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Abstract

Presenteeism occurs when workers are present at work but with diminished work capacity due to illness, stress, or other causes. Recent studies report that nursing is one of the leading professional groups experiencing presenteeism. Although studies of illness-related presenteeism predominate, fewer studies have investigated stress-related presenteeism. Nurses in Turkey are particularly vulnerable to stress-related presenteeism because of the country's low nurse-to-patient ratio. A scale for measuring presenteeism from job stress — the Job-Stress-Related-Presenteeism Scale—has been developed but not validated. This study had two objectives: to adapt the Job-Stress-Related-Presenteeism Scale to Turkish to use in measuring of presenteeism from job stress among nurses; and to assess the scale's validity. We conducted a cross-sectional study to test the content validity, construct validity, reliability, and stability of a Turkish version of the Job-Stress-Related Presenteeism Scale on a sample of 261 nurses. The content validity index of the Job-Stress-Related Presenteeism Scale was .65. Item-total score correlation values varied between .44 and .77. The confirmatory factor analyses confirmed the six-item, one-factor construct. The Cronbach's alpha internal consistency coefficient was .86. Results indicated that our adapted version of the Job-Stress-Related Presenteeism Scale is valid and suitable for use in Turkey.

Keywords

job stress, nursing, organizational behavior, presenteeism, well-being

Presenteeism, the phenomenon of being present on the job, but with diminished work capacity, has increasingly become recognized as a drain on productivity (Vänni et al., 2018). Like absenteeism, presenteeism can result from a variety of causes (Dalkılıç & Harmancı Seren, 2018; Rainbow, 2019). Among nurses, Rainbow & Steege (2017) found a variety of antecedents of presenteeism including illness, stress, lack of work-life balance, and nurse professional identity.

Nurses, who typically face challenging job demands, are vulnerable to presenteeism (Freeling et al., 2020). This is a serious issue because presenteeism can significantly decrease nurse productivity and performance (Rainbow et al., 2019). Nurses with presenteeism endanger their health and well-being (Freeling et al., 2020). Moreover, presenteeism in nursing has patient consequences as it is associated with increased medical (drug) errors, missed patient care, and decreased patient safety outcomes (Rainbow & Steege, 2017). In addition, when presenteeism is considered along with the fact that nurses often are exposed to microbes and faced with difficult patients and physical demands (Bogossian et al., 2014), it's understandable that nurses can become fatigued and develop negative attitudes towards their patients. This is worrisome as it may lead to a deterioration in the quality of care (Demerouti et al., 2009; Rainbow et al., 2019).

Sickness presenteeism, defined as going to work despite illness (Skagen & Collins, 2016), has been investigated extensively among nurses (Rainbow & Steege, 2017). However, that is not the case for stress-related or stress-caused presenteeism. Job stress has been identified as one of presenteeism's frequent causes (Der Feltz-Cornelis et al., 2020). Nurses face many stressors in healthcare environments, and they experience burnout from trying to cope with chronic stress (Manzano-García & Ayala, 2017). Even nursing students can suffer psychological strains as they contemplate the effects economic crises in some countries on their professional future (Manzano-García et al., 2017). A Delphi study that

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collected opinions from 40 experts indicated that, although there have been many studies of stressors experienced by nurses, there is still a need for further investigation of work factors negatively affecting nurses. The study's authors concluded that research on burnout resulting from chronic stress on nurses using quantitative and qualitative methodologies is required (Manzano-García & Ayala, 2017).

One impediment to investigating stress-related presenteeism has been the lack of a valid scale available in multiple languages. One candidate to fill this need is the Job-Stress-Related Presenteeism Scale, or JSRPS (Gilbreath & Frew, 2008). Gilbreath and Frew (2008) developed the JSRPS influenced by Cooper's (1994) conceptualization of presenteeism and their observations of stress-related presenteeism and its effects among workers. Cooper (1994, p. 2) referred to presenteeism as "the huge costs to public and private sector organizations of people turning up to work, who are so distressed by their jobs or some aspect of the organizational climate that they contribute little, if anything, to their work." That conceptualization of presenteeism fits well with investigations focused on the detrimental effects of the work environment on nurses, rather than an exclusive focus on the effects of illness (sickness).

The JSRPS's focal construct, *job-stress-related presenteeism*, is a psychological strain whose antecedent is job stress. It "occurs when employees are at work, but, because of job stress, only a portion of their cognitive energy is devoted to their work" (Gilbreath & Karimi, 2012). In other words, mental resources that otherwise would be devoted to work are instead diverted to efforts to cope with work-related stressors (Mathieu & Gilbreath, 2022).

The JSRPS has been increasingly used, particularly in nursing studies (e.g., Basar et al., 2022; Karimi et al., 2015; Rainbow et al., 2019). In the first study using the JSRPS (Gilbreath & Karimi, 2012), the scale had good internal consistency and it was correlated with but not redundant to a measure of employees' job stress. However, it has not been subjected to extensive validity analysis. Although there is some evidence for the scale's validity (Gilbreath & Karimi, 2012), additional validation would be helpful. In addition, the scale has not been available in the Turkish language, which is problematic given the amount of stress many Turkish nurses experience (Işık et al., 2022). This study addresses both of those needs by translating the JSRPS (Gilbreath & Frew, 2008) into Turkish and evaluating its validity and reliability.

Method

Procedure

We performed the adaptation procedure for the JSRPS based on the International Test Commission guidelines (International Test Commission, 2017) as depicted in Figure 1.

Language Validity. We used the International Test Commission guidelines to ensure that we followed best practices for adapting a scale from one language and culture to another (Hernández et al., 2020). The recommended process is known as *adaptation*, and it involves much more than simply *translation*. Some of the key steps are deciding whether a scale in a second language and culture could measure the same construct in the first language, selecting translators, conducting the translation, checking the equivalence of the scale in the second language and culture, and conducting validity studies (International Test Commission, 2017).

In accordance with the guidelines (International Test Commission, 2017), we considered the construct, presenteeism resulting from job stress, and judged that there was construct equivalence between U.S. and Turkish culture. Then the JSRPS' items were translated from English to Turkish by one of the researchers and a bilingual translator. Next, experts conversant in English evaluated the translated items in the local context (i.e., Turkey) by comparing the translated items with the original versions. After analyzing the experts' evaluations, the statements were synthesized and finalized in Turkish. Because both forward and back-translation between source and target languages is recommended (Hernández et al., 2020), the final step was a back-translation of the items and an assessment by the scale's author, who adjudged the scale translation to be accurate and faithful to the items' original meanings.

Content Validity. The Lawshe and Davis technique is the preferred content validity method as it provides a rigorous methodological approach for evaluating the validity of each scale item and the entire scale (Gilbert & Prion, 2016). It is a way to assess the degree to which the items and scale capture the focal construct. Therefore, we used the Lawshe technique to calculate the JSRPS' content validity ratio and the entire scale's content validity index. Using a content-validation form (Yusoff, 2019) designed for this purpose, 16 experts (one of them was a physician, 10 of them were nurses who had a master or doctoral degree in nursing management, and five of them were academics studying organizational behavior in healthcare settings) evaluated the scale's items. The form included both Turkish and English versions of each item. Experts read the statements in English and Turkish. They evaluated the translated one based on the original item, rating whether the Turkish statement has the same meaning as the original one. The experts' evaluations were scored as 1 = not appropriate, 2 = somewhat appropriate, or 3 = highly relevant. If more than half of the experts agree an item is highly relevant, the value of the content validity ratios (CVR) will range from 0 to 1. For example, if one collects 10 experts' views and only five of them rate the item as "highly relevant," the CVR of the item is calculated as 0. If more than half of the experts rate the item "highly relevant," the CVR value never equals to 0. In that case, it may be a value greater than 0 and less than or

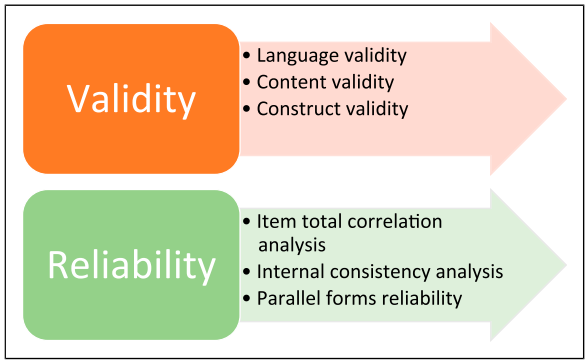

Figure 1. Procedure of validity and reliability.

equal to 1 if all experts rate the item as "highly relevant" (e.g., 0.1, 0.2, 0.3; Baghestani et al., 2019).

Sample

The next phase of our study involved data collection using a questionnaire. The purpose of this phase was to collect data for performing construct validity and internal consistency tests. Data were collected during 2021 in a training and research hospital affiliated with the Ministry of Health in Istanbul. The inclusion criteria for the participants were that they had (a) at least a bachelor's degree in nursing, (b) at least 1 year of professional experience, and (c) agreed, following informed-consent protocol, to participate in the research. Of the 378 nurses working in the hospital, data were collected from 261 who met the inclusion criteria and agreed to participate in the study.

The mean age of the participants was 30.8 (SD = 7.1). In addition, 78.2% of the nurses were female, and 57.9% were single (not married). The participants mostly had a bachelor's degree in nursing (82.6%), worked in shifts (77.0%), and worked in intensive care units (36.8%) or inpatient services (28.7%). In addition, participants' mean professional experience was 8.3 years (SD = 7.8), institutional experience was 6.7 years (SD = 6.3) years, and unit experience was 4.5 years (SD = 4.7).

Measures

Personal and Professional Information. The form used to collect demographic and professional information had 12 questions about participants' age, gender, marital status, education level, and hospital, institutional, and unit experience, work type, and monthly income.

Job-Stress-Related Presenteeism. The JSRPS consists of six items: "I'm unable to concentrate on my job because of work-related stress"; "I spend a significant proportion of my workday coping with work stress"; "work stress distracts my attention away from my job tasks"; "mental energy I'd otherwise devote to my work is squandered on work stressors"; "I delay starting on new projects at work because of stress"; and "I spend time talking to co-workers about stressful work situations." The response options range from 1 (*never*) to 5 (*always*). As the responses to the items ranged from 1 to 5, and the total scale score from 6 to 30, it was interpreted that, as the total score increased, the level of presenteeism related to work stress increased. The internal consistency coefficient of the scale as first reported was reported as .91 (Gilbreath & Karimi, 2012) and more recently as .88 (Mathieu & Gilbreath, 2022).

Stress-Related Items. The questionnaire included two stress-related items for performing parallel forms reliability. The first item was "How stressful do you think your work environment is?" with response options ranging from 0 (*Not at all*) to 10 (*Too much*). The second one was "How much do you think you can cope with this stress?" with response options ranging from 0 (*Not at all*) to 10 (*Absolutely*). Parallel forms reliability is a measure of reliability obtained by administering different versions of a scale—both containing items that assess the same concept, behavior or attitude to the same group of individuals (Fink & Litwin, 1995). The scores from the two versions can then be correlated to evaluate the consistency of results across alternate versions (Glossary for Reliability & Kansas State).

Data Collection

A researcher visited the hospital clinics to explain the concept of stress-related presenteeism and the purpose of the research to the nurses. Nurses were asked to complete the questionnaire within 1 week. One week later the researcher visited the clinics again and collected the completed questionnaires.

Data Analysis

Once the data was collected, we analyzed construct validity and conducted item analysis, Kaiser Meyer Olkin-Bartlett tests, exploratory and confirmatory factor analyses, and calculated Cronbach's alpha reliability coefficients using SPSS 22 and AMOS software.

Results

The nurses' mean total score was 17.6 (SD = 5.2) for the JSRPS. It was 8.7 (SD = 1.6) for the question "How stressful do you think your work environment is?" (0 = *Not at all*, 10 = *Too much*) and 5.7 (SD = 2.4) for the question "How much do you think you can cope with this stress?" (0 = *Not at all*, 10 = *Absolutely*).

Expert Ratings of Content Validity

In this study the content validity ratios of the JSRPS' items ranged from 0.50 to 0.87 (Supplementary file 1). Item 1, item 3 and item 6 were rated as appropriate by 8 experts and scored content validity ratios of 0.50. Item 4 and item 5 were rated as

appropriate by 14 of the experts and scored content validity ratios 0.77. And item 2 was rated as appropriate by 15 of the 16 experts and scored the highest content validity ratio (0.88). The content validity index of the scale was calculated as 0.65.

Item Total Score Correlations Reliability

We calculated the item total score correlations to assess whether the participants perceived each item to be related to the construct we sought to measure. Thus, we analyzed how related each item's score was with the entire scale score. Correlation coefficients obtained from item-total correlation analyses with the six items of the JSRPS are shown in Table 1. The item-total score correlation coefficients ranged between .44 and .77.

Construct Validity

The Kaiser-Meyer-Olkin (KMO) test is one way to assess the suitability of data for factor analysis. It tests the adequacy of the sample size, and KMO values between 0.8 and 1.0 indicate the sampling is adequate for performing construct validity tests. Therefore, we calculated the KMO value before performing exploratory and confirmatory factor analysis, and it was 0.87. Bartlett's Test of Sphericity assesses whether the variables are not orthogonal and suitable for factor analysis. A p-value less than .05 indicates that a factor analysis may be worthwhile (Shrestha, 2021). The Bartlett's test for our data was significant ($p < .001$).

We conducted both the exploratory and confirmatory factor analysis (EFA, CFA). The one-factor JSRPS explained 59.6% of the total variance in the EFA (Table 1). The one-factor structure of the scale was also confirmed by the scree plot graphic finding since the breakdown was horizontal in terms of the second dimension (Supplementary file 2). The eigenvalue of the Stress-Related Inability to Work Scale was 3.58.

The goodness-of-fit statistics of the conceptual model of the scale are in Table 2. The CFA results showed that the structural equation model of the scale was significant ($p < 0.001$). The Chi-Square/degree of freedom was 1.82 (Supplementary file 3). The root mean square error of approximation (RMSEA) was 0.056, the goodness of fit index (GFI) was 0.98, normed fit index (NFI) was 0.98, and the comparative fit index (CFI) was 0.99, confirming a good fit (McNeish & Wolf, 2021).

Parallel Forms Reliability

There is a negative relationship between the JSRPS and coping, and a positive relationship with stress ($p < 0.05$) (Supplementary file 4).

Internal Consistency Analysis

The Cronbach's alpha internal consistency coefficient of the Turkish version of the JSRPS was .86.

Table 1. Item total score correlation values and factor loadings of the items.

Items	Mean	(Standard Deviation)	Item Total Point Correlation Value (r)	Factor Loadings	% of Variance
1	2.83	(.99)	.702	0.868	59.584
2	2.98	(1.13)	.757	0.825	
3	2.60	(1.09)	.819	0.792	
4	2.77	(1.17)	.854	0.785	
5	3.05	(1.32)	.723	0.765	
6	3.36	(1.08)	.452	0.558	

r: Pearson correlation coefficient.

Table 2. Confirmatory factor analysis results.

Fit Indices	Good Fit	Adequate Fit	Acceptable Fit	Results	
χ^2/df	$0 \leq \chi^2/df \leq 3$	-	$3 \leq \chi^2/df \leq 4$	1.823	Good
GFI	$0.95 \leq GFI \leq 1$	-	$0.90 \leq GFI \leq 0.95$	0.982	Good
NFI	$0.95 \leq NFI \leq 1$	-	$0.90 \leq NFI \leq 0.95$	0.979	Good
CFI	$0.95 \leq CFI \leq 1$	-	$0.90 \leq CFI \leq 0.95$	0.990	Good
TLI	$0.95 \leq TLI \leq 1$	-	$0.90 \leq TLI \leq 0.95$	0.982	Good
RMSEA	$0 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$	$0.08 \leq RMSEA \leq 0.10$	0.056	Adequate
SRMR	$0 \leq SRMR \leq 0.05$	-	$0.05 \leq SRMR \leq 0.10$	0.024	Good

df: degree of freedom, GFI: goodness of fit index, NFI: Normed fit index, CFI: Comparative fit index, TLI: Tucker–Lewis index, RMSEA: Root mean square error of approximation, SRMR: Standardized root mean square residual.

Discussion

Although coping with job stress is something familiar to nurses around the world, this is especially true in Turkey. Turkey has only 2.7 nurses per 1000 population compared with the OECD European Region average of 8.3 per 1000 (OECD/European Union, 2022), which means nurses in Turkey care for four times more population compared with the European Union countries (Supplementary file 5). As recent studies have highlighted work overload as one of the most pernicious work stressors (Basar et al., 2022; Der Feltz-Cornelis et al., 2020; Manzano-García & Ayala, 2017), one can surmise that that nurses in Turkey are at high risk of stress-related negative outcomes.

When one considers the economic crises some countries are experiencing and their effect on nurses and nursing students who are the future's nursing professionals, we may also expect that economic conditions could exacerbate the already high levels of stress (Manzano-Garcia et al., 2017). Today, even developed countries' health care systems face threats of strikes and high turnover (Oliver, 2023). The situation in Turkey is even more dire because of the higher inflation rates (Simon & Echter, 2023) and lower nursing salaries (Oban et al., 2022).

Those influences on nurses, which affect their patients, are reasons why we undertook this study to translate and partially validate the scale prepared by Gilbreath & Frew (2008), the JSRPS. It is essential to test scales in terms of validity, reliability, and cultural appropriateness so that research using them is credible, accurate, and actionable. To that end, we share our conclusions regarding the JSRPS.

Language adaptation is one of the first steps for adapting a scale from one language to another. The items and meanings must be translated from the original to the target language. In this study, the recommended steps (Çapık et al., 2018; Hernández et al., 2020) were followed while translating the JSRPS.

Ayre & Scally (2014) reported an acceptable cut off value for CVR as 0.50 and number of raters on expert panels as 12. We employed 16 experts to evaluate and score each of the JSRPS's items. Our panel evaluated the scale's items as "quite appropriate" (Supplementary file 1). Three items got the lowest acceptable value, and the experts judged this to be a function of cultural differences or diverse perceptions between U.S. and Turkish culture. Therefore, those items were re-checked and further analyzed, and—after back-translation—discussed with the JSRPS's originator. Those processes led us to retain all the six of them.

A correlation coefficient of 0.30 and above of an item with the entire scale is interpreted as good for reliability. We assessed whether the item total scores correlated with the entire scale scores of the participants. That measure assesses whether each item is perceived by the participants to be consistent with the whole scale. However, this measure is not solely relied on; that is, one should not automatically delete items below that value, but evaluate them for possible removal (Boateng et al., 2018). Decisions about which scale items to retain are also informed by evaluating the item's effect on the Cronbach's alpha coefficient (Polit & Beck, 2020). In this study, none of the items correlated with the total scale score less than 0.30. In addition, removal of none of the items would have significantly improved the Cronbach's alpha value when deleted. Based on those analyses, we retained all of the JSRPS' items.

Both the EFA results and inspection of the Scree-plot curve indicated that the Turkish version of the JSRPS has a one-factor structure. The values of the validity indices of the confirmatory factor analysis also were good (McNeish & Wolf, 2021). Therefore, considering the fit indices and explained variance (Tables 1 and 2), our results indicate that the one-factor JSRPS-Turkish form is acceptable.

Because it is recommended to test scales' stability, we did so using parallel form realiability anlaysis. We used two visual analog items ranging from 0 to 10 to determine whether participants' responses were correlated with their JSRPS scores. Both items' scores were correlated to the scale score. Thus, that analysis confirmed that the participants answered the scale items and other questions consistently. Participants answered the 10-item visual analog item which asked "How stressful do you think your work environment is?" which was expected to correlate positively with the participants' adapted scale scores. It was positively correlated ($r = .42$, $p < .001$). Also nurses' scores on the second item ("How much do you think you can cope with this stress?"), which was expected to correlate negatively with the participants' adapted scale scores, was negatively correlated ($r = -.34$, $p < .001$).

The Cronbach's alpha value for the JSRPS was .86. This value is higher than what is generally considered acceptable (Nunnally, 1978; Sürücü & Maslakçı, 2020). Although the scale's high alpha does not imply that it is unidimensional, it does indicate that the scale has good internal consistency (Taber, 2018), and our results are comparable with the previous studies (George et al., 2017; Karimi et al., 2015; Rainbow et al., 2020).

Limitations

Our findings are limited to our research sample—one hospital in one city. This limitation should be considered in interpreting our results. It is therefore recommended to test the scale by using it in research conducted with employees in different institutions and sectors. It will also be helpful to conduct exploratory and confirmatory factor analyses using different samples of employees. In addition, though this study followed current best practices in scale adaptation and content validation, additional tests of the JSRPS could be conducted. For example, tests of its predictive validity, concurrent validity, and discriminant validity will be helpful.

Although we planned to reach out to more nurses to collect data for performing EFA and CFA on different samples and assessing the stability of the JSRPS, it was not possible because of Covid-19 contact precautions that were enacted during the study. We could not re-visit the hospital and collect data to assess test-retest reliability.

Implications for Nursing Management

Many employers use employee surveys to track how the work environment is affecting employees and to take action to shape it in positive directions. As Lowe (2002, p. 49) observed, "diagnosing the extent of work environment problems in healthcare is the first step in designing strategies to improve the quality of healthcare workplaces." We believe the JSRPS is one measure that should be used in those initiatives. It is one indicator of the toll the workplace is taking on nurses, and it will be helpful in understanding their attitudes, behavior, and needs. Scores on the JSRPS could be included in organizations' "dashboard indicators" of their workplace psychosocial conditions to monitor its effects on their employees (Gilbreath, 2008).

Conclusion

Nurses play a crucial role in multifaceted, complex, essential health care services. They are are social beings who often must deal with high-volume demands for patient care. Consequently, it is vital to attend to the psychosocial environment in which nurses perform their challenging duties, and measuring and addressing presenteeism is one way to do that. We have assessed one scale for doing that, the JSRPS (Gilbreath & Frew, 2008), and conclude that the Turkish-language version is reliable and valid enough for use in research if its need for additional testing is acknowledged. In particular, we recommend that it be tested in different institutions, industries, and study populations, and subjected to further validity analysis.

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Author Contributions

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Methodology: Arzu Kader Harmancı Seren, Brad Gilbreath
Formal analysis and investigation: Nihal Beklemis, Arzu Kader Harmancı Seren
Original draft preparation: Nihal Beklemis
Review and editing: Arzu Kader Harmancı Seren, Brad Gilbreath
Supervision: Brad Gilbreath

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Data Availability Statement

The data that support the findings of this study are available on request from Arzu Kader Harmanci Seren (arzukader@gmail.com) because of ethical considerations.

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Supplemental Material

Supplemental material for this article is available online.

References

Ayre, C., & Scally, A. J. (2014). Critical values for lawshe's content validity ratio: Revisiting the original methods of calculation. *Measurement and Evaluation in Counseling and Development*, *47*(1), 79–86. https://doi.org/10.1177/0748175613513808

Baghestani, A. R., Ahmadi, F., Tanha, A., & Meshkat, M. (2019). Bayesian critical values for Lawshe's content validity ratio. *Measurement and Evaluation in Counseling and Development*, *52*(1), 69–73. https://doi.org/10.1080/07481756.2017.1308227

Basar, U., Dogan, A., & Ertugrul, B. (2022). Antecedents of nurse burnout during a pandemic: Managerial way out. *Journal of Health Management*, 1–10. https://doi.org/10.1177/09720634221121364

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, *6*. https://doi.org/10.3389/fpubh.2018.00149.

Bogossian, F., Winters-Chang, P., & Tuckett, A. (2014). "The pure hard slog that nursing is.": A qualitative analysis of nursing work. *Journal of Nursing Scholarship*, *46*(5), 377–388. https://doi.org/10.1111/jnu.12090

Çapık, C., Gözüm, S., & Aksayan, S. (2018). Intercultural scale adaptation stages, language and culture adaptation: Updated guideline. *Florence Nightingale Journal of Nursing*, *26*(3), 199–210. https://doi.org/10.26650/FNJN39748

Cooper, C. L. (1994). The costs of healthy work organizations. In C. L. Cooper, & S. Williams (Eds), *Creating healthy work organizations* (pp. 1–5). Wiley.

Dalkılıç, E., & Harmancı Seren, A. K. (2018). Presenteeism: Reasons and results. *Journal of Health and Nursing Management*, *5*(2), 123–131. https://doi.org/10.5222/SHYD.2018.123

Demerouti, E., Le Blanc, P. M., Bakker, A. B., Schaufeli, W. B., & Hox, J. (2009). Present but sick: A three-wave study on job demands, presenteeism and burnout. *Career Development International*, *14*(1), 50–68. https://doi.org/10.1108/13620430910933574

Der Feltz-Cornelis, V., Maria, C., Varley, D., Allgar, V. L., & De Beurs, E. (2020). Workplace stress, presenteeism, absenteeism, and resilience amongst university staff and students in the COVID-19 lockdown. *Frontiers in Psychiatry*, *11*. https://doi.org/10.3389/fpsyt.2020.588803.

Fink, A., & Litwin, M. S. (1995). *How to measure survey reliability and validity* (*7*). Sage.

Freeling, M., Rainbow, J. G., & Chamberlain, D. (2020). Painting a picture of nurse presenteeism: A multi-country integrative review. *International Journal of Nursing Studies*, *109*(September 20), 103659. https://doi.org/10.1016/j.ijnurstu.2020.103659.

George, R., Chiba, M., & Scheepers, C. B. (2017). An investigation into the effect of leadership style on stress-related presenteeism in South African knowledge workers. *SA Journal of Human Resource Management*, *15*(0), 1–13. https://doi.org/10.4102/sajhrm.v15i0.754

Gilbert, G. E., & Prion, S. (2016). Making sense of methods and measurement: Lawshe's content validity index. *Clinical Simulation in Nursing*, *12*(12), 530–531. https://doi.org/10.1016/j.ecns.2016.08.002

Gilbreath, B. (2008). Creating career-conducive organizations: A primary intervention approach. *Advances in Developing Human Resources*, *10*(1), 8–31. https://doi.org/10.1177/1523422307310109

Gilbreath, B., & Frew, E. J. (2008). *The job-stress-related presenteeism scale [measurement instrument]*. Malik and Seeme Hasan School of Business, Colorado State University Pueblo.

Gilbreath, B., & Karimi, L. (2012). Supervisor behavior and employee presenteeism. *International Journal of Leadership Studies*, *7*(1), 114–131.

Glossary for Reliability, & Kansas State, University. https://www.kstate.edu/ksde/alp/resources/Glossary-Module2.pdf

Hernández, A., Hidalgo, M. D., Hambleton, R. K., & Gómez Benito, J. (2020). International test commission guidelines for test adaptation: A criterion checklist. *Psicothema*, *32*(3), 390–398. https://doi.org/10.7334/psicothema2019.306

International Test Commission. (2017). *The ITC guidelines for translating and adapting tests* (2nd edition). https://www.intestcom.org/files/guideline_test_adaptation_2ed.pdf

Işık, O., Tengilimoğlu, D., Tosun, N., Zekioğlu, A., & Tengilimoğlu, O. (2022). Evaluating the factors (stress, anxiety and depression) affecting the mental health condition of nurses during the COVID-19 pandemic. *Evaluation and The Health Professions*, *45*(1), 86–96. https://doi.org/10.1177/01632787211062660

Karimi, L., Cheng, C., Bartram, T., Leggat, S. G., & Sarkeshik, S. (2015). The effects of emotional intelligence and stress-related presenteeism on nurses' well-being. *Asia Pacific Journal of Human Resources*, *53*(3), 296–310. https://doi.org/10.1111/1744-7941.12049

Lowe, G. S. (2002). High-quality healthcare workplaces: A vision and action plan. *Hospital Quarterly*, *5*(4), 49–56, https://doi.org/10.12927/hcq.16509, https://www.researchgate.net/profile/Graham-Lowe-2/publication/11099132_High-Quality_Healthcare_Workplaces_A_Vision_and_Action_Plan/links/550afdb70cf265693cef5051/High-Quality-Healthcare-Workplaces-A-Vision-and-Action-Plan.pdf

Manzano-García, G., & Ayala, J. C. (2017). Insufficiently studied factors related to burnout in nursing: Results from an e-Delphi study. *PloS One*, *12*(4), e0175352. https://doi.org/10.1371/journal.pone.0175352

Manzano-García, G., Montañés, P., & Megías, J. L. (2017). Perception of economic crisis among Spanish nursing students: Its relation to burnout and engagement. *Nurse Education Today*, *52*(May 2017), 116–120. https://doi.org/10.1016/j.nedt.2017.02.020.

Mathieu, C., & Gilbreath, B. (2022). Measuring presenteeism from work stress: The job-stress-related presenteeism scale. *Journal of Occupational and Environmental Medicine*, *10*. https://doi.org/10.1097/JOM.0000000000000275310-1097.

McNeish, D., & Wolf, M. G. (2021). Dynamic fit index cutoffs for confirmatory factor analysis models. *Psychological Methods*. https://doi.org/10.1037/met0000425.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.

Oban, V., Dogan, M. B., & Dikec, G. (2022). A sentiment analysis of Turkish tweets shared in nursing week during the pandemic. *Journal of Health and Nursing Management*, *9*(2), 230–238. https://doi.org/10.54304/SHYD.2022.20053

OECD/European Union. (2022). *Health at a glance: Europe 2022: State of health in the EU cycle*. OECD Publishing. https://doi.org/10.1787/507433b0-en

Oliver, D. (2023). David oliver: "If you don't like it, just leave!" won't solve the NHS workforce crisis. *British Medical Journal*, *380*. https://doi.org/10.1136/bmj.p4.

Polit, D., & Beck, C. (2020). *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams and Wilkins.

Rainbow, J. G., Drake, D. A., & Steege, L. M. (2020). Nurse health, work environment, presenteeism and patient safety. *Western Journal of Nursing Research*, *42*(5), 332–339. https://doi.org/10.1177/0193945919863409

Rainbow, J. G., Gilbreath, B., & Steege, L. M. (2019). How to know if you're really there: An evaluation of measures for presenteeism in nursing. *Journal of Occupational and Environmental Medicine*, *61*(2), Article e25–e32. https://doi.org/10.1097/JOM.0000000000001506

Rainbow, J. G., & Steege, L. M. (2017). Presenteeism in nursing: An evolutionary concept analysis. *Nursing Outlook*, *65*(5), 615–623. https://doi.org/10.1016/j.outlook.2017.03.005

Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, *9*(1), 4–11. https://doi.org/10.12691/ajams-9-1-2

Simon, H., & Echter, A. (2023). *Beating inflation: An agile, concrete and effective guide*. Springer. https://doi.org/10.1007/978-3-031-20093-9_2

Skagen, K., & Collins, A. M. (2016). The consequences of sickness presenteeism on health and wellbeing over time: A systematic review. *Social Science and Medicine*, *161*(July 2016), 169–177. https://doi.org/10.1016/j.socscimed.2016.06.005.

Sürücü, L., & Maslakçı, A. (2020). Validity and reliability in quantitative research. *Business and Management Studies: An International Journal*, *8*(3), 2694–2726. https://doi.org/10.15295/bmij.v8i3.1540

Taber, K. S. (2018). The use of cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Vänni, K. J., Neupane, S., Siukola, A. E., Karinen, H. M., Pursio, H. K., Uitti, J., & Nygård, C. H. (2018). The Presenteeism Scale as a measure of productivity loss. *Occupational Medicine*, *68*(8), 512–518. https://doi.org/10.1093/occmed/kqy124

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. *Resource*, *11*(2), 49–54. https://doi.org/10.21315/eimj2019.11.2.6