

DOI: <http://doi.org/10.5281/zenodo.7766517>

Accepted: 23.03.2023

The Effects of Occupational Identification and Over Workloads of Medical Secretaries on Their Turnover Intention During the Covid-19 Pandemic Process

Dilek KOLCA

Istinye University, Vocational School of Health Services, Medical Documentation and Secretarial, Istanbul, Turkey

dkolca@istinye.edu.tr, ORCID: <https://orcid.org/0000-0002-8631-5147>

Canan BULUT

Kültür University, Department of Management and Organization, Health Institutions Management, Istanbul, Turkey

c.bulut@iku.edu.tr, Phone: 05547562729, Orcid: <https://orcid.org/0000-0001-5092-5261>

117

Mert BARIŞ

Yıldız Technical University, Istanbul, Turkey

mert.mertbaris@gmail.com, Orcid: <https://orcid.org/0000-0003-3435-4088>

Abstract

The study investigates the effects of the occupational identification levels and over workload variables on the turnover intention of medical secretaries working on the front lines of the health sector during the pandemic. The research utilized quantitative data collection and was built on the relational model. The universe of the research consists of medical secretaries who worked in the province of Istanbul during the pandemic; the study sample consists of 220 medical secretaries who worked actively during the pandemic. The dependent variable of the research is turnover intention, and the independent variables are occupational identification and workload. The data obtained were interpreted through normality distribution, validity and reliability, frequency (number, percentage, etc.) and regression analysis on the SPSS 26.0 program. 57.3% of 220 medical secretaries who

participated in the study were 18-25 years old, 79.1% were women, 71.4% were single and 52.3% had less than one year working experience. When the reliability value of each variable was examined, the occupational identification was found to be reliable at a value of 0.605, the workload perception was found to be reliable at a value of 0.779 and the turnover intention was found to be reliable at a value of 0.825. A statistically significant relationship was found between the age variable and the turnover intention. The data was normally distributed, and the established model was statistically significant. Workload perception had a statistically significant effect on the turnover intention, while occupational identification had no effect on turnover intention. A significant difference was found between participants in the 26-30 and 31-35 age groups ($X = -2.038$, $SD = 0.688$) when age and job turnover were compared. There was a positive linear relationship between workload and turnover intention according to the regression analysis results for the positive β coefficients. As the participants' workload perception increased, turnover intention increased ($r=0.502$; $p= 0.000<0.01$) and a 99% positive moderate relationship was found.

Keywords: Occupational Identification, Workload, Turnover Intention, Medical Secretaries.

INTRODUCTION

Institutions providing services in the health sector were most affected by the Covid-19 pandemic. Long working hours, isolation and fighting a contagious disease full of uncertainties greatly affected health workers. Amidst these challenges, the mainstay of healthcare professionals has been to heal people and this professional mission differentiates healthcare professionals from those working in other fields.

The concept of occupational identification refers to the extent to which a person remains committed to his or her profession. According to social identity theory, the individual develops according to the groups he or she feels he or she belongs to. Occupational identification is a common concept, especially among members of the healthcare professions. Special education is necessary to realize these professions and professional occupational and ethical rules are extremely important for professionals working in the health sector.

The medical secretarial profession in our country originated in the 1980s. An associate degree education at a university is necessary to enter this profession. During the education process identification with the medical secretarial profession begins. Occupational identification occurs through applied courses in the curriculum. Once they have completed the education process, medical secretary candidates identify with the job even more.

Like all other healthcare professionals, medical secretaries have been adversely affected by the pandemic. During the most intense periods of the pandemic, there was a significant increase in

over workloads with record-breaking increases in hospitalized patient numbers. Intense working conditions have caused occupational fatigue and even dismissal for many medical secretaries. This study investigated the effects of occupational identification and workload amidst the pandemic on medical secretaries' turnover intention.

Occupational identification is the degree to which an individual defines himself or herself according to the work he or she does, and the characteristics generally attributed to the people who do that job (Tajfel, 1978: 1193). It has been explained as “the self-concept of an individual consisting of knowledge, value and emotional importance attributed to a social group or groups about his profession.” (Falières & Herrbach, 2015: 754) Occupational identification implies that people recognize themselves in the values, norms and other identifiers of the profession they belong to as well as the occupational they work for. People tend to show a higher level of commitment to an occupational that fits their values and professional expectations (Callan et al., 2007: 452). With a positive attitude towards an employer, a person can move from an occupational identity toward a professional identity (Johnson et al., 2006: 501); with negative experiences of a profession, a person may have problems belonging to an occupational (Asplund, 2020: 542).

Occupational identification generally includes acceptance of institutional norms, principles and behavioral codes used to interpret and respond to situations and events (Apker & Fox, 2002: 109). For example, a healthcare professional may experience a conflict between the practices dictated by the occupational related to patient care and the philosophies and principles adopted by the profession. As a result, the health worker may seek an occupational with more compatible professional principles and may leave the original occupational. On the other hand, the less professional-institutional conflict, the more likely the employee will remain as an active member of his profession in the original occupational (Pham, 2020: 2684).

Occupational identification includes responsibility, values, ethical standards, and the relationship of individuals to professional practice. The formation of occupational identification is a complex process in which individuals identify with the development, challenges and balance between their personal and professional identities. A professional identity is formed in the process of the individual's education and training for the profession (Maslach et al., 2001: 73). It is predicted that occupational identification, which usually starts during the education period, increases during the process of working and maturing in the profession.

In a very simple way, work overload refers to work demand exceeding human limits (Hoonakker et al., 2011: 132). Interpretation and measurement of workload depends on the tasks performed, the total time required to complete the tasks, and job requirements. In the health literature, workload is measured using objective, subjective and physiological criteria (Orçanlı, et al., 2020). Determining objective workload requires workload measurement using electronic records and data.

Subjective workload is generally used to assess the physical or mental workload associated with a task (Emeç & Akkaya, 2018: 156) and is becoming increasingly necessary to support clinical and operational decision-making in the healthcare setting. Physiological workload is expressed in findings describing body changes such as body pressure and heart rate of the employee (Weissman et al., 2007: 451).

The factors determining the workload for people working in the health sector include the variety, volume and severity of disease, and the variation in patients. Because workload influences the efficiency and quality of healthcare, it is necessary to configure routing protocols and resource allocation policies to promote balanced over workloads. It has been observed that a patient waiting time increases as workload increases, particularly at low hospital occupancy rates (Elliott et al., 2014: 787) and high workload causes situations that threaten patient safety, increasing adverse (unexpected) events and mortality (Fishbein et al., 2019:2).

Turnover intention refers to an individual's subjective estimate of the probability of leaving an occupational in the near future (Mowday et al., 1982). Turnover intention is considered a conscious and deliberate desire to leave occupational in the near future and is considered the last part of a process (Mobley et al., 1978: 408). As an employee's tenure at the occupational lengthens, his or her expectations of promotion, title and status increase compared to recently hired co-workers. It is expected that the turnover intention is lower for employees with more tenure relative to those with less tenure, as re-establishing their values in a new occupational and entering a competitive job market is thought to reduce turnover intention (Hellman, 1997: 678).

A negative relationship was found between the turnover intention of physicians/nurses and trust in Covid-19 policies, fairness of colleagues, fair in-hospital procedures, and occupational identification. In addition, as the workload of physicians and nurses increased, the turnover intention increased (Correian & Almeida, 2020:2).

METHODS

The research utilized quantitative data collection and was built on the relational model. The universe of the research consists of medical secretaries who actively worked in Istanbul during the pandemic. Using the simple random sampling method, 220 medical secretaries comprised the study sample. Participation in the research was voluntary. Participants who did not want to participate in the study stated this while completing the scale form. The scale questions were sent to the participants online. The data underlying the research were collected between March and June 2022.

The model of the research is presented in Figure 1. Research hypotheses:

- H1: Occupational identification has a significant effect on turnover intention.
- H2: Workload has a significant effect on turnover intention.

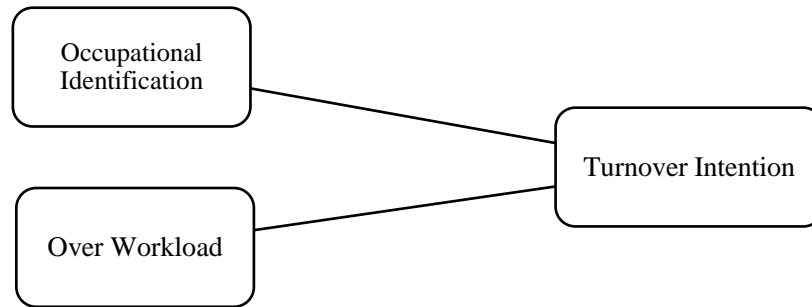


Figure 1. Model of the Study

The data of the study were collected by a four-part online questionnaire form prepared by the researchers. The first part of the data collection tool includes questions about sociodemographic information; the second part includes questions about the "Occupational Identification Scale"; the third part includes the "Workload Perception Scale"; and in the fourth part includes questions about the "Turnover Intention Scale."

The data collection tools of the research are given below.

- *Sociodemographic Information Form*: 4 questions about age, gender, marital status and working period.
- *Occupational Identification Scale*: created by Mael and Ashforth (1992) and adapted into Turkish by Kırkbeşoğlu and Tüzün (2009); 6 questions describing occupational identification in the scale.
- *Workload Perception Scale*: developed by Peterson et al. (1995) and adapted into Turkish by Derya (2008); 11 questions on workload perception, the mediating variable of the research.
- *The Turnover Intention Scale*: developed by Cammann et al. (1979), validity determined by Gül et al. (2008); 4 questions regarding the turnover intention of medical secretaries.
- The scale data was transferred to the computer and analyzed in the SPSS (Statistics Program for Social Sciences) 26.0 program. Validity and reliability analysis and normality test were performed. One-way analysis of variance (ANOVA) determined the differences within the study groups. "Test for Differences Between Two Independent Groups" (independent samples t-test) to determine the difference between the two groups, Pearson Correlation analysis and frequency analysis were used to identify the relationship between variables.

Table 1 shows the general characteristics of the medical secretaries participating in the research; a total of 220 participated in the study. 57.3% of the participants were between 18 and 25 years old;

79.1% were women and 71.4% were single. 52.3% of the participants had worked less than 1 year in their institutions.

Table 1. Sociodemographic Characteristics of the Participants

Characteristics/Category	Frequency (n)	Percentage (%)
Age		
18-25	126	57.3
26-30	36	16.4
31-35	30	13.6
36-40	21	9.5
41 and more	7	3.2
Gender		
Female	174	79.1
Male	46	20.9
Marital Status		
Married	63	28.6
Single	157	71.4
Working Period		
Less than 1 year	115	52.3
1-3 years	44	20
4-6 years	25	11.4
7-9 years	19	8.6
10 years and more	17	7.7

In this part of the study, the reliability analysis of the scales was performed with Cronbach's alpha coefficients. Depending on the Cronbach's alpha coefficient calculated, the reliability of the scales is interpreted as follows (Alpar, 2012):

- $0.00 \leq \alpha < 0.40$, the scale is unreliable
- $0.40 \leq \alpha < 0.60$, the scale reliability is low
- $0.60 \leq \alpha < 0.80$, the scale is quite reliable
- $0.80 \leq \alpha < 1.00$, the scale is highly reliable

Table 2 presents the reliability analysis of the Occupational Identification, Workload Perception and Turnover Intention Scales used in the research. It was found that the Occupational

Identification scale had a reliability value of 0.605, and the Workload Perception Scale had a value of 0.779. Doğan (2020) found a reliability value of 0.850 for Occupational Identification and 0.860 for the Workload Perception Scale in his study. Elmas (2012) found a reliability value of the Turnover Intention Scale of 0.93 in his study. We found a reliability value of the Turnover Intention Scale of 0.825.

Table 2. Reliability of Scales

Scales	Crobach Alpha Coefficient
Occupational Identification	0.605
Workload Perception	0.779
Turnover Intention	0.825

The skewness and kurtosis values of the data groups were examined to evaluate the conformity of the participants' data to the normal distribution. According to Liu et al. (2005), skewness and kurtosis values are expected to be ± 2.58 for the 5% confidence interval and ± 1.96 for the 1% confidence interval.²⁸ Skewness and kurtosis values were checked in order to determine the suitability of the data set obtained from 220 questionnaires applied to the participants in the study to the normal distribution. Findings related to the results are given in Table 3.

Table 3. Findings on Skewness and Kurtosis Values

	Skewness and Kurtosis Values	p
Turnover Intention	Skewness	0.241
	Kurtosis	0.168
Occupational Identification	Skewness	-0.677
	Kurtosis	2.099
Workload Perception	Skewness	0.458
	Kurtosis	0.524

In the data set of the study, the skewness value calculated from the total value of the Turnover Intention Scale was 0.241, and the kurtosis value was 0.168. The skewness value calculated from the Occupational Identification Scale total value is -0.677, and the kurtosis value is 2.099. The skewness value calculated from the Workload Perception Scale total value was 0.458, and the kurtosis value was 0.524.

Table 4 presents comparison test results for the analysis of the variables. A statistically significant difference was found between the age variable and the intention to leave the job [$F_{(4-219)} = 2.791$; $p < 0.05$]. In order to investigate the source of the difference, the results of the Post Hoc Tukey test were examined. According to the results of the test, there was a statistically significant difference between the mean scores of the individuals in the 18-25 age group and the individuals in the 36-40

age group ($p = 0.039$; $p < 0.05$). Individuals in the 18-25 age group ($\bar{X} = 10.29$) have lower turnover intention than the individuals in the 36-40 age group ($\bar{X} = 11.04$). No statistically significant difference was found between the other demographic variables and the scales ($p > 0.05$).

Table 4. Comparison of Demographic Variables and Research Scales

		n	Variable	X	SD	p
Age	Occupational Identification	126	18-25	22.619	3.214	.508
		36	26-30	22.305	3.284	
		30	31-35	22.533	3.645	
		21	36-40	22.809	5.861	
		7	41 and above	25	4.281	
	Workload Perception	126	18-25	29.388	6.857	.056
		36	26-30	30.666	6.624	
		30	31-35	29.700	7.076	
		21	36-40	34.047	8.083	
		7	41 and above	27.571	5.682	
	Turnover Intention	126	18-25	10.293	2.751	.027*
		36	26-30	11.305	2.423	
		30	31-35	9.266	2.598	
		21	36-40	11.047	3.787	
		7	41 and above	9.285	2.360	
Gender	Occupational Identification	174	Female	22.793	3.732	.257
		46	Male	22.108	3.226	
	Workload Perception	174	Female	29.021	7.101	.276
		46	Male	30.293	6.724	
	Turnover Intention	174	Female	10.293	2.779	.503
		46	Male	10.608	3.036	
Marital Status	Occupational Identification	63	Married	23.015	4.030	.346
		157	Single	22.503	3.468	
	Workload Perception	63	Married	31.111	7.498	.148
		157	Single	29.592	6.806	
Turnover Intention	63	Married	10.761	3.067	.182	
	157	Single	10.197	2.723		
Working Period	Occupational Identification	115	Less than 1 year	22.217	3.612	.101
		44	1-3 years	22.386	2.919	
		25	4-6 years	23.160	4.836	
		19	7-9 years	23.631	2.732	
		17	10 years and above	24.411	3.906	

	Workload Perception	115	Less than 1 year	29.121	7.193	.086
		44	1-3 years	31.909	6.977	
		25	4-6 years	30.480	5.531	
		19	7-9 years	28.421	7.819	
		17	10 years and above	32.411	6.073	
	Turnover Intention	115	Less than 1 year	10.234	2.887	.668
		44	1-3 years	10.681	2.907	
		25	4-6 years	9.880	2.847	
		19	7-9 years	10.421	2.631	
		17	10 years and above	11	2.524	

Multiple linear regression analysis was applied to the data to examine whether the total scores obtained from the occupational identification scale and the workload perception scale had a significant effect on turnover intention.

Table 5. Findings Related to the Effect of the Occupational Identification and Workload Perception Scale on Turnover Intention

Variables	B	SH	β	t	p
Constant	6.067	1.226		4.949	0.000
Occupational Identification Scale	-0.082	0.045	-0.105	-1.795	0.074
Workload Perception Scale	0.204	0.024	0.508	8.695	0.000*
R=0.513, R ² =0.256, F ₍₂₋₂₁₇₎ =38.650, *p<0.05, DW=1.792					

Table 5 shows that the established model is statistically significant and the perception of workload, one of the variables included in the analysis, has a statistically significant effect on turnover intention ($R = 0.513$, $R^2 = 0.256$, $F_{(2-217)} = 36.650$, $*p < 0.05$). The model shows turnover intention is the dependent variable and workload perception has a significant effect ($\beta = 0.204$, $p < 0.05$). The positive β coefficients indicate a positive linear relationship between the independent variables and the dependent variable. The occupational identification scale included in the analysis does not have a statistically significant effect on the turnover intention scale ($\beta = -0.082$, $p > 0.05$).

With the Pearson correlation matrix presented in Table 6, the relationships among the turnover intention, occupational identification and workload perception are shown.

Table 6. Findings Related to Correlation Results Among Turnover Intention, Occupational Identification and Workload Perception

Variables	1	2	3
-----------	---	---	---

1-Turnover Intention	1.000	-.076	.502**
2-Occupational Identification		1.000	.057
3-Workload Perception			1.000
The ** symbol indicates 0.01 significance level, and the * symbol indicates 0.05 significance level.			

Pearson correlation analysis was used to examine the relationship of turnover intention, occupational identification and participants' workload perception. Examination of the results showed that as the total score of the participants' workload perception increased, turnover intention total score increased ($r = 0.502$; $p = 0.000 < 0.01$) and there was a positive moderate relationship at the 99% confidence level. No statistically significant correlation was observed between the participants' occupational identification total score and turnover intention total score ($p > 0.05$).

DISCUSSION

Occupational identification is associated with commitment. The two express a person's relationship with his profession and are used interchangeably in the literature (Cohen, 2003). Identification with a profession includes dedication to a particular field. In addition to the motivation to be a professional in the field, occupational identification expresses commitment to the profession. Occupational identification is defined collectively as well as an individually (Jenkins, 2014). At the collective level, occupational identification is about relationships with the norms and standards developed by the profession, while at the individual level it is the understanding of one's role as a professional (Heggen, & Terum, 2013: 657). Individuals working in the field of healthcare exist within a culture of ownership where they behave morally and ethically while executing their professional duties and responsibilities. The formation of a culture of ownership consists of taking full care of one's job and being proud of one's profession. The formation of this culture in healthcare professionals is established by the connection between the fundamental values and the values of the institution (Sherman, & Cohn, 2019: 25).

Correct determination of the workload is necessary to optimize the performance of healthcare professionals. Workload reflects the margin between the effort required to complete a task and the resources available (Nuamah, & Mehta, 2020). Managing the workload of healthcare professionals during the pandemic has been difficult, as healthcare workers faced heavy workloads. The total workload of staff treating Covid-19 patients is significantly higher than those who have no contact with Covid-19 patients (Shoja et al., 2020: 3). A 33% increase in the over workloads of employees dealing with Covid-19 patients in the intensive care unit has been found (Lucchini et al., 2020: 59). A comparison of current working conditions showed that night shifts have higher workload scores than morning shifts and 8-hour shifts have a lower mental workload compared to 12-hour shifts (Mowday, 1982); during the Covid-19 pandemic, the long shifts of healthcare workers created enormous workload pressures, and this is thought to have impacted turnover intention.

A study of healthcare workers found that job satisfaction was significantly and negatively related to turnover intention. In addition, 60.9% of the employees had a strong intention to leave their current workplace in the next year (Masum et al., 2016: 9). This study, which examined the relationship between job satisfaction dimensions of health workers and their turnover intention, showed that career future and burnout affect turnover intentions of healthcare workers (Armstrong-Stassen et al., 1994: 416). Another study observed that 50% of health personnel intended to quit their jobs (Bjorvell H. & Brodin, 1992: 11). In addition, it has been observed that managers offer important support for the employee to stay on the job, possibly reducing the staff turnover rate in hospitals. Low job performance correlates to increased sick leave, which is in turn associated with more health reports and higher turnover intention (Parker & Kulik, 1995: 594). Demands from patients/relatives and perceived job image, professional growth opportunities, workload, job dissatisfaction, and relationships with colleagues were found to have an impact on turnover intention in healthcare workers (Lim, & Yuen, 1998). It has been observed that health workers' turnover intention is related to success, autonomy at work, stress level and workload (Tzeng, 2002: 876). Some factors, such as salary and promotion, have been found to be less influential compared to others. GPs with higher job satisfaction were found to be less likely to consider leaving patient care (Sibbald et al., 2003: 23), while nurses' dissatisfaction was found to be a major predictor of turnover intention (Shields, & Ward, 2001: 682). Some researchers have reported that dissatisfaction can predict 30% of departure from both the occupational and the profession (Lu et al., 2002: 215). A study on pharmacists' turnover intention found a strong correlation with career commitment (Gaither, & Mason, 1994: 188). Pharmacists have been found quit the profession for both external reasons (poor working conditions, long hours, no lunch breaks) and internal reasons (dissatisfaction with the profession, lack of challenging jobs) and one study on pharmacists found that part-time work and low desire to practice were associated with turnover intention. Pharmacists who are more satisfied with their main job are less likely to consider leaving the profession (Seston, et al., 2009: 127).

CONCLUSION

This study investigated the effects of occupational identification and over workloads of medical secretaries on their turnover intention, taking into account the Covid-19 pandemic. The study, conducted on 220 medical secretaries, used three different scales measuring occupational identification, workload perception and turnover intention. Participants in the study were mainly women, young people, singles and people with less than 1 year working experience in their institutions.

The analysis of the research first examined the validity and reliability values of the scales. The scales were found to be valid and reliable at an acceptable level. Comparison of the demographic variables with the scales determined the participants in the older age group to have a higher

turnover intention. In the regression analysis to reveal the relationship between the variables, no significant relationship was found between occupational identification and turnover intention, though an inverse relationship was found between workload and turnover intention. Given the pandemic conditions, it can be said that the increased workload of medical secretaries increased their turnover intention.

Medical secretaries constitute a profession with a low level of occupational identification compared to other healthcare professionals. Though a professional definition exists, the fact that a professional education is not compulsory to work in the field affects the occupational identification. The increase in working hours and the number of patients during the pandemic process has increased the workload of the profession, which has resulted in occupational fatigue among medical secretaries and, for some, departure from the profession.

Upon entering the medical secretariat profession, the occupational identification of the employees may increase if an education requirement exists.

Post-study recommendations:

- Due to the emergent nature of pandemic conditions, workload management has become difficult. Contingency plans should be developed together with employees to account for contingencies like pandemics and other natural disasters.
- The rate of departure from the profession is higher for medical secretaries compared to other healthcare professions. One of the main reasons for this is working conditions. Turnover intention will likely decrease with professional appreciation of these employees and fair workload distribution.

REFERENCES

- Apker, J., & Fox, D. H. (2002). Communication: improving RNs' organizational and professional identification in managed care hospitals. *JONA: The Journal of Nursing Administration*, 32(2), 106-114. <https://doi.org/10.1097/00005110-200202000-00010>.
- Armstrong-Stassen, M., al-Ma`Aitah, R., Cameron, S. & Horsburgh, M. (1994). Determinants and consequences of burnout: a cross-cultural comparison of Canadian and Jordanian nurses, *Health Care Women International*, 15 (5), 413-421. <https://doi.org/10.1080/07399339409516133>.
- Asplund, K. (2020). When profession trumps potential: The moderating role of professional identification in employees' reactions to talent management. *The International Journal of Human Resource Management*, 31(4), 539-561. <https://doi.org/10.1080/09585192.2019.1570307>.

- Bjorvell, H. & Brodin, B. (1992). Hospital staff members are satisfied with their jobs, *Scandium Journal of Caring Sciences*, 6 (1), 9-16. <https://doi.org/10.1111/j.1471-6712.1992.tb00116.x>.
- Callan, V. J., Gallois, C., Mayhew, M. G., Grice, T. A., Tluchowska, M., & Boyce, R. (2007). Restructuring the multi-professional organization: Professional identity and adjustment to change in a public hospital. *Journal of Health and Human Services Administration*, 29(4), 448-477.
- Cammann, C. F., & Jenkins, M. D. and Klesh, J. (1979). The Michigan Organizational Assessment Questionnaire. Unpublished Manuscript, University of Michigan: Ann Arbor. <https://doi.org/10.1037/t01581-000>.
- Cohen, A. (2003). *Multiple commitments in the workplace: An integrative approach*. Psychology Press. <https://doi.org/10.2307/20159060>.
- Correia, I., & Almeida, A. E. (2020). Organizational justice, professional identification, empathy, and meaningful work during COVID-19 pandemic: Are they burnout protectors in physicians and nurses? *Frontiers in psychology*, 11, 1-13. <https://doi.org/10.3389/fpsyg.2020.566139>.
- Derya, S. (2008). Crossover of Work-Family Conflict: Antecedent and Consequences of Crossover Process in Dual-Earner Couple, Koç Üniversitesi. Master thesis, İstanbul.
- Doğan, A. (2020). Perception of workload and mediating role of psychological resilience in the relationship between professional identification and burnout, Master thesis, Başkent University Institute of Social Sciences, Ankara.
- Elmas, S. (2012). A research on the effects of mobbing in the workplace and employees' intention to leave. Istanbul University: Master Thesis, Istanbul.
- Elliott, D.J., Young, R.S., Brice, J., Aguiar, R. and Kolm, P. (2014), Effect of hospitalist workload on the quality and efficiency of care, *JAMA Internal Medicine*, 174(5), 786-793. <https://doi.org/10.1001/jamainternmed.2014.300>.
- Emeç, Ş. & Akkaya, G. (2018). Mental Workload Assessment in the Health Sector and an Application, *Ergonomics*, 1(3), 156-162.
- Fishbein, D., Nambiar, S., McKenzie, K., Mayorga, M., Miller, K., Tran, K., ... & Capan, M. (2019). Objective measures of workload in healthcare: a narrative review. *International Journal of Health Care Quality Assurance*, 33(1), 1-17. <https://doi.org/10.1108/IJHCQA-12-2018-0288>.

- Falières, A. G. & Herrbach, O. (2015). Organizational and professional identification in audit firms: An affective approach. *Journal of business ethics*, 132(4), 753-763. <https://doi.org/10.1007/s10551-014-2341-2>.
- Gaither, C.A. & Mason H.L. (1994). Pharmacists and career commitment, career withdrawal intention, and career change, *J Pharm Mark Manage*, 8, 187-205. https://doi.org/10.3109/J058v08n01_11.
- Gül, H., Oktay, E. & Gökçe, H., (2008). Relationships between job satisfaction, stress, organizational commitment, turnover intention and performance: An application in the health sector, *Academic Perspective, International Refereed Social Sciences E-Journal*, 20, 1-11.
- Heggen, K., & Terum, L. I. (2013). Coherence in professional education: does it foster dedication and identification? *Teaching in Higher Education*, 18(6), 656-669. <https://doi.org/10.1080/13562517.2013.774352>.
- Hellman, C. M. (1997). Job satisfaction and intent to leave. *The journal of social psychology*, 137(6), 677-689.
- Hoonakker, P., Carayon, P., Gurses, A.P., Brown, R., Khunlertkit, A., Mcguire, K. and Walker, J.M. (2011), Measuring workload of ICU nurses with a questionnaire survey: the NASA Task Load Index (TLX), *IIE Transactions on Healthcare Systems Engineering*, 1(2), 131-143. <https://doi.org/10.1080/19488300.2011.609524>.
- Jenkins, R. (2014). *Social identity*. Routledge.
- Johnson, M. D., Morgeson, F. P., Ilgen, D. R., Meyer, C. J., & Lloyd, J. W. (2006). Multiple professional identities: Examining differences in identification across work-related targets. *Journal of Applied Psychology*, 91(2), 498–506. <https://doi.org/10.1037/0021-9010.91.2.498>.
- Kırkbeşoğlu, E., & Tüzün, İ. K. (2009). Distinction between Occupational Identification and Organizational Identification in Individualism-Collectivism Dilemma. *Journal of Organization and Management Sciences*, 1(1), 1-8.
- Lim, V. K. & Yuen, E.C. (1998). Doctors, patients, and perceived job image: an empirical study of stress and nurses in Singapore, *Journal of Behavior in Medicine*, 21 (3), 269-283. <https://doi.org/10.1023/a:1018769000750>.

- Liu Z, Sakakibara R, Odako T & et al. (2005). Mechanism of Abdominal Massage for Difficult Defecation in a Patient with Myelopathy (HAM/TSP). *J Neurol*; 252: 1280-1282. <https://doi.org/10.1007/s00415-005-0825-9>.
- Lu, K.Y., Lin, P.L., Wu, C.M., Hsieh, Y.L., Chang, Y.Y. (2002). The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses. *J Prof Nurs*, 18, 214-219. <https://doi.org/10.1053/jpnu.2002.127573>.
- Lucchini, A., Giani, M., Elli, S., Villa, S., Rona, R., & Foti, G. (2020). Nursing Activities Score is increased in COVID-19 patients. *Intensive & critical care nursing*, 59, <https://doi.org/102876>. 10.1016/j.iccn.2020.102876.
- Mael, F. A., ve Ashforth, B. E. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13: 103-123. <https://doi.org/10.1002/job.4030130202>.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>.
- Masum, A. K. M., Azad, M. A. K., Hoque, K. E., Beh, L. S., Wanke, P., & Arslan, Ö. (2016). Job satisfaction and intention to quit: an empirical analysis of nurses in Turkey. *PeerJ*, 4, 1-23. <https://doi.org/10.7717/peerj.1896>.
- Mobley, W.H., Horner, S.O., Hollingsworth A.T. (1978). An evaluation of precursors of hospital employee turnover, *Journal of Applied Psychology*, 63, 408-414. <https://doi.org/10.1037/0021-9010.63.4.408>.
- Mowday, R.T., Porter, L.W., Steers, R.M. (1982). *Organizational Linkages: The Psychology of Commitment, Absenteeism and Turnover*, Academic Press, San Diego, CA.
- Nuamah, J. K., & Mehta, R. K. (2020). *Design for stress, fatigue, and workload management*. In *Design for health* (pp. 201-226). Academic Press.
- Orçanlı, Ö. Ü. K., Bekmezci, M. & Eygü, H. (2020). Validity and Reliability Study of Subjective Workload Scale, 13th International Congress of Social Sciences with Contemporary Research, 06-08 November, Turkey.
- Parker, P. A. & Kulik, J.A. (1995). Burnout, self- and supervisor-rated job performance, and absenteeism among nurses, *Journal of Behaviors in Medicine*, 18 (6), 581-599. <https://doi.org/10.1007/BF01857897>.

- Peterson, M. F., Smith, P. B., Akande, A., ve Ayestaran, S. (1995). Role conflict, ambiguity, and overload: A 21-nation study. *Academy of Management Journal*, 38: 429-452. <https://doi.org/10.2307/256687>.
- Pham, M. (2020). The effect of professional identification and organizational identification on career satisfaction, job satisfaction and organizational commitment. *Management Science Letters*, 10(11), 2683-2694. <https://doi.org/10.5267/j.msl.2020.3.024>.
- Seston, E., Hassell, K., Ferguson, J., & Hann, M. (2009). Exploring the relationship between pharmacists' job satisfaction, intention to quit the profession, and actual quitting. *Research in Social and Administrative pharmacy*, 5(2), 121-132. <https://doi.org/10.1016/j.sapharm.2008.08.002>.
- Sherman, R., & Cohn, T. M. (2019). Promoting professional accountability and ownership. *American Nurse Today*, 14(2), 24-26.
- Shields, M.A. & Ward, M. (2001). Improving nurse retention in the National Health Service in England: the impact of job satisfaction on intentions to quit, *J Health Econ*, 20, 677-701. [https://doi.org/10.1016/S0167-6296\(01\)00092-3](https://doi.org/10.1016/S0167-6296(01)00092-3).
- Shoja, E., Aghamohammadi, V., Bazayr, H., Moghaddam, H. R., Nasiri, K., Dashti, M., ... & Asgari, A. (2020). Covid-19 effects on the workload of Iranian healthcare workers. *BMC public health*, 20(1), 1-7. <https://doi.org/10.1186/s12889-020-09743-w>.
- Sibbald, B., Boyke, C. & Gravelle, H. (2003). National survey of job satisfaction and retirement intentions among general practitioners in England, *Br Med J*, 326, 22-24. <https://doi.org/10.1136/bmj.326.7379.22>.
- Tajfel, H. (1978). *Differentiation Between Social Groups: Studies in the Social Psychology of Intergroup Relations*. Cambridge, MA: Academic Press.
- Tzeng, H. M. (2002). The influence of nurses' working motivation and job satisfaction on intention to quit: an empirical investigation in Taiwan. *International journal of nursing studies*, 39(8), 867-878. [https://doi.org/10.1016/S0020-7489\(02\)00027-5](https://doi.org/10.1016/S0020-7489(02)00027-5).
- Weissman, J.S., Rothschild, J.M., Bendavid, E., Sprivulis, P., Cook, E.F., Evans, R.S., Kaganova, Y., Bender, M., David-Kasdan, J., Haug, P., Lloyd, J., Selbovitz, L.G., Murff, H.J. and Bates, D.W. (2007), Hospital workload and adverse events, *Medical Care*, 45(5), 448-455. <https://doi.org/10.1097/01.mlr.0000257231.86368.09>.