



The effect of loneliness at work; work stress on work alienation and work alienation on employees' performance in Turkish health care institution

Santas, G¹., Isik, O² and Demir, A³

ABSTRACT

This study aims to determine the effect of loneliness at work and work stress on work alienation and work alienation on employee performance among employees in Turkish healthcare institutions. Data collection tools were composed of Loneliness at Work Scale Work Stress Scale, Work Alienation Scale and Performance Scale. The study results revealed that work alienation was influenced by work stress ($p=0.689$) and loneliness at work ($p=0.433$) positively. These influences were statistically significant ($p<0.05$). In addition, it was found that work alienation had a negative and statistically significant effect on performance ($p=-0.264$) ($p<0.05$). The performance of health employees decreased with increasing work alienation. It should be noted that low job performance of these employee may lead to irreversible consequences such as death or disability. Viewed from this perspective, the determined factors that cause work alienation in employees (health institutions) play significant role and health institutions are required to take precautionary measures.

Keywords: Loneliness at work, work stress, work alienation, employees work performance, health care institution.

Introduction

Employees are key success factor for production in any organization. Owing to the coexistence of many professional groups with different needs, expectations and the need for cooperation in healthcare services; employees and human relations in institutions have become more important. The skills and knowledge of the employees are significantly shaping the effectiveness, productivity and quality of healthcare services provided. It may create an obstacle for achieving the objectives of organization. Hence, it is believed that a deeper analysis of different organizational variables may provide a new perspective in determining organizational problems.

Authors' Affiliation:

Institute Name:

Hacettepe Universitesi,
² Hacettepe Universitesi,
³ Afyon Kocatepe Universitesi

Department:

Health Management, ²Health Management, ³Health Management

Country:

Ankara, Turkey, ²Ankara, Turkey ³Afyon, Turkey

Corresponding Author's Email:

gulcan.kahraman@hacettepe.edu.tr

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Loneliness at work, work stress, work alienation, and performance are among the topics that have the potential to affect human relations and organizational outcomes in professional life.

Loneliness is defined as “a complex set of feelings encompassing reactions to the absence of intimate and social needs” (Ernst & Cacioppo, 1998, p.1). When an employee faces difficulties in establishing social relations and social support in work environment, loneliness emerges at workplace (Dogan, Cetin, & Sungur, 2009). Based on the existing literature, emotional loneliness and social loneliness are two types of loneliness at workplace. While emotional loneliness focuses on one-to-one relationship with individuals, social loneliness happens in relationships with more than one person (Kaymaz, Eroglu, & Sayilar, 2014; Ernst & Cacioppo, 1998).

Work alienation is another variable examined in this research. It stems from the mismatch between the values of employees with the requirements of job roles (Mottaz, 1981; Wegner, 1975). Hirschfeld and Feild (2000) define work alienation as not dealing with the work. Alienated employee breaks the bonds of his/her work as cognitively and emotionally (Nair & Vohra, 2010).

When an individual’s psychological response exceeds his/her capacity or resources, *work stress* reveals (Zhang, LePine, Buckman, & Wei, 2014). Work stress is named as occupational stress, job stress, industrial stress, job strain, etc. in different studies. *Employee performance* is associated with the business activities of employees (Borman & Motowidlo, 1993). It is about spending time and effort to satisfy the requirements of employees by assuming the duties and responsibilities in an organization (Barutcugil, 2002).

The existing literature revealed that the phenomenon of work alienation is increasing among health employees at an alarming rate (Tastan, Isci, & Arslan, 2014; Usul & Atan, 2014; Yetis, 2013; Philips & Arikian, 2001). Loneliness is often associated with alienation (Kanungo, 1982) and considered as among organizational factors that lead to work alienation (Simsek, Celik, Akgemci, & Fettahlioglu, 2006). The relationship between two variables has not been studied empirically in health institutions. Given the nature of health care in terms of requiring teamwork, establishing social relationship is important at workplace. When employees have poor and peaceless human relations in delivering healthcare service; his / her attitude to the work may deteriorate. Employee may break the bonds of his/her work as cognitively, emotionally and get alienated from his / her work. The existing literature reveals that work stress may trigger work alienation (Egin, 2015; Erkilic, 2012; Isikhan, 2004). Owing to the excess number of patients, time pressure and overwork experienced in healthcare, work stress is considered as another organizational factor of work alienation in the model.

This study focuses on how work alienation arising from social and emotional loneliness and work stress affects performance among employees in health institutions. Work alienation leads to decreased job involvement and less likely to exert time and energy on the job (Sulu, Ceylan, & Kaynak, 2010; Armstrong-Stassen, 2006; Ashforth & Lee, 1990; Omran, 1983). As the work alienation increases, the employee performance is affected negatively (Chiaburu, Thundiyil, & Wang, 2014). Employees in health sector determine the size and scope of healthcare services. Hence, it should be noted that low work performance among health employees may lead to the non-recoverable results such as death or disability of the patients etc. Viewed from this perspective, it seems important to explore these variables in health employees.

This study proposes to examine the effect of loneliness at work i.e. work stress on work alienation and work alienation on employee performance among employees in health institutions.

Hypotheses

Following hypotheses have been developed to investigate the study:

H1: Loneliness at work has a significant effect on work alienation.

H2: Work stress has a significant effect on work alienation.

H3: Work alienation has a significant effect on performance.

Research Methodology

The population of the study consists of 850 employees working at a university hospital in Turkey known as *Afyon Kocatepe University Ahmet Necdet Sezer Research and Practice Hospital*. Sample size was calculated as 267 employees. The data was collected by restricted non-probability sampling. All survey data was collected via self-administered surveys and participation was voluntary.

Measures

Wright, Burt, and Strongman (2006) scale on *loneliness at work* was used in this study and were scored with a five-point Likert scale ranging from “strongly disagree (1)” to “strongly agree (5)” and consisted of 16 items. The items measure emotional deprivation (1-9) and social companionship (10-16).

Work stress was measured by using the *Work Stress Scale* developed (House & Rizzo, 1972). This scale measures the psychological and psychosomatic symptoms of an employee associated with stress, which is experienced in the workplace. The scale was translated into Turkish by Efeoglu (2006) and applied in the healthcare industry. The scale consists of 7 items and a single dimension. These items were scored with a five-point Likert scale ranging from “strongly disagree (1)” to “strongly agree (5)”.

The Work Alienation Scale was built upon the measure used by Kaya and Serceoglu (2013) and the scale measures the level of work alienation in a single dimension and consists of 6 items. The items were scored with a five-point Likert scale ranging from “strongly disagree (1)” to “strongly agree (5)”.

Kirkman and Rosen (1999) performance scale was used to measure employee performance. The scale consists of 4 items and a single dimension. These items were scored with a five-point Likert scale ranging from “never (1)” to “always (5)”. The data in this study was evaluated by SPSS (Statistical Package for the Social Sciences) and AMOS. Structural Equation Model (SEM) was used in the study.

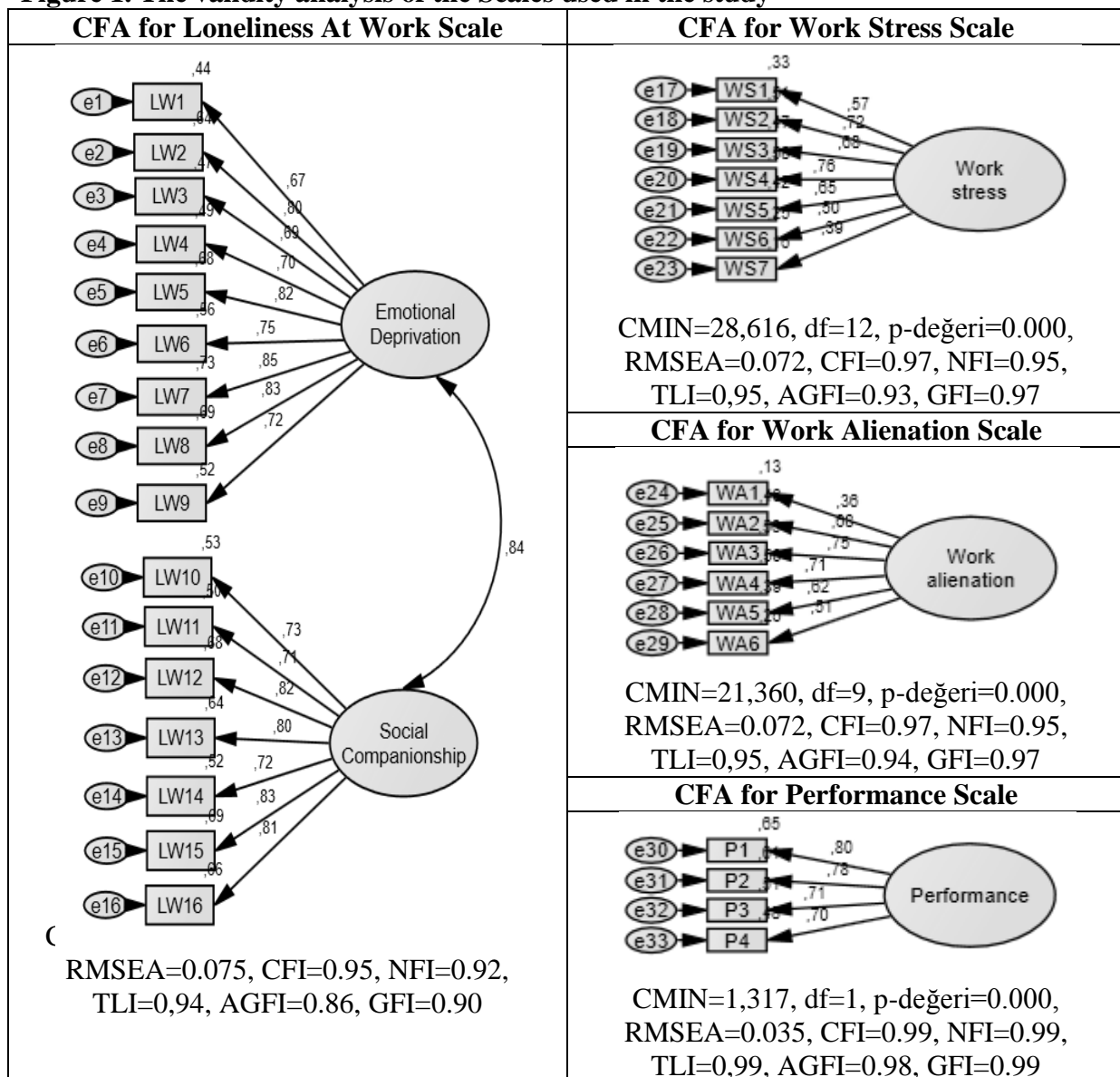
Cronbach's alpha values were found to be 0.95 for Loneliness at Work Scale; 0.805 for Work Stress Scale; 0.77 for Work Alienation Scale and 0.835 for Performance Scale as shown in Table 1. As Cronbach's alpha coefficient is closer to 1, the reliability of the scale increases (Gliem & Gliem, 2003). Hence, it can be said that the scales provide the necessary conditions for the reliability.

Table 1. Reliability Analysis of the Scales used in this study

	Number of Items	Cronbach's Alpha
Loneliness At Work	16	0.950
Work Stress	7	0.805
Work Alienation	6	0.770
Performance	4	0.835

The scales were assessed by Confirmatory Factor Analyses (CFA) as shown in Figure 1. The goodness-of-fit index (GFI, value above 0.90), the comparative fit index (CFI, value above 0.80), and the root mean square error of approximation (RMSEA, value smaller than .10) were examined to assess the adequacy of model fit in the study (Schumacher & Lomax, 2004). GFI was found as 0.90 for Loneliness at work; 0.97 for Work stress; 0.97 for Work alienation and 0.99 for Performance. The root mean square error of approximation was found as 0.075 for loneliness at work scale; 0.072 for Work Stress Scale; 0.072 for Work Alienation Scale and 0.035 for Performance Scale. The value is acceptable between 0.05 and 0.08 (Byrne, 2009). Based on the results, this study shows that the data set obtained from the scales is valid and the model has revealed a good fit to the data. In other words, the model provides the necessary conditions for analysis.

Figure 1. The validity analysis of the Scales used in the study



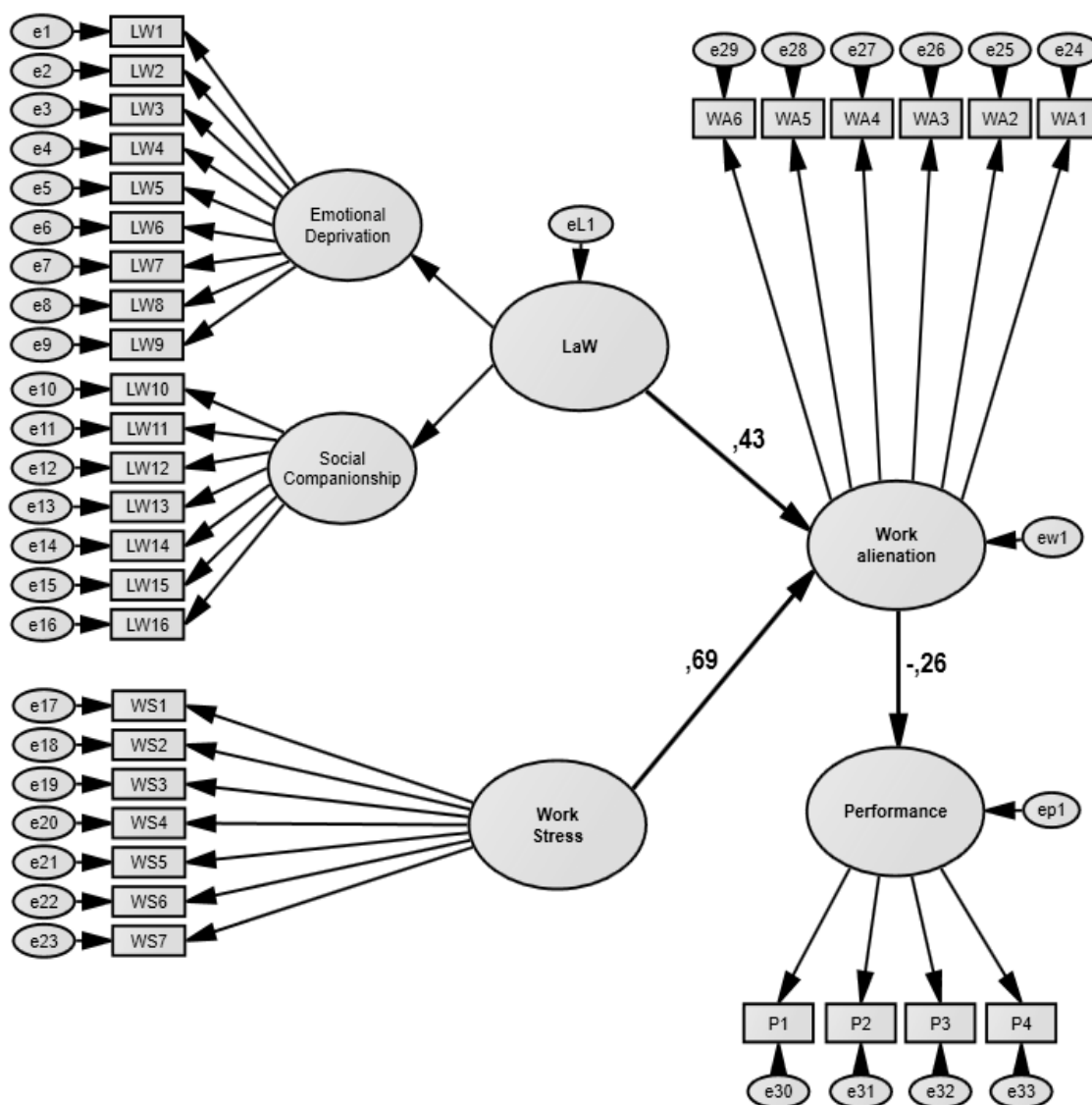
Results

The sample consisted of 64.4 % females; 55.1 % were single, 13.5 % were doctors, 69.6% were nurses and 16.9 % were allied health personnel. Majority of participants were of 24

years old and younger. 90 (33.7 %) were high-school graduates, 37 (13.9 %) had two-year degree, 96 (36 %) had four-year degree and 41 (15.4 %) had post-graduate degrees.

Based on theoretical background, the causal relationships were transformed into a structural equation by path diagrams. Before the assessment of structural models, the fitness of model was analyzed statistically. The purpose was to ensure the representation of causal relationships and the acceptability of the structural model. As shown in Figure 2, CMIN/df (922.100/481=1.917), GFI (0.90) and RMSEA (0.059) are at acceptable level in the model.

Figure 2. The output of structural equation model presenting the effect of loneliness at work and work stress on work alienation and work alienation on performance



CMIN=922.100, df=481, p-değeri=0.000, RMSEA=0.059, CFI=0.91, NFI=0.82, TLI=0.90, AGFI=0.80, GFI=0.90

After ensuring the fitness of model, Table 2 presents the evaluation of structural equation model. The study results revealed that work stress and loneliness at work were related to the work alienation. It was found that work alienation was influenced by work stress ($\rho=0.689$) and loneliness at work ($\rho=0.433$) positively. These influences were statistically significant

($p < 0.05$). In addition, it was found that work alienation had a negative and statistically significant effect on performance ($\rho = -0.264$) ($p < 0.05$).

Table 2. The effect of loneliness at work and work stress on work alienation and work alienation on performance

			Estimate	S.E.	C.R.	p	Hypothesis
Loneliness at Work	--->	Work Alienation	0.433	0.072	6.04	***	H1 Accepted
Work Stress	--->	Work Alienation	0.689	0.224	4.918	***	H2 Accepted
Work Alienation	--->	Performance	-0.264	0.058	-3.406	***	H3 Accepted

*** $p < 0.01$

Discussions and Conclusion

Given the lack of studies with combination of these variables in existing literature, it is expected that this research will contribute to existing literature in healthcare industry.

According to the results of this study, work stress had a positive and statistically significant effect on work alienation ($\rho = 0.689$) ($p < 0.05$), which is consistent with the study of Yadav and Nagle (2012) as they found that there was a relationship between work stress and work alienation. Employees getting alienated from organization, experience higher level of stress. Erkilic (2012) also found that organizational alienation was influenced by work stress positively ($r = 0.623$). It can be said that employees in Turkish healthcare institutes also get alienated with increasing work stress at workplace, where they spend a large part of their lives.

Another finding of the study is that loneliness at work had a positive ($\rho = 0.433$) and statistically significant effect on work alienation ($p < 0.05$). In the literature, there has been no practical study to examine the relationship between two variables. Theoretical studies suggested that loneliness at work was among the organizational reasons of work alienation (Elma, 2003; Simsek, Celik, Akgemci, & Fettahlioglu, 2006; Kanungo, 1982). Owing to having a complex and matrix organization structure, the relationship in health institutions require teamwork. There are employees from different professions at each stage of health care delivery to patients. Besides different professions, interpersonal relationships is considered to reflect the service quality produced and delivered. Hence, it is believed that weak and annoying employee relationships in working environment may reflect in the work of the employees and these employees get disoriented from their work.

In this study, it was found that performance was influenced by work alienation negatively ($\rho = -0.264$) and was statistically significant ($p < 0.05$). Kanungo (1982) suggested that work alienated employees experienced dissatisfaction and had been directed to unproductive behavior such as sabotage, goldbricking etc. Cevik (2009) also indicated that alienated employees did not work to improve themselves in terms of physical, mental aspects and did their job only as necessity. The study of Chiaburu, Thundiyil, and Wang (2014) was also consistent with this result with the other related studies, highlighting the intensity of work alienation in employees at healthcare institutions (Tastan et al. 2014; Usul and Atan, 2014; Yetis, 2013; Philips and Arikian, 2001). It should be noted that low job performance of these employees may lead to irreversible consequences on the clients (patients).

Besides theoretical studies, applied research studies are needed to determine the causes of loneliness at work and work stress in health institutions. There are limitations on the

generalization of these results for all health employees as the sample is a composition of employees in a province of Turkey and working at a university hospital. It is believed that future studies with larger sample would reveal more effective results.

Declarations

Competing Interests

The author declares that they have no competing interests.

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Authors' Contribution

Santas G. contributed in the study design, literature search, review of the manuscript, and manuscript preparation. Isik O. was involved in the the study design, analysis of the data, and review of the manuscript. Demir, A. was also involved in the literature search, data collection and review of the manuscript.

References

- Armstrong-Stassen, M. (2006). Determinants of how managers cope with organizational downsizing. *Applied Psychology: An International Review*, 55(1), 1-26.
- Ashforth, B. E., & Lee, R. T. (1990). Defensive behavior in organizations: A preliminary model. *Human Relations*, 43(7), 621-648.
- Barutcugil, I. (2002). *Performance Management*, Istanbul: Career Publishing.
- Borman, W. C. & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance, In Schmitt, N. ve Borman, W.C. (Eds.), *Personnel Selection in Organizations*, San Francisco: Jossey-Bass.
- Byrne, B. M. (2009). *Structural Equation Modeling with AMOS: Basic concepts, application, and programming*. New York: Routledge.
- Chiaburu, D., Thundiyil, T., & Wang, J. (2014). Alienation and its correlates: A meta-analysis. *European Management Journal*, 32, 24–36.
- Cevik, R. (2009). *The effect of behavior of manager on work alienation of teachers in secondary education institutions* (Master's thesis). Yeditepe University *Institute of Social Sciences, Istanbul*.
- Dogan, T., Cetin, B., & Sungur, M. Z. (2009). Reliability and validity of the Turkish version of loneliness at work scale. *Anatolian Journal of Psychiatry*, 10, 271-277.
- Efeoglu, I. E. (2006). *The effects of work family conflict on job stres, job satisfaction and organizational commitment: A study in the pharmaceutical industry* (Unpublished doctoral dissertation). Cukurova University Institute of Social Sciences, Adana.
- Egin, A. (2015). *Job Stress and Burnout in Working Life* (Master's thesis). Beykent University Institute of Social Sciences, Istanbul.
- Elma, C. (2003). *Teachers work alienation in elementary schools (Ankara case)* (Unpublished doctoral dissertation), Ankara University Institute of Social Sciences, Ankara.
- Erkilic, E. (2012). *The effect of organizational stress on organizational alienation: A study on five star hotels* (Master's thesis). Afyon Kocatepe University Institute of Social Sciences, Afyon.

- Ernst, J., & Cacioppo, J. (1998). Lonely hearts: Psychological perspectives on loneliness. *Applied and Preventative Psychology*, 8, 1-22.
- Gliem, R. R., & Gliem, J. A. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus.
- Hirschfeld, R. R., & Feild, H. S. (2000). Work centrality and work alienation: Distinct aspects of a general commitment to work. *Journal of Organizational Behavior*, 21(7), 789-800.
- House, R., & Rizzo, J. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance*, 7(3), 467-505.
- Isikhan, V. (2004). Stress and coping ways in working life. Ankara: Sandal Publishing.
- Kanungo, R. N. (1982). Work alienation: An integrative approach, Newyork: CBS Educational and Professional Publishing.
- Kaya, U., & Serceoglu, N. (2013). Alienation Among Emotion Workers: A Research in Service Industry. *Labour and Society*, 36(1), 311-346.
- Kaymaz, K., Eroglu, U., & Sayilar, Y. (2014). Effect of loneliness at work on the employees' intention to leave. *Industrial Relations and Human Resources Journal*, 16(1), 38-53.
- Kirkman B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, 42, 58-74.
- Mottaz, C. J. (1981). Some determinants of work alienation. *The Sociological Quarterly*, 22, 515-529.
- Nair, N., & Vohra, N. (2010). An exploration of factors predicting work alienation of knowledge workers. *Management Decision*, 48(4), 600-615.
- Omran, K. A. (1983). *An investigation of the relationship between alienation and individual attitudes and performance*, (Doctoral dissertation), The Graduate School of the City University, New York.
- Philips, L. & Arikian, V. (2001). A model of alienation from nursing work. Virginia: Virginia Commonwealth University.
- Simsek, M. S., Celik, A. Akgemci, T. & Fettahlioglu, T. (2006) Research of alienation management in organizations, *Selcuk University Journal of Institute of Social Sciences*, 15, 569-587.
- Sulu, S., Ceylan, A., & Kaynak, R. (2010). Work alienation as a mediator of the relationship between organizational injustice and organizational commitment: Implications for healthcare professionals. *International Journal of Business and Management*, 5(8), 27-38.
- Tastan, S., Isci, E., & Arslan, B. (2014). The examination of the effects of perceived organizational support on job alienation and organizational commitment: A study on private hospitals in Istanbul. *Pamukkale University Journal of Social Sciences Institute*, 19, 121-138.
- Usul, H., & Atan, A. (2014). The level of alienation in healthcare industry. *Karamanoglu Mehmetbey University Journal of Social And Economic Research*, 16 (26): 1-10.
- Wegner, E. L. (1975). The concept of alienation: A critique and some suggestions for a context specific approach. *Pacific Sociological Review*, 18(2), 171-193.
- Wright, S. L., Burt C. D. B., & Strongman, K. T. (2006). Loneliness in the workplace: Construct definition and scale development. *New Zealand Journal of Psychology*, 35(2), 59-68.
- Yadav, G. K., & Nagle, Y. K. (2012). Work Alienation and Occupational Stress. *Social Science International*, 28(2), 333-344.

- Yetis, Z. (2013). *Alineation for the work of the nurses working in public hospitals* (Master's Thesis). Atatürk University Institute of Medical Sciences, Erzurum.
- Zhang, Y., LePine, J. A., Buckman, B. R., & Wei, F. (2014). It's not fair...or is it?: The role of justice and leadership in explaining work stressor-job performance relationships. *Academy of Management Journal*, 57(3), 675-97.