Organizational Justice, Job Stress, and Work-family Conflict: Their Interrelationships in Universities' Personnel

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Abstract

Presence of justice in an organization plays a crucial role on employees' well-being and remarkable success of the organization itself. This fair environment may be an important factor in lower levels of stress, which is associated with balancing demands between work and family domains among employees at university. The main purpose of this study is to investigate the relationship between distributive, procedural, and interactional dimensions of organizational justice and job stress, between work-family conflict and job stress, and whether the perception of organizational justice elements do influence work-family conflict. In sum, drawing upon 146 non-academic employees at 5 state universities in Iran, our result indicated that interactional justice had the strongest negative relationship with stress at work and work-family conflict. Moreover, the reciprocal correlation was found between job stress and work-family conflict. Hence, in order to decrease level of stress and to better manage the work and family lives, organizations need to promote justice in workplace.

Key words: organizational justice, interactional justice, distributive justice, procedural justice, work-family conflict, job stress

Introduction

Today's, the increasing number of organizations and companies as well as increasing demands in workplaces has led to more work hours. In other words, in today's commercial and competitive markets, people have to allocate more time to their work. Both work and family domains need their own demands on the one hand, and there is an inseparable relationship between the practitioner/employee and workplace on the other. Thus, managers of organizations and industrial units are required to pay more attention to their personnel's private and working life, since the most important part of any organization is its human resources which can have effects on other sides of organization in achieving its goals (Bolino et al. 2002). Justice plays an important role in organizations, which is regarded as an important issue for the personnel. Organizational justice regards the personnel's attitude to see if the organization has a fair behavior toward them (Abu Elanan, 2010). Additionally, Colquitt and Judge (2004) stated that injustice in the fields of distribution, procedure, and interaction work as stress-stimulant factors in workplace lead to job stress among personnel (Fairbrother and Warn, 2003). As well, organizational injustice as an important and predictive factor negatively effects people allocate to work, some researchers consider stress-
stimulant factors as the main source of work-family conflict. Besides high managements at home conditions, people have less control over their working life (Higgins & Duxbury 1992). In some researches, work-family conflict is considered as a well-being factor and the practitioner's attitudes, e.g. as a job demand or stress-stimulant factor (Carlson, Grzywack and Zivnuska, 2009) and in other situations as a consequence of job stress and other work conditions (Taris et al. 2006).

Organizational justice and its consequences

Organizational justice considered as a ground for most behaviors in an organization has been studied by researchers for more than five decades (Greenberg, 2011), and is an important issue which is related both to material production and to interpersonal interactions (Latham, 2007). Organizational justice is a multidimensional structure encompassing from employees' payment to managers' fair behavior. Thus, researchers distribute justice to three distributive, procedural, interactional (interpersonal and informative) dimensions (Greenberg, 2005). Distributive justice refers to employees' belief about the fair rules according to which rewards and punishments are distributed. Procedural dimension refers to employees' belief about the fair rules according to which decisions are executed at workplace (Ishak and Alam, 2009). From another perspective, procedural justice includes two objective and subjective dimensions. Subjective dimension is as a behavior by which a specific procedure is perceived; and objective dimension refers to the way this procedure is executed (Tziner & Sharoni, 2014). Defining the amount of rewards and punishments is included in this dimension (Cropanzano & Schminke, 2001; De Konning, 2003). Interactional dimension refers to the extent of an organization's and its decision-makers' deferential behavior towards employees and fair distribution of information about adopted decisions among them (Ishak & Alam, 2009). In other words, with interactional justice it means that an organization should pay attention to its personnel's attitudes and feelings and consult with them about decisions; this helps employees fairly judge about justice at their workplace (Tziner & Sharoni, 2014). This is considered as a complementary dimension of procedural justice.

Moreover, researches show that the perception of organizational justice influences employees' attitudes towards their job. Those who perceive justice at their workplace are more satisfied with their job, are more committed to work, trust their superior, and are more willing to stay at their job (Loe, Yung, De Fandrov, 2009). Thus, depending on the high importance of the perception of organizational justice by personnel and the importance of its consequences on behavioral, emotional, and cognitive reactions of employees (Greenberg, 2011), we are to investigate the relationship between organizational justice, job stress and work-family conflict.

Job stress and work-family conflict

In recent years, job stress has been one of the most prominent issues in the field of work; as a result, many researchers have conducted studies on it (Pitariu, 2004, Brate, 2014, Singh and Dubey, 2011). Sub-structural concepts should be firstly perceived for better understanding of job stress (Spector, 2008). According to Lazarus' definition of interactional dimension, job stress refers to the gap between environmental demands and human resources; a gap by which the employee wastes much energy (Kleber & Van der Valden, 2003). In other words, those who try to realize more demands and requests will have a more job stress (Vermunt, & Steensma, 2003). Tziner and Sharoni (2014) stated that when the demands and requests are more than personnel's abilities and
resources, it will lead to job stress for them. Job stress can negatively influence personnel, while it leads to disadvantageous work behavior (Chraif, 2010) and weak performance (Pitariu, Chraif, & Radu, 2009); influencing the whole organization. Stress-stimulant situations can have different effects on the personnel regarding their experiences. This implies that the way personnel can cope with the situations will modify the extent of job stress (Lazarus, 2000 in a research performed by Landy and Conte, 2010). Work-family conflict as the most important stress-stimulant factor in family and workplace has a significant relationship with job and mental stress (Ahsan, Zaini, & Yong Fie, 2009). Although the notions of work and family are mostly the sources of happiness for people, sometimes it may lead to conflict (Westring &Ryan, 2011). Work as one of the most important requirements of the conflict creates difficult and challenging situations for people (Tziner & Sharoni, 2014). In other words, work-family conflict is created when work demands make it difficult to pay attention to family affairs (Blavia & Fron, 2005). In an ideal world, people should fractionalize their work and family demands into junior parts so that these demands do not slip over (Jex, Swanson, & Grubb, 2013). Taris et al. (2006) define work-family conflict as “the extent of meeting one’s work demands with a satisfactory and appropriate performance in non-working roles” (p. 140). In another definition, Ardogmus (2004) states that work relate to financial needs and family relates to emotional needs. Thus, once one of these needs interferes in another one, it will be changed to a source of problem to the extent which creating a balance between work and family are boring even if for most experienced employee (Armstrong, Atkin-Plunk, & Wells, 2015).

**Effects of organizational justice on job stress and work-family conflict and correlation between these two dependent variables**

Researches on presence or absence of justice have indicated that fairness is a crucial factor on employees' attitude and behavior (Cole, Bernerth, Walter, & Holt, 2010). Vermunt and Steensma (2001), studying different aspects of justice, point out that injustice is a stress-stimulant factor which makes personnel hesitate about realizing their demands. Similarly, researches have shown that organizational injustice is considered as the source of stress in all of its aspects (Francis & Barling, 2005). A study conducted by Robbins, Ford, & Tetrick, (2011), indicated that organizational injustice behaves as a stress-stimulant factor. Moreover, research shows that procedural and interactional justice acts better than distributive justice to reduce. Work-family conflict is the other variable which organization's policies and activities are of its main parts. These parts refer to the activities adopted to reduce work-family conflict stress (Colquitt and Judge, 2004). For example, Allen (2001) found that personnel perception about organization support of their families can negatively predict work-family conflict. Grendy (2001) stated that injustice policies and ways in organizations aggravate work interference in family. In study conducted by Tziner and Sharoni (2014) Arab respondents in Israel reported negative association between organizational justice and work-family conflict and job stress; there is a positive relationship between work-family conflict, between organizational justice and job stress; as well a positive association between work-family conflict and job stress. Similarly, a study conducted by Malisetty and Kumari (2016) indicated that there is a significantly negative relationship between organizational justice and work-family conflict and job stress. Also, research surveyed by Javanmard et al. (2014) showed that the correlation between work-family conflict and organizational justice is considerably negative. In their research, Basic, Hanez, and Stringhamburger (2015), found that poor distributive and procedural justice negatively influences on work-family interference. Similarly, personnel of health department
in six countries stated that the organizational justice has an impact on work-family conflict (Ferreira & Martinez, 2017).

The present study

The present study investigated the relationship between organizational justice and job stress regarding the influence of organizational justice on non-academic employees’ behavior and characteristics. Respecting significantly positive relationship between these two variables, we supposed that organizational justice influences on work-family conflict. Now, due to the importance of this issue among university employees (non-academic) and a dearth of information and studies conducted in Iran, we tried to investigate the relationship of perceived organizational justice as an underlying factor in prevention of stress and role conflicts among non-academic employees. In fact, it is expected that high level of injustice in organizations increases job stress and consequently reduces the ability to realize their demands at home and workplace. It is also expected that the results obtained from this study may help the responsible and decision-makers to create justice in an organization and as a result increase personnel's efficiency and efficacy.

Methodology

Participants

Statistical population of this study includes personnel of state universities in province of Mazandaran, Iran, which 146 non-academic employees from five universities participated in this study. From anthropological perspective, 53% of the participants were male and 47% were female whose average age was 38. Among the participants, 46% had B.A. and the rest had M.A. degree. 14% had less than 10, and 86% had more 10 years of job experience in an organization. It should be also added that 108 participants were married and 38 participants were single.

Measures

Organizational justice: Organizational justice questionnaire was made by Nihoff and Mormon with 20 scales in 1993, which includes three subscales of distributive justice (questions 1 to 5), procedural justice (6 to 11), and interactional justice (12 to 20). Three samples of this questionnaire are as follows: a) "I guess I have a fair work volume" in regard with distributive justice, b) "my boss ensures that its personnel’s concerns and interests are respected before some decisions are made" in regard with procedural justice, and c) “when a decision is made about my job, my boss will deferentially behaves toward me” in regard with interactional justice. Validity and
reliability of this questionnaire has been confirmed by Hamzehzadeh Afkham et al. in Iran (2013). Cronbach’s alpha coefficient obtained in this study is 0.86.

**Job stress:** Personnel’s job stress was measured by the 60-item questionnaire made by Osipow in 1987. Three sample of the questionnaire include: a) I have to do my work responsibilities at home, b) I should do some works lower than my ability, and c) my boss wants me to do something contrary to his sayings. Likert scale has been used to grade this questionnaire, which 1 stands for "never" and 5 for "most times". The number of questions in this questionnaire fluctuates from 60 to 300, in which higher numbers indicate higher level of stress. Validity of the questionnaire has been reported "very desirable" by Sharifian et al. in Iran in 2005, and its reliability has been calculated 0.89 based on Cronbach’s alpha.

**Work-family conflict:** The 18-item questionnaire made by Carlson, Kacmar, and Williams was used to assess work-family conflict. The range of answers has been used from 1 (totally disagree) to 5 (totally agree) based on Likert scale, which higher numbers indicate higher level of work-family conflict. Question samples are as follows: "I lose activities and events related to my family for the additional time of my work" or "my work prevents me from doing my home activities". Carlson et al. reported its reliability between 78% and 87% based on Cronbach’s alpha. Validity and reliability of the questionnaire has been confirmed and reported between 70% and 89% by Hashemi et al. in Iran in 2010, respectively.

**Findings**

The present study seeks to investigate the influences of organizational justice on job stress and work-family conflict. According to the findings reported for the main variables in Table 1, the mean for work-family conflict is generally higher than organizational justice and job stress. Also, there is more distribution (0.6) in work-family conflict. Generally, most of mean and distribution of the numbers relate to the distributive justice variable.

**Table 1. Descriptive findings of the variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>organizational justice</td>
<td>2.84</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>distributive justice</td>
<td>3.12</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>procedural justice</td>
<td>3.02</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>interactional justice</td>
<td>2.57</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>Job stress</td>
<td>2.9</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Work-family conflict</td>
<td>2.92</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>
The results of Kolmogorov-Smirnov test (K-SZ) have been reported in Table 2 to assess normal distribution of the variables. The results show that statistic Z for K-S test is not significant for all the variables, so they have a normal distribution. In other words, parametric tests such as Pearson coefficient test can be used to analyze data.

Table 2. Findings for normal distribution of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-family conflict</td>
<td></td>
<td>0.709</td>
<td>0.696</td>
</tr>
<tr>
<td>Job stress</td>
<td></td>
<td>1.079</td>
<td>0.195</td>
</tr>
<tr>
<td>Organizational justice</td>
<td>146</td>
<td>0.932</td>
<td>0.350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.652</td>
<td>0.789</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.495</td>
<td>0.967</td>
</tr>
</tbody>
</table>

According to Table 3, probability amount of the variable job stress, distributive, interactional, and procedural justice is less than 0.01 and 0.05, so there is a relationship among these variables. It should also be noted that there is an inverse negative and significant correlation among the variables of distributive, procedural, and interactional justice. It means that the more correlation of these three variables we have, the less work-family conflict we see and vice versa. Also, the correlation between job stress and work-family conflict is significantly positive at the level of 1%. In other words, there is a significant relationship among these variables, so the hypotheses are confirmed.

Table 3. Correlation coefficient between work-family conflict and job stress variable and components of organizational justice

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>R(m)</th>
<th>df</th>
<th>R(b)</th>
<th>(a)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stress</td>
<td></td>
<td>0.630**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interactional justice</td>
<td>146</td>
<td>-0.468**</td>
<td>144</td>
<td>0.208</td>
<td>0.01</td>
<td>0.000</td>
</tr>
<tr>
<td>Procedural justice</td>
<td></td>
<td>-0.453**</td>
<td></td>
<td>0.312</td>
<td>0.022</td>
<td>0.001</td>
</tr>
<tr>
<td>Distributive justice</td>
<td></td>
<td>-0.355*</td>
<td></td>
<td>0.159</td>
<td>0.05</td>
<td>0.046</td>
</tr>
</tbody>
</table>

In continue, linear regression analysis was used to predict the changes in the fields of work-family conflict and job stress. Results showed that interactional justice was the most important variable among the independent variables for both job stress and work-family conflict (Beta: -0.516 & Beta: -0.533) and was able to determine
almost 48% and 46% of work-family conflict and job stress, respectively. According to the above mentioned explanations and the results in Table 5, linear regression equation is as follows:

Eq.1. Work-family conflict: \( Y = 5.833 - 0.377 - 0.459 \quad R^2 = 0.482 \quad R^2_{adj} = 0.426 \)

Eq.2. job stress: \( Y = 4.118 - 0.245 - 0.266 \quad R^2 = 0.461 \quad R^2_{adj} = 0.403 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R²</th>
<th>R²_{adj}</th>
<th>SEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>work-family conflict</td>
<td>0.694</td>
<td>0.482</td>
<td>0.426</td>
<td>0.45</td>
</tr>
<tr>
<td>Job stress</td>
<td>0.679</td>
<td>0.461</td>
<td>0.403</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Table 4. Multiple regression for investigating the relationship among work-family conflict, job stress, and components of organizational justice

Table 5. The amount of the influence of the components of organizational justice on work-family conflict and job stress

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
<th>P</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>work-family conflict</td>
<td>Fixed number</td>
<td>5.833</td>
<td>0.583</td>
<td>-</td>
<td>10.0</td>
<td>0.00</td>
<td>8.468</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Distributive justice</td>
<td>-0.188</td>
<td>0.140</td>
<td>-0.221</td>
<td>-1.342</td>
<td>0.191</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Procedural justice</td>
<td>0.377</td>
<td>0.173</td>
<td>0.358</td>
<td>-2.185</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interactional justice</td>
<td>-0.459</td>
<td>0.122</td>
<td>-0.516</td>
<td>-3.761</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job stress</td>
<td>Fixed number</td>
<td>4.118</td>
<td>0.322</td>
<td>-</td>
<td>12.798</td>
<td>0.00</td>
<td>7.398</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Distributive justice</td>
<td>-0.245</td>
<td>0.077</td>
<td>-0.534</td>
<td>-3.174</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Procedural justice</td>
<td>-0.078</td>
<td>0.095</td>
<td>0.136</td>
<td>0.815</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interactional justice</td>
<td>-0.0266</td>
<td>0.067</td>
<td>-0.553</td>
<td>-3.951</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion**

Many studies have shown that organizational injustice has a crucial role in workplace. There are many factors showing that employees who must obey their organizational injustice, it will interfere in their private and work situations, this will lead to job stress. Regarding this issue, the present study intended to find an appropriate pattern to investigate the relationship among the variables among state universities in Iran. Specifically, we were supposed to know how justice in an organization can influence employees’ stress and work-family conflict and how these two last variables can influence each other.
According to the explanations, the research hypotheses are introduced as follows:

1) The negative relationship between three dimensions of organizational justice including distributive, procedural, and interactional dimension and job stress. 2) A positive relationship between job stress and work-family conflict. 3) A positive relationship between work-family conflict and job stress. 4) A negative relationship between three dimensions of organizational justice including distributive, procedural, and interactional dimension and work-family conflict.

Now, we discuss about implicit findings according to the hypotheses by emphasizing the details in the pattern.

According to the findings, the first hypothesis is confirmed. In other words, the significant relationship between components of organizational justice and job stress, which is in accordance with the studies of Proost et al. (2015); Bobocel & Hafer (2007), shows that the more justice employees feel in workplace, the less job stress they will experience. As well, a more detailed look at organizational justice shows that interactional justice has the highest influence job stress, which is in accordance with the study of Colquitt and Judge (2004). Thus, according to the finding of this research and other studies, we can say that directors and decision-makers at universities should reconsider about adopting decisions and information distribution among university personnel. In other words, if directors behave deferentially toward their personnel try to consider their interests and concerns, and execute justice in different parts of university; less job stress will be seen among their employees.

In regard with the second and third hypotheses, the results of regression coefficient, which is in accordance with the studies of Tziner and Sharoni (2014); and Armstrong et al. (2015), show that job stress and work-family conflict influence each other. This means that the more stress personnel feel at work, the more conflict they will experience at home. In other words, when personnel feel less stress at work, it will be reflected in their life leading to less work-family conflict and vice versa. "Overflow pattern" clarifies more on this correlation. It says that when personnel feel the least stress at work, this will be reflected in their life and consequently reduces work-family conflict among them.

Finally, results showed that there is a negative relationship between organizational justice and work-family conflict. In regard with the forth hypothesis we found that the influence of perceived organizational justice on work-family conflict as well as the results of correlation coefficient are in accordance with the studies of Ferreira and Martinez (2017); and Kahya and Kesen (2014). It means that the more justice is felt in an organization, the less conflict will be seen among its personnel. In other words, organizations can reduce work-family conflict by promoting the level of perceived organizational justice.
What is clear is the important role of decision-maker and managers in an organization which can help personnel’s mental health, efficiency, and work stress reduction through effective organizational interference such as holding educational courses on work-family conflict management (Malekiha et al., 2010) and creating flexible work patterns (Hennessy and Lent, 2008).

In general, inferential analysis of data confirmed that there is a negative and significant relationship between distributive, procedural, and interactional justice and job stress and work-family conflict among university personnel. On the other hands, there is a significantly positive relationship between job stress and work-family conflict.

References


