

Original Article (Qualitative)

Identification and validation of occupational stress factors for employees of the electricity distribution company of Ilam province

Ardeshir Shiri 

University of Ilam

Receive:

10 December 2023

Revise:

01 March 2024

Accept:

07 April 2024




Keywords:

stress,
job stress,
behavioral style of
managers,
environmental factors,
cultural factors,
environmental factors.

Abstract

This research was conducted with the aim of identifying and validating occupational stress factors among the employees of the electricity distribution company of Ilam province. The research is applicable in terms of purpose, and exploratory in terms of its mixed nature (qualitative-quantitative); which used thematic analysis strategy in the qualitative stage and descriptive-survey research in the quantitative stage. The statistical population in the qualitative section consists of the organization's experts, which was conducted with a targeted sampling of 16 in-depth interviews until reaching theoretical saturation. The statistical population in the quantitative part consists of the managers and employees of the electricity distribution company of Ilam province; using Morgan's table, 212 people were selected as a sample in a simple random way. The research tool has appropriate validity and reliability. In order to analyze quantitative data, factor analysis was used by means of Lisrel software. 7 overarching themes and 22 main themes were identified from the findings of the research. These themes include: individual factors (role burden, lack of experience, and personal expectations), group and interpersonal factors (intragroup conflict, utilitarianism, and group norm), job factors (job autonomy, job nature, and job facilitators), managerial factors (interaction method of managers, characteristics of managers, and behavioral style of managers), administrative and structural factors (service compensation, human resources planning, space and equipment, administrative issues, and control regulations), cultural factors and organizational climate (organizational climate, and organizational culture), and environmental factors (social and political factors, unexpected events, and economic factors).

Please cite this article as (APA): Shiri, A. (2024). Identification and validation of occupational stress factors for employees of the electricity distribution company of Ilam province. *Management and Educational Perspective*, 6(2), 194-218.

Publisher: Iranian Business Management Association	https://doi.org/10.22034/jmep.2024.429921.1297	
Corresponding Author: Gh		
Email: a.shiri@ilam.ac.ir	Creative Commons: CC BY 4.0	



Extended abstract

Introduction

Occupational stress is a physical and psychological response to the environmental stimuli (Ghaib Elahi & Adel, 2021). Job stress occurs when the job requirements do not match the capabilities and needs of the individual, (Tongchaiprasit, 2016). Considering the importance of the issue, it is necessary to identify sources of job stress to prevent the development of mental illnesses and reduce the job performance of employees (Mardani Hamooleh, et al, 2018).

The human resources and specialists of the electricity distribution company of Ilam province, who mostly have acceptable scientific knowledge and abilities and should have a good quality and quantity of work due to the nature of work; need to overcome these factors by the management of their organization if facing job stressors. Considering the scientific gap in the field of the effect of occupational stress on the employees of workshop environments and electric companies, it is necessary to investigate and analyze the factors of the occupational stress of employees, and more researches are needed to have a correct, deep, and comprehensive understanding of the factors. Get a stressful job; researches based on the context of each organization and each region, and according to which, operational solutions can finally be achieved to reduce the level of occupational stress. With this approach, the aim of the current research was to identify and validate the occupational stress factors of the employees of the electricity distribution company of Ilam province, and the following questions were raised and investigated:

- What are the job stressors of the employees of Ilam Electricity Company?
- How is the validation of the occupational stressors model of the employees of Ilam Electricity Company?

Theoretical framework

Occupational stress is a tension in which the interaction between the working conditions and the individual characteristics of the employee occurs; so that the demands of the work environment and as a result the pressures related to it are more than a person can handle (Hasanvand, Azad & Eskandari, 2022). Various factors affect the formation of occupational stress; from the perspective of Semmer (2003), the sources of occupational stress include intrinsic job stressors, role in the organization, workplace relationships, organizational structure, culture, and organizational atmosphere. In the following, some job stressors are presented based on research literature.

Occupational stressors

Individual factors are personal and individual characteristics in a job role, including role burden, job demand, role ambiguity, and role conflict. Role burden is the origin of many organizational problems, including job stress (Abbasi, 2015). Among the group factors that cause psychological pressure in the members of the group, we can mention the behavioral style of the managers, the lack of group cohesion, the conflict within the group, and the lack of respect for the dignity of the people in the group. Two of the most important job factors affecting job stress are job demand and job characteristics. Job demand is a psychological source of stress (shao et al, 2022). From the perspective of Armstrong & Taylor (2014), jobs are different in terms of variety of tasks, work autonomy, interaction with other jobs, responsibility, knowledge, and required skills. At the organizational level, various factors such as organizational culture, organizational atmosphere, and organizational structure are the cause of job stress in employees. Culture is defined as shared orientations that provide unity and give a certain identity (Ghalavandi, 2023), organizational culture is the shared views and

values of employees, and organizational climate is a relatively stable feature that governs the organization's atmosphere (Ashkanasy et al, 2011). And extra-organizational factors are factors that are outside the organization's environment and affect the behavior of employees and create stress in employees. The most important of these factors are: family issues, social status, economic status, and environmental changes (Shiri, 2015).

Research methodology

The current research is applicable in terms of purpose, and mixed type (qualitative-quantitative) in terms of method. To achieve this goal, thematic analysis method was used. Structural equation approach was used to validate the research model. The statistical population of this research in the qualitative part includes senior managers, vice presidents, heads and experts; and the statistical population in the quantitative part includes the employees of the Electricity Distribution Company of Ilam Province, numbering 500 people. The number of samples by random sampling was 212 people. The qualitative data collection tool was a semi-structured interview with 16 experts in a targeted way and up to the theoretical saturation stage. In order to check the reliability and validity of the research, first, all the interviews were recorded by the researcher and a fellow interviewer. Finally, the intra-subject agreement of the codes was checked, all of which were above 60%. Structural equation method was used to validate the quantitative model, and the data were analyzed through a researcher-made questionnaire using Lisrel software. The reliability of the questionnaire was calculated using Cronbach's alpha coefficient (0.94).

Research findings

The findings of the qualitative section with the theme analysis approach led to the extraction of 56 basic themes, 22 main themes (components), and 7 overarching themes (dimensions). The themes of individual factors, group and interpersonal factors, occupational factors, managerial factors, structural and administrative factors of the organization, cultural factors and organizational atmosphere, and environmental factors were identified as the main dimensions of occupational stress factors of employees. The confirmatory factor analysis method was used to validate the stress factors model of the career of employees. The fit index of the model is the chi square ratio to the degree of freedom of 1.81; and the GFI, AGFI, NFI, and IFI indices are estimated at 0.99, 0.85, 0.97, and 0.98, respectively; and the index RMSEA was also 0.05, which confirms the appropriate fit of the estimated model. In addition, all factor loadings are higher than 0.5 and significant, and show that the measurement model designed for the occupational stress factors of the employees of Ilam Electricity Distribution Company has a good fit, and all its components have desirable and meaningful effect in the model.

Discussion

The research was conducted with the aim of identifying and validating the stress factors of the employees of Ilam Electricity Distribution Company using a mixed method (qualitative-quantitative). The final research model was confirmed with 7 main dimensions.

In the dimension of individual factors, the results showed that employees are under psychological pressure at work in terms of the role burden, lack of experience, and the expectation of activities outside the job description, which corresponds with the research of Hosseinzadeh and Salimi (2023) and Flanagan & Flanagan (2023). In the context of group and interpersonal factors, research results confirm the effect of intragroup conflict, utilitarianism of individuals in the group, and intragroup norms on employee stress. The findings of this research are consistent with the findings of Soori et al, (2018) and Rezaian (2023). The results



related to job factors, including job independence, job nature, and job facilitators have an effect on employee stress, which is consistent with the findings of Darvishi et al, (2015) and Alborzi & Esmailzadeh (2015). The results of managerial factors include the three components of managers' interactive style, managers' characteristics, and managers' behavioral styles; aligned with the findings of Olivar et al, (2022) and Dodanwala et al, (2023). In the field of structural and administrative factors affecting employees' stress, service compensation components, human resource planning, space and equipment, administrative issues, and control regulations were identified. These items are consistent with the research results of Flanagan & Flanagan (2020) and Abd et al, (2023). In the context of cultural factors and organizational climate, two components of organizational climate and organizational culture were identified on employee stress, which corresponds with the findings of Ashkanasy et al, (2011) and Mirkamali, et al, (2016). Regarding environmental factors; the components of political and social factors, unexpected events, and economic factors were identified as stress factors for employees. This finding is aligned with the research results of Ghaib Elahi & Adel (2021) and Rashidi et al, (2020). According to the research findings, in order to moderate the impact of stressful factors, it is suggested:

- The job qualification conditions must be observed in the appointment of employees.
- To provide a necessary platform for participation and free expression in group decision-making meetings.
- The company should act on the granting of work independence by conducting a field survey of the maturity level and ability of the employees.
- Human relations training courses for managers should be held.
- Clarification should be made regarding the service compensation system and the method of payment of benefits.
- It is suggested to use the ideas and opinions of employees.
- Employees should be given material and spiritual support and judicial assistance.
- Courses of: time management, conflict management, psychological stress management at work, and lifestyle improvement for employees should be held.