EVALUATING THE RELATIONSHIP BETWEEN JOB BURNOUT AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR: A STUDY OF INDUSTRY, MINE AND TRADE ORGANIZATION EMPLOYEES

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ABSTRACT

One of the most important challenges facing organizations is the increasing levels of job burnout among their employees. In the meantime, it poses the question as what the relationship between this factor and organizational citizenship behavior is. The aim of this study was to investigate the relationship between burnout and organizational citizenship behavior to provide an appropriate model. The population of this study consisted of all employees of industry, mine and trade organization of Golestan province-Iran, the number of whom is 154, out of which, 120 employees were selected as a sample by the simple random sampling method. For collecting the data, two questionnaires of job burnout and organizational citizenship behavior were applied, and the obtained data was analyzed using the statistical methods of Kolmogorov–Smirnov test, Spearman's correlation test, Pearson's correlation test, Regression analysis, F-test and T-test. From the results, it was found that the variable of job burnout had a significant negative relationship with organizational citizenship behavior. The results demonstrated that among job burnout components, emotional exhaustion and reduced personal accomplishment can predict job satisfaction and organizational citizenship behavior in a negative direction.

Keywords: Job burnout; Organizational citizenship behavior; Employees of Golestan Province industry, mine and trade organization

1. INTRODUCTION

Psychological sensitivities in any jobs provide desirable context for job stress and injuries, so the prevention of burnout is considered as one of the main contexts in public health [1]. Fruedenberger was the first who used the concept of burnout to describe a state of exhaustion (emotional and mental) observed among employees [2]. In the article entitled "staff burnout", he defined it as a specific psychological condition in which, people experience emotional exhaustion, a lack of personal accomplishment and tending to depersonalize others [3]. At first, burnout was mainly identified within human service: “Burnout is a syndrome including emotional exhaustion, depersonalization and reduced personal accomplishment that can happen among employees working with people. However, by the late 1980s, it was found that burnout occurs out of human services, for example, managers, white and blue collar workers
and entrepreneurs. In the more general form, burnout is defined as “a state of exhaustion in which person is pessimistic about job value and his/ her abilities for doing it [4, 5].

According to Maslach’s model, burnout starts with emotional exhaustion which is a response to long term job stress. As a consequence of this emotional exhaustion, people avoid others and depersonalization occurs and if this situation continues, person feels failure in doing job affairs. Therefore, according to Maslach’s model, emotional exhaustion happens prior to depersonalization and reduced personal accomplishment is followed by situation [6].

Organizational citizenship behavior has attracted the most attention in organization and management literature and many of definitions, concepts and outcomes of this phenomenon in the workplace have been suggested by American researchers such as [7-13]. Generally it is suggested that organizational citizenship behavior represents those groups of beneficial organizational behavior which cannot be justified through formal role obligations and reward system in the organization [14, 15].

Examples of organizational citizenship behavior consists of helping voluntarily other employees, providing innovative suggestions to improve the organization, not overwhelming employees’ rights, not requesting unnecessary leaves, participating in the elective meetings [16].

The importance of organizational citizenship behavior (OCB) investigation is as follows: 1) Emphasis on the organizational citizenship behavior could minimize the conflicts due to ambiguity in job expectations. 2) Organizational citizenship behavior decreases to allocate rare resources via emphasis on extra role behaviors. 3) Educational institutes can provide the atmosphere which organizational citizenship behavior is motivated and facilitated. In this environment, facilitating factors of the organizational citizenship behaviors increase which result in decreasing obstacles. 4) It provides the opportunity of having a deeper understanding from organizational citizenship behavior factors and occupational and relative variables for the higher educational administrations [17].

According to Organ theory, organizational citizenship behavior has 5 dimensions:
- **Conscientiousness**: Organ has defined it as dedication to job which exceed formal requirements. Based on his opinion, people with high citizenship behavior, continue their job in the worst condition, even illness. This indicates their commitment to work.
- **Altruism**: it refers to discretionary and useful behaviors such as empathy, friendship and compassion that have the effect of helping another person with organizationally relevant tasks or problems.
- **Civic Virtue**: it refers to responsible participation of employees in political life cycle of organization and supporting the administrative function of the organization such as additional and extracurricular activities when their attendance is not necessary and etc. These behaviors indicate that staffs realize themselves as a part of organization and accept its responsibilities which entails.
- **Sportsmanship**: it refers to the willingness to tolerate circumstances without complaining. Organ (1988) defined it as the behavior of warmly tolerating the irritations that are an inevitable part of nearly every organizational setting.
- **Courtesy**: it is the discretionary behavior aimed at preventing work-related problems with others from occurring. This dimension indicates that the staffs behave respectfully with colleagues, supervisors and clients [18-20].
Due to the inevitability of the existence of factors causing burnout and their impacts on the OCB, and also to gain a better understanding of the relations among mentioned variables, a comprehensive investigation of this issue is needed mainly to improve and promote the organization.

In 2011, Salehi and Gholtash conducted a study entitled "The relationship between job satisfaction, job burnout and organizational commitment with the organizational citizenship behavior" for providing a proper model. The population of this study consists of all members of the faculty of the first district branches of Islamic Azad University, the number of whom is 3100, out of which, 341 were selected as a sample by the stratified sampling method. The results showed that the level of organizational citizenship behavior is slightly more than average. The variables of job satisfaction and organizational commitment have a positive effect and burnout and organizational atmosphere have a negative effect on organizational citizenship behavior. Of the job satisfaction components, job entity, satisfaction from colleagues and salary can predict the organizational citizenship behavior in a positive direction. Among the triple components of burnout (i.e. reduced personal accomplishment, depersonalization, emotional exhaustion), all three can predict the organizational citizenship behavior in a negative direction. Among the triple components of the organizational commitment, only normative commitment can predict the organizational citizenship behavior in a positive direction. Among the five components of the organizational atmosphere, only the supportive behavior of manager has a positive effect on the organizational citizenship behavior [21].

In 2005, a study, entitled "Associations among altruism, burnout dimensions, and organizational citizenship behavior" was conducted by Van Emmerik et al. The obtained results from 178 participants indicated that there was a positive relationship between altruism and organizational citizenship behavior. The results also showed that of the three dimensions of burnout, only reduced personal accomplishment was (negatively) associated with engagement in organizational citizenship behaviors [22].

Chiu and Tsai studied the relationship between burnout, job involvement and organizational citizenship behavior in 2006. Data was collected from 296 paired samples of service employees and their supervisors in 12 hotels and restaurants. The results indicated that while depersonalization has no independent effect on organizational citizenship behavior, emotional exhaustion and reduced personal accomplishment have negative effects on organizational citizenship behavior. Moreover, Job involvement mediated the relationships among emotional exhaustion, reduced personal accomplishment, and OCB [6].

In 2008, Schepman and Zarate studied the relationship between burnout, negative affectivity and organizational citizenship behavior for human services employees. The number of 32 employees completed surveys. The results showed that there is a significant positive relationship in all main variables of burnout, negative affectivity and organizational citizenship behavior with their components. There is also a significant negative relationship between organizational citizenship behavior with burnout and negative affectivity [23].

Gilbert et al. investigated the mediating effect of burnout on the relationship between structural empowerment and organizational citizenship behaviors in 2010. This research was studied 897 healthcare professionals in five Canadian hospitals. The results indicated that emotional exhaustion was a significant mediator of the relationship between empowerment
and organizational citizenship behavior. However the mediating role of emotional exhaustion was not supported the in relationship between empowerment and individual citizenship behavior [24].

In 2011, Sesen et al. studied the effect of burnout on organizational citizenship behavior under the mediating role of job satisfaction. Data was collected from 257 nurses in three university hospitals. The obtained results from regression analysis demonstrated that among burnout dimensions, only personal accomplishment reduction had an effect on OCB-O (OCB toward organization), while emotional exhaustion and depersonalization had no effect. Furthermore, from the mediation analysis, job satisfaction was found as a mediator in the relation between reduced personal accomplishment and OCB-O. However, it didn't show any mediating role in the relation between all three burnout dimensions and OCB-I (OCB toward individuals) [25].

1.1 Theoretical framework

The goal of this study is to survey the relationship between burnout and organizational citizenship behavior among industry, mine and trade organization (IMTO) employees of Golestan province-Iran. In general, theoretical principles indicate that there is a negative relationship between burnout and organizational citizenship behavior.

According to the conceptual model of research illustrated in Fig. 1, the relationship of burnout and its components (independent variables) will be studied with organizational citizenship behavior (dependent variable).

According to Maslach’s theory, burnout components consist of emotional exhaustion, depersonalization and reduced personal accomplishment [4]. Moreover, based on Organ's opinion, organizational citizenship behavior components is composed of conscientiousness, altruism, sportsmanship, courtesy and civic virtue [19].

![Fig. 1 Conceptual model of research](image)

1.2 Hypotheses

To reiterate, the following hypotheses were made:
Main Hypothesis 1: Burnout has a negative relationship with organizational citizenship behavior.
Sub-Hypothesis 1: Emotional exhaustion has a negative relationship with organizational citizenship behavior.
Sub-Hypothesis 2: Depersonalization has a negative relationship with organizational citizenship behavior.
Sub-Hypothesis 3: Reduced personal accomplishment has a negative relationship with organizational citizenship behavior.

2. METHODOLOGY

The present research is considered as an applied, correlation-survey study.

2.1 Participants

The data is gathered through 154 employees working in industry, mine and trade organization of Golestan province-Iran. Sample volume was estimated 108 persons based on Krejcie and Morgan’s sample size determination table [26]. The questionnaires were distributed among 120 persons and finally 110 questionnaires were returned. These persons were selected by simple random sampling.

2.2 Instruments

For collecting data, the burnout and organizational citizenship behavior questionnaires were used.
Job burnout questionnaire: To access the three burnout dimensions, Maslach Burnout Inventory (MBI) was employed. MBI consists of 22 items and has three dimensions: emotional exhaustion (9 items), depersonalization (5 items) and reduced personal accomplishment (8 items). Each item referred to a 5-point Likert type scale.

Organizational citizenship behavior: It consists of 15 items and designed to measure five OCB dimensions proposed by Organ that are labeled altruism (3 items), conscientiousness (3 items), sportsmanship (4 items), civic virtue (3 items) and courtesy (2 items). Each item was answered via a 5-point Likert scale.

In order to determine validity of the questionnaires, the method of content validity was applied, and the reliability was calculated by Cronbach's alpha [27], by which the acceptable coefficients of 0.89 for Burnout questionnaire and 0.946 for organizational citizenship behavior were obtained.

2.3 Data analysis

Data analysis was performed in two descriptive and inferential statistics levels. In descriptive statistics level, different kinds of central and dispersion indexes were used whereas in inferential statistics level, Kolmogorov–Smirnov test, Spearman’s correlation test, Pearson's correlation test, Regression analysis, F-test and T-test and also statistical software such as SPSS and Excel were implemented.
3. RESULTS AND DISCUSSION

3.1 Demographic Characteristics of the Sample

According to the obtained results among population, 80 persons (72.7%) were male and 30 persons (74.55%) were female. Also, based on the education level, 30 persons (27.3%) had diploma and associate degree, 60 persons (54.5%) had bachelor’s degree and 20 persons (18.2%) had master’s degree and higher. According to work experience, 53 persons (48.2%) had lower than 10 years experience, 44 persons (40%) had between 10 to 20 years and 13 persons (11.8%) had 20 years and more.

Investigating the employees’ burnout and organizational citizenship behavior based on their gender revealed that the average score of burnout in men was 1.03 and in women was 1.10. In the case of organizational citizenship behavior, the average score was 2.34 for men and 2.50 for women. Accordingly, it was found that burnout in men and women was in a very low level. However, organizational citizenship behavior of both groups was in an average level.

Exploring the status of these two variables based on the education level showed that the average score of burnout in people with diploma and associate’s degree was 0.87, bachelor’s degree was 1.10, master’s degree and higher was 1.15, while the average scores of organizational citizenship behavior in people with diploma and associate’s degree was 2.23, bachelor’s was 2.43 and master degree and higher was 2.46. Accordingly, it was found that burnout of all employees was in a very low level and their organizational citizenship behavior was in an average level.

Furthermore, surveying the status of research variables based on the work experience demonstrated that the average score of burnout in employees with the work experience of less than 10 years was 0.97, between 10 to 20 years was 1.09 and between 20 to 30 years was 1.21. Also, the average score of organizational citizenship behavior in employees with work experience of less than 10 years was 2.24, between 10 to 20 years was 2.36 and between 20 to 30 years was 2.17. Accordingly, it was found that burnout of all employees was in a very low level and their organizational citizenship behavior was in an average level.

Inspecting the average percentage of amplitude in burnout and organizational citizenship behavior components demonstrated that the average percentage in all three dimensions of burnout (i.e. emotional exhaustion with 95.5%, depersonalization with 100% and reduced personal accomplishment with 95.5%) were in a low level while among organizational citizenship behavior components, civic virtue with 96.4%, altruism with 100% and conscientiousness with 91.9% were in a very high level, sportsmanship 86.4 was in a high level and courtesy 67.3 was in an average level.

3.2 Inferential statistics analysis

In order to ascertain whether the data was normally distributed or not we applied Kolmogorov-Smirnov test [29, 30] where the null hypothesis was that the data is normally distributed. The results of the normality test are represented in Table 1.
Table 1. The summary of Kolmogorov-Smirnov test

<table>
<thead>
<tr>
<th>Kolmogorov – Smirnov</th>
<th>P-value</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.926</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>0.536</td>
<td></td>
</tr>
</tbody>
</table>

As can be perceived from the data in Table 1, P-value is much more than 0.05. Therefore it can be concluded that the null hypothesis is supported and the distribution is normal. Next, the details of the hypotheses along with the results of our statistical tests will be presented.

3.2.1 Main hypothesis

The main hypothesis of this research indicates that there is a significant relationship between burnout and organizational citizenship behavior. Therefore, in order to evaluate this hypothesis, Spearman and Pearson’s correlation tests were performed. The results are represented in Table 2.

Table 2. Result of Spearman and Pearson’s correlation tests between burnout and organizational citizenship behavior

<table>
<thead>
<tr>
<th>Organizational citizenship behavior</th>
<th>Spearman’s correlation coefficient</th>
<th>Pearson’s correlation coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout</td>
<td>-0.527*</td>
<td>-0.524*</td>
<td>0.000</td>
<td>110</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).

It is seen from the above table that Spearman and Pearson’s correlation coefficients are -0.527 and -0.524, respectively. As the level of significance for rejecting the null hypothesis was taken to be \( p \)-value <0.05, therefore we can conclude that above hypothesis is supported. It means that there is a negative relationship between burnout and organizational citizenship behavior. In fact, the increase in burnout of employees leads to reduction in their organizational citizenship behavior and vice versa. In following, the regression model is calculated between burnout and organizational citizenship behavior.

The significance level represented in Table 3 demonstrated that, this test is significant and there is a linear regression model between above factors (\( p \)-value <0.05 indicates the test is significant). In other words, there is a linear relationship between the employees’ burnout and organizational citizenship behavior.

Table 3. Analysis of variance (ANOVA) for burnout-organizational citizenship behavior

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Mean square</th>
<th>F-value</th>
<th>Sig.</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>6.128</td>
<td>2</td>
<td>3.064</td>
<td>22.514</td>
</tr>
<tr>
<td>Residual</td>
<td>14.154</td>
<td>104</td>
<td>0.136</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20.282</td>
<td>106</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the adjusted \( R^2 \) value represented in the above table, 30% variation in organizational citizenship behavior with the burnout components could be predicted by this model.
Now it is possible to determine the model parameters by means of coefficients represented in Table 4.

Table 4. Regression model of burnout components-organizational citizenship behavior relationship

<table>
<thead>
<tr>
<th>Response variable</th>
<th>Influential variables</th>
<th>Unstandardized Coefficients B</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational citizenship behavior</td>
<td>Reduced personal accomplishment</td>
<td>-0.252</td>
<td>-0.421</td>
<td>4.355</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Depersonalization</td>
<td>-0.057</td>
<td>-0.082</td>
<td>0.763</td>
<td>0.047</td>
</tr>
<tr>
<td></td>
<td>Emotional exhaustion</td>
<td>-0.118</td>
<td>-0.194</td>
<td>2.004</td>
<td>0.048</td>
</tr>
</tbody>
</table>

Based on the data presented in the above table, the final model can be expressed as follow:

\[ Y = -0.421X - 0.194Z \] (1)

where \( Y \) is the organizational citizenship behavior (dependent variable), \( X \) is the reduced personal accomplishment and \( Z \) is the emotional exhaustion.

The negative sign in front of the \( X \) term in Eq. (1) indicates that there is a negative-linear relationship between the burnout components and organizational citizenship behavior. In addition, the depersonalization coefficient was insignificant to the response (OCB) which could be manually removed from the model. It means that the increase in burnout leads to a reduction in OCB and vice versa. In other words, one unit increase in organizational citizenship behavior arises from 0.421 unit decrease in reduced personal accomplishment and 0.194 unit decrease in emotional exhaustion.

3.2.2 First sub-hypothesis

The first subsidiary hypothesis indicates that there is a significant relationship between emotional exhaustion and organizational citizenship behavior in IMTO employees. In order to evaluate this hypothesis, we hired Spearman and Pearson’s correlation tests. The results are presented in Table 5.

Table 5. Results of the Spearman and Pearson’s correlation tests between emotional exhaustion and organizational citizenship behavior

<table>
<thead>
<tr>
<th>Organizational citizenship behavior</th>
<th>Spearman’s correlation coefficient</th>
<th>Pearson’s correlation coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>-0.422*</td>
<td>-0.417*</td>
<td>0.000</td>
<td>110</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).

It is seen from the above table that Spearman and Pearson’s correlation coefficients are -0.422 and -0.417, respectively. As the level of significance for rejecting the null hypothesis was taken to be p-value <0.05, therefore we can conclude that above hypothesis is supported.
It means that there is a negative relationship between emotional exhaustion and organizational citizenship behavior. In fact, the increase in emotional exhaustion of employees leads to reduction in their organizational citizenship behavior and vice versa.

3.2.3 Second sub-hypothesis

The second subsidiary hypothesis indicates that there is a significant relationship between depersonalization and organizational citizenship behavior in IMTO employees. In order to evaluate this hypothesis, we hired Spearman and Pearson’s correlation tests. The results are presented in Table 6.

Table 6. Results of tests of Spearman and Pearson’s correlation tests between depersonalization and organizational citizenship behavior

<table>
<thead>
<tr>
<th></th>
<th>Spearman’s correlation coefficient</th>
<th>Pearson’s correlation coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depersonalization</td>
<td>-0.371*</td>
<td>-0.341*</td>
<td>0.000</td>
<td>110</td>
</tr>
</tbody>
</table>

*: Correlation is significant at the 0.01 level (2-tailed).

It is seen from the above table that Spearman and Pearson’s correlation coefficients are -0.371 and -0.341, respectively. As the level of significance for rejecting the null hypothesis was taken to be p-value <0.05, therefore we can conclude that above hypothesis is supported. It means that there is a negative relationship between depersonalization and organizational citizenship behavior. In fact, the increase in depersonalization of employees leads to reduction in their organizational citizenship behavior and vice versa.

3.2.4 Third sub-hypothesis

The third subsidiary hypothesis indicates that there is a significant relationship between reduced personal accomplishment and organizational citizenship behavior in IMTO employees. In order to evaluate this hypothesis, we hired Spearman and Pearson’s correlation tests. The results are presented in Table 7.

Table 7. Results of tests of Spearman and Pearson’s correlation tests between reduced personal accomplishment and organizational citizenship behavior

<table>
<thead>
<tr>
<th></th>
<th>Spearman’s correlation coefficient</th>
<th>Pearson’s correlation coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced personal accomplishment</td>
<td>-0.529*</td>
<td>-0.525*</td>
<td>0.000</td>
<td>110</td>
</tr>
</tbody>
</table>

*: Correlation is significant at the 0.01 level (2-tailed).

It is seen from the above table that Spearman and Pearson’s correlation coefficients are -0.529 and -0.525, respectively. As the level of significance for rejecting the null hypothesis was taken to be p-value <0.05, therefore we can conclude that above hypothesis is supported. It means that there is a negative relationship between reduced personal accomplishment and
organizational citizenship behavior. In fact, the increase in reduced personal accomplishment of employees leads to reduction in their organizational citizenship behavior and vice versa.

4. CONCLUSION

As mentioned earlier, this study aimed at investigating the relationship between burnout and organizational citizenship behavior.

In order to evaluate the main hypothesis and its sub–hypotheses, the Spearman and Pearson’s correlation tests were employed. Since, for all hypotheses the significance level was less than the error level, H₀ hypothesis was rejected. It means that there is a significant relation between burnout and its components with organizational citizenship behavior at the 95% confidence level with both Spearman and Pearson's correlation coefficients of -0.527. The negative coefficients would indicate that there is a negative relation between these two variables which means increasing in burnout results in decreasing OCB and vice versa.

Comparisons were made between our findings presented here and the findings from the other researches:

In 2005, Van Emmerik et al. [22] studied the relationship between altruism, burnout dimensions, and organizational citizenship behavior. The results indicated that among triple dimensions of burnout, only reduced personal accomplishment had a negative relation with commitment dimension in organizational citizenship behavior. In 2006, Chiu & Tsai [6] studied the relationship between burnout, job involvement and organizational citizenship behavior. The results pointed out that while depersonalization has no independent effect on organizational citizenship behavior, emotional exhaustion and reduced personal accomplishment have negative effects on it. In 2008, Schepman & Zarate [23] studied the relationship between burnout, negative affectivity and organizational citizenship behavior. The results indicated that there is a significant negative relationship between organizational citizenship behavior with burnout and negative affectivity. In 2010, Gilbert et al. [24] conducted a study to investigate the mediating effect of burnout on the relationship between structural empowerment and organizational citizenship behaviors. The results indicated that emotional exhaustion was a significant mediator of the relationship between empowerment and organizational citizenship behavior.

Based on the results obtained in this survey and the validation of the hypotheses which indicates a negative relationship between the burnout and its components with OCB among IMTO employees, the following suggestions are offered:

The reducing of the employees burnout can be performed through the strategies such as, matching the job expectations with the employees abilities, adopting relationship-oriented leadership styles in the organization, improving the performance evaluation system, applying measures for reducing favoritism in the promotion of employees by establishing a structured job promotion, providing preferment and development facilities in the organization and also making flexible rules and regulations. This will increase the possibility of performing organizational citizenship behaviors in a large extent.
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