentify the intensity of this relationship, Gamma test statistic is implemented which result is -.094. This fact addresses that there is a weak negative relationship between two variables and comparing to the results of Pearson correlation test (correlation statistic is equal to -0.158), the results are validated. Thus, the first hypothesis is approved by study data. A same process is applied to test the remaining study hypotheses, which the final results are presented in Table 4.
Table 4-Results for Study Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Final Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 JST $\Leftrightarrow$ AC</td>
<td>Approved</td>
</tr>
<tr>
<td>H2 JS $\Leftrightarrow$ TI</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3 AC $\Leftrightarrow$ TI</td>
<td>Approved</td>
</tr>
<tr>
<td>H4 JST $\Leftrightarrow$ JSA</td>
<td>Approved</td>
</tr>
<tr>
<td>H5 JSA $\Leftrightarrow$ TI</td>
<td>Approved</td>
</tr>
</tbody>
</table>

* Significant at the 0.05 level, ** Significant at the 0.01 level

JST: Job Stress, AC: Affective Commitment, JSA: Job Satisfaction, TI: Turnover Intention

5. Conclusion

The purpose of this study is to examine job stress and its consequences. Several hypotheses have been proposed for this purpose, which will be discussed later separately. The first finding in the role of job stress on affective commitment demonstrates that there is a direct and negative relationship between job stress and employees' affective commitment.

In other words, any extent a person suffers from job stress, the same amount of affective commitment he or she will be eased. So if the manager chooses to increase the level of affective commitment of the organization's staff, one of the proposed solutions can be found as an effort to reduce employees' job stress. The director must identify sources of job stress and take effective measures to remove or reduce the impact of these resources. Also, the analysis of the data showed that job stress has a direct and positive relationship with turnover intention.

The higher level of stress on organizational staff, the more possibility of them leaving their jobs. Considering the high levels of cost of employees' turnover imposed on the organization, every manager tries to lower the turnover rate. So one of the proposed solutions to management in order to reduce turnover is to decrease, and if possible eliminate, the sources of stress in the organization. Moreover, results proved that affective commitment is negatively yet directly correlated with turnover intention. In other words, another method that managers can utilize to reduce the level of turnover, would be to enhance employees' affective commitment. Thus, reducing stress can directly reduce turnover and also indirectly through increasing affective commitment is in effect. However, considering the greater impact of the affective commitment on reducing turnover rate, it would be a more effective solution to put more focus on augmenting staffs' affective commitment.

Another result of the present study is that job stress and job satisfaction are directly and negatively correlated. The higher levels of stress employees' experience, the more job satisfaction is diminished. Furthermore, we have proved that there is a direct and negative correlation between job satisfaction and turnover intention. Finally, another approach that is proposed to managers to reduce the turnover rate is to increase staffs' job satisfaction. The more satisfied they are with their work environment, the less likely they are to leave their jobs.

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