

Antecedents and Consequences of Job Stress among Private Sector Employees in Saudi Arabia

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Abstract

This study's main goal is to investigate the consequences that is resulted from job stress in Saudi Arabia firms. More precisely, the privet sector. It analyzes and explains common job stresses such as job burnout, role ambiguity and how it can lead to the turnover intention. The study sample consisted of 402 respondents, and the data was collected using an online questionnaire. Statical procedures were applied via SPSS (means, standard deviation, correlation analysis, reliability analysis) and AMOS (path analysis). Results of this research study have concluded that job stress has an indirect effect on turnover intention; however, job burnout directs the effect which means that when employees are in stress, it leads to job burnout, which may increase and so their turnover may increase.

The generalizability of the research findings might be constrained because of the research approach and the technique of sampling used. Researchers are thus urged to dig deeper into the offered premises. Practical consequences. The study analyzes the effects on the setting of the development workplace. This study addresses an acknowledged demand by investigating how to decrease the turnover intention and study need by investigating how to decrease the turnover intention and study reasons behind job stress and unhealthy work environment.

Keywords: Job Stress, Job Burnout, Role Ambiguity. Turnover Intention.

Introduction

The private sector of Saudi Arabia has experienced tremendous growth in recent years, leading to an increase in job opportunities and economic development. However, this growth has also brought with it the issue of job stress, which can have negative consequences on both employees and organizations. This issue has become a major concern for organizations as it affects their productivity, profitability, and sustainability. One of the main factors contributing to this problem is role ambiguity, which refers to the lack of clarity and understanding of job responsibilities and expectations. As such, this master's research aims to explore the antecedents and consequences of job stress in the private sector of Saudi Arabia. By conducting a comprehensive literature review and collecting data from employees in the private sector, we identify the various factors that contribute to job stress. This research provides valuable insights into the issue of investigating the relationship between role ambiguity, job stress, job burnout, and turnover intention. The findings of this research will provide valuable insights for organizations to develop effective strategies to reduce role ambiguity, job stress, burnout, and turnover intention among employees in the private sector of Saudi Arabia. It will offer practical recommendations for organizations to mitigate its negative effects of job stress. This study is based on the following theoretical model:



© Arab Administrative Development Organization- League of Arab States, 2023, pp 399-408. DOI: 10.21608/AJA.2023.214602.1460

^{*} This article was submitted in May 2023 and accepted for publishing in July 2023.

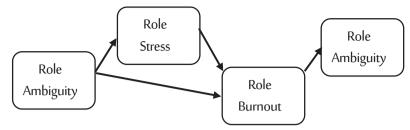


Figure 1 - The Theoretical Model

Theoretical Background and Hypothesis Development The relationship between Role Ambiguity and Job Stress

Role ambiguity refers to a situation where an individual is unclear about their role, responsibilities, and expectations in a particular job or organization. It can occur due to various reasons such as poor communication, lack of proper training, unclear job descriptions, and frequent changes in the organizational structure. Moreover, Job stress refers to the physical, emotional, and mental strain that employees experience because of their work environment. According to (Kumar & Singah, 2019) they suggest that role ambiguity is a significant predictor of job stress and that organizations should take steps to reduce role ambiguity to improve employee well-being. In compliance with (Brouwers & Bakker, 2011) they examined the relationship between role ambiguity and job stress in private sectors, more precisely among teachers, this study suggests that teachers who experience high levels of role ambiguity are more likely to experience job stress and burnout. The importance of clear job roles and responsibilities in reducing job stress were highlighted in this study also suggests that organizations should provide employees with adequate training and support to help them cope with role ambiguity. According to (Kahn & Rosenthal, 1964) they have found that there is a significant positive relationship between role ambiguity and job stress. Role ambiguity refers to the lack of clarity or uncertainty about one's job responsibilities, expectations, and goals. When employees experience role ambiguity, they are more likely to feel stressed and overwhelmed because they are unsure of what is expected of them. This can lead to decreased job satisfaction, lower productivity, and increased turnover rates. The researchers suggest that organizations should provide clear job descriptions, performance expectations, and feedback to reduce role ambiguity and alleviate job stress among employees. Thus:

H1: Role ambiguity significantly and positively relates to job stress.

The relationship between Role Ambiguity and Job Burnout

Job burnout is a state of emotional, physical, and mental exhaustion caused by prolonged exposure to stressful work situations. Cynicism, detachedness, and a perception of inefficiency or lack of success are its defining traits. According to (Scherer & Hwang, 2018) The impact of role ambiguity on job stress and burnout among nurses were examined and the need for clear communication between nurses and their supervisors was highlighted to reduce role ambiguity and improve job satisfaction. The researchers found that role ambiguity is positively related to job burnout. They conducted a meta-analysis of 50 studies and found that employees who experienced higher levels of role ambiguity were more likely to experience burnout. In accordance with (Kahn & Rosenthal, 1964) highlighted the negative impact of role ambiguity on employee well-being, job satisfaction, and organizational commitment. The review also discusses the potential causes of role ambiguity and suggests strategies for reducing its negative effects. The researchers were some of the first researchers to explore the relationship between role ambiguity and job burnout. They found that employees who experienced high levels of role ambiguity were more likely to experience stress and dissatisfaction with their jobs. According to (Maslach & Leiter, 2001) they found that employees who experienced high levels of role ambiguity were more likely to experience stress and dissatisfaction with their jobs. According to (Maslach & Leiter, 2001) they found that employees who experienced high levels of role ambiguity were more likely to experience at the stress and dissatisfaction. reduced personal accomplishment - all key components of job burnout. They also found that reducing role ambiguity can help prevent or reduce job burnout. Thus:

H2: Role ambiguity significantly and positively relates to job burnout.

The relationship between Job Burnout and Turnover Intention

Turnover intention refers to an employee's intention to leave their current job and seek employment elsewhere. It is a measure of an employee's level of commitment to their current organization and can be influenced by a variety of factors, including job satisfaction, organizational culture, leadership style, compensation and benefits, and opportunities for career growth. According to (Shanafelt & Sloan, 2016) the review finds that healthcare professionals who experience high levels of role ambiguity probably experience job burnout, which can lead to decreased job satisfaction and increased turnover rates. The researchers found that job burnout was significantly associated with turnover intention among healthcare professionals, they suggested that addressing burnout through interventions such as mindfulness training could reduce turnover intention. In accordance with (Violanti, 2016) examines the prevalence of job stress and burnout among police officers, including factors that contribute to these issues such as exposure to traumatic events, shift work, organizational culture, and lack of support from supervisors or colleagues. He suggested that addressing burnout through organizational support, training, and resources could reduce turnover intention. According to (Shanafelt, 2019) this literature review examines the prevalence of job stress and burnout among healthcare professionals, including nurses, physicians, and other healthcare workers. The review highlights the negative impact of job stress and burnout on healthcare professionals' physical and mental health, as well as patient care outcomes. The review also discusses various interventions that have been implemented to address job stress and burnout in healthcare settings. In accordance with (Lee & Ashforth, 2016) a meta-analysis of 82 studies was conducted to examine the relationship between job burnout and turnover intention. The results showed a significant positive correlation between job burnout and turnover intention, indicating that employees who experience burnout are more likely to consider leaving their jobs. Thus:

H3: Job burnout significantly and positively relates to turnover intention.

The relationship between Job Stress and Job burnout:

Research has consistently shown that job stress is a significant predictor of job burnout. A study conducted by Maslach and Jackson (1981) found that high levels of job stress were associated with increased levels of emotional exhaustion, depersonalization, and reduced personal accomplishment -all key components of burnout. Similarly, a meta-analysis conducted by Lee and Ashforth (1996) found a strong positive relationship between job stressors and burnout.

Several factors have been identified as potential moderators of the relationship between job stress and burnout. For example, social support from colleagues or supervisors has been found to buffer the negative effects of job stress on burnout (Halbesleben & Buckley, 2004). Additionally, individual differences such as personality traits or coping strategies may influence how individuals respond to job stressors (Schaufeli & Enzmann, 1998).

H4: Job stress significantly and positively relates to job burnout.

Job stress as a mediator between role ambiguity and job burnout:

One study conducted by Lee and Ashforth (1996) examined the mediating role of job stress in the relationship between role ambiguity and job burnout. The study involved 238 employees from various organizations in Canada. The results showed that role ambiguity was positively related to job stress, which in turn was positively related to job burnout. Furthermore, the study found that job stress partially mediated the relationship between role ambiguity and job burnout. Another study conducted by Schaufeli et al., (2009) also found a significant relationship between role ambiguity, job stress, and job burnout. The study involved 1,019 employees from various organizations in Europe. The results showed that role ambiguity was positively related to both job stress and emotional exhaustion (a component of job burnout). Furthermore, the study found that job stress fully mediated the relationship between role ambiguity and emotional exhaustion. Thus:

H5: Job stress will mediate the relationship between role ambiguity and job burnout

Job burnout as a mediator between job stress and turnover intention:

Job stress is one of the main factors that contribute to burnout, and it has been found to be a significant predictor of turnover intention. Research has shown that job burnout mediates the relationship between job stress and turnover intention. A study conducted by Lee and Ashforth (1996) found that job burnout fully mediated the relationship between job stress and turnover intention among employees in a healthcare organization. Similarly, another study by Halbesleben and Buckley (2004) found that burnout partially mediated the relationship between job stress and turnover intentions among nurses.

H6: Job burnout will mediate the relationship between job stress and turnover intention.

Job burnout as a mediator between role ambiguity and turnover intention:

A cross-sectional survey was conducted by Abdullah M, (2020) among 300 employees from various industries in Malaysia. The data were analyzed using structural equation modeling (SEM) to test the hypothesized model. The results showed that role ambiguity had a significant positive effect on job burnout, which in turn had a significant positive effect on turnover intention. Furthermore, job burnout partially mediated the relationship between role ambiguity and turnover intention. These findings suggest that organizations should take measures to reduce role ambiguity and prevent job burnout among employees to reduce their intention to leave the organization. Providing clear job descriptions, regular feedback, and training programs can help employees understand their roles better and reduce their stress levels, leading to higher job satisfaction and lower turnover rates.

H7: Job burnout will mediate the relationship between role ambiguity and turnover intention.

Methodology

Measures

This research used four-item scale of the originally 30 item scale (JSS) Job Stress Scale developed by Churchill et al. in 1974 as a tool to measure job-related stress. This scale assesses various aspects of job stress, including workload, role ambiguity, role conflict, and interpersonal relationships at work. The JSS has been greatly used in research on employee stress and resulted to have good reliability and validity.

The six-item turnover scale written by (Lee and Mitchell,1994) is a widely used tool to measure an employee's intention to leave their current job. The scale consists of six items that assess an individual's likelihood of leaving their job within the next year, including factors such as job satisfaction, organizational commitment, and alternative job opportunities. The scale has been validated in numerous studies and has been found to have high reliability and validity.

For the Role Ambiguity variable, the ten-item scale was taken from (Acker, 2004) who developed the Role Ambiguity Scale to measure the degree of ambiguity in job roles and responsibilities. The scale consists of 10 items that assess the clarity of job expectations, feedback, and communication. (Bedeian & Armenakis, 1981), they created a 12-item Role Ambiguity Scale to measure the extent to which employees perceive their job roles as unclear or uncertain. The scale assesses factors such as task requirements, performance expectations, and feedback. (Chang & Hancock, 2003), they developed a Role Ambiguity Scale

that measures the extent to which employees perceive their job roles as unclear or ambiguous. The scale consists of 10 items that assess factors such as task requirements, performance expectations, and communication. (Karasek Jr, 1979) developed the Job Content Questionnaire, which includes a subscale for role ambiguity. The subscale measures the degree to which employees perceive their job roles as unclear or uncertain. It includes items related to task requirements, performance expectations, and feedback.

The six-item burnout scale The Maslach Burnout Inventory (MBI) is a widely used tool for measuring burnout in individuals. It was developed by Christina Maslach, Susan Jackson, and Michael Leiter in 1996. The MBI has three subscales: personal accomplishment, depersonalization, and emotional exhaustion. Emotional exhaustion refers to feelings of being emotionally drained and overwhelmed by work demands. Depersonalization refers to a sense of detachment from others and a lack of empathy towards clients or colleagues. Personal achievement is a term used to describe sentiments of competence and success in one's career. The MBI has been extensively validated and has been used in numerous studies across different professions and cultures. It has been found to be a reliable measure of burnout, with good internal consistency and test-retest reliability (Maslach et al., 1996). The MBI has also been shown to have good construct validity, meaning that it measures what it is intended to measure (Schaufeli & Enzmann, 1998). The MBI manual provides detailed instructions on how to administer the scale, score the responses, and interpret the results. It also includes norms for different professions and populations.

Data Collection

The respondents in this study were 402 employees. These participants are working in different private Saudi firms that were selected by a convenience sampling technique. Data is gathered via a structured questionnaire. To ensure the reliability of this method, SPSS statistics data test is used to make sure that the questionnaire obtained relevant and accurate data for the study. Finally, a statistical model's goodness of fit is evaluated to determine how well the collection of observations matches the model. It highlights the discrepancy between the values obtained and those predicted by the statistical model (Maydeu-Olivares & Garca-Forero, 2010).

Results and Findings

Descriptive Statistics

As shown in Table 1, the survey data described that many of the respondents are female as they represent 96.5% and male represent only 3.5%. In terms of nationality, 68.4% of the respondents are Saudi. Whereas 31.6% of the respondents are non-Saudi. In terms of age, the majority of respondents are between 20 to 30 years old (67.4%), respondents less than the ages of 20 represent 23.1%, 7.5% of the respondents represent the ages of 30 to 40 years, 1.2% of the respondents represent ages above 50 and only 0.7% represent the age between 40 to 50.

Regarding the respondents' experience level, the majority of the respondents have less than 3 years of experience by 74.9%, 19.4% of the respondents have 3 to 7 years of experience. Followed by 4.7% of 7 to 15 years of experience and lastly, 1% of respondents have more than 15 years of experience.

Means, standard deviation, and correlation analysis of scales

As shown in Table 2, the descriptive analysis results showed that the mean and the standard deviation of the job stress is (2.396, 0.80). This

Table 1 – The demographic characteristics of respondents

	-
Variables	N (%)
Gender	
Male	14(3.5%)
Female	388(96.5%)
Total	402(100%)
Nationality	
Saudi	275(68.4%)
Non-Saudi	127 (31.6%)
Total	402(100%)
Age	
Less than 20 years	93 (23.1%)
Between 20-30 years	271(67.4%)
Between 30-40 years	30 (7.5%)
Between 40-50 years	3 (0.7%)
Older than 50 years	5 (1.2%)
Total	402(100%)
Experience	
Less than 3 years	301(74%)
Between 3-7 years	78(19.4%)
Between 7-15 years	19(4.7%)
More than 15 years	4 (1%)
Total	402(100%)

means that there is a fair percentage of respondents to neutrally agree for job stress. Most of the respondents agreed to a great extent that they felt difficulties were increasing that you could not overcome them, with a mean of 2.70, which leads to repetitive feeling of pressure, with a mean of 2.67 found that they could not cope with all the things that they had to do. With a mean of 2.14 is the percentage that felt nervous and stressed at a job. With a mean of 2.05 have felt angered because of a matter that has happened and were outside of their hands and outside of their control.

Moreover, the mean and standard deviation of role ambiguity are (3.644, 0.71). Most respondents know what their responsibilities with a mean are of 3.97, and with a mean of 3.64 know exactly what is expected of them, with a mean of 3.66 feel that they have clear, planned goal and objectives for their job, with a mean of 3.29 feel secure about how much authority they have.

In addition, the mean and standard deviation of job burnout are (2.639, 0.75). Many have accomplished many worthwhile things in their job, with an interested amount, and that is with a mean of 3.95. With a mean of 2.33 Feel emotionally drained from their work. With a mean of 2.17 feel used up at the end of the workday. With a mean of 2.22 feel that their job has been stressful lately. With a mean of 2.32 feel burned out from their work, and with a mean of 2.81 feel that their job is no longer satisfying to themselves.

For the turnover intention, the results showed that the mean and the standard deviation of the turnover intention are (2.530, 0.88). Many respondents were seriously considering leaving their job, with a mean

of 3.26. Less than that, with a mean of 2.00 indicated that they will likely actively look for a new job in the future. With a mean of 2.89 have been thinking about quitting their job. With a mean of 1.95 it was agreed that they will probably look for a new job in the future, because of many reasons, such as the certificates, location of job, etc... It is not that easy to look for a new job, even if their intention is present.

g *tion analysis* S Variables Mean SD 1 2 3 4

Vallables	Tricuit S				-
1. Role Ambiguity	3.644 0	.71 1			
2. Job Stress	2.396 0	.80 .206**	1		
3. Turnover Intention	2.530 0	.88 .236**	.337**	1	
4. Job burnout	2.639 0	.75 .260**	.663**	.593**	1

Table 2 – Means. Standard deviation and Correla-

For the correlation, it clearly shows that there is a significant positive relationship between all the variables; for example, there is a significant positive relationship between role ambiguity and job stress, job burnout and turnover intention. Which means that increased role ambiguity will increase the job stress, job burnout and will increase the turnover.

Reliability

As shown in Table 3, the reliability proven of the variables was accomplished, the Cronch's alpha for role ambiguity is 0.703 while the reliability for job stress is 0.739, job burnout's reliability is 0.798. And the reliability of the turnover intention is 0.790. Based on the findings, all the variables fell within the range of 0.7 to 1, the survey's findings are reliable and acceptable. SPSS statistics data test is used to make sure that the questionnaire obtained accurate data for this research study.

Scale	Cronch's N.O. Alpha item		
Role Ambiguity	0.703	4	
Job Stress	0.739	4	
Job Burnout	0.798	6	
Turnover Intention	0.790	4	

Path Analysis for Testing Fit Model

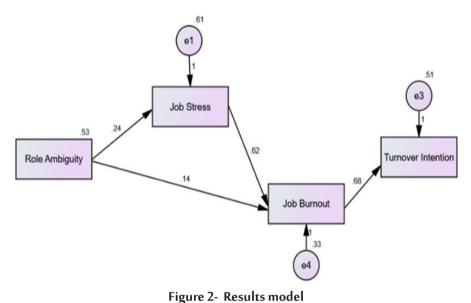
A path analysis was conducted using AMOS to test the hypothesis. The theoretical model in Figure 1 was tested. Table 4 shows a summary of the results model fit. Also, in Table 5 It is concluded that all the goodness of fit measures of the model indicates that all the indicators are at acceptable measurements, especially GFI, AGFI, CFI as they are no less than 0.95 and considered ideal.

The fit measures indicate the goodness of fit of the structural model and its ability to measure the mediation effect of job stress-**s and job burnout on the relationship between role ambiguity

on turnover intention. According to Figure 2, the impact of role ambiguity on job stress was confirmed (β =0.24, P<0.01), supporting (H1). Moreover, role ambiguity significantly affects job burnout, supporting (H2). Finally, there is a significant effect of job burnout turnover on intention with $(\beta=0.68)$, P<0.01), supporting (H3). Previous results support (H4, H5, H6 and H7).

Table 4 – Structural I	Path Analysis
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	-				
	Estimate	S.E.	C.R.	Р	Label
Job Stress <role ambiguity<="" td=""><td>0.703</td><td>.240</td><td>.056</td><td>4.261</td><td>***</td></role>	0.703	.240	.056	4.261	***
Job Burnout <job stress<="" td=""><td>0.739</td><td>.618</td><td>.039</td><td>15.948</td><td>***</td></job>	0.739	.618	.039	15.948	***
Job Burnout <role ambiguity<="" td=""><td>0.798</td><td>.140</td><td>.042</td><td>3.316</td><td>***</td></role>	0.798	.140	.042	3.316	***
Turnover Intention <job burnout<="" td=""><td>0.790</td><td>.684</td><td>.049</td><td>14.045</td><td>***</td></job>	0.790	.684	.049	14.045	***



Discussion

According to a 2015 study by Chen and colleagues, role ambiguity among Chinese nurses was positively correlated with job stress. Using a sample of 402 nurses, the study discovered that those who reported more position ambiguity also reported more job stress. Moreover, Role ambiguity was found to be positively correlated with workplace stress among social workers in the United States in a study by Koeske and Koeske (1993). The research, which included 150 social workers as a sample, discovered that individuals who reported more position ambiguity also reported more workplace stress. According to a Lee and colleagues (2018) study, job stress among Korean nurses was strongly correlated with role ambiguity. The research, which included 323 nurses as a sample, discovered that individuals who reported more role ambiguity also reported more job stress. Role ambiguity was found to be positively correlated with occupational stress among employees in a variety of American occupations by Spector and Jex

Table 5 – Model
Fit Summary

Model Fit Summary			
Chi-square	6.206		
DOF	2		
Plevel	0.045		
GFI	0.991		
AGFI	0.957		
CFI	0.989		
IFI	0.989		
NFI	0.985		
TLI	0.968		
RMSEA	0		

in their 1991 study. The study, which included a sample of 1,000 workers, discovered that individuals who reported more role ambiguity also reported more job stress. Job stress and burnout are positively correlated, according to numerous research. High levels of job stress were linked to higher degrees of emotional tired-ness, depersonalization, and decreased sense of personal accomplishment, all of which are symptoms of job burnout, according to a study by Maslach and Jackson (1981). Workplace stresses like workload, position ambiguity, and interpersonal conflicts were strongly correlated with burnout among healthcare employees, according to another study by Schaufeli and Enzmann from 1998. Job stress was strongly correlated with emotional tiredness and depersonalization among Italian teachers, according to a more recent study by Bianchi et al. (2015). Similarly, a study by Lee et al. (2019) discovered that burnout among Korean nurses was strongly correlated with job stress. Overall, this research indicates a link between job stress and burnout that is favorable. As a result, it's critical for businesses to handle workplace stressors in order to stop or lessen the likelihood of employee burnout.

Several studies have found a positive relationship between job stress and turnover intention. For instance, research by Lee and Ashforth (1996) indicated a positive relationship between stress at work and employees' intentions to leave the healthcare sector. across a similar vein, Spector and Jex's (1998) study discovered that job stress was a major predictor of individuals' intentions to leave their jobs across a variety of industries. Job stress was found to be positively correlated with Korean nurses' intentions to leave their jobs, according to Kim et al.'s (2013) other study.

According to several research, job burnout and intention to leave the job are positively correlated. In one study by Halbesleben and Buckley (2004), it was discovered that the intention of healthcare employees to leave their jobs was positively correlated with emotional exhaustion, a crucial aspect of burnout. Burnout was found to be a strong predictor of turnover intention across employees in several industries in a subsequent study by Lee and Ashforth (1996). In addition, across a range of professions and nations, Lee and colleagues' (2018) meta-analysis discovered a substantial positive association between burnout and turnover intention. According to the authors, firms should prioritize lowering employee fatigue to lower staff turnover.

Limitations of the Study and Suggestions for Future Research

Since only primary information was used in the data collection, some respondents would not have been able to elaborate further on some crucial facts, according to a structured questionnaire. The conclusion and findings might not be generalizable because the sample is only based on the private sectors. Additionally, because the convenience sampling technique reveals the respondent's restricted access, it is to be expected that different samples of respondents may yield various results. It is suggested to connect directly with employees and collect qualitative data through individual interviews for future research. In order to have a more representative sample and enhance the generalizability of the results, it is also advised to improve sampling methodologies.

Conclusion

Investigating the **effects** of role ambiguity, job stress, and job burnout on turnover intention in Saudi **organizations is the main goal of this study.** Results of the study have found that these variables have a direct and indirect effect on turnover intention, however, role ambiguity directs the effect which means that when employees are ambiguous, their stress may increase and so their turnover intention may increase. Moreover, When employees are confident in their ability to perform their duties and are generally relaxed and not feeling under pressure from their employer, as is the case when they are pleased with the organizational culture, there should be a reduction in employee turnover. Employee turnover will therefore be more likely as role ambiguity increases.

The study has found that job stress plays a crucial role in increasing turnover. Accordingly, when employees are stressed, this may decrease their satisfaction level, so they will be more likely to involve in turnover intention and when employees are less stressed, they will be satisfied so they will be less likely to involve in turnover intention. Further, it has been demonstrated that the major stress factors that are likely to push employees to turnover are role ambiguity and this is a job related stress factor; The findings clearly showed that there is a significant positive impact of tasks ambiguity on the desire to leave the work, inferring that employees who experience pressure at work and work ambiguity, such as having a lot of ambiguous tasks, are more likely to engage in turnover. The current study has the advantage of making generalizations that apply to larger populations. This is because job stress and depression can lead to problems with resignation at any place of employment.

Conflict of Interest

The authors declare formally that no conflicts of interest in the publication of this research paper.

Reference

- Abdullah, M. & Mansor, N. N. A. (2020). "Job burnout as a mediator between role ambiguity and turnover intention: A study among Malaysian employees", *International Journal of Human Resource studies*, 10 (3), 1-16.
- Acker, G. M. (2004). "Development and validation of the role Ambiguity scale", *Journal of applied psychology*, 89 (2), 264-271
- Bedeian, A. G. & Armenakis, A. A. (1981). "The measurement of role ambiguity and role conflict in organizations", *Journal of Vocational Behavior*, 18 (2), 236-247.
- Bianchi, R., Schonfeld, I. S. & Laurent, E. (2015). "Burnout-depression overlap: A review", *Clinical Psychology Review*, 36, 28-41.
- Brouwers, A., Tomic, W. & Bakker, A. B. (2011). "The relationship between role ambiguity and job stress among teachers: A literature review", *Educational Research Review*, 6 (2), 157-166.
- Chang, C. H. & Hancock, G. R. (2003). "Role ambiguity and job satisfaction revisited: An empirical investigation among Taiwanese employees", *International Journal of Human Resource Management*, 14 (6), 1047-1060.
- Churchill, G. A., Ford, N. M. & Walker Jr, O. C. (1974). "Measuring the job satisfaction of industrial salesmen", *Journal of Marketing Research*, 11 (3), 254-260.
- Halbesleben, J. R. & Buckley M. R. (2004). "Burnout in organizational life", *Journal of Management*, 30 (6), 859-879.
- Halbesleben, J. R. & Buckley M. R. (2004). "Burnout in organizational life", *Journal of Management*, 30 (6), 859-879.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D. & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*, (Vol. 1). John Wiley & Sons.
- Karasek Jr, R. A. (1979). *Job content questionnaire and user's guide: Revision 1*. Department of health and human services, public health service, centers for disease control and prevention, national institute for occupational safety and health.
- Kim, H., Shin, K. & Swanger, N. (2013). "Burnout and engagement: A comparative analysis using the Big Five personality dimensions", *International Journal of Hospitality Management*, 32 (1), 171-180.
- Koeske, G. F. & Koeske, R. D. (1993). "Role conflict and role ambiguity: A critical assessment of construct validity", *Psychological Reports*, 73 (3_suppl), 1299-1310.
- Kumar, S. & Singh, A. (2019). "Role ambiguity as a predictor of job stress among employees in private organizations: A literature review", *Journal of Management Development*, 38 (1), 2-16.
- Lee, R. T. & Ashforth, B. E. (1996). "A meta-analytic examination of the correlates of the three dimensions of job burnout", *Journal of Applied Psychology*, 81 (2), 123-133.
- Lee, R. T. & Ashforth, B. E. (1996). "A meta-analytic examination of the correlates of the three dimensions of job burnout", *Journal of Applied Psychology*, 81 (2), 123-133.
- Lee, R. T. & Ashforth, B. E. (2016). "A meta-analytic examination of the correlates of the three dimensions of job burnout", *Journal of Applied Psychology*, 81 (2), 123-133.
- Lee, R. T., Ashforth, B. E. & Bobko, P. (2018). "Burnout and turnover intentions across cultures: A meta-analysis", *Journal of Organizational Behavior*, 39 (3), 264-287.

- Lee, S., Kim, H. & Kim, J. (2018). "The relationship between role conflict/ambiguity and burnout among Korean nurses: The mediating effect of organizational commitment", *Journal of Nursing Management*, 26 (7), 874-881.
- Lee, Y., Lee, J. & Kim, J.-H. (2019). "The relationship between occupational stress and burnout syndrome in Korean nurses: A cross-sectional survey", *International Journal of Environmental Research and Public Health*, 16 (22), 4386.
- Maslach, C. & Jackson, S. E. (1981). "The measurement of experienced burnout", *Journal of occupational behavior*, 2 (2), 99-113.
- Maslach, C., Jackson, S.E. & Leiter, M.P. (1996). *Maslach burnout inventory manual*. 3rd ed. Palo Alto: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B. & Leiter M. P.(2001). "Job burnout", *Annual Review of Psychology*, 52 (1), 397-422.
- Maslach C. & Jackson S. E. (1981). "The measurement of experienced burnout", *Journal of Occupational Behavior*, 2: 99-113.
- Schaufeli, W. B. & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. CRC Press.
- Schaufeli, W. B. & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis Group.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). "How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism", *Journal of Organizational Behavior*, 30 (7), 893-917.
- Scherer, Y. K. & Hwang, J. (2018). "Role ambiguity, job stress, and burnout among nurses: A literature review", *International Journal of Nursing Studies*, 82, 21-35.
- Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., West, C. P. & Sloan, J. A. (2016). "Burnout and satisfaction with work-life balance among US physicians relative to the general US population", *Archives of Internal Medicine*, 176 (2), 204-213.
- Shanafelt T. D., Boone S., Tan L. et al. (2019). *Burnout and satisfaction with work-life integration among physicians in an academic health system*. Mayo Clin Proc Innov Qual Outcomes; 3 (3): 300-307.
- Spector, P. E. & Jex, S. M. (1991). "Relations of job characteristics from multiple data sources with employee affect, absence, turnover intentions, and health", *Journal of Applied Psychology*, 76 (1), 46-53.
- Spector, P. E. & Jex, S. M. (1998). "Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory", *Journal of Occupational Health Psychology*, 3 (4), 356-367.
- Violanti J. M., Andrew M. E., Burchfiel, C. M. et al. (2016). "Posttraumatic stress symptoms in police: A longitudinal study examining personal resilience resources and career-related variables", [published correction appears in Police Q. 2016;19 (2):222]. *Police Q.*;19 (1):1-25.