

Relationship between work–family conflict and turnover intention in nurses: A meta-analytic review

Bora Yildiz¹   | Harun Yildiz²  | Ozlem Ayaz Arda³ 

¹Faculty of Economics, Department of Management, Istanbul University, Istanbul, Turkey

²Ömer Seyfettin Faculty of Applied Sciences, Bandırma Onyedü Eylül University, Bandırma/Balıkesir, Turkey

³Brunel University London, Uxbridge, UK

Correspondence

Bora Yildiz, Istanbul University, Faculty of Economics, Department of Management, Beyazıt-Fatih, Istanbul, Turkey.
Email: borayildiz@istanbul.edu.tr

Funding information

The authors declared that this study has received no financial support.

Abstract

Aim: This meta-analytic review aimed to synthesize and analyse studies that explored the relationship between nurses' work–family conflicts and turnover intentions.

Design: This meta-analytical review was conducted according to the Joanna Briggs Institute guidelines and PRISMA checklist.

Data Sources: A total of 191 ($k = 14$) publications published between 2005 and 2019 in English, including grey literature on turnover intention and work–family conflict, were retrieved from PubMed, PsycINFO, Web of Science, ProQuest and Scopus databases.

Review Methods: Studies on the relationship between work–family conflict and turnover intention were summarized.

Results: An overall effect size of $r = .28$ ($N = 5781$, 95% CI [0.23–0.33]) was obtained, indicating a moderate, positive and significant relationship between work–family conflict and turnover intention. The moderator analysis showed that individualism and long-term orientation accounted for 90% of effect size heterogeneity of work–family conflict and turnover intention relationship.

Conclusion: Exploring the correlation between work–family conflict and turnover intention can provide guidelines and recommendations for the development of strategies to promote nurse retention and alleviate the nursing shortage. National culture, particularly individualism and long-term orientation, were found to play a significant moderator role in this relationship. Cultures that are highly individualistic and have a long-term orientation have a diminishing effect on the relationship between work–family conflict and turnover intention.

Impact: Work–family conflict and turnover intention are significantly correlated factors regardless of the studies' cultural characteristics examined in this study. Policymakers and managers should consider this finding and develop strategies that provide a balance-oriented work design to prevent nurse shortage.

KEYWORDS

meta-analysis, national culture, nurse, nursing, review, turnover intention, work–family conflict

1 | INTRODUCTION

In the ongoing COVID-19 pandemic, which has a massive impact on business and life, pressure on healthcare employees and increasing workloads have gone beyond the normal (Yildiz & Elibol, 2020). Particularly, the resulting overload has caused employees to sacrifice themselves to save others' lives and neglect their family lives. Nurses, as healthcare professionals, play an essential role in this tough process (Haddad et al., 2020). The need for them became even more pronounced during this period. For that reason, understanding the drivers of nurses' intention to leave the profession or the organization is critical in creating employee commitment and satisfaction. Among these drivers, shift work and long working hours (Caruso, 2014), high workloads and demands on the individuals, staff shortage (McKnight et al., 2020) and environmental factors at the workplace have been associated with work-family conflict and eventually create not only an intention but also an action for leaving their institutions for the nurses.

1.1 | Background

Turnover, which occurs because of unsatisfactory and stressful work environments, has adverse outcomes on healthcare institutions by leading to nursing shortage (Haddad et al., 2020; Li et al., 2018). One of the significant drivers of staff resignations is the turnover intention, which refers to 'a conscious and deliberate willfulness to leave the organization' (Tett & Meyer, 1993, p. 262). In recent years, while the demand for nurses has increased, rewards have decreased and working conditions have deteriorated, thereby increasing turnover intention (Dåderman & Basinska, 2016).

Work-family conflict is an essential determinant of turnover intention (Huyghebaert et al., 2018; Pisarski et al., 2006). For the present study, work-family conflict is defined as a state in which there is an imbalance between an individual's work and family roles where work responsibilities spill over to the family side (Netemeyer et al., 1996). Organizational issues such as stressful work environments and inadequate human resources management practices are the main causes of work-family conflict (Boamah & Laschinger, 2016). Unlike other professions, nursing mostly consists of women (Dåderman & Basinska, 2016); therefore, nurses need to balance responsibilities at home and at work. Similarly, nurses encounter multiple and conflicting demands from patients' needs, organizational and family-based demands (Gandi et al., 2011). Therefore, it is not easy to maintain work-family balance while working shifts as well as the housework and childcare duties (Kim & Windsor, 2015). These responsibilities increase stress levels and make nurses prone to work-family conflict (Battistelli et al., 2013). Achieving stability between job and family expectations is difficult (Sabokro et al., 2013), but if managerial and organizational measures are taken, this conflict can become more manageable.

In recent years, work-family conflict has become more complicated because of the changes in social relations, workplaces and home environments. The changing environment that surrounds us has become more uncertain and unpredictable, especially during the COVID-19 pandemic. Consequently, these circumstances bring to light the importance of work-family conflict, which poses serious risks for individuals' physical and mental health (Eby et al., 2005). Although scholars generated a significant amount of research related to work-family conflict, health sector-specific research is relatively limited. Being one of the most important antecedents of nurses' turnover intention (Huyghebaert et al., 2018), work-family conflict causes a considerable contradiction between job and family responsibilities in affecting the blurred gender roles and changing employee values (Greenhaus & Powell, 2006). The new normal that we all adapt into, mounted the questioning of not only our ordinary lives but also our existing values and routines which will have the potential to change the game in every aspect of our work lives. Undoubtedly, health care personnel, particularly nurses, will be the most influential workforce in this new normal. Therefore, understanding the most prominent factors in their turnover intentions and taking actions accordingly for the relevant causes of turnover intention become vital for health sector decision-makers and professionals to retain their key healthcare staff.

Even though these discussions shed light on the importance of the relationship between work-family conflict and turnover intention, to our knowledge, no study illustrates the general framework of the existing relationships nursing settings. In line with the underlying objective of expanding the knowledge on the antecedents of turnover intentions for nurses, we used meta-analysis.

This meta-analytic review includes the published research which studied the link between work-family conflict and turnover intention of nurses. Meta-analytic reviews include different studies that have unique characteristics, national cultures may account for this heterogeneity (Li et al., 2018). Based on this idea, given the review sample from fourteen different countries, we propose that Hofstede's (2020) national cultural dimensions of power distance, masculinity, long-term orientation, indulgence, uncertainty avoidance and individualism may account for the variability of the effect size of work-family conflict-turnover intention relationship.

2 | THE REVIEW

2.1 | Aim

The aim of this review was to summarize studies on the relationship between nurses' work-family conflict and turnover intention. In line with this aim, this review addresses the following questions:

RQ1. What is the effect size of the relationship between nurses' work-family conflict and turnover intention?

RQ2. Is the effect size homogeneous or heterogeneous?

RQ3. If the effect size is heterogeneous, which moderators lead to this heterogeneity?

2.2 | Design

This meta-analytical review was conducted according to the Joanna Briggs Institute guidelines (Joanna Briggs Institute, 2019) and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA; Mother et al., 2010) checklist. This review summarized the findings of past researches to provide a holistic framework of the relationship between the work-family conflict and turnover intention of nurses.

2.3 | Search methods

The publication pool was created by searching online databases: Web of Science, PubMed, Scopus, PsycINFO and ProQuest. To obtain recently published studies relevant to work-family conflict and turnover intention, the search included all types of publications that were published before March 2020. To provide maximum sensitivity, we use the title, keyword and abstract option of EndNote(X9) software. Key search terms included nursing* nurse*, work-family conflict*, work-life conflict* work-family interference*, turnover intention*, *turnover and intention to quit* (see Table 1 for search results).

2.4 | Quality appraisal

All articles were examined for quality with respect to the published 'Quality Assessment and Validity Tool for Correlational Studies' (Cicolini et al., 2014). This assessment tool consists of 13 questions for checking and evaluating the design, sample, measurement and statistical analysis of each study (Table 2). According to this tool, the total scores of the publications were categorized as low (0–4), medium (5–9) or high (10–14). Two coders who were familiar with the work-family conflict and turnover literature coded the studies using an excel sheet. The coding details of all studies included in this meta-analysis

are presented in Table 2. To ensure intercoding reliability between the two coders, Cohen's (1960) weighted Kappa correlation coefficient was used ($r = 0.82$; 95% CI [0.48–1.00]). The result of this test indicated that inter-coding reliability between the two coders was robust.

2.5 | Inclusion criteria

We included publications that met the following criteria: (1) papers were published in English, (2) samples were of nurses, (3) studies investigated the relationship between work-family conflict and turnover intention, (4) studies reported at least a correlation or beta coefficient for the variables, and (5) studies clearly provided a construct definition of work-family conflict and turnover intention.

2.6 | Exclusion criteria

The exclusion criteria were as follows: (a) studies written in other languages but archived as if written in English (b) studies reporting incomplete data, (c) replications such as a paper published as both dissertation and article, (d) studies have poor statistics, (d) book chapters, reviews, editorials, (e) studies that have no correlation results and sample size information, and (f) studies that their corresponding authors were not available.

2.7 | Study selection and outcomes

We set our search criteria as 'no time-limited' and found 191 studies in the electronic databases (Figure 1). First, all records were imported into EndNote (X9) reference management software. Then, duplicate studies were eliminated, and a total of 82 publications were selected for screening. We screened abstracts, correlation and regression results, and reliability levels of 18 publications that met the targeted criteria. After reviewing these articles, four publications were excluded from the study; one was related to the occupational turnover intention that refers to permanently giving up the nursing job, and three were outliers. Finally, 14 publications published between the dates of 2005 and

TABLE 1 Search results

Database	Number of articles	Search terms
Web of science	134	nursing* nurse*, work-family conflict*, work-life conflict* work-family interference*, turnover intention*, turnover*, intention to quit*
Scopus	13	
ProQuest	15	
PubMed	7	
PsycINFO	4	
Duplicates removed	91	
Studies selected for synthesis by three reviewers	18	
Final study selection (after quality selection)	14	

*Refers that these keywords searched in title, keywords, and abstract of the selected databases by using EndNote X9 software.

TABLE 2 Quality assessment scores

Criteria	Afsar and Rehman (2017)	Huyghebaert et al. (2018)	Sabokro et al. (2013)	Alishutwi (2016)	Dion (2006)	Battistelli et al. (2013)	Rajkonwar and Rastogi (2018)	Cohen and Kirchmeyer (2005)	Boamah and Laschinger (2016)	Pisarski et al. (2006)	Zhang et al. (2019)	Däderman and Basinska (2016)	Yamaguchi et al. (2016)	Han et al. (2015)	
DESIGN															
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	
SAMPLE															
2	0	1	1	0	1	1	1	0	0	0	1	0	0	0	
3	0	1	1	1	1	1	1	0	0	0	1	0	1	0	
4	1	1	1	0	1	0	1	1	1	1	1	1	1	1	
5	1	1	1	1	1	1	0	0	1	0	1	1	1	0	
6	0	0	1	0	0	1	1	1	0	0	0	0	1	1	
MEASUREMENT															
Work-family conflict (IV) [assess for IV correlated with DVs only]															
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Influence on the measure of turnover intention (DV)?															
9	1	1	0	1	1	0	1	1	1	0	1	0	0	1	
10	2	2	2	2	2	2	2	2	2	2	2	0	0	1	
11	1	1	1	1	1	1	1	0	1	1	1	1	1	0	

(Continues)

TABLE 2 (Continued)

Criteria	Afsar and Rehman (2017)	Huyghebaert et al. (2018)	Sabokro et al. (2013)	Alshutwi (2016)	Dion (2006)	Battistelli et al. (2013)	Rajkonwar and Rastogi (2018)	Cohen and Kirchmeyer (2005)	Boamah and Laschinger (2016)	Pisarski et al. (2006)	Zhang et al. (2019)	Däderman and Basinska (2016)	Yamaguchi et al. (2016)	Han et al. (2015)
STATISTICAL ANALYSIS														
12 If multiple outcomes were studied, are correlation analysed?	1	1	1	1	1	1	1	1	1	1	1	1	0	1
13 Were outliers managed?	0	0	0	1	0	0	0	0	0	1	0	1	0	0
TOTAL	10	12	12	11	12	11	12	8	10	9	12	8	8	8
Overall study validity rating (circle one) (0-4 = LO; 5-9 = MED; 10-14 = HI)	3	3	3	3	3	3	3	2	3	2	3	2	2	2

2019, of which 11 were research articles, 2 were dissertations and 1 published conference paper were included in the review (see Table 1).

2.8 | Data abstraction

The data abstraction form created by three reviewers. The following data were extracted: authors; year, country, and publication type; study design; subjects; theory; measure; reliability Cronbach's alpha; mean age, analysis, variables associated with turnover intention; quality assesment scores (see Table 3 for further details).

2.9 | Synthesis

In meta-analysis studies, publication bias is a serious problem with misleading consequences. Although the funnel plot is a visual way to show whether publication bias exists or not, it is less powerful when compared with the other symmetry tests (Sedgwick, 2013), because there are several reasons behind asymmetry in funnel plots (Sterne et al., 2011). Points in Figure 2a,b represent each study, and studies that are located in the upper side of the funnel plot have large effect size while the smalls are placed at the bottom side of the funnel plot. Despite the fact that the distribution of studies is symmetrical about the middle line, we sought to determine whether there was a publication bias or not ($k < 25$ studies) by performing Egger's regression test (Egger et al., 1997) and a rank correlation test (Begg & Mazumdar, 1994). The results of the Egger's regression test ($z = 0.8191$; $p = 0.41$) and the rank correlation test ($r = 0.23$; $p = 0.20$) were not statistically significant. In addition to these analyses, a fail-safe N analysis was conducted to detect publication bias. Analyses developed by Rosenthal (1979), revealed no publication bias in our study ($N = 1,986$). In other words, the sample size of this review exceeds the recommended number of sample size which is 5,781 in this study. Based on these results, there was no publication bias in this study.

To address our research questions, Hunter and Schmidt's (1990, 2004) three-stage meta-analytic approach was followed, which included (1) testing the main effect size, (2) testing heterogeneity (the moderator existence test) and (3) testing the moderating effects.

Extracted data were encoded using the R program (R Core Team, 2020). The data were analyzed by using the following packages: "metaphor" (Viechtbauer, 2010), "robumeta" (Fisher et al., 2017), "meta" (Balduzzi et al., 2019), and "psychmeta" (Dahlke & Wiernik, 2019). Correlation coefficients and sample sizes were used to calculate the effect size. When publications reported regression coefficients only, we transformed beta coefficients to the correlation coefficient using the formula $r = b + 0.5 \lambda$ suggested by Peterson and Brown (2005). According to this formula, λ refers to an indicator of beta; if the beta is negative, λ equals zero; if it is positive, then the indicator's value is one. In correlational meta-analysis, because Pearson's r is not normally distributed, we converted these values to Fisher's Z statistic (Swanson & Holton, 2005).

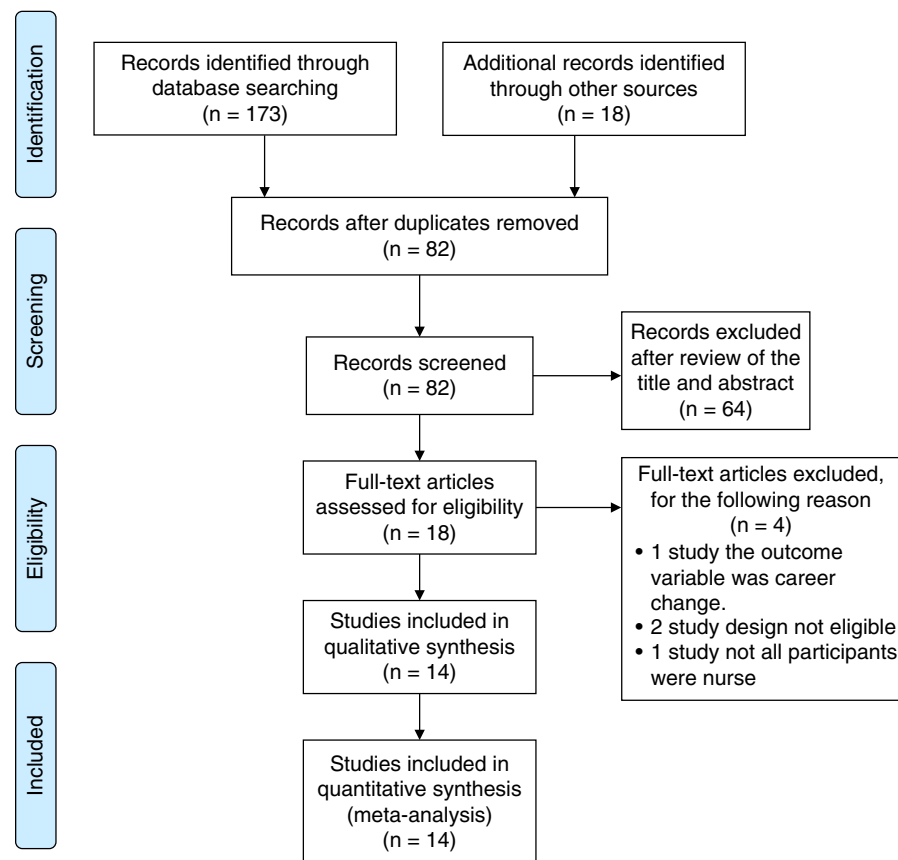


FIGURE 1 Flow diagram of literature search

The samples in this study were heterogeneous because of the different sample sizes, different populations and the variation in the characteristics of the included studies. As seen in Figure 2, because these characteristics signal heterogeneity, random-effects models were selected (Hedges & Vevea, 1998; Borenstein et al., 2011). To test the homogeneity of correlations across the studies, the I^2 statistic was used. The I^2 test describes the source of true heterogeneity not sampling error in studies (Borenstein et al., 2011; Huedo-Medina et al., 2006). I^2 values of 25%, 50% and 75% represent low, medium and high heterogeneity respectively (Higgins et al., 2003). Another indicator of heterogeneity is the Tau-squared (τ^2) statistic; if the value of this test is zero, it means there is no heterogeneity (Quintana, 2015).

High-level heterogeneity may stem from moderator variables (Quintana, 2015). Therefore, we followed the moderator procedure outlined in past studies (Del Re, 2015). To test the moderator effect, we selected the mixed-effects model (Viechtbauer, 2010).

2.10 | Moderator coding

Work-family conflict is interpreted in different ways across cultures. For example, while conflict is perceived as an opportunity for development in China, it is interpreted as a threat in the United States (Aycan, 2008). For that reason, the role of cultural variations is one of the critical factors that affect the strength of the relationship between work-family conflict and turnover intention (Billing

et al., 2014). According to Hofstede's (2020) cultural dimensions, the authors coded national culture, namely individualism, power distance, masculinity, uncertainty avoidance, long-term orientation and indulgence. According to this taxonomy, power distance refers to the expecting and accepting the distribution of power. Individualism is related to the interdependence of the members of a society. While masculinity is related to the motivations of people, femininity is about liking what to do. As the name implies, uncertainty avoidance is about the tolerance of ambiguity or inconstancy and the long-term orientation is about seeing the big picture of past, present and future and maintaining links among time spans. Finally, indulgence stems from the upbringing of individuals in a society and refers to the controlling of the desires and the impulses of the individuals (Hofstede, 2020). The national culture scores of each country, as continuous moderators, were obtained from Hofstede's (2020) website. The culture scores for each dimension range from 1 to 100.

3 | RESULTS

3.1 | Study characteristics

The sample of the studies consists of nurses ($N = 5,781$) mostly working in hospitals, nursing homes and healthcare centres. The detailed characteristics of the individual studies are presented in Table 3.

TABLE 3 Study characteristics

Author (year), country, type	Study design	Subjects	Theory	Measures	Reliability Cronbach's α	Mean age	Analysis	Variables associated with turnover intention	Quality assessment
Zhang et al. (2019), China, Article	Longitudinal	236 nurses from 7 tertiary hospitals	Conservation of resources theory	WFC - Carlson and Kacmar (2000); TI - Mitchell et al. (2001)	WFC - 0.94 TI - 0.92	N/A	Correlation, regression	Job satisfaction, life satisfaction	12
Huyghebaert et al. (2018), France, Article	Cross-sectional and time-lagged	269 nurses from 18 healthcare centres	Self-determination theory	WFC - Lourel et al. (2005); TI - Crossley et al. (2002)	WFC - 0.88 TI - 0.85	40.3	Correlation, SEM	Psychological safety climate and psychological need thwarting	12
Rajkonwar and Rastogi (2018), India, Article	Cross-sectional, descriptive	160 nurses from 26 hospitals	N/A	WFC - Carlson and Kacmar (2000); TI - Zopiatis et al. (2014)	WFC - 0.84 TI - 0.83	N/A	Correlations, regression	Work-family enrichment	12
Afsar and Rehman (2017), Pakistan, Article	Cross-sectional, descriptive	187 nurses in 4 hospitals	Job embeddedness theory and workforce flexibility	WFC - Netemeyer et al. (1996); TI - Abrams et al. (1998)	WFC - 0.83 TI - 0.88	36.6	Correlation, SEM	Job embeddedness, workforce flexibility, work-family conflict	10
Yamaguchi et al. (2016), Japan, Article	Longitudinal	1778 nurses (685, 472, and 621 nurses from hospitals, home healthcare, and nursing homes)	N/A	WFC - Carlson and Kacmar (2000); TI - self-developed	WFC - 0.89 TI - N/A	N/A	Correlation, regression	Job control, work-family culture, family stress	8
Däderman and Basinska, (2016), Poland, Article	Cross-sectional, descriptive	188 nurses from various hospitals	The conservation of resources theory	WFC - Netemeyer et al. (1996); TI - Däderman and Basinska, (2016)	WFC - 0.89 TI - N/A	41	Correlation, regression	Quantitative workload, interpersonal conflicts at work, work-family conflict	8
Boamah and Laschinger (2016), Canada, Article	Cross-sectional, descriptive	215 nurses from one hospital	Work-life model and work-life balance theory	WFC - Fisher-McAuley et al. (2003); TI - Kelloway et al. (1999)	WFC - 0.92 TI - 0.87	27	Correlation, SEM	Burnout, work-family interference, areas of work-life	10
Alshutwi (2016), Saudi Arabia, Dissertation	Cross-sectional, descriptive	113 nurses	Workplace support and turnover intention conceptual model	WFC - Netemeyer et al. (1996); TI - Cammann et al. (1979)	WFC - 0.88 TI - 0.76	27.9	Correlation, regression	Stress, family-supportive supervisor behaviours	11
Han et al. (2015), South Korea, Article	Cross-sectional, descriptive	423 nurses from 5 general hospitals	Stress, appraisal, and coping theory	WFC - Carlson and Kacmar (2000), Yeon (2010); TI - Lee and Lee (2000)	WFC - 0.84 TI - 0.84	32.9	Correlation, SEM	Job stress, job burnout	8
Battistelli et al. (2013), Italy, Article	Cross-sectional, descriptive	440 nurses from one hospital	Role conflict theory and job embeddedness theory	WFC - Netemeyer et al. (1996); TI - Battistelli et al. (2014)	WFC - 0.91 TI - 0.89	35.4	Correlation, SEM	Job satisfaction, organizational commitment, community embeddedness	11
Sabokro et al. (2013), Iran, Proceeding	Cross-sectional, descriptive	494 nurses from various hospitals	The conservation of resources theory	WFC - Netemeyer et al. (2004); TI - self-developed	WFC - 0.84 TI - 0.82	N/A	Correlation, SEM	Work-family conflict, family work-conflict, job leave intention, organizational support	12

(Continues)

TABLE 3 (Continued)

Author (year), country, type	Study design	Subjects	Theory	Measures	Reliability Cronbach's α	Mean age	Analysis	Variables associated with turnover intention	Quality assessment
Pisarski et al. (2006), Australia, Article	Cross-sectional, descriptive and time-lagged	1257 nurses from private and public hospitals	Shift-work intervention model	WFC - Bohle and Tilley (1998); TI - Caplan et al. (1980)	WFC - 0.86 TI - 0.89	37.5	Correlation, SEM	Job satisfaction, physical health, psychological well-being, supervisor support, colleague support, team identity, team climate, control, work-life conflict, negative affect	9
Dion (2006), USA, Dissertation	Cross-sectional, descriptive	115 nurses	N/A	WFC - Netemeyer et al. (1996); TI - Cammann et al. (1983)	WFC - 0.88 TI - 0.83	46.6	Correlation, regression	Workplace incivility, supervisor support, organizational support, job satisfaction, nurse stress, work-family conflict, family-work conflict	12
Cohen and Kirchmeyer (2005), Israel, Article	Cross-sectional, descriptive	240 nurses from 3 hospitals	Theory of absenteeism	WFC - Shamir (1983); TI - Mobley et al. (1979)	WFC - 0.72 TI - 0.94	33.2	Correlation, regression	Organizational support, personal coping, work/non-work conflict, turnover, absence frequency, absence duration	8

3.2 | Correlations between work-family conflict and turnover intention

As seen in the forest plot (Figure 3), the positive correlations between work-family conflict and turnover intention were between the ranges of $r = 0.15$ to 0.47 (95% [CI 0.02–0.66]). Because the value zero was not in the confidence intervals (CI), all correlations were positive and statistically significant.

3.3 | Meta-analysis of the correlation between work-family conflict and turnover intention of nurses

Based on the Higgins et al. (2003) classification, the 14 studies had high levels of heterogeneity ($I^2 = 73\%$, CI [40.79–89.44]), and the Q-statistic was consistent with this result [$Q(13) = 47.30$, $p < 0.001$]. Supporting these results, the tau-squared value was also significant ($\tau^2 = 0.007$, 95% CI [0.0018–0.0223]). These indicators describe that the heterogeneity among the variables originated mostly from true heterogeneity and not from sampling error in studies. Using a random effects model (Borenstein et al., 2011), our meta-analysis found that the effect size of the relationship between work-family conflict and job performance was 0.28 for the overall sample, with a 95% confidence interval of 0.23–0.33.

In the literature, the most accepted effect size classification is Cohen's (1988) classification that consists of three levels namely small ($d = 0.2$), moderate ($d = 0.5$) and high ($d = 0.8$) level effect sizes. However, a recent study, analysing 708 meta-analytic studies, discussed Cohen's classification as too exigent (Gignac & Szodorai, 2016). According to this view, 'Cohen's effect size guidelines were based principally on an essentially qualitative impression, rather than a systematic, quantitative analysis of data'. Moreover, they found that a small proportion of studies (3%) of correlations in the literature were as large as $r = 0.50$. Based on the 708 meta-analytic review findings, Gignac and Szodorai (2016) updated Cohen's classification as 0.10 as small, 0.20 as typical or moderate, and 0.30 relatively large. In this respect, according to the Gignac and Szodorai's (2016) effect size classification, the average effect size of work-family conflict and turnover intention was found as moderate level in this study [$N = 5,781$ ($r = 0.28$, $p < 0.01$, 95% CI [0.23–0.33])]. Therefore, the results were considered to be robust.

3.4 | Power analysis

We performed a power analysis to assess the meta-analysis's statistical power following the equations of Valentine et al. (2010). To achieve this, we used a custom script (Winterton & Quintana, 2019). Accordingly, we entered the average number per group ($N = 413$), the number of effects ($N = 14$), and the summary effect size (0.28) into the custom scripts to estimate the ranges of effect sizes that this meta-analysis includes. Given the expected effect size (0.28) at high levels of heterogeneity, we achieved 100% power. As suggested

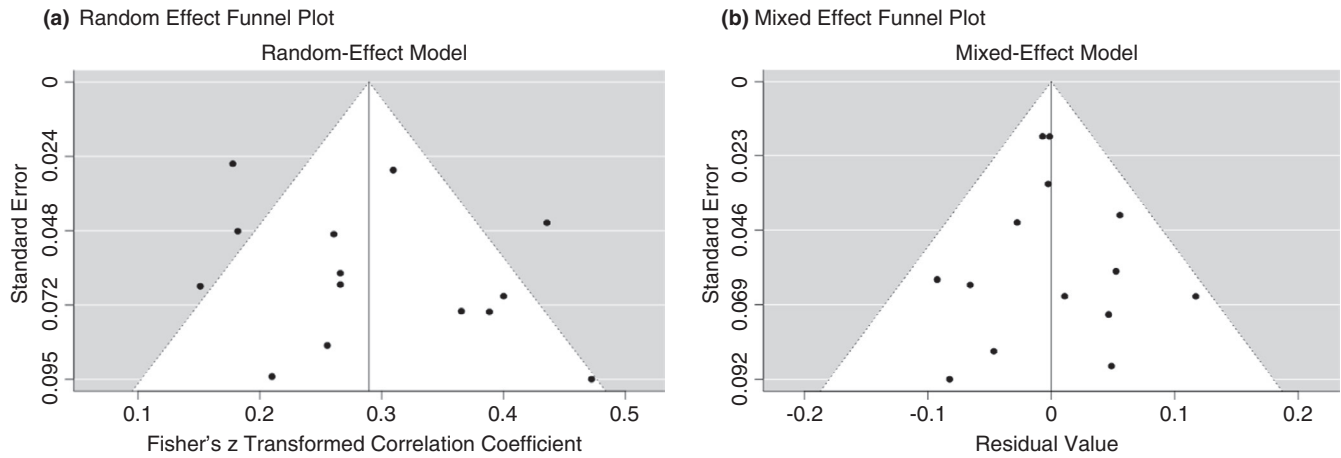


FIGURE 2 Funnel plots of random effect (a) and fixed effect (b) models

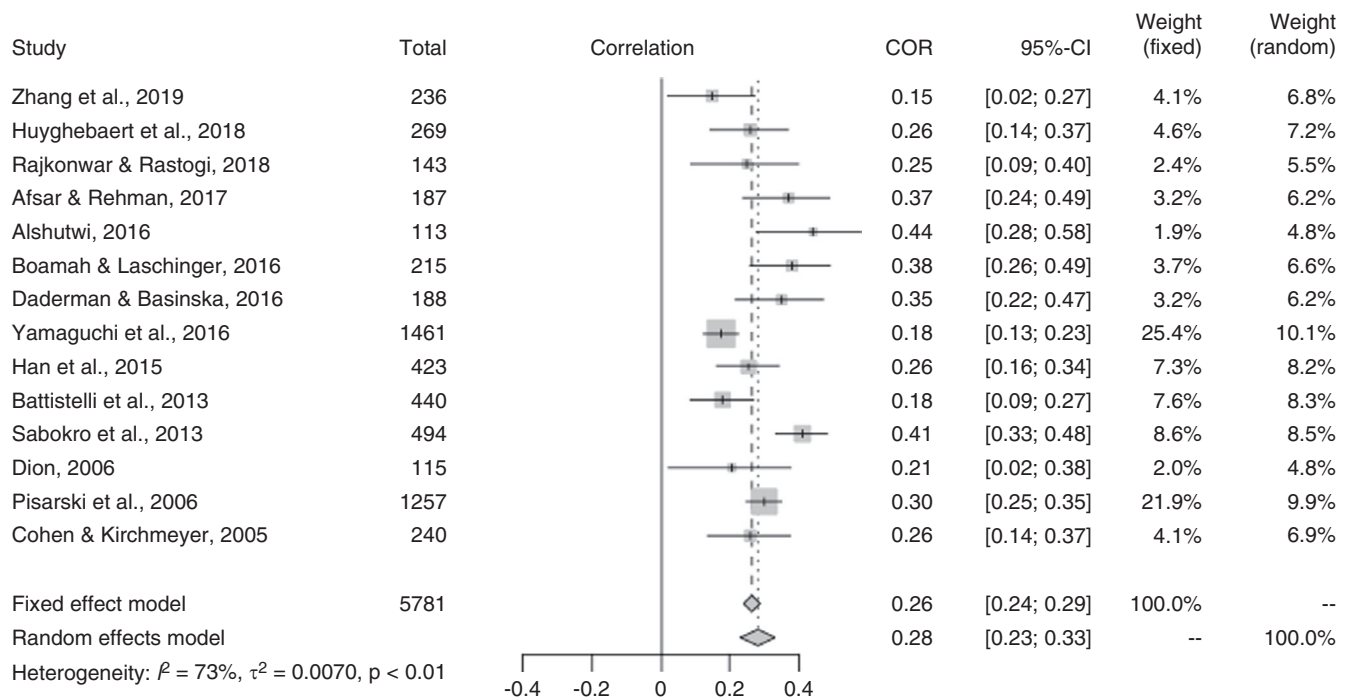


FIGURE 3 Forest plot

by Winterton et al. (2020), even if these values were adjusted conservatively (effect size of 0.1 and low heterogeneity), statistical power remains above 96%.

3.5 | Moderator analysis

Following the procedures suggested by Del Re (2015), the moderator role of national culture on effect size heterogeneity was tested. The meta-regression result indicated that (Table 4) the heterogeneity of the moderator model for individualism and long-term orientation were significant [$Q_M(6) = 42.72$, $p < 0.001$, $Q_E(7) = 4.59$, $p = 0.71$, $\tau^2 = 0.003$ (95% CI [0–0.0086]) $I^2 = 0\%$ (95% CI [0–69.03])]. The results indicated that individualism ($B = -0.002$; $z = -2.3512$;

$p < 0.05$; 95% CI [–0.0045 to –0.0004]) and long-term orientation ($B = -0.033$; $z = -4.0198$; $p < 0.001$; 95% CI [–0.0049 to –0.0017]) have a negative impact on the effect size of work–family conflict–turnover intention relationship. According to these results, while the levels of individualism and long-term orientation increase, the effect size heterogeneity of the work–family conflict–turnover intention relationship decreases.

4 | DISCUSSION

Although meta-analyses and reviews have been conducted over the past five decades, there is a scarcity of research on the relationship between nurses' work–family conflict and turnover intention. Our

Model 1	Estimate	SE	z	p	95% CI	
					L	U
Intercept	0.472	0.123	3.841	0.001***	0.2310	0.7126
Power distance	0.001	0.001	0.428	0.669	-0.0019	0.0029
Individualism	-0.002	0.001	-2.351	0.019*	-0.0045	-0.0004
Masculinity	-0.002	0.001	-1.622	0.105	-0.0032	0.0003
Indulgent	0.002	0.001	1.586	0.113	-0.0004	0.0037
Uncertainty avoidance	0.002	0.001	1.484	0.138	-0.0005	0.0038
Long term orientation	-0.003	0.001	-4.020	0.001***	-0.0049	0.0017

Note: Model Summary: $Q_M(6) = 42.72$; $p < 0.001$, $Q_E(7) = 4.59$; $p = 0.710$, $\tau^2 = 0$ [95% CI = 0-0.0086], $I^2 = 0\%$ [95% CI = 0-69.03]

* $p < 0.05$, *** $p < 0.001$.

TABLE 4 Meta-regression results for moderators (mixed effect model)

findings suggest that work-family conflict is an important indicator of turnover intention as in line with previous research. Specifically, the nursing workforce who predominantly consists of women, tends to develop leaving intentions mainly because of family responsibilities such as marriage, children or older people who need substantial care (Nooney et al., 2010). As depicted by Yildiz and Elibol (2020), this general picture is in accordance with the conservation resources theory (Hobfoll, 1989). The fact that work-family conflict threatens nurses' positive resources, such as psychological and physical health, nurses tend to protect their well-being by having turnover intention.

This study's timing is also meaningful as it coincides with the COVID-19 pandemic, which causes extensive work hours in hospitals to save the lives of patients. Meanwhile, healthcare professionals, especially nurses, sustained their tasks without family interaction, potentially causing psychological and physical burnout (Wang et al., 2012). Apparently, nurses are playing a significant role in this new normal. Additionally, 90% of nursing professionals consists of women (World Health Organization, 2020), and there are many roles expected from them in terms of gender in society (Greenhaus & Powell, 2006). The working shifts, as well as the duties of housework and childcare blur the boundaries between work and home (Gandi et al., 2011). Hence, the deterioration of the balance between work and family might be the root cause of this turnover intention (Haddad et al., 2020). Moreover, work-family conflict is deemed an important factor in threatening the physical and mental health of an individual. Thus, the conflicts experienced cause nurses to be more careless and may lead to various adverse outcomes like absenteeism, sluggishness or low commitment (Netemeyer et al., 2004).

It is evident that regardless of country of origin, work-family conflict has a moderate effect on turnover intention, which, in turn, emerges as an important issue. Meta-analytic reviews include different studies with unique characteristics, and national culture characteristics may account for the variety of the studies (Li et al., 2018). In response to this call, given the review sample from 14 different countries, we propose that Hofstede's (2020) national cultural dimensions of power distance, masculinity, long-term orientation, indulgence, uncertainty avoidance, and individualism may account for the variability of the effect size of the relationship between

work-family conflict and turnover intention. However, our findings showed that only individualism and long-term orientation had a moderating effect on the relationship between work-family conflict and turnover intention relationship. According to Hofstede's (2020) classification, 'Individualism' refers to the interdependence of the members of society. While 'long-term orientation' is about seeing the big picture of the past, present and future and maintaining links among these periods. From the individualistic perspective, this could be explained by the social identity theory (Burke & Stets, 2009). Because nurses in highly individualistic cultures tend to associate their success with their identities, they may be more focused on their tasks and see their work as a kind of personal accomplishment. From this perspective, they may overlook work's spillover into their personal lives. Even though past research found that individualists are more prone to work-family conflict (Olson et al., 2013), this could be explained by the human-oriented nature of nursing jobs and high on-task identity and task significance (Hackman & Oldham, 1976). Consequently, nurses from highly individualistic backgrounds could also be more organized and therefore experience less conflict. Furthermore, putting long-term programs into practice for nurses' development and well-being may lead to high levels of affective commitment (Fazio et al., 2017), which in turn will be effective in reducing turnover intention. When nurses in long-term oriented cultures experience work-family conflict, they tend to perceive the situation as temporary and therefore may put aside their turnover intention (Hofstede, 2020).

Our results also have practical implications. Alternative work arrangements could be especially important for a diverse workforce that includes dual-earner couples, single parents, and employees caring for a sick or ageing relative (Robbins & Judge, 2013). Alternate work arrangements such as working with flexible hours and job sharing may alleviate work-family conflict and reduce nurse turnover intention. Specifically, the lack of full understanding of the complexity of nursing by hospital administrators may cause high levels of work-family conflict and turnover intention (Sasso et al., 2017). Therefore, supportive supervisor behaviours (Alshutwi, 2016; Zhang et al., 2019) and organizational support (Sabokro et al., 2013) can mitigate the adverse outcomes of work-family conflict.

4.1 | Limitations and further research implications

Despite its comprehensive nature, this study also had some limitations. The majority of reviewed publications had cross-sectional designs and were quantitative; further research should examine studies with longitudinal research designs and that are qualitative. Qualitative studies were excluded from this study, but they may include meaningful information (such as personality traits and organizational factors). The majority of the individual samples usually consisted of female nurses; to generalize the results, further research should include a representative number of male nurses. Furthermore, the present study only focused on certain online databases. Further research should take into account other databases. Also, further meta-analytic reviews should focus on potential moderators that may affect the results generated by other studies in the literature. In the future, the causal effect of work–family conflict on turnover intention should be investigated by using potential mediators such as burnout and job satisfaction. One of the major limitations of the study was also the number of publications, which was limited. There is a need for future empirical studies to conduct more comprehensive meta-analyses.

5 | CONCLUSION

This meta-analytical review supported the individual studies' findings by providing evidence in which work–family conflict has a critical role in predicting turnover intention. In this regard, clarifying and understanding the role of work–family conflict in nursing settings might be useful in providing a preventive work environment and a work design that enables a balance between work and family. This study will help managers, hospitals, other institutions such as nursing homes and healthcare centres and policymakers generate solutions for minimizing work–family conflict and sustaining the desired balanced work design. Using this study, cultural differences, especially individualism and long-term orientation, should be taken into account by managers and hospitals to create an organizational milieu where individualist work performance is targeted and long-term oriented relationships with nurses are established.

ETHICS APPROVAL

There is no need for ethics approval.

LANGUAGE EDITING CERTIFICATE

The manuscript was edited at Scribendi Author Services.

CONFLICT OF INTEREST

No conflict of interest was declared by the authors.

AUTHOR CONTRIBUTIONS

BY: Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; BY, HY and OAA: Involved in drafting the manuscript or revising it critically

for important intellectual content; BY, HY and OAA: Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content; BY, HY and OAA: Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1111/jan.14846>.

ORCID

Bora Yildiz  <https://orcid.org/0000-0002-0373-6457>

Harun Yildiz  <https://orcid.org/0000-0003-0394-9812>

Ozlem Ayaz Arda  <https://orcid.org/0000-0002-2836-6317>

TWITTER

Bora Yildiz  @dr.borayildiz

REFERENCES

- Abrams, D., Ando, K., & Hinkle, S. (1998). Psychological attachment to the group: Cross-cultural differences in organizational identification and subjective norms as predictors of workers' turnover intentions. *Personality and Social Psychology Bulletin*, 24(10), 1027–1039. <https://doi.org/10.1177/01461672982410001>
- *Afsar, B., & Rehman, Z. U. (2017). Relationship between work–family conflict, job embeddedness, workplace flexibility, and turnover intentions. *Makara Human Behavior Studies in Asia*, 21(2), 92–104. <https://doi.org/10.7454/mssh.v21i2.3504>
- *Alshutwi, S. (2016). *The influences of family supportive supervisor behaviors on the relationships among work–family conflict, stress, and turnover intention in Saudi Arabian registered nurses*. (Publication No. 1342) Doctoral dissertation, University of Wisconsin-Milwaukee. ProQuest Dissertations and Theses Global.
- Aycan, Z. (2008). Cross-cultural perspectives to work–family conflict. In K. Korabik & D. Lero (Eds.), *Handbook of Work–Family conflict* (pp. 359–371). Cambridge University Press.
- Balduzzi, S., Rucker, G., & Schwarzer, G. (2019). How to perform a meta-analysis with R: A practical tutorial. *Evidence-Based Mental Health*, 22, 153–160.
- *Battistelli, A., Portoghese, I., Galletta, M., & Pohl, S. (2013). Beyond the tradition: Test of an integrative conceptual model on nurse turnover. *International Nursing Review*, 60(1), 103–111.
- Begg, C. B., & Mazumdar, M. (1994). Operating characteristics of a rank correlation test for publication bias. *Biometrics*, 50(4), 1088–1101. <https://doi.org/10.2307/2533446>
- Billing, T. K., Bhagat, R., Babakus, E., Srivastava, B. N., Shin, M., & Brew, F. (2014). Work–family conflict in four national contexts: A closer look at the role of individualism–collectivism. *International Journal of Cross-Cultural Management*, 14(2), 139–159. <https://doi.org/10.1177/1470595813502780>
- *Boamah, S. A., & Laschinger, H. (2016). The influence of areas of work–life fit and work–life interference on burnout and turnover intentions among new graduate nurses. *Journal of Nursing Management*, 24(2), E164–E174.
- Bohle, P., & Tilley, A. J. (1998). Early experience of shiftwork: Influences on attitudes. *Journal of Occupational and Organizational Psychology*, 71(1), 61–79. <https://doi.org/10.1111/j.2044-8325.1998.tb00663.x>

- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2011). *Introduction to meta-analysis*. John Wiley & Sons.
- Burke, P. J., & Stets, J. E. (2009). *Identity theory*. Oxford University Press.
- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). *The Michigan organizational assessment questionnaire*. Unpublished manuscript, University of Michigan.
- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1983). Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, E. E. Lawler, P. H. Mirvis, & C. Cammann (Eds.), *Assessing organizational change: A guide to methods, measures, and practices* (pp. 71-138). John Wiley & Sons.
- Caplan, R. D., Cobb, S., French, J. R., Harrison, R. V., & Pinneau, S. R. (1980). *Job demands and worker health*. The Institute of Social Research, The University of Michigan.
- Carlson, D. S., & Kacmar, K. M. (2000). Work-family conflict in the organization: Do life role values make a difference? *Journal of Management*, 26(5), 1031-1054. [https://doi.org/10.1016/S0149-2063\(00\)00067-2](https://doi.org/10.1016/S0149-2063(00)00067-2)
- Caruso, C. C. (2014). Negative impacts of shiftwork and long work hours. *Rehabilitation Nursing*, 39(1), 16-25. <https://doi.org/10.1002/rnj.107>
- Cicolini, G., Comparcini, D., & Simonetti, V. (2014). Workplace empowerment and nurses' job satisfaction: A systematic literature review. *Journal of Nursing Management*, 22(7), 855-871. <https://doi.org/10.1111/jonm.12028>
- *Cohen, A., & Kirchmeyer, C. (2005). A cross-cultural study of the work/nonwork interface among Israeli nurses. *Applied Psychology-an International Review-Psychologie Appliquee-Revue Internationale*, 54(4), 537-567. <https://doi.org/10.1111/j.1464-0597.2005.00224.x>
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37-46. <https://doi.org/10.1177/001316446002000104>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Erlbaum.
- Crossley, C. D., Grauer, E., Lin, L. F., & Stanton, J. M. (2002). Assessing the content validity of intention to quit scales. In *annual meeting of the Society for Industrial and Organizational Psychology, Toronto, Ontario, Canada* (Vol. 9, pp. 23-31).
- *Dąderman, A. M., & Basinska, B. A. (2016). Job demands, engagement, and turnover intentions in Polish nurses: The role of work-family interface. *Frontiers in Psychology*, 7, 1-14.
- Dahlke, J. A., & Wiernik, B. M. (2019). psychmeta: An R package for psychometric meta-analysis. *Applied Psychological Measurement*, 43(5), 415-416. <https://doi.org/10.1177/0146621618795933>
- Del Re, A. (2015). A practical tutorial on conducting meta-analysis in R. *The Quantitative Methods for Psychology*, 11(1), 37-50. <https://doi.org/10.20982/tqmp.11.1.p037>
- *Dion, M. J. (2006). *The impact of workplace incivility and occupational stress on the job satisfaction and turnover intention of acute care nurses*. ProQuest Dissertations and Theses.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of Vocational Behavior*, 66(1), 124-197. <https://doi.org/10.1016/j.jvb.2003.11.003>
- Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *BMJ*, 315, 629-634. <https://doi.org/10.1136/bmj.315.7109.629>
- Fazio, J., Gong, B., Sims, R., & Yurova, Y. (2017). The role of affective commitment in the relationship between social support and turnover intention. *Management Decision*, 55(3), 512-525. <https://doi.org/10.1108/MD-05-2016-0338>
- Fisher-McAuley, G., Stanton, J., Jolton, J., & Gavin, J. (2003). Modelling the relationship between work life balance and organisational outcomes. *Paper presented at the Annual Conference of the Society for Industrial-Organisational Psychology*. Orlando, April 12, 2003, (pp. 1-26).
- Fisher, Z., Tipton, E., & Zhipeng, H. (2017). robumeta: Robust Variance Meta-Regression.R package nversion 2.0. <https://CRAN.R-project.org/package=robumeta>
- Gandi, J. C., Wai, P. S., Karick, H., & Dagona, Z. K. (2011). The role of stress and level of burnout in job performance among nurses. *Mental Health in Family Medicine*, 8(3), 181-194.
- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences*, 102, 74-78. <https://doi.org/10.1016/j.paid.2016.06.069>
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of management review*, 31(1), 72-92.
- Hackman, J. R., & Oldham, G. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250-279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7)
- Haddad, L. M., Annamaraju, P., & Toney-Butler, T. J. (2020). Nursing shortage. *StatPearls [Internet]*. StatPearls Publishing.
- *Han, S. S., Han, J. W., & Choi, E. H. (2015). Effects of nurses' job stress and work-family conflict on turnover intention: Focused on the mediating effect of coping strategies. *Asian Women*, 31(3), 1-20. <https://doi.org/10.14431/aw.2015.09.31.3.1>
- Hedges, L. V., & Vevea, J. L. (1998). Fixed-and random-effects models in meta-analysis. *Psychological Methods*, 3(4), 486-504. <https://doi.org/10.1037/1082-989X.3.4.486>
- Higgins, J. P., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *BMJ*, 327, 557-560. <https://doi.org/10.1136/bmj.327.7414.557>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hofstede, G. (2020). *Cultural dimensions, country comparison*. Retrieved from <https://www.hofstede-insights.com/country-comparison/israel/>
- Huedo-Medina, T. B., Sánchez-Meca, J., Marin-Martínez, F., & Botella, J. (2006). Assessing heterogeneity in meta-analysis: Q statistic or I² index? *Psychological Methods*, 11(2), 193-206.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods for meta-analysis*. Sage.
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). Sage.
- *Huyghebaert, T., Gillet, N., Fernet, C., Lahiani, F. J., & Fouquereau, E. (2018). Leveraging psychosocial safety climate to prevent ill-being: The mediating role of psychological need thwarting. *Journal of Vocational Behavior*, 107, 111-125. <https://doi.org/10.1016/j.jvb.2018.03.010>
- Joanna Briggs Institute. (2019). *Joanna Briggs Institute Reviewers Manual*. Retrieved from <https://wiki.joannabriggs.org/display/MANUAL/JBI+Reviewer%27s+Manual>
- Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source nature and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, 4(4), 337-346. <https://doi.org/10.1037/1076-8998.4.4.337>
- Kim, M., & Windsor, C. (2015). Resilience and work-life balance in first-line nurse manager. *Asian Nursing Research*, 9(1), 21-27. <https://doi.org/10.1016/j.anr.2014.09.003>
- Lee, E. H., & Lee, J. H. (2000). The moderating effect of coping strategies upon multiple role conflicts and depression within dual employed couples. *Korean Journal of Psychology*, 5(2), 287-303.
- Li, H., Shi, Y., Li, Y., Xing, Z., Wang, S., Ying, J., Zhang, M., & Sun, J. (2018). Relationship between nurse psychological empowerment and job satisfaction: A systematic review and meta-analysis. *Journal of Advanced Nursing*, 74(6), 1264-1277. <https://doi.org/10.1111/jan.13549>
- Lourel, M., Gana, K., & Wawrzyniak, S. (2005). Home-work interaction: A French adaptation and validation of "Survey Work-Home Interaction-Nijmegené (SWING)". *Psychologie du Travail et des Organisations*, 11(4), 227-239.
- McKnight, J., Nzinga, J., Jepkosgei, J., & English, M. (2020). Collective strategies to cope with work related stress among nurses in resource constrained settings: An ethnography of neonatal nursing in Kenya. *Social Science & Medicine*, 245, 112698. <https://doi.org/10.1016/j.socscimed.2019.112698>

- Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablinski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44(6), 1102–1121.
- Mobley, W. H., Griffeth, R. H., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86(3), 493–522. <https://doi.org/10.1037/0033-2909.86.3.493>
- Mother, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2010). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *International Journal of Surgery*, 8(5), 336–341. <https://doi.org/10.1016/j.ijisu.2010.02.007>
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology*, 81(4), 400–410. <https://doi.org/10.1037/0021-9010.81.4.400>
- Netemeyer, R. G., Brashear-Alejandro, T., & Boles, J. S. (2004). A cross-national model of job-related outcomes of work role and family role variables: A retail sales context. *Journal of the Academy of Marketing Science*, 32(1), 49–60. <https://doi.org/10.1177/009207303259128>
- Nooney, J. G., Unruh, L., & Yore, M. M. (2010). Should I stay or should I go? Career change and labor force separation among registered nurses in the US. *Social Science & Medicine*, 70(12), 1874–1881. <https://doi.org/10.1016/j.socscimed.2010.02.037>
- Olson, K. J., Huffman, A. H., Leiva, P. I., & Culbertson, S. S. (2013). Acculturation and individualism as predictors of work-family conflict in a diverse workforce. *Human Resource Management*, 52(5), 741–769. <https://doi.org/10.1002/hrm.21559>
- Peterson, R. A., & Brown, S. P. (2005). On the use of beta coefficients in meta-analysis. *Journal of Applied Psychology*, 90(1), 175–181. <https://doi.org/10.1037/0021-9010.90.1.175>
- *Pisarski, A., Brook, C., Bohle, P., Gallois, C., Watson, B., & Winch, S. (2006). Extending a model of shift-work tolerance. *Chronobiology International*, 23(6), 1363–1377. <https://doi.org/10.1080/07420520601055316>
- Quintana, D. S. (2015). From pre-registration to publication: A non-technical primer for conducting a meta-analysis to synthesize correlational data. *Frontiers in Psychology*, 6, 1–9. <https://doi.org/10.3389/fpsyg.2015.01549>
- R Core Team. (2020). *R: A language and environment for statistical computing*. R foundation for statistical computing. Retrieved from <https://www.R-project.org/>
- *Rajkonwar, B., & Rastogi, M. (2018). The impact of work–family issues on turnover intentions among nurses? A study from North-Eastern India. *Journal of Health Management*, 20(2), 164–177. <https://doi.org/10.1177/0972063418763652>
- Robbins, S. P., & Judge, T. A. (2013). *Organizational behavior* (15th ed.). Pearson Prentice Hall.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638–641. <https://doi.org/10.1037/0033-2909.86.3.638>
- *Sabokro, M., Baghbani, S., & Amiri, A. N. (2013). Work-family conflict: The role of organizational supportive perception in turnover intention: Case study of nurses of Tehran's hospitals. In V. Ribiere & L. Worasinchai (Eds.), *The International Conference on Management, Leadership and Governance* (pp. 282–287). The Institute for Knowledge and Innovation South-East Asia Bangkok University.
- Sasso, L., Bagnasco, A., Aleo, G., Catania, G., Dasso, N., Zanini, M. P., & Watson, R. (2017). Incorporating nursing complexity in reimbursement coding systems: The potential impact on missed care. *BMJ Quality & Safety*, 26(11), 929–932. <https://doi.org/10.1136/bmjqs-2017-006622>
- Sedgwick, P. (2013). Meta-analyses: How to read a funnel plot. *BMJ*, 346, f1342. <https://doi.org/10.1136/bmj.f1342>
- Shamir, B. (1983). Some antecedents of work-nonwork conflict. *Journal of Vocational Behavior*, 23(1), 98–111.
- Sterne, J. A. C., Sutton, A. J., Ioannidis, J. P. A., Terrin, N., Jones, D. R., Lau, J., Carpenter, J., Rucker, G., Harbord, R. M., Schmid, C. H., Tetzlaff, J., Deeks, J. J., Peters, J., Macaskill, P., Schwarzer, G., Duval, S., Altman, D. G., Moher, D., & Higgins, J. P. T. (2011). Recommendations for examining and interpreting funnel plot asymmetry in meta-analyses of randomised controlled trials. *BMJ*, 343, d4002. <https://doi.org/10.1136/bmj.d4002>
- Swanson, R. A., & Holton, E. F. (2005). *Research in organizations: Foundations and methods in inquiry*. Berrett-Koehler Publishers.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2), 259–293. <https://doi.org/10.1111/j.1744-6570.1993.tb00874.x>
- Valentine, J. C., Pigott, T. D., & Rothstein, H. R. (2010). How many studies do you need? A primer on statistical power for meta-analysis. *Journal of Educational and Behavioral Statistics*, 35(2), 215–247. <https://doi.org/10.3102/1076998609346961>
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36(3), 1–48.
- Wang, Y., Chang, Y., Fu, J., & Wang, L. (2012). Work-family conflict and burnout among Chinese female nurses: The mediating effect of psychological capital. *BMC Public Health*, 12(1), 1–8.
- Winterton, A., & Quintana, D. S. (2019). *Associations of loneliness and social isolation with cardiovascular and metabolic health: A systematic review and meta-analysis - power analysis - osf.io*. OSF. <https://osf.io/uczmd/>
- Winterton, A., Rødevand, L., Westlye, L. T., Steen, N. E., Andreassen, O. A., & Quintana, D. S. (2020). Associations of loneliness and social isolation with cardiovascular and metabolic health: A systematic review and meta-analysis protocol. *Systematic Reviews*, 9, 1–7. <https://doi.org/10.1186/s13643-020-01369-8>
- World Health Organization. (2020). *World health statistics 2020: Monitoring health for the SDGs, sustainable development goals*. World Health Organization. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/332070/9789240005105-eng.pdf>
- *Yamaguchi, Y., Inoue, T., Harada, H., & Oike, M. (2016). Job control, work-family balance and nurses' intention to leave their profession and organization: A comparative cross-sectional survey. *International Journal of Nursing Studies*, 64, 52–62. <https://doi.org/10.1016/j.ijnurstu.2016.09.003>
- Yildiz, B., & Elibol, E. (2020). Turnover intention linking compulsory citizenship behaviours to social loafing in nurses: A mediation analysis. *Journal of Nursing Management*, 1–11. <https://doi.org/10.1111/jonm.13200>
- *Zhang, Y., Rasheed, M. I., & Luqman, A. (2019). Work-family conflict and turnover intentions among Chinese nurses the combined role of job and life satisfaction and perceived supervisor support. *Personnel Review*, 49(5), 1140–1156. <https://doi.org/10.1108/PR-01-2019-0017>
- Zopiatis, A., Constanti, P., & Theocharous, A. L. (2014). Job involvement, commitment, satisfaction and turnover: Evidence from hotel employees in Cyprus. *Tourism Management*, 41, 129–140. <https://doi.org/10.1016/j.tourman.2013.09.013>

How to cite this article: Yildiz B, Yildiz H, Ayaz Arda O. Relationship between work–family conflict and turnover intention in nurses: A meta-analytic review. *J Adv Nurs*. 2021;77:3317–3330. <https://doi.org/10.1111/jan.14846>

The *Journal of Advanced Nursing (JAN)* is an international, peer-reviewed, scientific journal. *JAN* contributes to the advancement of evidence-based nursing, midwifery and health care by disseminating high quality research and scholarship of contemporary relevance and with potential to advance knowledge for practice, education, management or policy. *JAN* publishes research reviews, original research reports and methodological and theoretical papers.

For further information, please visit *JAN* on the Wiley Online Library website: www.wileyonlinelibrary.com/journal/jan

Reasons to publish your work in *JAN*:

- High-impact forum: the world's most cited nursing journal, with an Impact Factor of 2.561 – ranked 6/123 in the 2019 ISI Journal Citation Reports © (Nursing; Social Science).
- Most read nursing journal in the world: over 3 million articles downloaded online per year and accessible in over 10,000 libraries worldwide (including over 6,000 in developing countries with free or low cost access).
- Fast and easy online submission: online submission at <http://mc.manuscriptcentral.com/jan>.
- Positive publishing experience: rapid double-blind peer review with constructive feedback.
- Rapid online publication in five weeks: average time from final manuscript arriving in production to online publication.
- Online Open: the option to pay to make your article freely and openly accessible to non-subscribers upon publication on Wiley Online Library, as well as the option to deposit the article in your own or your funding agency's preferred archive (e.g. PubMed).