

The Relationship between Work Engagement and Workaholism and Nurses' Job well-being

Banafsheh Abdi ^a, Azam Alavi ^{b*}

^a Department of Health Services Management, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran

^b Department of Nursing, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran

ARTICLE INFO

ORIGINAL ARTICLE

Article History:

Received: 21 July 2024

Revised: 10 September 2024

Accepted: 06 October 2024

*Corresponding Author:

Azam Alavi

Email:

azam_alavi92@yahoo.com

Tel: +38 33361003

Citation:

Abdi B, Alavi A. The Relationship between Work Engagement and Workaholism and Nurses' Job well-being. Journal of Social Behavior and Community Health (JSBCH). 2024; 8(2): 1449-1456.

ABSTRACT

Background: Nurses continuously face workaholism and work engagement that affect the professional performance of nurses. The aim of this study was to investigate the relationship between work engagement and workaholism with nurses' job well-being.

Methods: This was a descriptive correlation study. Two hundred nurses from Lahijan Hospitals were selected by convenience sampling method in 1399. Data were collected using three standard questionnaires of work engagement, workaholism, and job well-being. Data analysis was used using SPSS21 software using descriptive statistics (mean, standard deviation, percentage) and inferential methods (Single regression test).

Results: The results of the study showed that work engagement and workaholism can predict the job well-being of nurses in Lahijan hospitals ($p < 0.001$). Among the dimensions of job well-being, the results showed that workaholism is negatively related to the job satisfaction of nurses ($p = 0.03$), but has a positive relationship with the dimensions of perceived stress and nurses' sleep problems ($p < 0.001$). Among the dimensions of job well-being, work engagement can predict positive the job satisfaction of nurses ($p < 0.001$), but cannot predict the perceived stress and the nurses' sleep problems ($p > 0.05$).

Conclusion: According to the results of the study, work engagement and workaholism are good predictors for nurses' job well-being. Therefore, it is suggested that managers help to enhance nurses' job well-being by improving the motivated and vibrant work environment, creating work engagement, and reducing work addiction.

Keywords: Work, Addiction, Nurses, Psychological well-being, Work engagement

Introduction

Well-being is initially referred to as psychological and mental well-being. The concept of psychological well-being has been expressed as a way of life full of joy and pleasure; this concept states that psychological well-being is not a consequence, but a process that focuses on living well and engaging all human abilities (Barazandeh, 2016). Employees' welfare in this study consists of three sections: Job satisfaction, perceived stress, and sleep disorders. Job satisfaction refers to the sum of the positive tendencies or feelings that individuals have about their jobs (Caesens et al., 2014). Research shows that job satisfaction as the most important job attitude of organizational employees has a significant impact on physical and mental health, efficiency and performance (AbediKooshki et al., 2024). Perceived stress is an individual interpretation against stress (Aghbolaghi et al., 2023). Nursing profession is exposed to high stress due to working conditions (Barati et al., 2022). Also, sleep disorders are a prevalent concern among nursing professionals, with substantial implications for their physical and psychological well-being (Janatolmakan et al., 2024). The prevalence of sleep disorders in Iranian nurses has been reported as 56 % (Babaei & Kamali Tabrizi, 2023). Hospitals are increasingly faced with challenges and changes; under such circumstances nurses can coordinate with new conditions if they are both physically and mentally, emotionally and cognitively involved with their work and duties and belong to what they do (Abolghasem Mosalman et al., 2022).

Work engagement represents the experience of meaningfulness, passion, honor, and being too much involved in work (Hakimi, 2019). Professional engagement is the basic need of man. This meaningful social sense creates a sense of security and solidarity, and from the point of view of psychology, engagement is an important concept in human development, motivation, and personality development (Zarshenas et al.). Work engagement is described as a positive and satisfactory state of the individual about their work and refers to the

relationship between the employees and their work (Abrishamirad et al., 2021; Schaufeli, 2017). Work engagement is determined by high energy levels, mental flexibility, tendency to invest, and perseverance during work, the person is not easily tired, even in the face of problems (Moreira-Fontán et al., 2019). Employees' work engagement points to positive psychological conditions in the individual, which leads one to engage in their role and the success of organizations actively and does not depend solely on the competence or skill of employees, but it depends on how employees respond emotionally to their work and organization (hasanvand & arefnezhad, 2021). Studies in the nursing profession showed that work engagement affects nurses' self-efficacy, quality of care, and patient satisfaction, which as a result of a higher level of attachment increases work (Keyko et al., 2016). Along with the concept of job engagement, workaholism concept is important in nursing profession.

Addiction to work (workaholism) indicates that people are repeatedly and consistently working even if they are not at work (KUN, 2018). The concept of addiction to work as a continuous pattern of work is too far beyond expectation, and a compulsory obsession with the job is defined (Andreassen et al., 2018; Griffiths et al., 2018). The nursing job of prone jobs is the phenomenon of addiction to work (Fars & Arak, 2017). Nurses can experience high levels of workaholism as they have to deal with excessive job demands and should highly be committed to their profession (Gillet et al., 2021). For job addicts, the job is of the highest importance on the life list, and because of the requirements of work and coercion or uncontrollable need for uninterrupted work, they cannot devote sufficient time to family and friends, therefore, inter-individual and spiritual relationships are weakened (Fars & Arak, 2017; Zarei & Fooladvand, 2022). Work-addicted people are highly waiting for themselves, and when they do not work, they feel instability, anxiety, absurdity, and disability (Kang, 2020; Khorasani

Ferdavani & Farhadi, 2023). Studies show that other consequences of work addiction such as destruction of work-life balance, interpersonal conflicts, duality, mental illness, and lack of cooperation in group work are due to their limited social skills (Dargahi et al., 2019; Fars & Arak, 2017). Workaholism disrupts physical health, individual happiness levels, interpersonal relationships, and even the psychosocial performance of the individual (Zarei & Fooladvand, 2022). If hospitals lack lively, energetic, talented, conscious, and expert staff, it will be difficult to deal with complex conditions. Job engagement and well-being in healthcare organizations are increasingly important because it can improve the quality of patient care and affect employees. In all hospital departments, we deal with nurses who have been regular, sympathetic, and interested in the work of nursing; but usually after a few days of working and encountering a multitude of job stresses and stress in the workplace, they feel tired and even want to step down. Likewise, workaholism has received a little attention in the nursing profession. Therefore, the aim of this study was to investigate the relationship between work engagement and workaholism and nurses' job well-being.

Methods

This was a descriptive correlational study. Two hundred nurses from Piroz, Shafa, and Milad hospitals in Lahijan were selected by convenience sampling method in 1399 according to the Cochran sampling formula $\frac{(1.96)^2 \cdot (0.500)^2 \cdot 270}{((0.05)^2 \cdot (270) - (0.05)^2 + ((1.96)^2 \cdot (0.500)^2)} = 183$. The minimum sample size included 183 people, and 220 questionnaires were distributed. And finally, 200 questionnaires were returned to the researcher and analyzed. Inclusion criteria, was having at least an associate degree, and at least one year of working experience. The study exclusion criteria were the unwillingness to complete the questionnaires. The questionnaires were distributed after receiving the permission letter from the Islamic Azad University of Shahrekord and the hospitals. Informed consent was obtained and the purpose of

the study was explained to the participants. Participants were assured that their personal information would be confidential and will only be provided to the research team.

The data collection tools included a demographic questionnaire (age, sex, education, years of work experience) and three standard questionnaires: Job Well-being Questionnaire (According to Concept Model of the Caesens, 2014) consists of 17 questions and three areas of job satisfaction (4 questions), perceived stress (8 questions) and sleep problems (5 questions) with a five-degree Likert scale 1 to 5 (too much to very little) (Caesens et al., 2014). Based on the Barazandeh l.'s study, the total reliability of job well-being questionnaire was 0.78, Cronbach's alpha coefficient for job satisfaction was 0.71, perceived stress was 0.78, and sleep problems was 0.84 (Barazandeh, 2016). The standard work engagement questionnaire (Shuffle and Baker, 2003) had 17 questions with a five-degree Likert scale of 1 to 5 (I completely agree to 5 completely disagree). The validity and reliability of this questionnaire have been confirmed by many Iranian researchers (hasanvand & arefnezhad, 2021). Based on the Babaei Khalaji et al.'s study, the reliability of this questionnaire was 0.70 (Babaei Khalaji et al., 2013). Working Addiction Questionnaire (Schaufeli et al., 2009) includes 17 questions with a five-degree Likert scale of 1 to 5 (fully agree to completely disagree). The validity and reliability of this tool are confirmed in the study of Ariaporan and Cronbach's alpha coefficient of this questionnaire which was reported as 0.82 (Ariapooran, 2019). In this study, the nation of three questionnaires was divided into the submission of the three questionnaires. In the midst of the general and overall assembly with less than 2.2 of the poor score, the score of 2.5 to 3.75 was resorted to 3.75 and the higher score of 3.75.

Data analysis was done via SPSS21 software using descriptive statistics (mean, standard deviation, percentage) and inferential methods (single regression test).

Results

Data analysis showed that the majority of samples were 147 (73.5 %) females who were married. The majority of the samples had 124 (62

%) of the service history of between 1-5 years. Also, the majority of 127 people (63.5 %) were less than 30 years old and the majority had an undergraduate degree of 183 (91.50 %). (Table1)

Table 1. The demographic properties of nurses

		Percentage (number)
Age	< 30years	(63.5)127
	31-40	(30) 60
	41-50	(4.5) 9
	> 50	(2) 4
Years of work experience	1-5	(62)124
	6-10	(28.5)57
	11-15	(1.5)3
	16-20	(2.5)5
	21-25	(2.5) 5
	26-30	(3)6
Education	Associate	(5.5)11
	BSN	(91.5)183
	MSc	(2.5)5
Sex	male	(26.5)53
	female	(73.5) 147

The mean scheme for nurses' job well-being in the present study was 3.50 ± 0.59 . Also, the mean scores of the job addiction score and job engagement were 3.46 ± 0.58 and 3.62 ± 0.62 , respectively.

The findings of the Kolmogorov-Smirnov test showed that the data had a normal distribution. The

results of a single regression test showed that workaholism can predict the job well-being of nurses in Lahijan hospitals. Among the dimensions of well-being, workaholism is negatively related to the job satisfaction of nurses but has a positive relationship with the dimensions of perceived stress and nurses' sleep problems. (Table2)

Table 2. Regression coefficient between workaholism with job well-being and their domains of nurses

Dependent Variable	B	Std. Error	Beta	R ^y	t	Sig
Constant	0.87	0.703	-	-	8.35	0.000
Job satisfaction	-0.87	0.372	- 0.72	0.52	-2.35	0.03
Constant	0.686	0.227	-	-	3.02	0.03
Perceived stress	0.819	0.065	0.66	0.44	12.64	0.000
Constant	0.546	0.282	-	-	5.47	0.000
Sleep problems	0.553	0.080	0.43	0.19	6.87	0.000
Constant	0.531	0.210	-	-	26.38	0/000
Job well-being	-0.781	0.111	- 0.95	0.90	- 7.04	0.01

The results of a single regression test showed that work engagement can predict the job well-being of nurses in Lahijan hospitals. Among the dimensions of well-being, work engagement

has a positive relationship with the dimensions of job satisfaction, but work engagement could not significantly predict the dimensions of perceived stress and the nurses' sleep problems. (Table 3)

Table 3. Regression coefficient between work engagement with job well-being and their domains of nurses

Dependent variable	B	Std. Error	Beta	R ²	t	Sig
Constant	0.172	0.270	-	-	4.33	0.000
Job satisfaction	0.694	0.078	0.53	0.28	8.87	0.000
Constant	0.971	0.572	-	-	3.44	0.05
Perceived stress	-0.012	0.161	-0.02	0.02	-0.74	0.942
Constant	0.153	0.418	-	-	3.20	0.03
Sleep problems	0.691	0.112	-0.24	0.05	-1.63	0.18
Constant	0.153	0.165	-	-	6.98	0/000
Job well-being	0.691	0.048	0.71	0.51	14.47	0.000

Discussion

The results of the present study showed that workaholism can predict nurses' job well-being. Among the dimensions of career well-being, the results showed that workaholism with nurses' job satisfaction negatively predicts, in other words, job satisfaction decreases by increasing workaholism. But the dimensions of perceived stress and nurses' sleep problems positively predict, in other words, by increasing workaholism, perceived stress and nurses' sleeping mammals increase. In this regard, the study of Jenaabadi et al. (2017) showed that there is a positive and significant correlation between the addiction to work and job stress and burnout. The results of regression analysis also showed that the addiction component can predict job stress as well as nurses' job burnout (Jenaabadi et al., 2017). Also, the results of the study by Sarfaraz et al. (2022) confirmed that there is a significant relationship between workaholism and job satisfaction and job stress (Sarfaraz et al., 2022), which supports the results of the present study. Also, the results of the study by Saiga et al. (2021) showed that there is a significant negative relationship between addiction to work and work engagement of Japanese nurses (Saiga & Yoshioka, 2021). The results of the study by Kasemy et al. (2020) also showed a significant relationship between workaholism and poor mental and physical health and the low quality of life of nurses (Kasemy et al., 2020). In addition, the results of CaSens et al. showed between workaholism and job well-being, job stress, sleep disorders, and job satisfaction, there was a significant relationship (Caesens et al., 2014).

The results of a single regression test showed that work engagement can predict the job well-being of nurses in Lahijan hospitals. Among the dimensions of well-being, work engagement has a positive relationship with the dimensions of job satisfaction, but work engagement could not significantly predict the dimensions of perceived stress and the nurses' sleep problems. In this regard, the results of the study by Derakhshan et al. (1398) showed that job engagement has a positive effect on job satisfaction (Derakhshan & Esakhani, 2020). The study by Ge et al. (2022) showed that there is a meaningful relationship between job engagement and job satisfaction (Ge et al., 2021). Moreover, Keylo stated that the affiliation the work causes personal consequences for nurses such as job satisfaction (Keyko et al., 2016). The results by Barazandeh et al.'s study (2016) showed that work engagement on job satisfaction has a positive and negative impact on sleep disorders (Barazandeh, 2016). The study of Zhang et al. (2021) et al. and (2023) Aguilaar showed that there is a significant negative relationship between occupational engagement and nurses' job stress (Cabrera-Aguilar et al., 2023; Zhang et al., 2021). The nursing profession is accompanied by high stress, so according to the results of the studies, nearly 7 to 15 percent of nurses have an overwhelming balloon burnout experience, and almost 10 % of them have faced a degree of mental exhaustion. Therefore, the job engagement of nurses can be the basis for the high quality of services in the health centers and to moderate the shortage of human resources in hospitals (Hakimi, 2019). Work engagement affects intention to quit and job performance; as employees

are more involved, they find their job more meaningful, self-sufficient, and inspiring, and in turn, more sacrifices and focus on their careers are needed, leading to higher job performance and job satisfaction (Moeini Korbekandi & Tabarsa, 2024). Work engagement makes employees emotionally communicate with their job tasks which enhances mental and physical and mental health of employees (Bailey et al., 2017). Thus, work engagement is required for nursing profession and work engagement is an approach to better understand work experience such as job well-being.

Conclusion

Based on the research findings, it can be concluded that workaholism and job engagement are a good predictor of nurses' job well-being. Given that nursing profession is associated with high stress, a sense of job well being in workplace is one of the essentials of the work, and the role of managers in creating job well-being for the workplace is very important. Therefore, it is suggested that improving the motivated and vibrant work environment and designing job motivation systems can help increase nurses' job engagement. Although managers may focus on the bright side of workaholism, which helps to ensure that nurses feel competent to carry out their tasks effectively, managers must be careful that nurses with tendencies toward workaholism experience low job well-being that may affect their work performance. Therefore, by providing psychological courses in the hospitals, the risks of workaholism for nurses should be expressed.

Acknowledgment

The authors would like to thank the Deputy of Research and Technology of Islamic Azad University of Shahrekord and the nurses for their cooperation.

Conflicts of interest

The authors declared no conflict of interests.

Funding

This research was conducted without any financial support.

Ethical considerations

This study was conducted in accordance with the principles of the Helsinki Declaration and was confirmed by the Ethics Committee of Falavarjan Islamic Azad University.

Code of Ethics

IR.IAU.FALA.REC.1397.043

Authors' contributions

B. AS. and A. A implemented the study; A. A devised methodology; B. A collected data; B. A analyzed data; A. A wrote the original draft; A. A did reviewing and editing; B. A found the resources, and A. A did the supervision.

Open Access Policy

Users are allowed to read, download, copy, distribute, print, search, crawl for indexing or link to the full texts of the articles, or use them for any other lawful purpose, without asking prior permission from the author.

References

- AbediKooshki, S., Roohafzaei, S., & Shahdosti, H. (2024). Determining the relationship between organizational climate and job satisfaction in nurses working in the Corona ward of Imam Khomeini Hospital in Esfaryen. *Beyhagh*, 29(1), 102-114.[persian]
- Abolghasem Mosalman, T., Nakhoda, M., Fahimi Far, S., & Khandan, M. (2022). The Relationship between Nurses' Engagement and Knowledge Management (Case Study: Firoozabadi Hospital in Tehran). *Sciences and Techniques of Information Management*, 8(3), 251-282. [persian]
- Abrishamirad, S., Kordi, M., & Abbasi, T. (2021). A comparison of Employee's Engagement Models with emphasis on Human Resources in Iranian Organizations. *Iranian Journal of Comparative Education*, 4(3), 1329-1348. [persian]
- Aghbolaghi, N., Aghdasi, A., Rostami, H., & Ahangar, A. (2023). Examining the Effectiveness of Mindfulness Based Stress Reduction on Mental Fatigue, Perceived Stress, and Emotion

- Regulation in Nurses. *Journal of Health and Care*, 24(4), 368-379. [persian]
- Andreassen, C. S., Schaufeli, W. B., & Pallesen, S. (2018). Myths about "The myths about work addiction" Commentary on: Ten myths about work addiction (Griffiths et al., 2018). *Journal of behavioral addictions*, 7(4), 858-862.
- Ariapooran, S. (2019). Sleep problems and depression in Iranian nurses: The predictive role of workaholism. *Iranian journal of nursing and midwifery research*, 24(1), 30-37. [persian]
- Babaei Khalaji, M., Ahmadi, S. A. A., & Shahbazi, M. (2013). Investigation of the Effective Factors on Employee Engagement of Nurses in Farabi Eye Hospital affiliated to Tehran University of Medical Sciences. *Journal of Public Administration*, 5(4), 39-56. [persian]
- Babaei, Z., & Kamali Tabrizi, P. (2023). Sleep disturbances in nurses: the role of occupational stress, mindfulness and self-compassion. *Quarterly Journal of Nursing Management*, 11(4), 93-102. [persian]
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International journal of management reviews*, 19(1), 31-53.
- Barati, H., Hasani, F., Panah, A. G., & Poushaneh, K. (2022). The Evaluation Modeling Distress Tolerance Based on Unpleasant Lifestyle with Mediation of Cognitive Emotion Regulation in Women Nurses Hospital in During Coronavirus Disease. *Quarterly Journal of Psychological Methods and Models Autumn*, 13(49), 31-42. [persian]
- Barazandeh, L. (2016). The effect of social support of the employees welfare with mediation of work addiction and belonging. *Journal of Research in Human Resources Management*, 8(3), 83-108. [persian]
- Cabrera-Aguilar, E., Zevallos-Francia, M., Morales-García, M., Ramírez-Coronel, A. A., Morales-García, S. B., Sairitupa-Sanchez, L. Z., & Morales-García, W. C. (2023). Resilience and stress as predictors of work engagement: the mediating role of self-efficacy in nurses. *Frontiers in Psychiatry*, 14, 1202048.
- Caesens, G., Stinglhamber, F., & Luypaert, G. (2014). The impact of work engagement and workaholism on well-being: The role of work-related social support. *Career Development International*, 19(7), 813-835.
- Dargahi, S., Barati Moghadam, B., Ahmadboukani, S., & Ayadi, N. (2019). The Relationship of Perceived Intimacy from the Main Family and Work-Family Conflict with Empathy and Addiction to Work in Medical Staff. *Iranian Journal of Medical Ethics and History of Medicine*, 12, 325-337. [persian]
- Derakhshan, Z., & Esakhani, A. (2020). Studying the impact of high performance work systems on job satisfaction with focus on mediating role of work engagement. *Journal of Development & Evolution Mngement*, 1398(special issue), 433-440. [persian]
- Fars, I., & Arak, I. (2017). The effects of workaholism and perfectionism on marital stress and social skills in nurses. *Journal of Health and Care*, 19(1), 50-61.
- Gillet, N., Austin, S., Fernet, C., Sandrin, E., Lorho, F., Brault, S., . . . Aubouin Bonnaventure, J. (2021). Workaholism, presenteeism, work-family conflicts and personal and work outcomes: Testing a moderated mediation model. *Journal of clinical nursing*, 30(19-20), 2842-2853.
- Griffiths, M. D., Demetrovics, Z., & Atroszko, P. A. (2018). Ten myths about work addiction. *Journal of behavioral addictions*, 7(4), 845-857.
- Hakimi, I. (2019). A Survey on the Relationship between Personal and Organizational Spirituality with Job Engagement: Meaning of Work Mediating Role. *Research in Cognitive and Behavioral Sciences*, 9(1), 77-90. [persian]
- hasanvand, a., & arefnezhad, m. (2021). Investigating the effect of hospital ethics on nurses' job affiliation as an effective human capital in sustainable development [Applicable]. *Quarterly Journal of Nersing Management*, 10(1), 23-34. <http://ijnv.ir/article-1-789-en.html>.

- [persian]
- Janatolmakan, M., Naghipour, A., & Khatony, A. (2024). Prevalence and factors associated with poor sleep quality among nurses in COVID-19 wards. *Scientific Reports*, 14(1), 16616. [persian]
- Jenaabadi, H., Miri, M. R., & Mirlatifi, P. R. (2017). Correlation of workaholism with job stress and job burnout in nurses. *Journal of Health Promotion Management*, 6(2), 20-25. [persian]
- Kang, S. (2020). Workaholism in Korea: Prevalence and socio-demographic differences. *Frontiers in psychology*, 11, 569744.
- Kasemy, Z. A., Abd-Ellatif, E. E., Abdel Latif, A. A., Bahgat, N. M., Shereda, H. M. A., Shattla, S. I., . . . Ramadan, A. N. (2020). Prevalence of workaholism among Egyptian healthcare workers with assessment of its relation to quality of life, mental health and burnout. *Frontiers in Public Health*, 8, 581373.
- Keyko, K., Cummings, G. G., Yonge, O., & Wong, C. A. (2016). Work engagement in professional nursing practice: A systematic review. *International journal of nursing studies*, 61, 142-164.
- Khorasani Ferdavani, M., & Farhadi, H. (2023). Meta-analysis of the treatment of Internet addiction, computer game addiction and Workaholism. *Scientific Journal of Social Psychology*, 11(68), 17-35. [persian]
- KUN, B. (2018). Ten myths and twenty years: What we know and what we still do not know about work addiction. *Journal of behavioral addictions*, 7(4), 863-866.
- Moeini Korbekandi, M., & Tabarsa, G. (2024). The Effect of Self-Efficacy and Optimism on Job Performance: The Mediating Role of Work Engagement. *Public Administration Perspective*, 15(1), 15-35. [persian]
- Moreira-Fontán, E., García-Señorán, M., Conde-Rodríguez, Á., & González, A. (2019). Teachers' ICT-related self-efficacy, job resources, and positive emotions: Their structural relations with autonomous motivation and work engagement. *Computers & Education*, 134, 63-77.
- Saiga, E., & Yoshioka, S.-I. (2021). Factors influencing the happiness of Japanese nurses: association with work engagement and workaholism. *Kawasaki Journal of Medical Welfare*, 26(2), 81-93.
- Sarfaraz, M., Sarfaraz, S., Maqsood, A., Ahmed, N., Vohra, F., Abduljabbar, T., & Abduljabbar, A. S. (2022). Assessing the impact of workaholism and work engagement on medical university employee stress and satisfaction levels. *PeerJ*, 10, e12565. [persian]
- Schaufeli, W. B. (2017). Applying the Job Demands-Resources model: A 'how to' guide to measuring and tackling work engagement and burnout. *Organizational dynamics*, 46(2), 120-132.
- Zarei, S., & Fooladvand, K. (2022). Relationship between Self-Esteem and Maladaptive Perfectionism with Workaholism among Health Care Workers: The mediating role of Rumination. *Iranian Journal of Psychiatric Nursing (IJPN) Original Article*, 9(6). [persian]
- Zarshenas, L., Sharif, F., Molazem, Z., Kayer, M., Ebadi, A., & Zare, N. Professional belonging in nursing students: a qualitative research. *Sadra Med Sci J* 2018; 6 (1): 45-55. [persian]
- Zhang, M., Zhang, P., Liu, Y., Wang, H., Hu, K., & Du, M. (2021). Influence of perceived stress and workload on work engagement in front-line nurses during COVID- 19 pandemic. *Journal of clinical nursing*, 30(11-12), 1584-1595.