
ARTICLE REVIEW

The Role of Job Stress and Job Satisfaction in Predicting Job Burnout of Teachers of Students with Special Needs

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ABSTRACT

Introduction	The aim of this study was to determine the role of job stress and job satisfaction in predicting job burnout in teachers of students with special needs in Shiraz, Iran.
Methods	The sample included 136 teachers of students with special needs that were selected through convenience sampling. For data collection, the Burnout Inventory, Job Stress Questionnaire, and the Minnesota Satisfaction Questionnaire were used. Data were analysed using Pearson correlation coefficient and simultaneous multiple regression.
Results	The results showed that job stress positively and significantly predicted job burnout and job satisfaction negatively and significantly predicted job burnout.
Conclusion	According to the findings of this study, it is suggested that organisations related special education field to design and develop appropriate educational and supportive programs (such as holding workshops on stress management in the workplace, providing free counseling and psychological services, identifying individual and environmental factors affecting job satisfaction in teachers of students with special needs, helping to increase their job satisfaction, providing assistants for these teachers, and etc.). This will increase job satisfaction and reduce job stress in teachers of students with special needs. In this way, the burnout of teachers of students with special needs will be reduced.
Keywords	Job Stress - Job Satisfaction - Job Burnout - Teachers - Students with Special Needs.

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INTRODUCTION

There are growing evidences regarding to vocational health challenges.¹ Employees who manage human behaviors (such as teachers) exhibit high levels of job stress.² About 88% of teachers worldwide experience job stress.³ In fact, teaching is one of the most stressful jobs in the world,⁴ compared to other professionals, teachers are recognised as one of the groups most affected by stress.⁵ Given this issue, one of the challenges that have always been faced in the field of education is the reduction of energy and workforce of teachers, which causes a number of teachers to lose their efficiency and effectiveness, and in some cases to leave the education system even before retirement.⁶ Teachers who work in the field of education with special needs students are in a much more sensitive and challenging situation and experience more stress compared to the students without special needs.^{7,8} This may be due to the fact that special education teachers face a variety of challenges, including educating students with different intellectual abilities, physical limitations, and emotional or behavioral problems.⁹ In fact, in educating students with special needs, these teachers have to bear a set of social, educational, and emotional burdens that threaten their mental and physical health.¹⁰ In this group of teachers, the tensions have even led to a turnover.¹¹

Therefore, as one of the important services, teaching students with special needs has been of special interest to researchers in the field of psychology and education. In recent decades, some researchers have examined different variables related to the vocational health in teachers of students with special needs.^{12,13} Of the most important variables in teachers' vocational health is a phenomenon called burnout. Burnout is a state of mental and emotional fatigue that is caused by chronic stress such as pressure and time constraints and lack of resources to perform the assigned tasks.¹⁴ Burnout has three dimensions: emotional fatigue, depersonalisation, and personal inadequacy. Emotional burnout means that one's emotional resource is over-expanded and depleted. This is a sign of emotional exhaustion when the teacher thinks that he cannot dedicate himself to students and teaching as he used to.¹⁵ From the perspective of depersonalisation, one has a negative perception and attitude towards others, which leads to negative and overly cruel responses to others. Personal inadequacy also means a decrease in a sense of competence and success in the job. When teachers feel inadequate to do the job (such as teaching) and other school responsibilities, they feel inadequate.

According to Bartoňová and Smetáčková,¹⁶ teachers' burnout manifest in three main areas: physical, cognitive, and emotional. In the physical domain, burnout usually presents with physical fatigue, lack of energy, nausea when entering the workplace, or various forms of chronic pain. In the

cognitive domain, the most common symptoms are decreased interest in new stimuli, difficulty in concentrating, slow thinking, or memory loss. In the emotional domain, the most common symptoms include a lack of interest in other people, a lack of sensitivity to their needs and irritability.

Research on teacher's burnout in special education shows that several factors play a significant role in burnout, such as teacher's characteristics (age, experience, degree of education, work environment, and school context),^{17,18} student's challenging behaviors,¹⁹ personal characteristics,²⁰ social support,²¹ bureaucracy and lack of roles and rare opportunities to share ideas with others.²² All of these are factors in special education teachers, that contribute to the feeling of confusion and professional isolation, and as a result, increase their dissatisfaction and burnout. In addition, an increasing workload such as preparation of educational materials based on student needs, development and implementation of individual education programs, management of problematic behaviors, cooperation with parents and other stakeholders of students with special needs, and the complex situations in teachers workplace lead to greater stress and burnout.²³ On the other hand, some researchers stated that teachers who experienced burnout were at risk of harm such as irritability, fatigue, hopelessness, pessimistic attitude, alcoholism, substance abuse, reduced teaching quality,²⁴ reduced tolerance for misbehavior,²⁵ and increased use of oppressive disciplinary methods.²⁶

Research on burnout has shown that having high stress at work significantly increases burnout.^{23, 27, 28} In fact, job stress is a negative mental feeling that is experienced in the job situation.³ Job-related stress prevents employee productivity, which is also very common among teachers and manifests unpleasant feelings such as anxiety, irritability, anger, frustration, and depression.^{2, 29, 3} Teachers' stress lead to emotional consequences such as depression, anxiety, burnout, and reduced job satisfaction.^{30, 31} In addition to these consequences, it includes absenteeism, inefficiency, and suicide attempts.^{32, 33} Research has also shown that job stress leads to physiological symptoms such as headaches, immune system dysfunction, musculoskeletal pain, and cardiovascular diseases.^{3, 30} Overall, the results of these studies are evidence to support the claim that job stress can lead to burnout.

It is obvious that the more people have physical, mental, emotional, and economic security in their work environment, the more their job satisfaction.³⁴ Job satisfaction is a positive or pleasurable emotion that results from job or work experience of an employee.³⁵ The concept of job satisfaction can be defined based on two main theoretical approaches.³⁶ The first describes job satisfaction through a single dimension that can be

expressed on a scale between two opposite poles: satisfaction-dissatisfaction. The principle of this experimental dimension is that, increasing in one of the poles will decrease the other. At the same time, a balance can be struck in which the person is neither satisfied nor dissatisfied. In the concept of single-factor job satisfaction, the same approach can be used to determine the level of satisfaction from different aspects and job conditions. According to the other approach, job satisfaction is considered as an independent dimension than job dissatisfaction. The two-dimensional concept assumes that job satisfaction and dissatisfaction are affected by various aspects of work that can be considered as satisfaction (aspects affect job satisfaction) or dissatisfaction (aspects affect job dissatisfaction).³⁶ Teacher's age, years of service, issues outside of school,^{37, 38} different types of leadership,³⁹ types of feedback and support, job expectations, teacher's competency, and continuing education,⁴⁰ lack of teaching aids, extra duties, low income and bureaucracy⁴¹ are factors that affect teacher satisfaction.

It is worth mentioning that the effect of job satisfaction on burnout has been confirmed in various studies. For example, a study by Song et al,⁴² found that job satisfaction reduced burnout. A study by Mohamed et al,⁴³ also found that university staff suffered from high levels of burnout, which negatively affected their job satisfaction. A study by Scanlan and Still,⁴⁴ showed that job satisfaction, intention to leave a job, and burnout were all strongly correlated. In this study, job reward, job control, feedback, and participation had the strongest relationship with lower levels of burnout, less intention to leave the job, and higher job satisfaction. Emotional demands, work shifts, and job interference with home affairs were all associated with higher levels of fatigue at work. According to a study by Molero Jurado et al,⁴⁵ one-third of high school teachers were strongly burnout. The results of this study also showed that high burnout was associated with job satisfaction. A study by Mijakoski et al,⁴⁶ found that there is a relationship between perceived teamwork and job satisfaction and lower levels of burnout.

In general, according to the findings of previous research, it can be concluded that burnout under the influence of various factors such as job stress and job satisfaction can have a significant impact on the efficiency and work quality of employees in different fields. In fact, burnout can't be ignored as an annoying phenomenon that poses serious challenges to employees in physical, psychological, and social dimensions. On the other hand, research has shown that harsh working conditions are a factor that facilitates burnout. Therefore, jobs such as the teaching profession, especially teachers of students with special needs, require a different type of education,

communication, and teaching methods compared to students with typical development. Since teaching them requires extra skill, effort, and time, it puts teachers at greater risk of burnout. Research findings show that about one-third of these teachers leave their jobs permanently after a while. This is one of the challenges that has always been faced in educating students with special needs. Given the importance of this issue, the present study examined the role of job stress and job satisfaction in predicting burnout in teachers of students with special needs and sought to answer the following questions:

- 1) Is there a significant relationship between job stress and job satisfaction with burnout in teachers of students with special needs?
- 2) Can the job stress in teachers of students with special needs predict their burnout?
- 3) Can the job satisfaction in teachers of students with special needs predict their burnout?

MATERIALS AND METHODS

Population, sample, and sampling method

The statistical population consisted of all special school teachers in Shiraz, Fars Province, Iran, from 2020 to 2021. The convenience sampling method was used to select 136 teachers of students with special needs in Shiraz. Convenience sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. In other word, convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. Since the number of teachers of students with special needs in Shiraz was small and random sampling was not possible, therefore, convenience sampling method was used.

Instrument

Burnout Inventory (MBI)

Burnout Inventory (MBI) was used to measure job burnout in this study. This scale was developed by Maslach and Jackson.⁴⁷ MBI includes 22 items that measure emotional exhaustion (9 items), depersonalisation (5 items), and low sense of personal accomplishment (8 items) in workplaces. The scoring of items in MBI was based on a 5-point Likert scale. The respondents chose one of the five options available, including strongly agree, agree, not certain, disagree, and strongly disagree to express their feelings towards the items in the inventory. Maslach and Jackson⁴⁷ calculated the reliability of this test using Cronbach's alpha for each of the subscales in this questionnaire and obtained the following coefficients: Emotional exhaustion, 0.90; depersonalisation, 0.79; and low sense of personal accomplishment, 0.71. In this study, the validity of the scale was assessed by

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measuring the correlation between the scores of emotional exhaustion, depersonalisation, and low sense of personal accomplishment, and the correlation coefficients were found to be 0.75, 0.65, and 0.76, respectively. It should be noted that the teachers completed the paper and pencil version of MBI individually, which took about 15 to 20 minutes.

Job Stress Questionnaire (JSQ)

Job Stress Questionnaire (JSQ)⁴⁸ was used to measure job stress. This scale was initially used to determine organisational determinants of stress. This scale comprised 12 items scored on a five-point Likert scale ranging from “strongly agree” to “strongly disagree”. In this questionnaire, job stress had two distinct dimensions, namely, time pressure and job-related anxiety.⁴⁹ Wu et al,⁴⁹ measured the overall reliability of this scale using Cronbach’s alpha coefficient and it was reported to be 0.85. Glazer et al⁵⁰ stated that the overall reliability of this scale reported in different studies ranged between 0.78 and 0.91. To measure the reliability of time pressure and anxiety dimensions, Parker and DeCotiis,⁴⁸ used Cronbach’s alpha coefficient and calculated their reliability as 0.86 and 0.74, respectively. They estimated the correlation between the factors, used as scales, to assess the validity of the questionnaire and calculated it as 0.54. It should be noted that the teachers individually completed the paper and pencil version of JSQ at school, which took about 15-20 minutes.

The Minnesota Satisfaction Questionnaire (MSQ)

The Minnesota Satisfaction Questionnaire (MSQ-short form) was used in the present study to measure job satisfaction. This scale was developed by Weiss et al,⁵¹ the short form of the MSQ included 20 items that were relevant to a number of job facets which respondents indicated their degree of relative satisfaction using a 5-point Likert scale (1 = very

dissatisfied, 5 = very satisfied). The total score for all the items were considered as job satisfaction. Higher scores indicated higher job satisfaction and lower scores indicated lower job satisfaction. The manual indicated the internal consistency for these scales, on the basis of a variety of occupational groups, produced a median reliability coefficient of 0.90 for the general satisfaction scale. In Schleicher et al,⁵² alpha coefficients of 0.94 were reported for the MSQ. It was suggested that the validity of the short form may be inferred from the validity of the long-form.⁵¹ A study by Hirschfeld,⁵³ concluded that revising the MSQ short form resulted in no significant difference in the factor structure. It should be noted that the teachers individually completed the paper and pencil version of MSQ at school, which took about 15-20 minutes.

Statistical analysis

To determine the correlation between research variables, the Pearson correlation coefficient was used. In predicting job burnout based on job stress and job satisfaction, multiple regression was used in a simultaneous manner. It was worth noting that the significant rate was $p < 0.01$.

Ethical Considerations

Teachers gave verbal consent for participation in this study. The teachers were aware of the purpose of the study and they had the right to leave the study at any time. They were assured that all their information would remain confidential. The ethical review board of the regional Special Education Organization approved the study. The reference number for ethical approval was: 98.1327.9

RESULTS

The sample characteristics of the teachers of students with special needs were presented in Table 1.

Table 1 Sample characteristics of the teachers of students with special needs

	Teachers of students with special needs (N = 136)
Mean age (years) (SD)	38.17 (11.32)
Range (years)	23-57
Male (female)	31 (105)
Family size (SD)	4.07 (2.19)
educational level (%): < B.A(>B.A)	3.73 (96.27)
work experience (%): (≤10 years, 10-20 years, ≥20 years)	8.09, 54.41, 37.5

The Pearson correlation results showed a positive and significant correlation between job burnout and job stress ($p < .01$) and a negative and

significant correlation between job burnout and job satisfaction ($p < .01$) (Table 2).

Table 2 Correlation coefficients between job burnout, job stress and job satisfaction

Variables	Job Burnout	Job Stress	Job Satisfaction
job burnout	1		
job stress	.404**	1	
job satisfaction	-.302**	-.513**	1

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

For predicting job burnout based on job stress and job satisfaction, multiple regression was

used in a simultaneous manner and the results were presented in Table 3.

Table 3 Results of simultaneous regression for prediction of job burnout based on job stress and job satisfaction

Criterion variables	Predictor variables	F	R ²	B	B	T	P
Job Burnout	Job Stress	26.13	.16	.52	.40	5.11	.001
Job Burnout	Job Satisfaction	13.46	.09	-.33	-.30	3.66	.001

Note. F= F-test; R²= adjusted R square; B= unstandardized regression coefficient; Beta= standardized regression coefficient; T= T-test; P= p value.

As shown in Table 3, the results of regression analysis showed that job stress ($\beta=.40$, T=5.11, $P=.001$) positively and significantly predicted job burnout ($R^2 = .16$, F=26.13, $P<.001$). This variable explained a 16% of the variance in job burnout scores. In addition, the results showed that job satisfaction ($\beta=-.30$, T=3.66, $P=.001$) predicted job burnout negatively and significantly ($R^2 = .09$, F=13.46, $P<.001$). This variable explained a 9% of variance in job burnout scores.

DISCUSSION

The present study examined the role of job stress and job satisfaction in predicting burnout in teachers of students with special needs. The findings of the present study showed that job stress positively and significantly predicted burnout. This finding was in line with the findings of Teles et al,⁵⁴ Kim and Moon,⁵⁵ Khamisa et al,⁵⁶ and they confirmed each other's findings. Explaining this finding, it can be stated that stress is a factor that can impair the productivity and performance of employees and threaten their physical and mental health in such a way that it can lead to behaviors such as substance abuse, quitting work, or even attempting suicide. However, the more difficult the working conditions, the higher job stress experience by the employees. Therefore, teachers of students with special needs are among the groups that are always at high risk of job stress due to the difficult work situation. In fact, these teachers face problems such as role ambiguity, overload, heterogeneity and dynamic nature of the disorder, time-consuming evaluations, implementation of individual training, use of coping styles to control students' abnormal behaviors, and lack of appropriate training to manage students' behavior and overall high stress. Altogether, these problems increase their stress.^{3, 22, 57} In such circumstances, one can expect the phenomenon of burnout in this group of employees because job stress and its negative consequences are considered

one of the main factors in causing burnout.^{58, 59} In confirmation of this,⁶⁰ it is believed that burnout is the ultimate response to frequent and severe periods of stress. According to Reddy and Anuradha,³² stress is activated in the body due to the mismatch between environmental demands and the body's ability to cope with such demands. However, research shows that teachers of students with special needs face many conflicts from the beginning of their teaching career, which leads to increased levels of stress and even leaving the job, which is one of the symptoms of burnout.^{3, 33}

In addition to the findings of this study, job satisfaction negatively and significantly predicts burnout. This finding was in line with the findings of Molero Jurado et al,⁴⁵ Lambert et al,⁶¹ Im Choi and Koh,⁶² Skaalvik and Skaalvik,⁶³ and they confirmed each other's findings. Explanation to this finding, it can be stated that lack of specific roles and rare opportunities to share ideas with others are factors that led to the confusion of special education teachers in their role and occupational isolation which result in dissatisfaction and increase their burnout, according to Gersten and Keating.⁵⁷ Some researchers have also shown in their studies that low job satisfaction in teachers can be attributed to excessive workload due to curriculum changes, irrational demands, and lack of support systems.^{64 - 66} According to Bernard,⁶⁷ factors such as workload, peer relationships, job security, student-teacher ratio, administrative support, and lack of appreciation also play a decisive role in the job satisfaction of special education teachers. It is worth noting that one of the indicators of dissatisfaction is leaving the job. This phenomenon has grown significantly in recent years, and according to Bartoňová and Smetáčková,¹⁶ the main reasons for this problem are low wages, finding better jobs, high workload, and stress. Accordingly, the strong correlation between job satisfaction and burnout can be argued that job dissatisfaction in teachers of

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students with special needs can predict their burnout.⁵⁴

Finally, it should be noted that this study was conducted in teachers of students with special needs, so the results can only be generalised to this community. Future researchers are suggested to compare the role of factors such as job stress, and job satisfaction on teachers' burnout in different groups of teachers in special education. In order to make the results more generalisable, future researchers are recommended to study the role of factors such as job stress, and job satisfaction in predicting teachers' burnout with a larger sample size in different populations. Given that many factors can affect the burnout in teachers of students with special needs, it is recommended that in future research, researchers identify factors that can reduce burnout in this group of teachers. The results of this study can help related organisations in special education to design and develop appropriate training and support programs to reduce the burnout in teachers of students with special needs.

CONCLUSIONS

The findings of the present study showed that job stress positively and significantly predicted job burnout, and job satisfaction negatively and significantly predicted job burnout. It is necessary to design and implement preventive, educational, and support programs (such as holding workshops on stress management in the workplace, providing free counseling and psychological services, identifying individual and environmental factors affecting job satisfaction in teachers of students with special needs and helping to increase their job satisfaction, providing assistants for these teachers, and etc.) to reduce job stress and increase the job satisfaction in teachers of students with special needs, and such measures will help to reduce teacher's burnout.

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Declaration of interest statement

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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