

The relationship between nurses' perceived organisational, supervisor and co-worker support, psychological well-being and job performance

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Abstract

Objective: To examine the relationship involving nurses' perception of organisational, supervisor and co-worker support, psychological well-being and job performance.

Methods: The cross-sectional, correlational study was conducted from June 2016 to January 2017 after approval from the ethics review committee of Istanbul Medipol University, Istanbul, Turkiye, and comprised nurses working in public or private sector and being in their current employment for at least one year. Data was obtained using Organisational Support, Co-Worker Support, Supervisor Support, Psychological Well-Being and Job Performance scales. Data was analyzed using SPSS 26.

Results: Of the 1056 nurses, 896(84.8%) were women and 160(15.2%) were men. The overall mean age was 30.69±7.53 years (range: 17-59 years) and mean professional experience was 9.31±7.66 years (range: 1-36 years).

Conclusion: Organisational, supervisor and co-worker support increased psychological wellbeing. Supervisor and co-worker support had a positive effect on job performance, but organisational support did not. Psychological wellbeing also increased job performance. Psychological well-being had a mediating role in the effect of organisational, supervisor and co-worker support on job performance. There was a positive relationship between perceived support, psychological wellbeing and job performance of nurses.

Key Words: Co-worker support, Job performance, Organisational support, Psychological well-being, Supervisor support (JPMA 73: 552; 2023) **DOI:** 10.47391/JPMA.6594

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Introduction

Improving job performance (JP) in healthcare staff has been studied over the years and is still an issue of interest for managers and researchers.¹ The main goal of healthcare institutions is to provide high-quality care.² Nurses, who constitute the majority of workforce in healthcare institutions, have a great impact on providing high-quality patient care and improving organisational performance.^{2,3} Since they are directly responsible for patient care, job performance of nurses is an important issue that determines the quality of care and the consequent level of patient satisfaction.^{3,4} Therefore, it is of great importance to understand the relevant factors in order to improve nurses' JP.¹

JP is a multidimensional concept influenced by organisational, managerial and team structure characteristics as well as various personal traits.¹ Supportive work environment plays an important role in the provision of high-quality healthcare services. The presence of supportive supervisors, co-workers and

organisations make nurses feel safer and better.⁵ Studies indicated that there was a positive relationship of higher organisational support (OS) with nurse and patient outcomes.^{6,7} It has been shown that supervisor support (SS) and communication with the supervisor positively affect nurses' JP.⁸ However, constant feeling of control and the lack of support by co-workers for creative behaviours decrease employee performance.⁹

Psychological well-being (PWB) is an important fact for working environments of nurses. A high PWB level is essential for nurses' JP, coping with stress,¹⁰ and being more positive towards the organisation and environment.¹¹ Co-workers can serve as a source of social support by providing emotional support to each other.¹² Co-worker support (CWS) plays an important role in dealing with stress and tension of employees.¹³ OS and CWS increase verbal communication, and the support provided in organisations reduces psychological stress.^{10,14} It is emphasised that perception of OS has a positive relationship with psychological satisfaction and plays an important role in the nurses' autonomy, expertise and PWB.¹⁴ It has been reported that employees are affected by their PWB through meeting their social and psychological needs, job satisfaction, feeling valuable, morale, motivation, organisational commitment

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and increasing high performance.^{11,15,16}

Limited studies are found that examine the effect of nurses' perceived SS, CWS and OS variables on their PWB and JP. The current study was planned to fill the gap by examining the relationship involving nurses' perception of OS, SS and CWS, PWB and JP.

Subjects and Methods

The cross-sectional, correlational study was conducted from June 2016 to January 2017 after approval from the ethics review committee of Istanbul Medipol University, Istanbul, Turkiye. The study hypotheses were developed along a conceptual framework (Figure 1).

characteristics of the nurses, as well as various standardised tools.

The SS scale¹⁸, which has already been adapted to Turkish,¹³ consists of 11 items. It is on 5-point Likert scale ranging from "Strongly Disagree = 1" to "Strongly Agree = 5". A higher score indicates higher perceived supervisor support. Cronbach's alpha coefficient of the Turkish adaptation was 0.94, while it was 0.96 in the current study.

The CWS scale¹⁹, which has already been adapted to Turkish,¹³ consists of 9 items. It is on 5-point Likert scale ranging from "Strongly Disagree = 1" to "Strongly Agree = 5". A higher score indicates higher perception of CWS. Cronbach's alpha coefficient of the Turkish adaptation

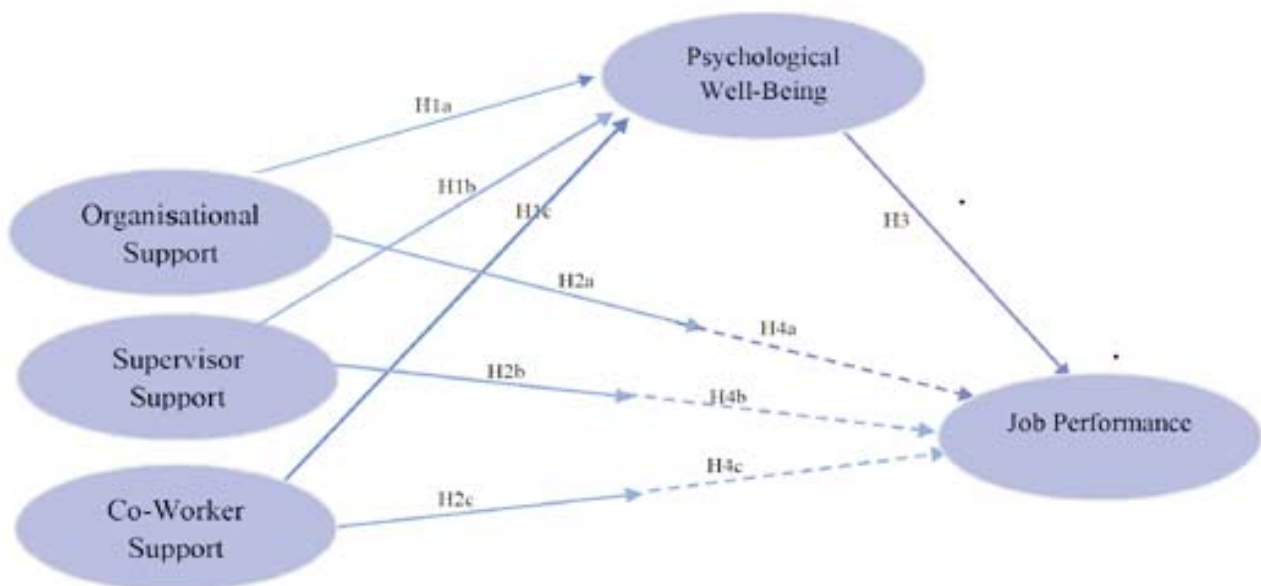


Figure-1: Research model and hypothesis

The study was conducted at four different hospitals located in the western part of Turkiye, and permission was obtained from each of them. Hospitals in Turkey are categorised as public and private hospitals and public and foundation university hospitals. In the study, as representative of these groups, hospitals with higher number of beds were selected. Those included were nurses having spent at least one year in their current employment because in Turkiye, performance evaluation is usually conducted at the end of a year.¹⁷ Informed consent was obtained from all the participants, and those who refused to participate were excluded.

Data was collected using the individual identification form, including socio-demographic and professional

was 0.90, while it was 0.90 in the current study.

The OS scale,²⁰ which has already been adapted to Turkish,¹³ consists of 12 items. It is on 5-point Likert scale ranging from "Strongly Disagree = 1" to "Strongly Agree = 5". A higher score indicates higher perception of OS. Cronbach's alpha coefficient of the Turkish adaptation was 0.93, while it was 0.76 in the current study.

The PWB scale,²¹ which has already been adapted to Turkish,²² consists of 42 items and 21 items are negative expressions. It is a 7-point Likert scale ranging from "Strongly Disagree = 1" to "Strongly Agree = 7", with the total score ranging from 42 to 294. A higher score indicates higher PWB. Cronbach's alpha coefficient of the

Turkish adaptation was 0.87, while it was 0.89 in the current study.

The JP scale,²³ which has already been adapted to Turkish,²⁴ consists of 25 items and has two sub-dimensions. The first 16 items measure the contextual performance and the last 9 items measure the task performance. The current study used the task performance dimension, which is a 5-point Likert scale ranging from "Strongly Inaccurate = 1" to "Strongly Accurate = 5". A higher score indicates higher JP. Cronbach's alpha coefficient of the Turkish adaptation was 0.65, while it was 0.85 in the current study.

It took about 25-30 minutes for an individual to complete the entire survey.

Post-hoc power analysis was conducted using G*Power 3.1.9.7)²⁵. R2 was obtained in the post-hoc analysis, while the value of 0.42 was obtained as a result of regression analysis, and it was found that three independent and one mediating variables had an effect on JP. In the studies, the results were determined by the fact that the statistical strength is $1-\beta=0.95$, and that the difference between correlation and group was calculated in Cohen and Parajapati et al., studies. Standardized effect size (large effect) and power 9f2) were $f^2: 0.35$ and 0.95 (95%), respectively, while significance level was 0.05.

Data was analysed using SPSS26. Skewness and Kurtosis values ranged between +1.5 and 1.5, indicating normal distribution.²⁶ Mean, standard deviation, Cronbach's alpha (α), Pearson correlation analysis were used in data evaluation. In the mediator variable analysis, Hayes' PROCESS macro (Model 4) and bias-corrected bootstrapping (5.000 bootstrap samples) were used in a regression framework.²⁷ The results were evaluated at 95% confidence interval (CI) and $p < 0.05$ was taken as the level of statistical significance.

Results

Of the 1,780 nurses approached, 1,056 (59.3%) filled out

Table-2: Pearson correlation coefficients, mean and standard deviation (SD) of the study variables (N: 1056).

Variables	Min-Max	Mean	SD		1	2	3	4	5
1. Supervisor Support	1-5	3.57	0.85	r	1	.415*	.557*	.207*	.208*
2. Co-worker support	1.11-5	3.83	0.68	r		1	.250*	.313*	.213*
3. Organisational Support	1.33-4.67	3.10	0.53	r			1	.234*	.135*
4. Psychological Well-Being	144-288	204.72	28.00	r				1	.388*
5. Job Performance	1.89-5	3.98	0.58	r					1
Cronbach Alpha					.96	.90	.76	.89	.88
Skewness					-.721	-.607	-.254	.091	-.424
Kurtosis					.810	1.065	.797	-.847	.418-

r: Pearson correlation, * $p < .001$

Table-1: Demographic data of the subjects (N: 1056).

Variables	Frequency n	Percentages %
Gender		
Female	896	84.8
Male	160	15.2
Marital Status		
Single	595	56.3
Married	461	43.7
Education Background		
Associate degree	259	24.6
Bachelor's degree	674	63.8
Graduate degree	123	11.6
Hospitals		
Foundation university hospital	228	21.6
Private hospital	130	12.3
Public university hospital	409	38.7
Public hospital	289	27.4
Working unit		
Surgical units	737	69.8
Medical units	319	30.2
Position		
Nurse manager	143	13.5
Staff nurse	913	86.5
Schedule		
Daily shift	364	34.5
Mix (Daily & night shifts)	692	65.5
	Min – Max	Mean±SD
Age	17 – 59	30.69±7.53
Professional Experience (year)	1 – 36	9.31±7.66

SD: Standard deviation.

the survey form; 896(84.8%) women and 160(15.2%) men. The overall mean age was 30.69 ± 7.53 years (range: 17-59 years) and mean professional experience was 9.31 ± 7.66 years (range: 1-36 years) (Table 1).

Correlation coefficients, mean and standard deviation of variables (Table 2), indirect effects of exploratory variables on responsive variables (Table 3), explanatory effects of variables on responsive variables (Table 4), and mediating effects (Figure 2) showed positive relationships among

Table-3: Indirect effects of exploratory variables on responsive variable (N: 1056).

			Effect	SE	LLCI	ULCI
JP ->	PWB ->	OS	.10	.02	.07	.13
JP ->	PWB ->	SS	.05	.01	.03	.07
JP ->	PWB ->	CS	.10	.01	.07	.12

CS: Co-worker support, JP: Job performance, OS: OrganisationOrganisational support, PWB: Psychological wellbeing, SS: Supervisor support,SE: Standard error, LLCI: Lower level confidence interval, ULCI: Upper level confidence interval.

Table-4: Explanatory effects of variables on responsive variables (N: 1056).

			B	β	S.E	C.R.	R ²	P	Lower Bounds (BC)	Upper Bounds (BC)	p (BC)
Direct Effects											
PWB	<---	OS	2.05	.23	.26	7.802	.06	<.001	1.54	2.57	<.001
JP	<---	PWB	.05	.38	.01	12.928			.04	.05	<.001
JP	<---	OS	.05	.05	.03	1.621	.15	<.001	-.01	.11	.105
PWB	<---	SS	1.14	.21	.17	6.884	.04	<.001	.82	1.47	<.001
JP	<---	PWB	.05	.36	.01	12.546			.04	.05	<.001
JP	<---	SS	.09	.13	.02	4.632	.17	<.001	.05	.13	<.001
PWB	<---	CWS	2.15	.31	.20	10.696	.10	<.001	1.75	2.54	<.001
JP	<---	PWB	.04	.37	.01	11.990			.04	.05	<.001
JP	<---	CWS	.086	.10	.025	3.396	.16	<.001	.04	.14	<.001

CS: Co-worker support, JP: Job performance, OS: OrganisationOrganisational support, PWB: Psychological wellbeing, SS: Supervisor support.

the key variables.

Direct effect of OS, SS, CWS on PWB were 0.23, 0.21 and 0.31, respectively. Direct effect of OS, SS, CWS on JP were 0.05, 0.13 and 0.10, respectively. Direct effect of PWB were 0.38, 0.36, 0.37 on JP. The indirect effect of OS, SS, CWS through PWB on JP were 0.10, 0.05 and 0.10, respectively (Figure 3).

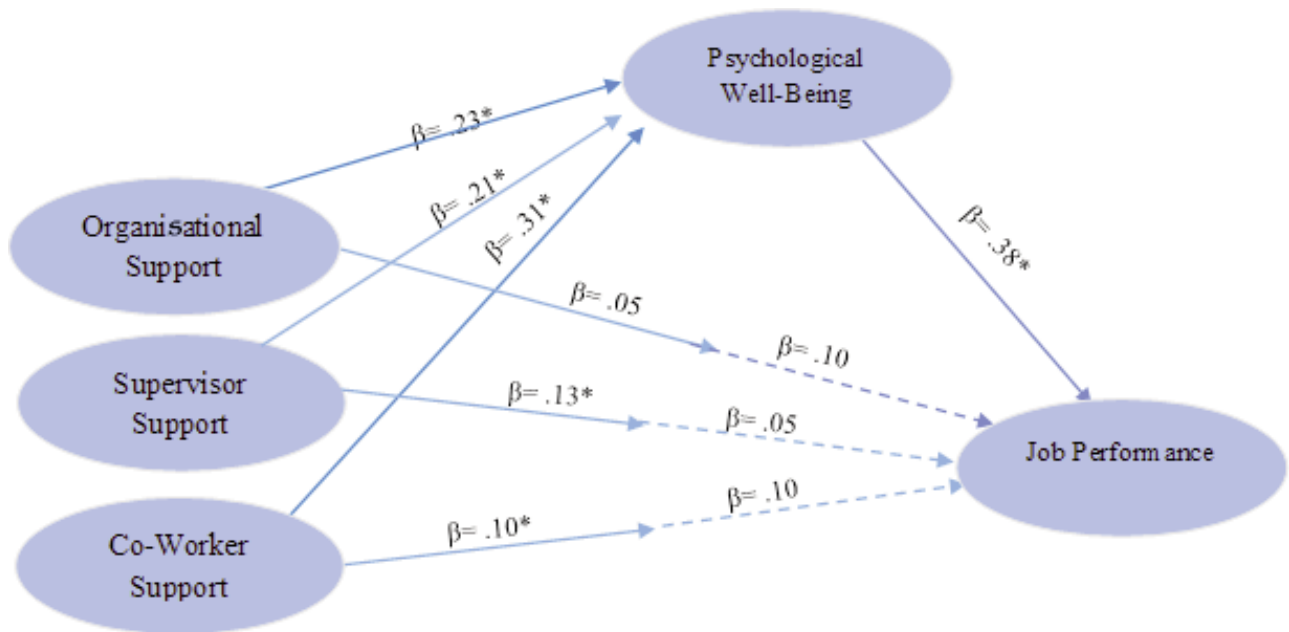


Figure-2: The mediating effect.

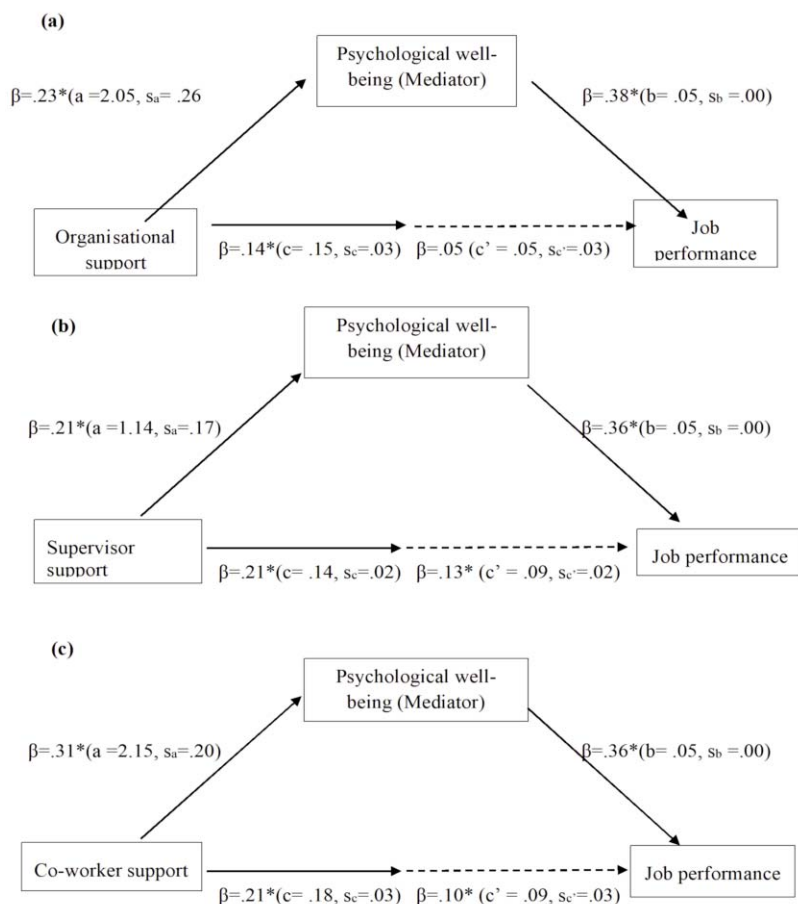


Figure-3: It is shown that a, b, c' pathways were direct effects and the c pathway was the total effect of related variables. (a) Mediation effect of professional wellbeing for the relationship between organisation organisational support and job performance, (b) Mediation effect of professional wellbeing for the relationship between supervisor support and job performance, (c) Mediation effect of professional wellbeing for the relationship between co-worker support and job performance.

* $p < 0.001$

Discussion

Employees who feel good psychologically can contribute to JP and adapt to organisational change by coping effectively with stress.²⁸ In this context, the current study has provided evidence that PWB has a mediating effect in the relationship involving OS, SS, CWS and JP.

A study found a positive relationship between support provided to nurses and their wellbeing.²⁹ Support provided to nurses is important for the mental health of nurses and reduce the risk of emotional exhaustion and desensitisation.³⁰ Exhaustion and depression decreased in employees with high SS and low workload.¹⁵ SS, CWS and OS have been shown to be associated with staff health and safety.¹⁶ It was reported that SS affected the health and wellbeing of employees when there was no support in the workplace or when a problem was

encountered. In addition, the nurses presented high job commitment and satisfaction when SS was high.³¹ These results support the current findings, and draws attention towards the importance of providing support to nurses for their wellbeing.

The present study determined a positive relationship of SS, CWS and PWB with JP, but OS had no significant direct effect. Some studies stated there was a positive relationship of CWS and SS with job responsibilities, and CWS directly affected JP positively. Therefore, employees who perceive SS perform better.^{8,32} OS led to an increase in the performance by affecting PWB.¹⁸ Previous studies reported that social support strengthens employees' ability to cope with stress sources.^{2,33} In the current study, OS had no significant effect on JP. Constantly changing health policies and decisions taken in Turkiye may have been the reason behind the finding.

A study reported that PWB had a partial mediating role in the relationship between quality of care and job satisfaction, while it had full mediating role in the relationship between emotional intelligence and performance.³⁴ The feeling of gratitude and anger felt by the employees towards their organisation is an indicator of their PWB. Perceived OS and SS have a mediating effect on performance.³⁵ The nurses with high PWB may be willing to demonstrate their full potential.

Self-reported data is a limitation of the current study.

Conclusion

A mediating role of PWB was found in the relationship involving OS, CWS and JP.

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References

1. Krijgsheld M, Tummers LG, Scheepers FE. Job performance in healthcare: a systematic review. *BMC Health Serv Res.* 2022;

- 22:149. doi: 10.1186/s12913-021-07357-5.
2. Tong L. Relationship between meaningful work and job performance in nurses. *Int J Nurs Pract*. 2018; 24:e12620. doi: 10.1111/ijn.12620.
 3. Tran KT, Nguyen PV, Dang TT, Ton TN. The impacts of the high-quality workplace relationships on job performance: A perspective on staff nurses in Vietnam. *Behav Sci*. 2018; 8:109. doi: 10.3390/bs8120109.
 4. Kieft RA, de Brouwer BB, Francke AL, Delnoij DM. How nurses and their work environment affect patient experiences of the quality of care: a qualitative study. *BMC Health Serv Res*. 2014; 14:249. doi: 10.1186/1472-6963-14-249.
 5. Wiskow C, Albrecht T, de Pietro C. How to create an attractive and supportive working environment for health professionals. Denmark: World Health Organisation Regional Office for Europe.
 6. Labrague LJ, McEnroe-Petitte DM. Job stress in new nurses during the transition period: An integrative review. *Int Nurs Rev*. 2018; 65:491-504. doi: 10.1111/inr.12425.
 7. Pahlevan Sharif S, Ahadzadeh AS, Sharif Nia H. Mediating role of psychological well-being in the relationship between organisational support and nurses' outcomes: A cross-sectional study. *J Adv Nurs*. 2018; 74:887-99. doi: 10.1111/jan.13501.
 8. Ravangard R, Yasami S, Shokrpour N, Sajjadnia Z, Farhadi P. The effects of supervisors' support and mediating factors on the nurses' job performance using structural equation modelling: A case study. *Health Care Manag*. 2015; 34:265-76. doi: 10.1097/HCM.0000000000000068
 9. Glaser J, Seubert C, Severin H, Herbig B. "The impact of learning demands, Work-Related resources, and job stressors on creative performance and health", *J Personal Psychol*. 2015; 14:37-48. DOI:10.1027/1866-5888/a000127
 10. Loi R, Aoi KYO, Xu AJ. Perceived organisational support and coworker support as antecedents of foreign workers' voice and psychological stress. *Int J Hospitality Manage*. 2014; 36:23-30. doi: 10.1016/j.ijhm.2013.08.001
 11. Nelson K, Boudrias JS, Brunet L, Morin D, De Civita M, Savoie A. et al. Authentic leadership and psychological well-being at work of nurses: The mediating role of work climate at the individual level of analysis. *Burnout Res*. 2014; 1:90-101. doi: 10.1016/j.burn.2014.08.001
 12. Velando-Soriano A, Ortega-Campos E, Gomez-Urquiza JL, Ramirez-Baena L, De La Fuente El, Canadas-De La Fuente GA. Impact of social support in preventing burnout syndrome in nurses: A systematic review. *Jpn J Nurs Sci*. 2020; 17:e12269. doi: 10.1111/jjns.12269
 13. Giray MD, Sahin DN. Perceived organisational, supervisor and coworker support scales: A study for validity and reliability. *Turk Psychol Articles*. 2012; 15:1-11.
 14. Kurtessis JN, Eisenberger R, Ford MT, Buffardi LC, Stewart KA, Adis CS. Perceived organisational support: A meta-analytic evaluation of organisational support theory. *J Manage*. 2017; 43:1854-84. doi: 10.1177/0149206315575554
 15. Wong KC. Work support, psychological well-being and safety performance among nurses in Hong Kong. *Psychol Health Med*. 2018; 23:958-63. doi: 10.1080/13548506.2018.1437275
 16. Wright AT, Cropanzano R, Bonett GD. The moderating role of employee well-being on the relationship between job satisfaction and job performance. *J Occup Health Psychol*. 2017; 12:93-104. doi: 10.1016/j.chb.2014.05.020
 17. Aydemir Gedük, E. Determination and application of nursing services performance evaluation criteria in a Hospital Affiliated to the Ministry of Health (Doctoral dissertation). Istanbul, Turkey: Istanbul University Institute of Health Sciences, Nursing Management Department, 2017.
 18. Karasek RA, Triantis KP, Chaudhry SS. Co-worker and supervisor support as moderators of associations between task characteristics and mental strain. *J Occupat Behav*. 1982; 3:181-200. doi: 10.1002/job.4030030205
 19. Gant LM, Nagda BA, Brabson HV, Jayaratne S, Satranc WA, Singh A. Effects of undermining on African American workers' perceptions of coworker and supervisory relationships and psychological well-being. *Social Work*. 1993; 38:158-64. doi: 10.1093/sw/38.2.158
 20. Eisenberger R, Huntington R, Hutchison S, Sowa D. Perceived organisational support. *J Appl Psychol*. 1986; 71:500-7. doi: 10.1037/0021-9010.71.3.500
 21. Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J Personal Soc Psychol*. 1989; 57:1069-81. doi: 10.1037/0022-3514.57.6.1069
 22. Akin A. The Scales of Psychological Well-being: A Study of Validity and Reliability. *Educational Sciences: Theor Pract*. 2008; 8:741-50.
 23. Goodman AS, Svyantek JD. Person-organisation fit and contextual performance do shared values matter. *J Vocat Behav*. 1999; 55:254-75. doi: 10.1006/jvbe.1998.1682
 24. Unlu O, Yurur S. The relationship among emotional labor, emotional exhaustion and task/contextual performance: a study with service industry workers at Yalova. *Erciyes Uni J Facul Econ Adminis Sci*. 2011; 37:183-207.
 25. UCLA: Statistical Consulting Group. G*Power: Statistical power analyses, Version 3.1.9.7. [Online] [Cited 2022 November 09]. Available from: URL: <https://stats.oarc.ucla.edu/other/gpower/>
 26. Tabachnick BG, Fidell LS. *Using Multivariate Statistics* 6th ed. Boston, MA: Pearson, 2013.
 27. Hayes AF, Scharckow M. The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychol Sci*. 2013; 24:1918-27. doi: 10.1177/0956797613480187
 28. Yunita PI, Saputra IGNWH. Millennial generation in accepting mutations: Impact on work stress and employee performance. *Int J Soc Sci Humanities*. 2019; 3:102-14. doi.org/10.29332/ijssh.v3n1.268
 29. Aronsson G, Theorell T, Uzum T, Hammarstrom A, Hogstedt C, Marteinsdottir I, et al. A Systematic review including meta-analysis of work environment and burnout symptoms. *BMC Public Health*. 2017; 17:264. doi: 10.1186/s12889-017-4153-7
 30. Weigl M, Stab N, Herms I, Angerer P, Hacker W, Glaser J. The associations of supervisor support and work overload with burnout and depression: A cross-sectional study in two nursing settings. *J Adv Nurs*. 2016; 72:1774-88. doi: 10.1111/jan.12948
 31. Hammig O. Health and well-being at work: the key role of supervisor support. *SSM-Population Health*. 2017; 3:393-402. doi: 10.1016/j.ssmph.2017.04.002
 32. Pohl S, Galletta M. The role of supervisor emotional support on individual job satisfaction: a multilevel analysis. *Appl Nurs Res*. 2017; 33:61-6. doi: 10.1016/j.apnr.2016.10.004
 33. Frear KA, Donsbach J, Theilgard N, Shanock LR. Supported supervisors are more supportive, but why? A multilevel study of mechanisms and outcomes. *J Bus Psychol*. 2018; 33:55-69. doi: 10.1007/s10869-016-9485-2
 34. Pahlevan Sharif S, Ahadzadeh AS, Sharif Nia H. Mediating role of psychological well-being in the relationship between organisational support and nurses' outcomes: A cross-sectional study. *J Adv Nurs*. 2018; 74:887-99. doi: 10.1111/jan.13501 SAME AS REF 7
 35. Friedman A, Carmeli A, Dutton JE. When does respectful engagement with one's supervisor foster help-seeking behaviours and performance? *J Vocational Behav*. 2018; 104:184-98. doi: 10.1016/j.jvb.2017.11.007