

Importance of Job Satisfaction, Organizational Commitment and Problem-Solving Competence in Nurse Human Resource Management

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<p style="text-align: center;">Corresponding Author Ayşegül TURAN</p> <p style="text-align: center;">DOI https://10.48121/jihsam.1307209</p> <p style="text-align: center;">Received 30.05.2023</p> <p style="text-align: center;">Accepted 17.10.2023</p> <p style="text-align: center;">Published Online 23.10.2023</p> <p style="text-align: center;">Key Words Nurse, job satisfaction, organizational commitment, problem solving</p> <p><i>This study is derived from 792135 numbered, "The Effects of Nurses' Confidence in Problem Solving Skills on Job Satisfaction and Organizational Commitment" " titled master thesis of Omar Abed Alialah under the supervision of Asist Prof. Dr. Ayşegül Turan on 23.03.2023 in the 2022- 2023 academic year at the Nursing Department of the Health Sciences Institute of Kirsehir Ahi Evran University.</i></p>	<p style="text-align: center;">ABSTRACT</p> <p><i>Nurses' confidence that they can solve the problems they will encounter in their professional lives, their job satisfaction and organizational commitment are important in terms of creating a peaceful and productive working environment. These issues should be given importance in terms of increasing the quality of health services and ensuring patient and employee satisfaction. In this study, which is modeled as descriptive and relationship-seeking, it is aimed to measure nurses' perceptions of job satisfaction, organizational commitment, and problem-solving competencies and to reveal how these perceptions change according to nurses' demographic characteristics. The population of the study consists of nurses working in a private hospital in Kirsehir. The data of the research were collected with a face-to-face questionnaire. Job Satisfaction, Organizational Commitment and Interpersonal Problem-Solving Scales were used to collect the data of the research. As a result of the research, it has been determined that the Constructive Problem-Solving Factor differs significantly according to the age and marital status variables, the Persistent Approach to Problem Solving Factor according to the age variable, and the Physical Conditions Factor of the Job Satisfaction Scale differs significantly according to the Marital Status Variable. It was determined that there was no significant difference in any of the other factors and variables. In conclusion, in order to ensure a peaceful and productive working life, it is recommended that nurses be given regular in-service training on problem solving and psychological resilience.</i></p>
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INTRODUCTION

Individuals face problems sooner or later in their working life. If the individual is a health worker, the solution becomes more difficult, requires urgency, and causes intense stress. As the problems experienced increase and they are not overcome with appropriate approaches, job satisfaction and organizational commitment decrease. The priority of nurse human resource management should be to reverse this pessimistic picture.

A problem is defined as a situation that physically or emotionally disturbs the person, causes hesitation, and has several possible solutions. The main characteristics of the problem are that it is a challenge for the person facing the problem, the person needs to solve it, the person has not encountered this problem before and is not willing to solve it (Yıldırım and Bağsürer, 2019). Education, training, development, maturity level, abilities, motivations, social and cultural environment are among the factors that affect problem solving (Yıldırım et al., 2014).

Scientists have developed many theories about problem solving. According to Bandura, the strength of people's belief in their own competencies determines whether they will try to cope with certain problems (Çetinkaya, 2013). On the other hand, John Dewey's Theory of Reflective Thought includes interpreting the experience, naming the problems outside the experience, making explanations for the problems, forming and testing assumptions (Kızılkaya and Aşkar, 2009). Karl Popper argues that the problems caused by the failure of the individual will increase the knowledge and experience of the individual. Alex Osborne's theory of problem solving consists of three stages, including finding the problem, idea, and solution (Yiğiter, 2012). Mountrose revealed a five-stage problem-solving strategy that includes emotions (Dede, 2021). Thorndike, on the other hand, recommends trial and error method in problem solving (Yıldırım, 2016).

Nursing is not a static profession. Developing and advancing the profession requires scientific research and using scientific techniques to solve the problems encountered. Nursing care, which is applied with an evidence-based and scientific approach in problem solving, also increases the quality of the service provided (Taşçı, 2005).

It is an important element in increasing their performance that ensuring employees are satisfied with their jobs by providing the necessary opportunities. Job satisfaction includes components such as pay, advancement, working conditions, supervision, organizational procedures, and co-worker relationships (Al-Zu'bi, 2010).

Nursing services have a great role in the efficiency and sustainability of health services. Nurses' job satisfaction is essential for high quality health care

delivery. If job satisfaction is not achieved in nurses, it is seen that the quality of patient care decreases, the cost of health care increases and the staff turnover rate increases in nurses (Türe, 2020).

According to Porter and Lawer (1968), organizational commitment of employees is defined as a set of behaviors that motivate employees to work for the benefit of the organization, to want to stay in the organization, and to accept the goals and values of the organization (as cited in Chen et al, 2015). In their research, Meyer and Allen (1991) developed a commitment model based on these themes, arguing that the definitions of commitment in the literature can be conceptually grouped into three themes: "wants and desires", "perceived cost" and "obligation".

In the event that nurses' organizational commitment increases, their institutional affiliation develops, and as a result of using their professional knowledge and skills more, excellence in nursing practices can be achieved (Amiri, 2007).

There are many studies in the literature on job satisfaction, organizational commitment and problem solving. Studies in the field of executive nursing generally address the issues of job satisfaction, organizational citizenship, perceived leadership, and organizational commitment. The problem-solving competence of nurses has not been associated with organizational commitment and job satisfaction in any study. However, determining the relationship and affecting factors between nurses' problem-solving competencies, job satisfaction and organizational commitment will contribute to the creation of a healthier organizational climate. In order to fill this gap in the literature, this study revealed changes in nurses' perceptions of job satisfaction, organizational commitment, and problem-solving competence according to their demographic characteristics, revealing clues that will guide nurse human resources management.

Answers to "What is the level of nurses' perceptions of job satisfaction, organizational commitment and problem-solving competencies?" and "How do nurses' perceptions of job satisfaction, organizational commitment and problem-solving competencies vary according to their demographic characteristics?" questions were investigated with this research.

MATERIAL AND METHOD

Sample of the research

The population of the research consists of 74 nurses working in Kırşehir Private Musa Gül Hospital. Sample selection was not made in the study, active volunteer participants were included in the population. The minimum number of samples and the degree of impact were calculated with the GPOWER 3.1.9.7 program (priori and post hoc) and are presented in the appendix.

In the explanatory factor analyzes conducted in SPSS Program, the Kaiser Meyer Olkin (KMO) value for the Organizational Commitment Scale was 0.843; 0.867 for Job Satisfaction Scale; For the Interpersonal Problem Solving Inventory, it was found to be 0.772 and the value is within the reference range for sample adequacy (Çokluk et all, 2012). In addition, N HOELTER values for sample adequacy of the AMOS program (N HOELTER ≥ 63 for the Organizational Commitment Scale; N HOELTER ≥ 65 for the Job Satisfaction Scale; N HOELTER ≥ 59 for the Interpersonal Problem Solving Inventory) are also within the reference range (Hoelster, 1983).

Data collection tools

The data of the research were collected by Job Satisfaction, Organizational Commitment, and Interpersonal Problem-Solving Scales. The Job Satisfaction Scale, which aims to measure job satisfaction, was developed by Durak Batıgün and Hisli Şahin. It is a 32-item Likert type scale. This scale has four (Physical Conditions, Individual Conditions, Autonomy, Business Policies and Salary) factors. Organizational Commitment scale, developed by Meyer and Allen (1991) and adapted into Turkish by Dağlı, Elçiçek and Han (2018), consists of three factors: affective commitment, continuance commitment and normative commitment. Developed by Çam and Tümkaya (2007), the Interpersonal Problem-Solving Inventory is a 50-item Likert-type scale. The scale has five (Negative Approach to the Problem, Constructive Problem Solving, Taking Responsibility, Persistent Approach, Diffidence) factors.

Data collection method

The data of the research were collected through face-to-face survey between 15-30 July 2022.

Ethics committee and institutional permission

Before starting the research, ethics committee approval was obtained from the Social Sciences Ethics Committee of Kırşehir Ahi Evran University (Ethics committee decision No: 2022-05/11 Date: 07.07.2022). In addition, institutional permission was obtained from Kırşehir Private Musa Gül Hospital, and it is attached.

Analysis of Data

In the analysis of the data collected in the study, the Statistical Package for The Social Sciences (SPSS) program was used. Descriptive statistics were used for the demographic data and scale scores of the participants. The scales were analyzed by taking their averages. Higher averages mean higher participants' perceptions of job satisfaction, organizational commitment and problem-solving competence. ANOVA analysis was applied to examine the relationship between scale factors and demographic variables.

RESULTS

20.3% of the participants are men and 50% are married. The working years of 60.8% of the participants are in the range of 1-5 years, and the income status of 95.9% of them is in the range of 4000-6000 TL. Looking at their age, it is seen that 37.8% of them are between 18-25 years old and 9.5% of them are 46 years old and over.

Table 1. Descriptive characteristics of the participants

Income status	N	%	Age	N	%
4000-6000	71	95,9	18-25	28	37,8
6001-8000	1	1,4	26-35	18	24,3
8001-10000	1	1,4	36-45	21	28,4
10001 and above	1	1,4	46 years and older	7	9,5
Working year	N	%	Gender	N	%
1-5	45	60,8	Male	15	20,3
6-10	13	17,6	Female	59	79,7
11-15	10	13,5	Marital status	N	%
16-20	4	5,4	Married	37	50,0
26 years and above	2	2,7	Single	37	50,0

The nurses' job satisfaction, organizational commitment and perception levels of interpersonal problem solving were evaluated by the average of the scale items. When Table 2 is examined, it is seen that the averages of the Affective Commitment factor of the Organizational Commitment scale were between 4.43 and 4.57; Continuance Commitment factor averages were between 4.20 and 4.28; Normative Commitment factor averages were between 3.64 and 4.39. Job Satisfaction scale consists of Physical Conditions, Individual Conditions, Autonomy, Business Policies and Wage dimensions.

The averages of the Physical Conditions factor are between 4.34 and 4.45; Individual Conditions factor averages are between 3.93 and 4.14; Autonomy factor averages are between 4.15 and 4.28; The Business Policies and Wages factor averages are between 4.14 and 4.38. Interpersonal Problem-Solving Scale consists of Negative Approach to Problem, Constructive Problem Solving, Taking Responsibility, Persistent Approach and Self-Confidence. The averages of the Negative Approach factor are between 3.73 and 3.93; Constructive Problem-Solving factor averages are between 4.23 and 4.35; Taking Responsibility factor averages are between 4.01 and 4.24; Persistent Approach factor averages are between 3.81 and 3.96; The self-confidence factor averages are between 3.80 and 3.84.

In Table 2, it is seen that the mean scores of the Interpersonal Problem-Solving Scale are relatively low compared to the others. In addition, the standard deviations of this scale are higher than the others. The high standard deviation is due to the large number of different views. Especially, when evaluated according to the factor content, due to the low self-confidence factor average, it can be deduced that the nurses have a perception of inadequacy in subject of benefiting from previous experiences when faced with a problem, acting hastily in solving the problem, and believing that they can overcome the problem.

It is seen that the Emotional Commitment factor averages of the Organizational Commitment scale have the highest averages and the lowest standard deviations compared to other scale factors. When the factor content is examined, it can be said that nurses have a high perception of belonging to the institution, to see themselves as a part of the family in the institution, to have a special place in the private life of the institution, and to the emotional commitment to the institution.

Table 2. Means of scale items

Scale Name	Factor Name	Factor mean	Items	Mean	Standard Deviation
Organizational commitment	Emotional Commitment	4,49	b1	4,43	0,72
			b2	4,45	0,71
			b3	4,49	0,63
			b4	4,55	0,58
			b5	4,57	0,62
	Continuing Commitment	4,23	b6	4,22	0,91
			b7	4,28	1,03
			b8	4,20	0,94
	Normative Commitment	4,19	b9	4,31	0,88
			b10	3,64	1,22
			b11	4,39	0,64
			b12	4,30	0,87
			b13	4,32	0,81
Job satisfaction	Physical Conditions	4,38	d1	4,35	0,671
			d2	4,45	0,705
			d3	4,34	0,799
			d4	4,38	0,771
	Individual Conditions	4,06	d8	4,04	0,957
			d10	4,12	0,906
			d11	3,93	0,984
			d14	4,14	0,984
			d15	4,08	1,030
	Autonomy	4,20	d5	4,28	0,884
			d9	4,15	0,932
	Business Policies and Salary	4,26	d12	4,19	0,932
			d6	4,27	0,816
d7			4,14	0,926	
Interpersonal Problem Solving	Negative Approach to the Problem	3,87	d13	4,38	0,947
			p3	3,92	1,21
			p6	3,93	1,20
			p14	3,92	1,21
	Constructive Problem Solving	4,31	p16	3,73	1,34
			p1	4,23	0,99
			p2	4,35	0,91
	Taking Responsibility	4,16	p11	4,35	0,91
			p4	4,24	0,99
			p8	4,01	1,04
	Persistent Approach	3,89	p9	4,23	0,99
			p5	3,96	1,00
			p7	3,92	1,06
Diffidence	3,82	p15	3,81	1,07	
		p10	3,84	1,05	
		p12	3,84	1,05	
			p13	3,80	1,09

ANOVA analysis was applied to determine whether nurses' perceptions of problem solving, job satisfaction and organizational commitment differ according to their demographic characteristics. The Constructive Problem-Solving Factor of the Interpersonal Problem-Solving Scale differed significantly according to age and marital status variables, the Persistent Approach Factor of the Interpersonal Problem-Solving Scale differed significantly according to the Age variable, and the Physical Conditions Factor of the Job Satisfaction Scale differed significantly according to the Marital Status Variable. Except for the factors and variables above, it was determined that there was no significant difference between any of the factors and variables.

When Table 3 is examined, it is seen that nurses' perceptions of constructive problem solving differ significantly according to their ages (F: 5,701; p: 0.001). The biggest difference is between the 18-25 age group (x: 13.78±1.52) and over the age of 46 (x: 10.57±2.29). The following conclusions can be drawn from the fact that the average of nurses in the 18-25 age group is slightly higher than the others: young employees know their needs at the time of the problem, can comprehend the direct or indirect effects of the problem, and have a positive attitude by seeing the problem as experience.

Table 3. ANOVA Results of Constructive Problem-Solving Factor of Interpersonal Problem-Solving Scale by Age Variable

Age range	Number	Mean	Standard Deviation	Source variance	of	Sum of squares	Mean of squares	of	F	p	Gap
18-25 (1)	28	13,78	1,52	Between groups		92,81	30,93		5,701	,001	1>4
26-35 (2)	18	13,72	2,42	In-group		379,84	5,426				2>4
36-45 (3)	21	11,90	3,04								3>4
46 years and older (4)	7	10,57	2,29								
Total	74	12,93	2,54								

According to Table 4, nurses' persistent problem-solving approaches differ significantly according to their age (F: 3.67; p: 0.016). The biggest reason for the difference is 18-25 (x: 12.60±2.49) and over 46 (x: 9.00±0) participants. It is clear from this result that

Participants over the age of forty-six are more passive than others, in terms of proving their right and defending themselves until the end, stubbornly going after the problem until the problem is solved, insisting on reaching a solution in problem solving.

Table 4. ANOVA Results of Persistent Approach Factor of Interpersonal Problem-Solving Scale by Age Variable

Age range	Number	Mean	Standard Deviation	Source variance	of	Sum of squares	Mean of squares	of	F	p	Gap
18-25 (1)	28	12,60	2,49	Between groups		75,94	25,31		3,67	,016	1>4
26-35 (2)	18	11,38	2,72	In-group		481,90	6,88				2>4
36-45 (3)	21	11,61	3,05								3>4
46 years and older (4)	7	9,00	0,00								
Total	74	11,68	2,76								

Nurses' perceptions of constructive problem solving differ significantly according to their marital status (F: 4.85; p: 0.03). Since the mean of single participants (x:

13.56±1.99) is higher than married ones (x: 12.29±2.88), it can be inferred that single nurses do not have a destructive attitude in coping with the problem, think creatively and focus on a solution (Table 5).

Table 5. ANOVA Results of Constructive Problem-Solving Factor of Interpersonal Problem-Solving Scale by Marital Status Variable

Marital status	Number	Mean	Standard deviation	Source variance	of	Sum of squares	Mean of squares	of	F	p	Gap
Married	37	12,29	2,88	Between groups		29,85	29,85		4,85	0,03	1>2
Single	37	13,56	1,99	In-group		442,81	6,15				
Total	74	12,93	2,54								

According to Table 6, nurses' perceptions of physical conditions in job satisfaction differ significantly according to their marital status (F: 4.68; p: 0.03). The fact that the mean of single participants (x: 18.10±1.85)

is higher than the married ones (x: 16.91±2.78) indicates that single nurses are satisfied with the order and cleanliness, technological facilities, and interpersonal communication style in their workplaces.

Table 6. ANOVA Results of the Physical Conditions Factor of the Job Satisfaction Scale by Marital Status Variable

Marital status	Number	Mean	Standard deviation	Source of variance	Sum of squares	Mean of squares	F	p	Gap
Married	37	16,91	2,78	Between groups	26,16	26,16	4,68	0,03	2>1
Single	37	18,10	1,85		In-group	402,32			
Total	74	17,51	2,42						

DISCUSSION

There are different results between age and perceptions and attitudes towards problem solving in the literature. It is stated that problem-solving self-confidence is high at young ages in some studies, while in others, there are findings that problems can be solved more easily in older ages with the effect of lived experiences.

A significant difference was found between the constructive problem-solving factor and the age variable in this study (F: 5,701; p: 0.001). The average of the participants aged 18-25 is higher than the participants aged 46 and over (Table 3). Yıldırım and Bağsürer (2019), in their study with nurses, found that there was no statistically significant difference between problem solving and the age variable. Koç, Koyuncu, and Sağlam (2015) determined that the problem-solving skill levels of nursing and midwifery students did not differ significantly according to their age.

Erkuş and Bahçecik (2015) also revealed that nurses' perception of problem solving did not change according to their age. Er et al (2018) found that the problem-solving competencies of sports and classroom teaching students differ significantly according to their ages. Gemlik and Sur (2004) revealed that there is a significant difference between the problem-solving perceptions of private hospital administrators and their age. Ulupınar (1997), in her study with nursing students, found that the average of problem-solving scale decreased with increasing age. Similarly, Kelleci and Gölbaşı (2014) revealed that the perception of problem solving is high in youthful age groups.

It was observed that nurses' perceptions of constructive problem solving differed significantly according to their marital status in this study (F: 4.85; p: 0.03). The mean of single participants (x: 13.56±1.99) is higher than the married ones (x: 12.29±2.88). Başar, Akın, and Durna (2015) found that nurses' perceptions of problem solving did not differ according to their marital status. Akın et al. (2007) found that the problem-solving scale scores of married students were significantly higher than those of single students in their study with nursing students. In their study with nurses, Karakurt and Ekinci (2015) revealed that problem solving

perceptions differ according to their marital status, and divorced nurses have a higher average than single nurses.

Nurses' perceptions of physical conditions in job satisfaction differ significantly according to their marital status in this study (F: 4.68; p: 0.03). The mean of single participants (x: 18.10±1.85) is higher than the married ones (x: 16.91±2.78). Koyutürk (2015) found that the job satisfaction of health workers differed significantly according to their marital status, and the average of single participants (2.84) was higher than the married ones (2.68) in her thesis study. Dündar (2011) revealed that the working conditions sub-dimension of the teachers' job satisfaction scale differs significantly according to marital status, and the average of married people (2.49) is higher than that of singles (2.29) in the thesis study. Sağır (2016) found that job satisfaction did not differ according to marital status in his research with Ministry of National Education employees. Azim et al (2013) found that job satisfaction did not differ according to marital status in a study with Bangladeshi employees. Yorulmaz, Kırarç, and Yılmazsoy (2018) revealed that the job satisfaction of the employees differed significantly according to their marital status, and the average of the single participants (2.95) was higher than the married (2.71) in their study with healthcare professionals. In the comparison of job satisfaction and marital status, it is seen that different results are obtained in different samples.

CONCLUSION

The fact that the nursing profession focuses on human health and has an error-free structure causes intense stress in the execution of the profession. The smallest problem to be experienced in such an environment causes uneasiness and anxieties to increase. In in-service trainings organized for nurses, the issue of problem solving should be broadly addressed. For example, persevering approach skills such as stubbornly going over the problem until it is solved, insisting to reach a result should be gained. When faced with a problem, there is a need for nurses who know what they need to solve, approach the problem positively and focus on the solution.

In this study, nurses' job satisfaction, organizational commitment and perception levels of problem solving were examined. Emotional Commitment factor averages of the Organizational Commitment scale have the highest averages (4,49) and the lowest standard deviations compared to other scale factors. Physical Condition factor averages of the Job satisfaction scale have the highest averages (4,38) and the lowest standard deviations compared to other scale factors. Constructive Problem Solving factor averages of the Interpersonal Problem Solving scale have the highest averages (4,31) and the lowest standard deviations compared to other scale factors.

In this study, it was examined whether nurses' job satisfaction, organizational commitment and problem-solving perceptions differ according to their demographic characteristics. The following results were achieved:

Nurses' perceptions of physical conditions in job satisfaction differ significantly according to their marital status.

Nurses' perceptions of constructive problem solving differ significantly according to their marital status.

Nurses' persistent problem-solving approaches differ significantly according to their age.

Nurses' perceptions of constructive problem solving differ significantly according to their ages.

Nurse human resources cover a large area among healthcare professionals. Keeping this resource and ensuring its effective use is possible by ensuring their job satisfaction. It is seen that the physical conditions dimension of the job satisfaction scale has the highest

average in this study. It can be said that the health institutions are clean, bright, spacious, warm, or cool according to the season, decorated with a modern architecture, and providing technological opportunities at the highest possible level are motivating tools in the job satisfaction of nurses. Demarcation of the limits of authority and responsibilities and the degree of freedom in the business environment are among other issues.

As a result, it is critical for nurses, who constitute an important part of the health workforce, to have and develop problem-solving skills to achieve excellence in service delivery. Job satisfaction is defined as a key component in ensuring nurses' retention. Nurse job satisfaction has a significant role in patient satisfaction, quality service delivery and cost reduction. Increasing organizational commitment of nurses and formation of institutional belonging; it means making maximum use of their knowledge and skills and realizing international scientific standards in nursing practices.

In order to provide and receive healthy healthcare services, nurses' job satisfaction, organizational commitment and problem-solving competencies should not be ignored. Professional career training for nurses should be encouraged. Manager-employee relations should be reviewed and improved.

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Conflict of Interest:

No

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REFERENCES

- Akın S, Gungor I, Mendi B, Sahin N, Bizat E, Durma Z (2007). Nursing student's problem-solving skills and Internal-external locus of control. *Journal of Education and Research in Nursing*; 4(2): 30-36.
- Al-Zu'bi HA (2010). A study of relationship between organizational justice and job satisfaction. *International journal of business and management*; 5 (12):102-109.
- Amiri M (2007). The study of knowledge, attitude and performance of managers with conflict management background in faculty of medical sciences of Shahrud. *The Horizon of Medical Sciences*; 12:50-54.
- Azim MT, Haque MM, Chowdhury RA (2013). Gender, marital status and job satisfaction, an empirical study. *International Review of Management and Business Research*; 2 (2):488-498.
- Başar, G., Akın, S. and Durma, Z. (2015). Evaluation of Problem Solving and Communication Skills in Nurses and Nursing Students. *Gümüşhane University Journal of Health Sciences*, 4 (1), 125-147
- Chen SY, Wu WC, Chang CS, Lin CT, Kung JY, Weng HC, (2015). Organizational justice, trust, and identification and their effects on organizational commitment in hospital nursing staff. *BMC Health Services Research*; 15(1):363-369.
- Çam S, Tümkaya S (2007). Development of interpersonal problem-solving inventory (CPSI): A study of validity and reliability. *Turkish Journal of Psychological Counseling and Guidance*; 3(28).
- Çetinkaya S (2013). The effect of problem-solving education on problem solving skills, interpersonal relationship style and anger control in male high school student adolescents (Master thesis). Adnan Menderes University. Health Sciences Institute, Aydın.
- Dağlı A, Elçiçek Z, Han B (2018). Adaptation of Organizational Commitment Scale into Turkish: Validity and reliability study. *Electronic Journal of Social Sciences*; 17(68): 1765-1777.
- Dede G (2021). The relationship between problem solving and solidarity in the profession in nurses (Master thesis). Maltepe University Graduate Education Institute, Istanbul.
- Durak Batıgün A, Hisli Şahin N (2006). Two scales for work stress and health psychology research: Type A personality and job satisfaction. *Turkish Journal of Psychiatry*; 17(1):32-45.
- Dündar T (2015). The Relationship Between Organizational Justice Perceptions and Job Satisfaction Levels (Master Thesis). Yıldız Teknik University. Social Sciences Institute, Istanbul.

- Er, Y., Aktaş, S., Türker, A., Güven, F. & Alkan, N. (2018). Evaluation of Self-Esteem and Problem-Solving Skills of Physical Education and Sports Teaching and Classroom Teaching Students. *Mus Alparslan University International Journal of Sport Sciences*, 2 (1), 16-29.
- Erkuş, B. and Bahçecik, N. (2015). Critical thinking level and problem-solving skills of nurses and nurses working in private hospitals. *Clinical and Experimental Health Sciences*, 5 (1), 1-9.
- Gemlik, N. and Sur, H., (2004). A Study on the Perception Level of Problem-Solving Skills of Private Hospital Managers, *Journal of Physical Education and Sport Sciences*, 11(2).
- Karakurt, N., and Ekinci, M. (2015). The Relationship between Nurses' Perceived Social Support and Problem-Solving Skills. *Gümüşhane University Journal of Health Sciences*; 4(4).
- Kelleci, M., and Gölbaşı, Z. (2004). Investigation of Problem-Solving Skills of Nurses Working in a University Hospital in Terms of Some Variables. *Journal of Cumhuriyet University School of Nursing*, s: 1-8.
- Kızılkaya G, Aşkar P (2009). Problem çözmeye yönelik yansıtıcı düşünme becerisi ölçeğinin geliştirilmesi. *Eğitim ve Bilim*; 34(154):82-92.
- Koç Z, Koyuncu S, Sağlam Z (2015). Problem Solving Skill Levels of Health School Nursing and Midwifery Students and Affecting Factors. *Education and Research in Nursing*, 12(1), 41 - 50.
- Koyutürk A (2015). Health Workers Of Organizational Justice and Job Satisfaction in Example of a Public Hospital (Master thesis). Okan University. Health Sciences Institute, Istanbul.
- Meyer JP, Allen NJ (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*: 61-89.
- Sağır M (2016). Job satisfaction in aging workforce ministry of national education (Master thesis). Cankaya University. Social Sciences Institute, Ankara.
- Taşçı S (2005). Problem solving process in nursing. *Journal of Health Sciences*; 14:73-78.
- Türe A, Akkoç İ (2020). The effect of perceived trust in the working environment on job satisfaction levels of nurses. *Turkish Journal of Social Sciences Studies*;5(2);136-152.
- Ulupınar, S. (1997). The Effect of Nursing Education on Students' Problem-Solving Skills (Doctoral Thesis). Istanbul University Institute of Health Sciences, Istanbul.
- Yıldırım N (2016). Evaluation of nurses' entrepreneurial personality traits, problem solving skills and effective factors (Master thesis). Istanbul Bilim University Institute of Social Sciences, Istanbul.
- Yıldırım B, Bağsürer N (2019). Investigation of Problem-Solving Processes of Nurses Working in a University Hospital. *Middle East Journal of Medicine*; 11(1):27-33.
- Yıldırım B, Özkahraman Koç Ş, Sarıkaya Karabudak S (2014). Examining the relationship between nursing and midwifery students' problem-solving skills and learning styles. *Gumushane University Journal of Health Sciences*; 3(3):859-882.
- Yiğiter K 2012. The effect of recreational activities on perceived problem-solving skills and self-esteem levels of university students (Master thesis). Kocaeli University Health Sciences Institute, Kocaeli.
- Yorulmaz M, Kırac R and Yılmazsoy B (2018). The Effect of Demographic Characteristics of Healthcare Professionals on Job Satisfaction. 2. International 12. National Health and Hospital Administration Congress Full Text Proceeding. Page: 844-851.