



The Mediator Role of Procrastination in the association between Job Characteristics and Job Stress among Employees of Shahid Rajaei Customs Office, Bandar Abbas, Iran (2017)

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Abstract

Background: This study aimed to examine the association between job characteristics and procrastination with the mediating role of job stress among the official staff of Shahid Rajaei Customs Office, Bandar Abbas, Iran, 2017.

Materials and Methods: This descriptive research is a pathway analysis. The statistical population included all staff members (n=650) at Shahid Rajaei Customs Office. Based on the Guernsey and Morgan's table, 242 staff were selected as the samples through random sampling. To collect data, we employed three questionnaires, including job characteristics, job stress, and procrastination questionnaires. The content validity of the instruments was approved. In addition, reliability was reported at 0.78, 0.79, and 0.86 for the abovementioned questionnaires, respectively. The data were analyzed using Pearson's correlation coefficient and regression. Statistical analysis was performed using SPSS Statistics software V.21.0.

Results: A significant association was observed between job characteristics and procrastination ($r = -0.420$, $P < 0.01$). Moreover, a significant negative association was found between job stress and procrastination in the staff ($r = 0.538$, $P < 0.01$). According to the results of the present research, job stress could mediate the association between job characteristics and procrastination.

Conclusion: According to the importance job characteristics theory, it could be used in decreasing job stress in organizations.

Keywords: Procrastination, Job Stress, Employees

Introduction

Human resources are considered as the most valuable capitals of organizations. Thus, organizations are required to make an effective use of their human resources to achieve their objectives and to meet environmental challenges. To this end, one of the efforts made by organizations to retain their human resources is to identify factors reducing stress [1].

Job stress is an emotional response produced when job conditions and possibilities are not consistent with workforce capacity, resources, and

needs. Moreover, individual factors, such as character defects, personality traits, and coping strategies could lead to its incidence [2]. Under such conditions, job stress could have negative impacts on job satisfaction, absenteeism, as well as job burnout. It should be noted that job stress outcomes are not limited to the workplace, and they could influence other life aspects [3]. In this regard, organizational procrastination refers to the act of postponing, suspending, and disregarding duties and responsibilities as well as leaving actions for the future. Stress and anxiety are

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among the consequences of procrastination which could lead to the waste of time and resources in individuals and organizations, thereby exerting a negative impact on health status [4].

According to Schraw (2007), behavior considered as procrastination is needless, delaying, and counterproductive [5]. Lay (1976) describes procrastination as frequent failure to do what needs to be done to reach goals [6]. Job characteristics are among the factors affecting employee behavior in an organization. In this study, the dimensions of the job characteristics model has been used as the basic theory. Herzberg (1978) believes some factors in the workplace lead to job satisfaction while a separate group of factors leads to dissatisfaction, which are all independent of each other. However, unlike Herzberg's theory that a specific advice is not provided for a job, the job characteristics theory of work considers job design [7].

Therefore, given the theoretical background of this study and lack of research in this field, this research attempts to examine the association between job characteristics and job stress by taking into account the mediator variable of procrastination at Shahid Rejaee Customs Office, Iran.

Materials and Methods

This descriptive research uses pathway analysis and primary data collected through questionnaires. The respondents were assured that all their responses would be kept confidential. This study emphasized the use of close-ended questionnaires which were responded to, based on a 4-point Likert scale to determine the level of interest in and

perception of each element. All questionnaire items were analyzed using SPSS Statistics V.21.0 (IBM Corporation, Armonk, NY, USA).

The statistical population included all employees (n=242) at Shahid Rajaei Customs Office located in Bandar Abbas in 2017. Based on the Guernsey and Morgan's table (Table 2), 95 subjects were selected as the samples through random sampling. Three questionnaires of job characteristics, neglect, and job stress were used. The questionnaires were taken from previous studies and modified to fit the current context. The questionnaires consisted of items related to distributed job stress (13 questions), distributed job characteristics (15 questions), and items for measuring neglect (29 questions). All questionnaires had proper validity and reliability. They were scored on a 4-point Likert scale of 'strongly agree', 'agree', 'strongly disagree', and 'disagree' with the weights of 4, 3, 2, and 1, respectively.

Results

According to the analysis of the data obtained from the participants, 134 individuals (55.4%) were male and 108 individuals (44.6%) were female. In addition, 215 individuals (88.8%) were married and 27 individuals (11.2%) were single. In terms of the level of education, 67 participants (27.7%) had a high school diploma, and 29 individuals (12.0%) held an associate's degree. In addition, 74 individuals (30.6%) had a bachelor's degree, and 72 of them (29.8%) held master's and postgraduate degrees.

Table 1. Kolmogorov-Smirnov test for the assumption of the normality of research variables

Variable	Job Characteristics	Job stress	Procrastination
Kolmogorov-Smirnov test	1.678	1.223	0.967
Significance level	0.07	0.100	0.307

The second assumption reviewed was the presence of a linear association between the research variables, which was separately examined for all these variables. For the presence of a linear association between the research variables, the probability of the F-value in the linear factor needed not to exceed 0.05. In the present

study, the probability of the F-value in the linear factor was not greater than 0.05 in each association, which indicated the presence of a linear association between the research variables. The first step in the path analysis model after reviewing the assumptions was to investigate the correlation matrix between the variables (Table 1).

Table 2. Correlation matrix

Variables	Job characteristics	Job stress	Procrastination
Job characteristics	1.000		
Job stress	-.495**	1.000	
Procrastination	-.420**	.538**	1.000

** Correlation was significant at a 99% confidence level.

Based on Table 2, the association between job characteristics, job stress, and procrastination was negative; however, there was a positive correlation

between job stress and procrastination. To test this hypothesis, the following steps were taken (Table 2).

Table 3. Regression model coefficients of procrastination, job characteristics, and job stress

Variables	Estimated B	Standard error	Estimated standard β	t-value	P-value
Job characteristics	0.427	0.061	0.409	6.975	0.000
Job stress	0.360	0.076	0.280	4.768	0.000

Since the beta values of the variables of job characteristics and job stress were significant at the error level of less than 0.001, these variables had an effect on procrastination.

Accordingly, an increase of one unit in the variable of job stress increased the mean of procrastination by 0.360 (Table 3).

To calculate the standardized regression

coefficient between job characteristics and job stress, the regression analysis was performed once more.

Procrastination was the dependent variable. To calculate β_2 , a regression test had to be performed once again, so the standard beta coefficient between the two variables of job characteristics and job stress was calculated.

Table 4. Regression model coefficients of associations between job characteristics and job stress

Variables	Estimated B	Standard error	Estimated standard β	t-value	P-value
Job characteristics	0.434	0.062	0.460	6.786	0.000

Where the dependent variable is job stress, we will have the following in the Fig 1:

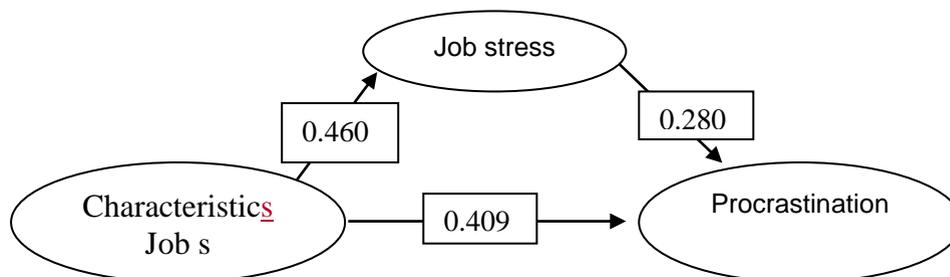


Fig.1. The results of path analysis for testing the hypothesis

Table 5. The effect of the total association of the variables

Route	Direct impact	Total effect
Job characteristics → Procrastination	0.409	$0/280 \times 0/460 + (0/409)$
Job characteristics → Job stress	0.460	0.460
Job stress → Procrastination	0.280	0.280

The following items are considered for the association between the variables:

If the total effect is less than 0.3, the observed correlation will not be significant.

If the total effect is calculated between 0.3 and 0.6, the observed correlation will be desirable.

If the total effect exceeds 0.6, the observed correlation will be highly desirable.

Since the total effect is equal to 0.537 being between 0.3 and 0.6, the correlation is desirable. However, this analysis has not yet been completed (Table 5).

Table 6. Model summary for error calculation

Estimated Standard error	R2adj	R2	R	Model
0.419	0.346	0.351	0.593	

Based on Table 6, the final step was taken to calculate the error as follows:

$$e^2 = 0/649 = 0/351 - 1$$

The values of R2 and e2 were 0.351 and 0.65, respectively, indicating that 35% of the variance of

the dependent variable could be explained by the model, and that 65% of the remaining variables could not be explained as such.

Thus, we would have:

Discussion

The main objective of this study was to investigate the effect of job characteristics on procrastination with a view of the mediating effect of job stress in the employees of Shahid Rajaei Customs Office in Bandar Abbas.

The independent variable was job characteristics, the dependent variable was neglect, and the mediator variable was job stress [8]. The results indicate that job characteristics have a direct effect on procrastination, which is consistent with the findings of the studies of Salamon, Jovkers, and Jobandeh. According to them, job characteristics affect job attitude and improve business outcomes. In addition, procrastination could be influenced by changes in the interpersonal variables of employees' occupational characteristics that affect employee procrastination [9].

In another study titled "nudity and stress in nurses", procrastination was reported to increase stress in nurses, which is consistent with the results of this study. In explaining this finding, one could argue that nurses are confronted with people of various traits in their work sectors, so their daily lives are fraught with unpleasant situations; thus, stress causes them to practice procrastination [10]. People with diverse job characteristics seem to be able to adapt to the environment inside and outside the organization according to their own characteristics. They make the right decision, which is the best way to choose the right way and practice neglect. According to the results, job stress has no mediator role in the association between job characteristics and procrastination. The results also indicate that job characteristics have a significant occupational impact on job performance, which is consistent with Akbari's findings. He believes that job characteristics lead to factors supporting people in tensions. Therefore, job characteristics could be considered as a promising concept to be used in preventive programs for various types of damage and reducing occupational stress [11].

A lot of studies have been done on this topic, which were compared with the present study. All findings of other studies were consistent with the current research, and there were no results to be exactly the same as the results of the present study. Considering the contradiction in different studies, two conclusions could be drawn. Firstly, other factors should be identified in the association between job characteristics and job stress. Secondly, the sample size of the current work was small, so the modeled variables were not significant. Thus, some other factors could be

effective, and it is suggested that a larger sample size be considered in future research.

Conclusion

Based on the findings, job stress and job satisfaction exert significant impacts on increasing work-related procrastination among employees of the studied organization.

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