




EXPLAINING STRESS AND DEPRESSION LEVEL OF NURSES: THE EFFECTS OF ROLE CONFLICT AND ROLE AMBIGUITY

 **Ayşe Gökçen Kapusuz¹**

Şelçuk University, Beyşehir Ali Akkanat Faculty of Tourism, Konya, Turkey.
Email: aysegokcenkapusuz@gmail.com



ABSTRACT

Article History

Received: 8 November 2018

Revised: 19 December 2018

Accepted: 26 February 2019

Published: 15 April 2019

Keywords

Health

Stress

Depression

Nurses

Behaviors

Role conflict and ambiguity.

Jel Classification

I120; M100.

Productive human resources and behaviors play a significant role in the task and performance-oriented organizations in today's competitive, innovative, developable, and profitable business life. In this ever-changing and increasingly globalized World, people confront stress and right after depression based on their different roles, threats and events. The aim of this research is to analyze the effects of role conflict and role ambiguity of nurses upon the stress and depression with different theoretical backgrounds. In this study, the relationship among all mentioned variables was examined and analyzed based on the survey data with the participation of 141 randomly chosen nurses from the public hospital in Osmaniye, Turkey. Based on the results of hierarchical regression analysis; role ambiguity, role conflict, and depression are significantly related to job stress of nurses. Besides, there is an insignificant relationship between role conflict and depression. On the other hand, there are negative effects of role ambiguity upon the depression of nurses. This negative relationship between role ambiguity and depression increases from -0.309 to -0.321 when combined with role conflict. Role conflict and role ambiguities are two factors that cause to stress and depression in both personal and work life. The productivity of workers/employees especially in the health sector is depending on different environmental, individual, and psychological factors. Managers should consider the changing of the work environment and variability of patients besides personal needs and abilities while distributing the extra roles of nurses.

Contribution/Originality: This study is one of the very few studies which have investigated quartet relationship among role conflict, role ambiguity, stress and depression in health sector under the light of Person-Organization Fit Theory and Effort-Reward Imbalance-ERI-Model.

1. INTRODUCTION

The objective of this study is to review the sources of stress and depression in terms of role conflict and role ambiguity among healthcare workers especially nurses. To be able to analyze the effects of role conflict and role ambiguity of nurses upon the stress and depression, literature will be analyzed under the different theoretical references such as Person-Organization Fit Theory which was founded in 1930s and 1950s, and Effort-Reward Imbalance-ERI-Model. Nurses represent the largest group in the health sector as healthcare workers. As other employees work in different sectors, nurses also react to the changing situations in their workplace if they are a part of that. Stress and depression are a common phenomenon in the nursing environment and other health professions as well. Stressful work environment necessitates developing a defense mechanism of healthcare members especially

nurses. They have to learn how to deal with different stressful factors while doing their job. Otherwise, it will become a continual disease. Nursing is one of the stressful jobs especially for the women who are performing different tasks at the same time as a mom, wife, nurse ...etc. and as Elloy and Smith emphasized that they are trying to combine marriage and a job (Elloy and Smith, 2003). Stress and depression are generally known as influential factors which negatively affected for both personal and organizational lives and performances.

Authors indicate that nurses have different and various situations create stress in work places (Adiguzel, 2012). People try to prevent themselves from stress, depression, and their negative effects by personal characteristics and their social roles. When hospital environment are well-structured, roles are well-defined, and nurses feel at home, they will work effectively and efficiently by keeping away from the stress and depression. Different characteristics of factors causing stress and right after depression play a part in different steps of both work and social life. Job is one of the significant factors causing stress and depression in personal life (Hebrani *et al.*, 2009).

2. LITERATURE REVIEW

Nursing is one of the stressful jobs especially for the women who are performing different tasks at the same time as a mom, wife, nurse ...etc. and as Elloy and Smith emphasized that they are trying to combine marriage and a job (Elloy and Smith, 2003). Individual roles and tasks are formed and directed people' behaviors in time and different roles are generally represented the expectations (Başaran, 2008). In social and individual life, different factors and conditions that perceived as a threat or danger and described as a negative situations are defined as a stressor (Kızıldağ, 2014).

While both women and men face stress and depression in work life, women feel the negative effects more than men, because they are pursuing their jobs indoors and out, undertaking household duties and caring for children (Bittman, 1991; Elloy and Smith, 2003). In psychological and behavioral literature, factors that cause to stress and its negative effects can differently be categorized by different authors and researchers (Singh, 2000). Everything that perceived as a threat/danger by individual is defined as a stressor and either physical or psychological reactions against stressors are defined as an employee or individual stress. The risk of depression is generally based on the level of job stress and as Leunga (2009) emphasized that it can be said that high level of job stress is a factor to double the risk of depression (Leunga, 2009).

Stress is one of the factors which negatively affect people and their psychological moods in both work and social life (Polatçı and Özyer, 2015). Role conflict that defined as a situation combined with opposed expectations is also one of the factors caused to stress (Ceylan and Ulutürk, 2006). Various researches in relevant literature draw attention to the positive relationship between role conflict and role ambiguity (Dubinsky *et al.*, 1992). Performance conditions and problems of workers are different for each profession and it is the fact that different jobs and conditions have different sources of stress as well (Cam and Cakır, 2008).

Sources causing to stress of nurses' work places are generally classified as new practices and expectations, work conditions, heavy workload, interpersonal communication problems, working with extremely sick people, organizational climate, values, and norms, ...etc. (Clegg, 2001; Adiguzel, 2012). Performance of health organizations depend on the workers' productivity, service quality, and institutional stability. From this point of view, wrong choices among employees and applications can cause to different negative effects as well (Dussault and Dubois, 2003). As Chisari and co-workers emphasized that stress can be described as a factor which reduce performance and effectiveness at work and untreated stress can become chronic by starting with headache, different pains, panic attacks ...etc (Chisari *et al.*, 2017).

As known in general, role conflict generally refers to the circumstances of contradictory situations and requests in single or multiple roles in personal and work life when pressures appear in one's role. On the other hand, the lack of alliance and the lack of information about different roles are defined as a role ambiguity as well (Elloy and Smith, 2003). Role ambiguity is generally originated from the lack of knowledge and experiences while role conflict is

caused by divergent expectations (Polatçı and Özyer, 2015). The greater part of the researches focused on the role conflict and role ambiguity as the main factors cause to stress and depression.

As mentioned before, these variables and relationship among them can be explained by Person-Organization Fit Theory and Effort Reward Imbalance-ERI-Model. Person-Organization Fit is one of the five dimensions or a type of Person-Environment Fit Theory in which employees may fit organizational requirements or not (Judge and Kristof, 2004). Organizations have a dynamic, competitive, and changing structure which requires employees to easily move and accord with different situations. As Robbins and Judge (2009) described that the fit between the personality of employees and organizational culture is much more important than the fit between individual characteristics and a job. On the other hand, the fit between individual and organization can be defined as a convenience between employees and organizations with sharing similar characteristics (Kristof *et al.*, 2005). Fit is a significant value for employers to create a positive organizational climate and share their ideas with employees. According to Caliskan (2017) the process which consists orientation efforts have two main sub dimensions named as supplementary fit and complementary fit. Kristof (1996) explained that the relationship between the main personal characteristics (values, attitudes, aims...) and the main organizational characteristics (norms, goals, culture...) identifies "supplementary fit". Besides, "complementary fit" is identified by the relationship between personal and organizational demands and supplies. The high level of person-organization fit will provide reducing stress and depression and increasing organizational commitment and job satisfaction.

Effort Reward Imbalance-ERI-Model argues the mutuality related to high level of efforts and low level of received rewards. Based on that people experience stress and then depression in work environment. The model is generally used to explain the effects of negative work conditions upon the healths of people working in service industry (Demiral, 2015). In general, employees at work expect adequate rewards in return for their efforts. Different illnesses, distress, unhappiness, stress, depression and so on will emerge when an imbalance is occurred between personal efforts and received rewards in an organization (Siegrist, 2005). Otherwise, organizational identification, socialization, commitment, job satisfaction...etc. will come true. The model also endeavors to address and emphasize other models which point out the stress by measuring and focusing on the individual differences (Siegrist, 2008). Besides, the ERI model emphasizes the importance of the balance between personal efforts and rewards in work life to be able to compete with detrimental outcomes such as stress and depression.

3. METHODOLOGY

3.1. Participants

The analyses carried out in this study centered on the relationship among role conflict, role ambiguity, job stress, and depression. The effects of role conflict and role ambiguity upon the stress and depression have also been examined. For that, different scales firstly translated into Turkish have also been used to be able to conduct a survey. Based on the conceptual literature reviews, strong and significant relationship is awaited from the survey results gathered from 141 nurses in Osmaniye/Turkey.

3.2. Scales/Materials and Data Collection

Besides demographic factors and questions, four combined scales were used with four variables and 42 items in total. The role conflict generated by Rizzo *et al.* (1970) contains 8 items; role ambiguity generated by the same researchers also contains 6 items. On the other hand, job stress originated by House and Rizzo (1972) contains 7 items, and Beck's depression inventory/scale contains 21 items and all these items attached to the survey in this research with Likert-type scale from 1 to 5, indicating responses of "strongly disagree (1)" to "strongly agree (5)".

200 questionnaire forms have been distributed to the nurses and 141 of them returned to contribute to the analyses process and all returned forms have been added to the analyses structure. The rate of return was 70,5%. To analyze all these collected data, hierarchical regression analysis in SPSS has been used to be able to see the

relationship among the mentioned variables. The major goal of the present study is to determine the association between job stress, depression, role conflict, and role ambiguity of the nurses in a public hospital especially it is aimed to examine the effects of role conflict, and role ambiguity upon the stress and depression level of nurses.

4. FINDINGS AND RESULTS

Based on the reliability analysis, Cronbach’s alpha has been found as 82% for 42 items in total. Besides, reliabilities for each variable are seen as 81.5% for role ambiguity, 67.3% for role conflict, 83.9% for job stress, and 89.3% for depression. Both total and each result of reliability tests are implied the reliable survey data and analyses as well.

On the other hand, based on the results of hierarchical regression analysis, significant relationships (sig.<0.05) have been found among variables. Role ambiguity, role conflict, and depression are significantly related to job stress of nurses. Besides, there is an insignificant relationship between role conflict and depression. Role ambiguity is negatively associated with stress and depression (-0.217; -0.309). The negative effect of role ambiguity upon the stress of nurses increases from -0.217 to -0.254 when combined with role conflict. On the other hand, if role ambiguity, role conflict, and depression have coexisted, the effects of role ambiguity upon the stress are negatively decreasing from -0.254 to - 0.143 and becomes insignificant (sig. 0.055 > 0.05). Role conflict is positively related to job stress and this positive effect decreases from -0.433 to -0.386 when combined with depression and role ambiguity. Depression and stress of nurses are positively and significantly related to each other. These mentioned results can be seen in Table 1:

Table-1. Hierarchical Regression Analysis Results (1).

Model	Constants	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	4.520	0.370		120.211	0.000
	RoleAmb	-0.251	0.096	-0.217	-2.619	0.010
2	(Constant)	2.714	0.457		5.941	0.000
	RoleAmb	-0.294	0.087	-0.254	-3.395	0.001
	RoleConf	0.571	0.099	0.433	5.779	0.000
3	(Constant)	1.988	0.452		4.394	0.000
	RoleAmb	-0.165	0.085	-0.143	-1.937	0.055
	RoleConf	0.510	0.093	0.386	5.485	0.000
	Depress	0.816	0.173	0.348	4.719	0.000

Dependent Variable: Stress.

Table-2. Hierarchical Regression Analysis Results (2).

Model	Constants	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.129	0.154		7.345	0.000
	RoleAmb	-0.153	0.040	-0.309	-3.833	0.000
2	(Constant)	0.890	0.209		4.254	0.000
	RoleAmb	-0.158	0.040	-0.321	-3.986	0.000
	RoleConf	0.075	0.045	0.134	1.665	0.098
3	(Constant)	0.425	0.218		1.949	0.053
	RoleAmb	-0.108	0.038	-0.219	-2.804	0.006
	RoleConf	-0.022	0.047	-0.040	-0.478	0.633
	Stress	0.171	0.036	0.402	4.719	0.000

Dependent Variable: Depression.

When continued to examine the effects of variables, the negative effects of role ambiguity upon the depression of nurses can be seen in Table 2. This negative relationship between role ambiguity and depression increases from - 0.309 to -0.321 when combined with role conflict. On the other hand, then taking a look at the combined effects of role ambiguity, role conflict, and stress upon the depression levels of nurses, the significant and negative effect of role ambiguity is decreasing from -0.309 to -0.219. Besides, if role ambiguity and role conflict coexist, the positive

relationship between depression and role conflict draws attention but this is an insignificant relationship (sig. 0.098 > 0.05). This positive but insignificant effect of role conflict is getting negative (from, 134 to -0.040; insignificant at the 0.05 level) when combined with role ambiguity and job stress. Again, stress and depression are positively and significantly related to each other. All these results can be seen below:

As a result, job stress is much more effective than other variables upon depression of nurses. Depression is also seen positively and significantly effective upon job stress (0.348) but it can be said that job stress of nurses stimulates depression (0.402). Role conflict is positively effective upon the job stress but stressful nurses' depression levels increase and role conflict is negatively effective on this.

5. DISCUSSION

Stress can be defined as a response to a stressor and it is not easy to keep stressful conditions in the human body for a long time. A little stress can be good for being motivated and alert. Stress and depression are generally used to describe negative situations which affect people' physical and psychological well-being. Besides role conflict and role ambiguity, work environment, organizational culture, policies, values and norms, organizational communication and so on also cause a high rate of stress and depression.

Today, the productivity of workers especially in the health sector is depending on different environmental, individual, and psychological factors. Role ambiguity and role conflict as a role stressors (Polatçı and Özyer, 2015) are just two factors directly related to finding a balance between organizational and personal stress and right after the depression. Managers should consider the changing of the work environment and variability of patients besides personal needs and abilities while distributing the extra roles of nurses.

Roles have generally expressed the expectations. Task behaviors of employees are described as an interaction between an individual and his/her functional environment while the role behaviors are described as another output of interaction between the individual and again his/her social environment. The effects of role stressors are examined with different variables and some researchers focused on the effects of role stressors upon the burnout levels of people and burnout dimensions. It can be focused on the effects of role stressors upon the psychological capital as well in the future and further studies. When working hours are flexible at the hospitals, personal goals are coherent with the organizational goals, the norms and values are clearly written, and it is easy to communicate with co-workers and top management and so on, it will be easier to deal with stress and depression for nurses based on their role specifications. It should be said that the limitations of this study are the limited survey distribution, the size of collected data, and geographical limitation. Even though, good reliability results of the instruments were found. At the same time, it is thought that if all these mentioned limitations go away, different and remarkable results in a different setting will be found and contributed to the future researches.

Funding: This study received no specific financial support.

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

REFERENCES

- Adiguzel, O., 2012. The impact of work related stress, role clash and role ambiguity on employee turnover: An application on nurses. *International Journal of Alanya Faculty of Business*, 4(3): 163-169.
- Başaran, İ.E., 2008. *Organizational behavior: Manpower of production*. Ankara: Political Press and Publication.
- Bittman, M., 1991. *Juggling time: How Australian families use time*. Canberra: Australian Government Publishing Service.
- Caliskan, A., 2017. Person organization harmony theory. In *Management and Strategy: 101 theory and approach*. Turunç, Ö., Turgut, H. (Eds.). Ankara: Political Bookstore.
- Cam, S. and P. Cakır, 2008. Personal and business-related perception of job stress perception comparison by variables. *Journal of Police Sciences*, 10(3): 21-40.

- Ceylan, A. and Y.H. Ulutürk, 2006. Role uncertainty, role conflict, relations between job satisfaction and performance. *Doğuş University Journal*, 7(1): 48-58.
- Chisari, E.M., T. Lo Castro, A. Grasso, C.G. Chisari, S. Di Nuovo and G. Chisari, 2017. Functional stress and microbiota eye in subjects with type 2 diabetes: A multifactorial approach. *Acta Medica Mediterranea*, 33(1): 9-16.
- Clegg, A., 2001. Occupational stress in nursing: A review of the literature. *Journal of Nursing Management*, 9(2): 101-106. Available at: <https://doi.org/10.1046/j.1365-2834.2001.00216.x>.
- Demiral, Y., 2015. Psychosocial factors in working life. *Occupational Health and Safety Journal (MSG)*, 5(20): 22-26.
- Dubinsky, A.J., R.E. Michaels, M. Kotabe, C.U. Lim and H.-C. Moon, 1992. Influence of role stress on industrial salespeople's work outcomes in the United States, Japan and Korea. *Journal of International Business Studies*, 23(1): 77-99. Available at: <https://doi.org/10.1057/palgrave.jibs.8490260>.
- Dussault, G. and C.A. Dubois, 2003. Human resources for health policies: A critical component in health policies. *Human Resources for Health*, 1(1): 1-16. Available at: <https://doi.org/10.1186/1478-4491-1-1>.
- Elloy, D.F. and C.R. Smith, 2003. Patterns of stress, work-family conflict, role conflict, role ambiguity and overload among dual-career and single-career couples: An Australian study. *Cross Cultural Management: An International Journal*, 10(1): 55-66. Available at: <https://doi.org/10.1108/13527600310797531>.
- Hebrani, P., F. Behdani and M. Mobtaker, 2009. Examining tolerance factors in nurses. *Principles of Mental Health*, 3(10): 231-237.
- House, R.J. and J.R. Rizzo, 1972. Toward the measurement of organizational practices: Scale development and validation. *Journal of Applied Psychology*, 56(5): 388-396. Available at: <https://doi.org/10.1037/h0033444>.
- Judge, T.A. and A.L. Kristof, 2004. Personality, interactional psychology, and person-organization fit. In *Personality and Organizations*. Schneider, B., Smith, D.B. (Eds.). New Jersey: Lawrence Erlbaum Associates.
- Kızıldağ, D., 2014. Employee stress, negative work attitudes and behaviors. *Introduction to Organizational Psychology*. Özkara, B. (Ed.). Ankara: Nobel Academic Publishing Education Consulting Tic. Ltd. Sti.
- Kristof, A.L., 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49. Available at: <https://doi.org/10.1111/j.1744-6570.1996.tb01790.x>.
- Kristof, A.L., R.D. Zimmerman and E.C. Johnson, 2005. Consequences of individuals fit at work: A metaanalysis of person-job, person-organization, person-group, and person supervisor fit. *Journal of Personnel Psychology*, 58(2): 281-342. Available at: <https://doi.org/10.1111/j.1744-6570.2005.00672.x>.
- Leunga, S., 2009. Occupational stress, mental health status and stress management behaviors among secondary school teachers in Hong Kong. *Health Education Journal*, 68(4): 328-343.
- Polatçı, S. and K. Özyer, 2015. The effects of role stressors on burnout a research. *International Journal of Social Science*, 33(Spring I): 29-40.
- Rizzo, J.R., R.J. House and S.I. Lirtzman, 1970. Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15(2): 150-163. Available at: <https://doi.org/10.2307/2391486>.
- Robbins, S.P. and T.A. Judge, 2009. *Organizational behavior*. 13th Edn., Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Siegrist, J., 2005. Social reciprocity and health: New scientific evidence and policy implications. *Psychoneuroendocrinology*, 30(10): 1033-1038. Available at: <https://doi.org/10.1016/j.psyneuen.2005.03.017>.
- Siegrist, J., 2008. Chronic psychosocial stress at work and risk of depression: Evidence from prospective studies. *European Archives of Psychiatry and Clinical Neuroscience*, 258(5): 115-119. Available at: <https://doi.org/10.1007/s00406-008-5024-0>.
- Singh, J., 2000. Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing*, 64(2): 15-34. Available at: <https://doi.org/10.1509/jmkg.64.2.15.17998>.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Management and Sustainability shall not be responsible or answerable for any loss, damage or liability, etc. caused in relation to/arising out of the use of the content.