Mediating role of time management in the correlation between role conflict and job burnout among the teachers working at Zahedan technical training colleges, Iran

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**Abstract**

**Background:** Teacher burnout and role conflict are considered as serious problems in school environments. This study was carried out in order to investigate the mediating role of time management in the correlation between role conflict and job burnout in the teachers of technical training colleges in the Iranian city of Zahedan.

**Materials and Methods:** In this descriptive correlational study, 200 teachers were selected using the random sampling method and studied in a correlational scheme. In order to measure the research variables, time management behavior, job burnout, and role conflict questionnaires were used. The data were analyzed using the ‘path analysis’ statistical method and AMOS 23 software.

**Results:** The data analysis results showed that ‘role conflict’ (β = 0.34 and P <0.001) had a direct and positive impact on job burnout, and role conflict (β = -0.18 and P <0.001) had a significant negative impact on time management. In addition, time management (β = -0.19 and P <0.001) had a significant negative impact on job burnout. The indirect impact of role conflict (β = 0.032 and P <0.001) on job burnout, with the mediating role of time management, was confirmed as well.

**Conclusion:** We concluded that the variable of time management plays a mediating role in the correlation between the two variables of role conflict and job burnout.

**Keywords:** Role, Conflict, Time Management, Job, Burnout, Teachers

**Introduction**

Work environment is one of the factors that lead to complexities in human life and affect other areas of life. The major part of the average person’s daily life is spent in the work environment (1). Job burnout is a psychological syndrome in response to chronic interpersonal stressors of the job (2). According to Maslach Burnout Approach, the three key dimensions of this response are overwhelming exhaustion, the feelings of cynicism and detachment from the job, and the sense of ineffectiveness and lack of accomplishment (2). Therefore, investigating individual, environmental, and organizational issues with which teachers deal can contribute to the prevention of job burnout.

‘Role conflict’ is one of the factors that affect mental health potentially. When a role interferes, and is incompatible, with another role, individuals evaluate the role negatively as the source of the conflict, which results in dissatisfaction with the job (3). Role conflict has a negative correlation with job satisfaction (4, 5). The results of numerous studies on role conflict show that it is equally important for individuals and organizations. Role conflict is important for organizations, for it leads to reduced productivity, reduced job satisfaction, increased lateness and absenteeism at work, increased resignation, and reduced organizational commitment; in contrast, it is important for individuals because, as a source of risks to
employee health, it leads to difficulties in performing tasks, inefficiencies in parenting tasks, as well as reduced marital satisfaction and mental health (5). Researches have reported a significant positive correlation between role conflict and job burnout, and occupational stress (6, 7, 8).

According to Darawad et al., time pressure is one of the variables that affect job burnout (9). ‘Time management’ has been introduced as an approach to coping with time-related workplace stress. This approach consists of some techniques for defining short-term goals, turning them into tasks and activities for their faster implementation, planning for and prioritizing daily tasks, and preventing work interruptions so as to remove limitations to the performance of tasks (10). Time management is the effective use of resources and a way of achieving personal goals, which includes skills, such as personal discipline, being targeted, interruption control, task organization, and the like. These skills can eliminate many sources of organizational stress and reduce their negative impacts effectively (9). Time management is not merely the controlling of each second and minute of time, yet it involves the methods by which people make use of their time to improve their lives (11). In time management, needs and demands are categorized based on their priority and the time and resources required to address them (10). In their study of the correlation between time management and job burnout, researchers (12, 13, 14, 15 & 16) found out that there was a significant correlation between job burnout and time management. Job burnout exerts harmful effects, and its physical, psychological, social, and organizational consequences have drawn the attention of many researchers. Since contemporary work environments and the teaching quality are of paramount importance in the maintenance of teachers’ health and wellbeing (17), the present study was done aimed at investigating the correlation of role conflict and moral disturbances with the job burnout of technical training college teachers, with the mediating role of time management. The conceptual model of the research is presented in figure 1.

![Figure 1: Conceptual model of research](image)

**Materials and Methods**

This research was conducted using a descriptive correlational approach. The research population consisted of the 2nd-grade teachers of the secondary schools of Zahedan in the academic year of 2017-2018, from among which 200 teachers were selected using the random sampling method, according to Morgan’s table. To conduct the research, firstly, a list of teachers was provided and after determining the sample size, they were contacted. The research questionnaires were distributed among 2nd-grade technical training college teachers. Next, the questionnaires were analyzed. In the process of conducting the research, the teachers were provided with information on how to respond to the questionnaires and briefed on the research goals. The ethical considerations of the confidentiality of questionnaire data were assured so that the questionnaires would be responded to honestly. The inclusion criteria for the present study were having teaching experiences at technical and vocational high schools and willingness to participate in the research.

The research tools were as follows:

**Time management questionnaire:** To assess time management, Trueman and Hartley’s time management behavior questionnaire (1996) was used (18). This tool consists of 14 questions. The minimum and maximum scores on this scale are 14 and 70, respectively. Scoring was designed according to a 5-point scale (from always ‘5’ to never ‘1’). Trueman and Hartley (1996) obtained Cronbach’s alpha for the questionnaire at 0.79 (18), and Savari (2008) obtained its reliability value at 0.72 (19). The validity of the mentioned questionnaire was calculated by its correlation with the ‘academic procrastination’ questionnaire, with its value calculated at 0.65, being significant at the level of 0.001 (19).

**Job burnout questionnaire:** This questionnaire was introduced by Maslach and Jackson (1981) (20), having been based on a new estimate of the phenomenon of stress, i.e. burnout. It included 22 questions to measure emotional exhaustion, depersonalization, and the lack of personal accomplishment. The minimum and maximum scores for this scale were 22 and 154, respectively.
The questionnaire was scored on a 7-point Likert scale. Maslach and Jackson reported the internal consistency coefficients for emotional exhaustion, depersonalization, and personal accomplishment at 0.90, 0.79, and 0.71, respectively. The reliability and validity of this questionnaire were first confirmed in Iran by Philan (1992), with its reliability coefficient having been estimated at 0.78, using the Cronbach’s alpha (21).

Role conflict questionnaire: The role ambiguity-conflict scale was created by House et al. (1983). This scale consists of 14 questions, with the minimum and maximum scores of the role conflict questionnaire being 14 and 70, respectively. Six points (1 to 6) measured role ambiguity (with the minimum and maximum scores for role conflict being 6 and 30, respectively) and the other 8 items (7-14) measured role conflict. Its scoring was designed according to a 5-point scale (from always ‘5’ to never ‘1’), with the minimum and maximum scores for role conflict being 8 and 40, respectively. The questionnaire was designed as a 4-point Likert scale. In their study, Abolqasemi et al. (2006) reported the Cronbach’s alpha coefficient of this scale to be at 0.89. In addition, they reported the validity coefficient of the role conflict subscale to be at 0.66 (22).

The data analysis was conducted using Amos and SPSS 22. The correlation analysis and path analysis were used in this study as well.

**Results**

Before examining the hypotheses, the mean, standard deviation, and correlation of the variables were examined, with the full results of which presented in Table 1. As Table 1 shows, the correlation coefficient of the exogenous variable of role conflict with job burnout is \( r = 0.36 \), being significant at the level of 0.01. Likewise, the correlation between the endogenous variable of time management and job burnout is \( r = -0.21 \), being statistically significant at the level of 0.01. In addition, the results of the correlation matrix showed that the correlation between the variables was significant.

| Variables | Mean ± SD | 1 | 2 | 3 |
|-----------|-----------|---|---|---|
| Role conflict | 22.44 ± 5.10 | 1 |   |   |
| Time management | 57.32 ± 8.00 | -0.59** | 1 |   |
| Job burnout | 65.31 ± 9.28 | 0.54** | -0.21* | 1 |

*P<0.01         **P<0.001

Considering the results, it was possible to examine the model. The fitting indices of the model were initially calculated.

As to the research question ‘Does time management play a mediating role in the relationship between role conflict and job burnout?’ the research results showed that the variable of role conflict, through the mediation of time management aspects, had an indirect impact on job burnout. In this regard, the results of the first hypothesis of the study are presented in Figure 2 and Table 2.
As figure 2 and Table 2 show, role conflict ($\beta = -0.18$ and $P < 0.001$) has had a direct and negative impact on time management. In addition, role conflict ($\beta = 0.34$ and $P < 0.001$) has had a positive and direct impact on job burnout.

### Table 2: The coefficients of the direct paths in the model

| Path                        | Estimated value | Standard value | Standard error | T     | P-value |
|-----------------------------|-----------------|----------------|----------------|-------|---------|
| Role conflict to time management | -0.41           | -0.18          | 0.16           | -2.56 | 0.001   |
| Role conflict to job burnout       | 0.109           | 0.34           | 0.022          | 4.88  | 0.001   |
| Time management to job burnout            | -0.238          | -0.19          | 0.061          | -3.91 | 0.001   |

In order to investigate the mediating role of time management in role conflict and job burnout, Bootstrap instructions were used, with the results presented in Table 3. As the table shows, time management leads to the reduction of the impact of role conflict on job burnout; in addition, the mediating role of this variable has been confirmed. Furthermore, in the present study, the indirect impact of role conflict ($\beta = 0.034$ and $P <0.05$) on job burnout was confirmed.

### Table 3: The estimation of indirect paths in the model using Bootstrap to investigate the mediating role of time management in role conflict and job burnout

| Criterion variable | Mediator variable | Path         | Predictor variable | Estimated value | Lower bounds | Upper bounds | P-value |
|--------------------|-------------------|--------------|--------------------|-----------------|--------------|--------------|---------|
| Job burnout        | Time management    | Role conflict|                    | 0.034           | 0.090        | 0.027        | 0.05    |

### Discussion

The aim of this study was to investigate the correlation of role conflict and job burnout with the mediating role of time management in technical training college teachers. The study results confirmed the direct impact of role conflict on job burnout and the indirect impact of role conflict on time management. In addition, the indirect impact of role conflict on job burnout, with the mediating role of time management, was confirmed. All and all, the research results confirmed the fitness of the research model.

Furthermore, research results verified the direct and positive impact of role conflict on job burnout. In other words, role conflict in organizations is a significant predictor of job burnout. The results of this research were consistent with the studies done by Jirapa (6), Mete et al. (7), and Zhou et al. (8). The conflict of the duality of workplace roles is accompanied by ambiguity and confusion. Over time, teachers may get tired and burnt out if they perform conflicting roles. In other words, if teachers’ ideas of their jobs are in conflict with their job roles, they will experience negative emotions, with their efficacy and vitality in their jobs reduced, leading to job burnout. Role conflict leads to the negative evaluation of one’s performance and the sense of personal inadequacy, resulting ultimately in emotional exhaustion. In general, stress and job demands, such as role conflict in different workplace environments provoke negative emotional and behavioral reactions in employees; hence, the greater an employee’s role conflict and incompatibility of duties are, the more intense their job burnout and fatigue will be (23). Therefore, given the research fundamentals as well as the theoretical alignment of the variables of role conflict and job burnout, it seems logical for role conflict to exert a significant positive and direct impact on job burnout. One of the major results of this research was that the mediating role of time management was confirmed in role conflict and job burnout. Although no research has so far investigated the indirect impact of role conflict on job burnout with the mediating role of time management, it also has done no investigation on considering the findings of previous research on the negative and direct impacts of role conflict on time management (Tunc (24), Celik (25), and Husomi and Sarikhani (26)) on the other hand the negative and direct impacts of time management has been confirmed on job burnout (Ebrahimie et al. (13), Pak Sereshet (14), Teng et al. (15), Baezat and Edeibrad (16), and Häfner et al. (17)) on the other, the findings of the present research were confirmed. According to Hosseinazadeh and Yaghoubi Shadmehr, conflict management is very important and effective in reducing job burnout (27). Maslach considered the conflict between personal values and workplace values as a factor contributing to job burnout (8). We can claim that these two variables are directly correlated with each other. The results of this study...
indicate that time management, as a stress-reducing organizational skill, can mitigate the effects of role conflict on job burnout. Time management is considered the effective use of resources and a way of achieving personal goals. On the one hand, it can help reduce role conflict by setting goals, and on the other, it reduces job burnout by attaching meaning to the job as well as reducing stress. On this ground, time management can be considered the skill of reducing negative workplace impacts and adapting to workplace conflicts and stress.

One of the limitations of the present study was that in the proposed model, due to the large number of components and limitations of the path analysis model, it was not possible to examine some of job stress variables, adaptation strategies, and the like. The other limitations included the lack of adequate theoretical and research literature on the role of time management in research variables and the teachers’ failing to return a sufficient number of questionnaires. Based on the findings and results of the present study, one can suggest that time management be promoted in the teachers of technical and vocational colleges so as to reduce job burnout. It is also suggested that similar research be done on teachers in other fields and statistical populations, with the results compared with those of the present study. In addition, given the theoretical and empirical foundations of the variables of the present model, it is suggested that other relevant models be examined and tested, with their results compared with the findings of the present study.

Conclusion

The results showed that role conflict had a direct and positive impact on job burnout, with role conflict having exerted a significant negative impact on time management. In addition, according to the results, one can conclude that the variable of time management performs a mediating role in the relationship between the two variables of role conflict and job burnout.

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