

Work–Family Symbiosis in Nurses: Work–Family Positive Spillover in Female Nurses in North India

MDIM Journal of Management
Review and Practice
1(2) 76–95, 2023
© The Author(s) 2023
DOI: 10.1177/mjmrp.231195485
mbr.mjmrp.mdim.ac.in



Fatima Riyaz Khateeb¹ 

Abstract

This study determines the nature and extent of positive spillover between work and family in case of female nurses in Jammu & Kashmir, India. The relationship is construed along three dimensions, namely, affective positive spillover, behavior-based instrumental positive spillover, and value-based instrumental positive spillover in both the directions of work to family and family to work. The work-life positive spillover (WFPS) is examined with respect to life satisfaction and psychological well-being (PWB) of female nurses. A survey was conducted using a questionnaire among female nurses in seven government-run hospitals in Jammu & Kashmir in North India. A total of 311 data points were gathered through random sampling. SPSS is used for analyzing data. Hypotheses were tested through SEM using AMOS 24 and in addition to Pearson correlation, Cronbach's alpha test, and descriptive statistics were used to draw out the inferences. The findings show that WFPS has a considerable impact on the PWB and life satisfaction of female nurses. This impact varied according to the aspects of spillover, with value-based instrumental positive spillover being most important in the case of psychological well-being and affective positive spillover being most significant in the case of life satisfaction. Thus far the relationship between work and life has been construed as being in conflict which thus has influenced the labor policy formulation in case of nurses and healthcare. A more holistic policy framework must also consider the positive relationship between work and life that this work has posited.

Keywords

Nursing work life, positive spillover, nurses wellbeing, life satisfaction, psychological wellbeing

¹The Károly Ihrig Doctoral School, University of Debrecen, Hungary

Corresponding author:

Fatima Riyaz Khateeb, The Károly Ihrig Doctoral School, University of Debrecen, Debrecen, Egytem Utca, 1 Hungary, 4032.
E-mail: khateeb.fatima86@mailbox.unideb.hu



Introduction

The relationship between work and family life is a topic that continues to pique researcher's interest across the world. Economic development, globalization, and equitable job opportunities are all modernizing trends that have led to a greater focus on the impact of work-life issues on one's well-being. These issues have been dealt with and researched under the rubric of work-life balance (WLB).

WLB is defined as a person's impression of how well his or her life responsibilities are balanced. This definition is based on the person-centered approach, which considers WLB to be a holistic concept encompassing all areas of an individual's life, which is unique for each person and can vary throughout the course of people's lives depending on their career or life stage, and which is dependent on an individual's life values, goals, and aspirations (Greenhaus & Allen, 2011). It is crucial to stress that WLB is a notion that applies to all working individuals, independent of their family circumstances (i.e., single, childless employees with no extra caregiving duties) because it captures the individual's ability to accomplish effectively the things that are important to them (Kossek et al., 2014). WLB is based on two fundamental dimensions, namely, role engagement in work and family life and alleviation of conflict between work and family roles.

At its inception, the research on WLB of individuals was primarily focused on the negative consequences that domains of work and life have on each other. However, in due course of time, the researchers started to focus on how the interaction between work and personal life can have constructive effects on each other.

The enhancement hypothesis, an alternative to the older scarcity hypothesis, which forms the basis of the paradigm of work-family conflict, asserts that playing many roles can be advantageous. The advantages of one role influencing another have been operationalized in a number of ways, such as gaining knowledge or skills that can be applied in another role (Edwards & Rothbard, 2000; Sieber, 1974), creating a safety net against failure in another role (Barnett & Hyde, 2001; Sieber, 1974) and giving people a wider frame of reference from which to relate to other domains (Barnett & Hyde, 2001; Sieber, 1974). It is assumed that the combined effect of these advantages makes it easier to integrate and manage the roles, which produces fewer unfavorable results and more favorable ones (Thoits, 1983; Voydanoff, 2002).

The recognition of the fact that work and family responsibilities need not necessarily be incompatible and such a relationship can have positive results as well, resulted in conception theories like positive spillover (Grzywacz & Marks, 2000), work-life facilitation (Grzywacz, 2002) and work-life enrichment (Greenhaus & Powell, 2006). These theories basically focus on how positive encounters in one domain of life (e.g., work) can lead to productive experiences in the other domain (e.g., personal life) (Baltes et al., 2009). These theories have been receiving great attention from various researchers for several years now (Masuda et al., 2012). Among the theories that have been proposed in addressing this positive relationship between the two domains include work-life facilitation, work-life enrichment, and work-family positive spillover (WFPS).

The concept of spillover originally propounded by Wilensky (1960) explicates that the experiences in one domain of life (e.g., work) transmit into the other domain of life (e.g., family) thereby directly affecting the kind of experience you will have in the other domain (Edwards & Rothbard, 2000). This phenomenon has been addressed using other terms including generalization, similarity, isomorphism, continuation, familiarity, and extension (Edwards & Rothbard, 2000).

The evidencing of positive spillover has been shown to have effect on all domains which contribute to positive work, non-work, and stress-related outcomes (Lee et al., 2021). This is made possible through three pathways. First, there is an increase life satisfaction due to positive affect spillover (Heller & Watson, 2005). Second, positive spillover acts as a defense mechanism against unpleasant life experiences (Barnett & Hyde, 2001). Third, good performance in one function might provide psychological availability and therefore lead to psychological wellbeing.

In a significant study, Hanson et al. (2006) studied the positive spillover under three categorizations; value-based instrumental positive spillover, behavior-based instrumental positive spillover, and affective positive spillover. In their conceptualization, affective positive spillover (work-to-family and/or family-to-work) occurs when positive effects (e.g., appreciation) in one domain ease the process of fulfilling responsibilities in the other domain. Behavior-based instrumental positive spillover (work-to-family and/or family-to-work) occurs when the behavior (e.g., multitasking) required in one domain makes it easier to fulfill the commitments in the other domain. Lastly, value-based instrumental positive spillover (work-to-family and/or family-to-work) comes to pass when the values, for instance, autonomy, in one domain, improve the functioning in the other domain. All these dimensions have been analyzed in the present study. Experiencing positive spillover is said to have beneficial results at both individual as well as organizational level. Individuals experiencing positive spillover are less likely to develop problematic drinking behaviors and are more likely to develop a better sleeping pattern and such individuals in all probability are going to experience job satisfaction as well (Poelmans et al., 2008).

WFPS has been used interchangeably with other positive constructs like work-family facilitation and work-life enrichment. While there are similarities between these constructs, they are some polarities as well. While positive spillover includes transfer of personal gains (skills, affect, and behavior) from one domain to other, facilitation includes capital gains (employment benefits, money) along with the personal gains (Hanson et al., 2006). Similarly, work-life enrichment includes not only the transfer of resource gains from one domain to other (positive spillover) but the individual being able to recognize the positive effects of this transfer on the other domain (enrichment) (Masuda et al., 2012; Wayne, 2009).

The severity of the COVID-19 pandemic, with over 172 million confirmed cases and 3.7 million fatalities globally (World Health Organization, 2021), as a public health concern has put health care professionals including nurses at the center of attention. Nursing, an especially challenging profession, involves both mental and physical stress and with changes in shift timings, female nurses, who

also partake in caregiving roles, find it challenging to attain WLB. This becomes more acute in Indian context where the drastic changes in the gender roles at work have not translated into any major changes at the domestic front leading to greater imbalances between work and life (Shastri et al., 2021), which has further been exacerbated by a chronic shortage of nurses in government hospitals (Gill, 2016).

WLB policies formulated for nurses in India must not only consider the negative relationship between work and personal life but also the positive interactions. As a result, effective impact in one domain enhances performance in the other (Edwards & Rothbard, 2000).

Work-life interventions and policies in India with regards to nurses have been limited to providing maternal leaves/benefits, on-site childcare, personal leave, one month leave a year among others. These benefits have been put forward within the paradigm of work and life conflict. With the intention that these benefits may alleviate the conflict between work and life. In a changing conceptual landscape of the field of WLB these interventions need to be re-investigated such that the positive interactions between work and life are also addressed at the policy level. To bring this, about the need for an empirical study seeking to investigate the nature of work and life through the lens of positive work life spillover is called for.

Evidence from such a study would be useful in creating organizational interventions, and public policies focusing on various kinds of social support at work that promote WLB. Furthermore, determining which types of support at home are more beneficial to family life satisfaction may be valuable for implementing appropriate family therapies. The locale of the study is justified by total absence of any instance of such in North India which is the locale of the present study. Therefore, the research objectives of this study are enumerated as under:

1. To analyze the constituents of work–family positive spillover with respect to PWB of female nurses.
2. To analyze the constituents of work–family positive spillover with respect to the life satisfaction of female nurses.

Literature Review

Recognizing the need for understanding the nature of WLB in nurses in India one comes across substantial research that has been published through the years. The research can be categorized along three major dimensions.

Firstly, those studies that relate to the psychological effects of work on the nurses. Some of the significant studies in this group include effects of low esteem and high stress (Johnson et al., 2020), prevalence of depression/anxiety in wake of covid-19 pandemic (Wilson et al., 2020), prevalence of burnout (Kesarwani et al., 2020), effect of psychological capital on perception of burnout (Gupta et al., 2019), personality traits and burnout among female nurses (Divinakumar et al., 2019) among others.

Second category of studies includes themes where job perception of nurses has been considered. Some of themes include quality of work-life (Bhende et al., 2020), organizational commitment (Shabir & Gani, 2020), job satisfaction (Singh et al., 2019; Dhamija et al., 2019), fear of litigation (Saqib et al., 2020) among others. Third category includes studies undertaken with an organizational view into account. Some of the examples include workplace empowerment (Nayak et al., 2018), shift work effects (Verma et al., 2018) and organizational culture (Madhiwalla et al., 2018). Given context of these studies is Indian some of the studies reflect cultural aspects of the effects of/on work including workplace spirituality (Iyer & Deshmukh, 2018) and positive religious coping (Pandey & Singh, 2019).

As may be discerned from the aforementioned research, almost all the research that has been conducted has focused on negative aspects of the relationship between the two roles. Although, studies have consistently pointed to conflict between work and life of the nurses but nonetheless the turnover intention among the nurses across the board remains invariably low. Studies indicate how turnover intention can be significantly related to the positive work–family interface in form of work–family enrichment (McNall et al., 2009; Yang & Lee, 2009) work–family facilitation (Karatepe & Azar, 2013) and more importantly work–family positive spillover (Sok et al., 2018).

Consequently, a possibility of positive relationship between work and life is to be surmised which is sought for through the paradigm of positive spillover in this study.

Hypothesis Development

Psychological well-being (PWB) signifies individuals' positive self-perception, being fully aware of oneself including one's strengths and weaknesses, being able to successfully face difficult times, and discovering the life's purpose (Yayla & Eskici İlgin, 2021). The task of successfully managing the work responsibilities along with taking care of the non-work responsibilities can negatively affect the psychological health. This is especially true for women, who along with managing the work responsibilities also are generally primary caregivers at home (Wilkinson, 2013). PWB has been proven to have various characteristics that cannot be covered by a single domain.

Published literature indicates that when the experiences of one domain have a positive impact on the experiences of the other domain, it would have a positive impact on the PWB of the individuals. For instance, Farradinna et al. (2019) in their study of female academicians found that PWB was influenced by work-to-family positive spillover. Similarly, Kim et al. (2020) in their study found that those individuals who experienced positive work–family spillover reported having higher well-being.

Research shows that PWB has been shown to be crucial in boosting mental health among healthcare personnel, resulting in the preservation of a

happy nurse practice environment and improved patient care (Andrews & Wan, 2009; Coetzee et al., 2012; Murray et al., 2016). A 2015 systematic review of literature found that satisfaction with life, job and family was significantly and positively connected with psychological well-being of nurses (Hall et al., 2016). Following which the PWB of nurses and WFPS are hypothesized to have a positive relationship. The hypotheses along the three dimensions runs as:

- H_{1a} : There is a positive relationship between affective work-life positive spillover (WFPS) and psychological wellbeing of female nurses.
- H_{1b} : There is a positive relationship between behavior-based instrumental WFPS and psychological wellbeing of female nurses.
- H_{1c} : There is a positive relationship between value-based instrumental WFPS and psychological wellbeing of female nurses.

When individuals believe that they are able to balance their work and non-work responsibilities, it leads to decrease in role strain, thereby increasing their life satisfaction (Perrone & Civileto, 2004). Life satisfaction is defined by Sousa and Lyubomirsky (2001) as “contentment with or acceptance of one’s life circumstances, or the fulfillment of one’s wants and needs for one’s life as a whole.” Imbalance between work and non-work domain leads to decrease in life satisfaction (Yucel, 2017; Zhao et al., 2011). Contrarily, research has shown that being able to strike a balance between work and non-work responsibilities helps individuals to achieve better life satisfaction (Best & Chinta, 2021; Yusuf & Khan, 2018). Wolfram and Gratton (2014) in their study found that positive spillover from home was positively related to life satisfaction. Similarly, Stevanovic and Rupert (2009), found that, positive spillover leads to greater life satisfaction. In cases of the nurses, the studies regarding alternative theories positing the positive relationship between life and work of the nurses like enrichment and facilitation are more in number than those studying positive spillover. A study conducted in South Korea posits that family-to-work enrichment had a greater effect on life satisfaction (Rhee & Zheng, 2019). Another study in Malaysia concludes that there is a causal link between work–family enrichment and life satisfaction in nurses as mediated by the social support (Wan Rashid et al., 2011). Following the lead of these studies a positive relationship between spillover and life satisfaction of nurses is surmised which along the three dimensions of spillover as:

- H_{2a} : There is a positive relationship between affective WFPS and life satisfaction of female nurses.
- H_{2b} : There is a positive relationship between behavior-based instrumental WFPS and life satisfaction of female nurses.
- H_{2c} : There is a positive relationship between value-based instrumental WFPS and life satisfaction of female nurses.

Sample and Data Collection

Sample and Sampling Technique

This study was conducted at seven hospitals connected with the Government Medical College (GMC) in Srinagar between November and December 2022. The GMC gave the researcher a list of the nurses who worked at these facilities, as well as their marital statuses. The sample size was determined using the method for sample sizes inside a known universe. All nurses employed in these hospitals (N = 623) were included in the research group. Using the computation of sample size inside a given universe, the sample size was calculated to be 238 nurses with a 95% confidence interval and a 5% error range.

Given the possibility of data loss, the data collecting procedure was completed when data from 328 nurses were obtained using simple random selection from this group. The data of 17 nurses who were suffering from chronic illnesses at the time of data collection were eliminated. Thus, **311** nurses participated in the study.

Measures

Demographics: Four personal and family demographical questions were asked. These included questions related to the age, years of work experience, marital status and education qualification of the nurses.

Independent Variables

Work–Family Positive Spillover

WFPS scale by Hanson et al. (2006) was used to study the status of positive spillover among the nurses. The positive spillover from work to family as well as family to work was analyzed. The scale is significant in so far as it distinguishes and sets apart the concept of positive spillover from facilitation and enrichment although any presence of spillover may not exclude the presence of work and life conflict. It is an 18-item scale and the questions were related to affective, behavioral, and value-based instrumental WFPS. It is a seven-point Likert scale with “1” indicating total disagreement and “7” indicating total agreement.

Dependent Variables

PWB: Participants' PWB was assessed using the positive affective well-being scale (Hess et al., 2005). Other studies have successfully used this measure to assess PWB among employees (e.g., Arnold et al., 2007). Using a seven-point Likert-type scale (1 = not at all to 7 = all the time), participants indicated the extent to which they have felt positive emotional states (e.g., lively, motivated) over the previous four months.

Life Satisfaction: The study is employing satisfaction with life scale (SWLS) formulated by Diener et al. (1985). It is a five-item scale that assesses an individual's global cognitive assessments of life satisfaction. Participants use a seven-point scale ranging from 7 "strongly agree" to 1 "strongly disagree" to indicate how much they agree or disagree with each of the five statements. The scale runs from 5 to 35 points, with higher scores indicating a better level of life satisfaction.

Data Analysis

Data analysis was carried out with SPSS 23 software. Reliability analysis was done for the questionnaire using Cronbach's alpha parameter. The correlation was computed to assess the research variables' internal relationships and descriptive statistics for the five variables, namely, Affective WFPS, Behavior-based Instrumental WFPS, Value-based instrumental WFPS, PWB and Life Satisfaction. Before SEM was deployed, the confirmatory factor analysis (CFA), common method bias (CMB), and multicollinearity were calculated. The structural model is constructed with independent variables as Affective WFPS, Behavior-based Instrumental WFPS, Value-based instrumental WFPS and PWB and Life Satisfaction as dependent variables. The use of self-report questionnaires has been contested in the HRM literature (Bryman, 1988; Spector, 1986), with some arguing that they may lead to unnaturally high correlations across measures of behavioral components. The use of a self-report methodology may have raised the magnitude of the observed correlations, but this impact would have no influence on the statistical significance of the observed associations between the research variables (Carmines & McIver, 1981; Kent, 2001). In reality, because work-life spillover is subjective, the constructs included in this study were tested by asking employees to express their attitudes and views (Fisher, 2001). As a result, self-report questionnaires are an appropriate and easy tool for gathering study data.

Results

Table 1 indicates the sample demographic characteristics, including age, marital status, years of work experience, and education qualification. More than half of the female nurses in the current study are aged between 31 and 40 years (53.7%), followed by those aged between 25 and 30 (24.4%), and lastly, the nurses aged 41 and above (21.9%). The sample constitutes 68.2% of the married female nurses and the rest 31.8% are either unmarried, divorced, or widowed. 55.9% of the sample have 6–15 years of work experience, 25.1% have work experience of above 16 years. 62.1% of the sample nurses have a bachelor's degree, 21.8% of the nurses have master's degree and the rest 16.1% have lower education.

The results of the mean, standard deviation and correlation coefficient among the constructs are presented in Table 2. The correlation analysis shows that all predictor

Table 1. Demographic Characteristics of the Sample.

Characteristics	Range	Frequency	%
Age	25–30	76	24.4
	31–40	167	53.7
	41 and above	68	21.9
Marital status	Unmarried/divorced/widow	99	31.8
	Married	212	68.2
Years of work experience	1–5	59	19
	6–15	174	55.9
	Above 15	78	25.1
Education qualification	Masters	68	21.8
	Bachelor’s degree	193	62.1
	Lower education	50	16.1

Table 2. Mean, Standard Deviation, and Correlation Coefficient of Study Variables.

Constructs	Mean	SD	1	2	3	4	5
1 Affective WFPS	5.24	0.87	–	0.55*	0.45*	0.32*	0.58*
2 Behavior-based instrumental WFPS	5.23	0.76	0.55*	–	0.60*	0.40*	0.55*
3 Value-based instrumental WFPS	5.27	0.79	0.45*	0.60*	–	0.40*	0.59*
4 Psychological well-being	4.62	0.84	0.32*	0.40*	0.40*	–	0.43*
5 Life satisfaction	4.38	0.77	0.58*	0.55*	0.59*	0.43*	–

Note: *Correlation is significant at the 0.01 level (2-tailed).

constructs, that is, affective WFPS, behavior-based instrumental WFPS and value-based instrumental WFPS were positively and significantly correlated with psychological wellbeing. Similarly, all the predictor constructs also showed a significant positive correlation with life satisfaction. These correlation results act as preliminary evidence to support the hypothesized relationships of the current study.

Confirmatory Factor Analysis

CFA was conducted to calculate the standardized factor loadings of all the items and the items below the threshold value of 0.6 were removed. Based on the results, one item from each construct except for affective WFPS were removed. After removing the items, CFA produced a good model fit: $\chi^2 = 705.79$, $df = 395$, $\chi^2 = 1.78$,

CFI = 0.94, RMSEA = 0.05, and TLI = 0.94. To measure the internal consistency of the constructs, Cronbach's Alpha test was conducted. The alpha reliability of all study constructs were above the acceptable limit of 0.70 (Taber, 2018). The values of average variance extracted (AVE) (Table 3) of the variables ranged from 0.57 to 0.63, all above the minimum acceptable value of 0.5. This indicates all the latent constructs have an acceptable convergent validity. Discriminant validity ($\sqrt{\text{AVE}}$) of

Table 3. Factor Loadings, Validity Reliability and VIF.

Constructs/Items	Factor Loading	α	AVE	$\sqrt{\text{AVE}}$	CR	VIF
Affective WFPS		0.92	0.63	0.79	0.93	1.45
WFPS1	0.78					
WFPS2	0.82					
WFPS3	0.78					
WFPS4	0.76					
WFPS12	0.85					
WFPS13	0.87					
WFPS14	0.84					
WFPS15	0.66					
Behavior-based instrumental WFPS		0.91	0.59	0.77	0.91	1.79
WFPS5	0.78					
WFPS6	0.79					
WFPS7	0.83					
WFPS8	Dropped					
WFPS16	0.72					
WFPS17	0.76					
WFPS18	0.77					
WFPS19	0.74					
Value-based instrumental WFPS		0.88	0.59	0.77	0.88	1.57
WFPS9	0.75					
WFPS10	0.89					
WFPS11	0.79					
WFPS20	0.66					
WFPS21	Dropped					
WFPS22	0.74					
Psychological well-being		0.89	0.57	0.76	0.89	–
PWBI	0.76					

(Table 3 continued)

(Table 3 continued)

Constructs/Items	Factor Loading	α	AVE	$\sqrt{\text{AVE}}$	CR	VIF
PWB2	0.82					
PWB3	0.79					
PW4	Dropped					
PWB5	0.73					
PWB6	0.65					
PWB7	0.8					
Life satisfaction		0.86	0.61	0.78	0.86	–
LS1	0.71					
LS2	0.79					
LS3	0.78					
LS4	Dropped					
LS5	0.84					

each construct (ranged from 0.76 and 0.79) was higher than its standardized correlation value with other constructs, therefore meeting the condition of discriminant validity (Fornell & Larcker, 1981). Construct reliability of all constructs were above the acceptable value of 0.8 (Fornell & Larcker, 1981). This indicates that requirements for the validity and reliability of the measurement model are met. All the results are presented in Table 3.

Common Method Bias

Considering that all the data is collected through a single questionnaire, at same time it is necessary to check the potential of CMB problem. Harman's one-factor analysis using the principal component analysis are employed to assess the potential CMB problem. The unrotated solution found no indication of one apparent factor. Results show five factors with eigenvalues above 1, with the first factor explaining only 19.48% of the total variance. In addition to this, CFA of single factor analysis result in a poor model fit: $\chi^2 = 2861.70$, $df = 405$, $\chi^2 = 7.06$, CFI = 0.58, RMSEA = 0.14, and TLI = 0.48; thereby additionally confirming no indication CMB.

Multicollinearity

The problem of multicollinearity occurs when there is high correlation between two or more predictors (independent variables) that can adversely impact regression interpretation by limiting the size of the R^2 and confounding the contribution of independent variables. The variance inflation factor (VIF) helps to determine the severity of multicollinearity among the independent variables. There is no issue of multicollinearity, when the values of VIF are below 3 (Neter

Table 4. Hypothesis Testing.

Hypothesized Path	Estimate			t-Value	Results
	B	Beta (β)	SE		
Affective WFPS → Psychological well-being	0.15	0.16	0.06	2.22*	Accepted
Behavior-based instrumental WFPS → Psychological well-being	0.2	0.18	0.09	2.07*	Accepted
Value-based instrumental WFPS → Psychological well-being	0.29	0.26	0.08	3.24***	Accepted
Affective WFPS → Life satisfaction	0.31	0.37	0.05	6.00***	Accepted
Behavior-based instrumental WFPS → Life satisfaction	0.18	0.18	0.07	2.51*	Accepted
Value-based instrumental WFPS → Life satisfaction	0.33	0.34	0.06	4.93***	Accepted

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

et al., 1983). In the present study, VIF of the independent constructs range from 1.45 to 1.79, thus indicating absence of multicollinearity.

Structural Model

For testing the hypothesis, structural model was performed in AMOS. The model fit of the hypothesized five-factor model indicated a good fit: $\chi^2 = 710.98.70$, $df = 396$, $\chi^2 = 1.79$, CFI = 0.94, RMSEA = 0.05, and TLI = 0.94. The results indicate that all three dimensions of spillover have a positive impact on the psychological well-being of the nurses (Table 4 and Figure 1). In case of the affective WFPS a significant positive influence on PWB ($\beta = 0.16$, $p < .05$) is seen which therefore supports H_{1a} . Similarly, behavior-based instrumental WFPS shows a significant positive influence on the PWB of the respondents ($\beta = 0.18$, $p < .05$) and thus supporting H_{1b} . H_{1c} was also supported as value-based instrumental WFPS shows a significant positive influence on PWB ($\beta = 0.26$, $p < 0.01$).

In similar vein, all three dimensions of WFPS show a positive impact on the life satisfaction of the nurses (Table 4 and Figure 1). Affective WFPS has a significant positive influence on the degree of life satisfaction of the respondents ($\beta = 0.31$, $p < .001$) supporting H_{2a} . Behavior-based instrumental WFPS also has a significant positive influence on life satisfaction ($\beta = 0.18$, $p < .05$), supporting H_{2b} .

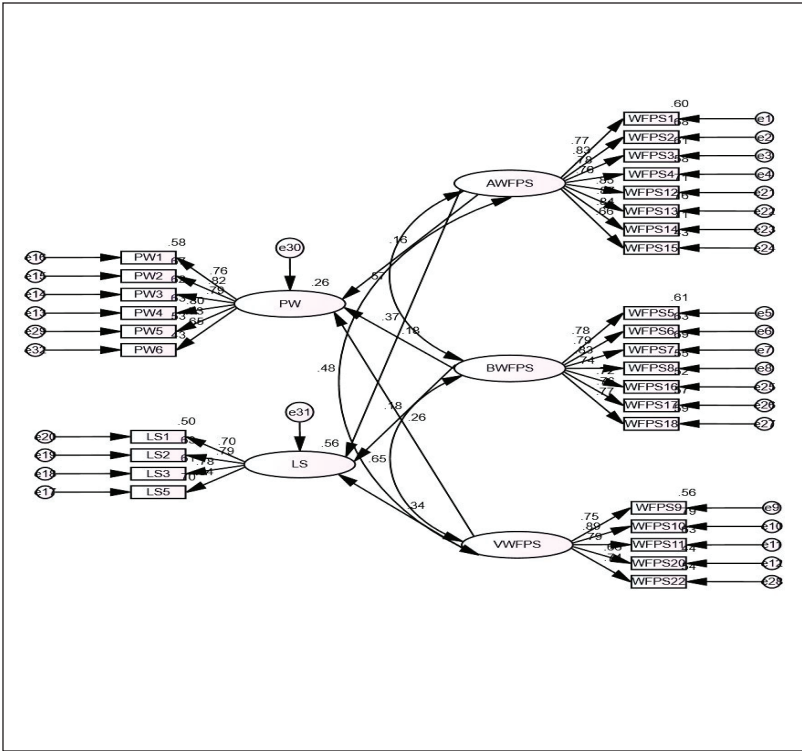


Figure 1. Structural Model.

Table 5. Regression Analysis.

Model 1	β	t
Affective WFPS	0.14	2.37*
Behavior-based instrumental WFPS	0.18	2.75**
Value-based instrumental WFPS	0.22	3.6***
Note: Dependent variable: Psychological well-being		
Model 2	β	t
Affective WFPS	0.33	6.48***
Behavior-based instrumental WFPS	0.19	3.37**
Value-based instrumental WFPS	0.27	5.2***

Note: Dependent variable: Life satisfaction.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Finally, value-based instrumental WFPS also has a significant positive influence on life satisfaction ($\beta = 0.34, p < .001$), thus supporting the hypothesis H_{2c} .

Finally, regression analysis has been carried out in SPSS to validate whether results are in line with those calculated through SEM (Table 5). The findings

showed a strong link between the outcomes of the SEM and the SPSS regression-based analysis.

Discussion

The present study focused on testing the influence of work and family positive spillover on psychological well-being and life satisfaction, using SEM. This approach is superior to regression analysis in that all predictor and outcome effects can be tested at the same time. The measurement model provides strong support for the separation of the three dimensions of WFPS. Similarly, both the measurement and structural yielded an acceptable degree of fit to the data providing strong support for the effects tested. Overall, the findings were largely in line with the literature, suggesting commonalities on the benefits of positive spillover with respect to life satisfaction and PWB.

WFPS, along all three dimensions, showed significance in predicting psychological well-being. This supports findings in the literature (Grzywacz & Marks, 2000; Hammer et al., 2005; Hanson et al., 2006). While WFPS was also significantly related to life satisfaction along all three dimensions. It should be noted that skills and behaviors show up same factor because skills are characteristically evidenced as behaviors.

In case of psychological well-being, value-based spillover scores higher in determining the increase in the psychological well-being followed by behavioral-based instrumental spillover and affective spillover. This fundamentally translates to the fact that the more values and behaviors employees reported transferring from work to family, the better their mental health and the higher their satisfaction.

These results suggest that allowing and encouraging employees to apply the skills, abilities, and values they have acquired at home—such as diligence, patience, and honesty—at work will enhance mental health. Given that values and behaviors learned in one role, for example, have a socializing influence on one's general life values and thus vicariously affect what is valued in other roles. For instance, (Vondracek & Schulenberg, 1986) assert that youngsters who playfully copy adults and help out around the house are the first to engage in job socialization. According to Kanter (1989), family culture may have an impact on the workplace by influencing family members' job-related morals, such as their work ethic. Learning research suggests that the transfer of knowledge, skills, and behaviors is more likely when they are generalized into abstract psychological and emotional schemas, facilitating skill transfer despite situational dissimilarities (Bandura, 1977), which thus justifies the preponderance of value and behavioral spillover in case of PWB.

Similar to the PWB, life satisfaction is significantly contingent on work–family positive spillover. But unlike, PWB the affective and value-based instrumental spillover have higher beta values than behavioral spillover.

Positive spillover has been linked to more satisfied families in other job contexts such as education, remote work, and caregivers. It is only appropriate that employing work-related skills and behaviors in domestic settings strengthens

family ties. Although it might be challenging to point out, on the grounds of published research as to what kinds of skills and behaviors developed at work are most effective for enhancing circumstances in life or vice versa. Differentiating between skills and behaviors acquired at work that are beneficial and/or harmful in non-work roles (life roles) more critical as it may better help in distinguishing between positive and negative spillover. As a consequence, family therapists and employee trainers could advise staff members to apply these practical work behaviors and abilities at home.

Given that the affective positive spillover among the three most closely aligns with the enrichment and facilitation models (Hanson et al., 2006) wherein the studies have implied that members who experience work–family enrichment not only have higher levels of satisfaction with their jobs but also have a higher level of satisfaction with their overall lives.

Exploring the correlations using SEM has been one of the main contributions of the current work. To our knowledge, no research have used this strategy for both measurement and prediction models as the positive spillover literature in research on nursing is still in its infancy. Our study offers a significant addition since the measurement model assessed the overall strength and reliability of the outcomes measures as well as reaffirmed the three characteristics of positive spillover. Furthermore, as all results are examined concurrently, the researcher's findings may be seen as more comprehensive and offer a more thorough understanding of the impact of positive spillover on results.

Practical Implications

Among the nurses sampled for this study, more than 75% were aged above 30 years and 68% of them were married. Such a demographic of women in the given context (North India) entails that they engender many roles in the home, such as providing childcare, eldercare and caregiving. The acquisition of various resources should therefore make it easier to perform these duties. As a result, it is incumbent on companies to create training programs that highlight and amplify facilitative and enriching impacts. Employers can reduce the expense of poor employee mental health by encouraging work-to-family positive spillover and work-to-family value-based instrumental positive spillover. Given that WFPS has been proven to be contingent on how engaging occupations are, it is critical that both employment resources be enhanced and interventions to improve job engagement be implemented.

These interventions can come in the form of programs like “Civility, Respect, and Engagement in the Workplace” and job crafting intervention programs. It must be borne in mind that evidencing of facilitation, enrichment and positive spillover in organizations does not rule out work and family conflict. A sufficient amount of assistance for balancing work and family life is still required for a robust yet empathetic organization.

Limitations and Future Direction

There are a few limitations to consider when examining the links observed between the various aspects of positive spillover and other variables offered in this study. First, because all the data was acquired using self-report questionnaires, it is probable that the relationships could have been exaggerated due to CMB. However, on Harman's one-factor analysis using the principal component analysis is employed to assess the potential CMB problem. The un-rotated solution found no indication of one apparent factor

Positive spillover has been used relatively interchangeably with other phrases in recent studies to indicate the benefits of participating in both work and family, such as facilitation, enhancement, and enrichment. The MIDUS scale, for example, has been described as a measure of both positive spillover (Grzywacz, 2000; Grzywacz et al., 2002; Grzywacz & Marks, 2000) and facilitation (Grzywacz, 2002; Grzywacz & Butler, 2003; Grzywacz & Marks, 2000). Positive spillover, according to the researcher, is one way via which both facilitation and enrichment may occur. Positive spillover, on the other hand, does not capture all of the positive impacts described as part of these novel constructs (e.g., physical resources, social capital, and material resources).

When assessing the generalizability of the findings, it is critical to note a few key constraints. A randomly selected sample would have provided the most rigorous test of generalizability. Because we lacked the necessary resources, the sample is made up of nurses from public hospitals and not the private ones.

As previously stated above, the mechanisms through which WFPS can be aided must be researched. One possibility is to try to include examples from other life domains into staff training sessions. According to learning studies, information transfer is more likely when it is generalized into abstract schemas, allowing skill transmission despite situational dissimilarities.

Conclusion

This research examined the impact of WFPS on PWB and life satisfaction of female nurses. Data were collected through structured questionnaires using a sample size of 311 female nurses across seven hospitals in Jammu & Kashmir, India. Hypotheses were tested through SEM. The results indicate that WFPS has a significant influence on PWB and life satisfaction of female nurses. This influence differed with respect to the dimensions of spillover with value-based instrumental WFPS most significant in case of psychological well-being and affective spillover in case of life satisfaction.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Fatima Riyaz Khateeb  <https://orcid.org/0000-0002-5743-7161>

References

- Andrews, D., & Wan, T. (2009). The importance of mental health to the experience of job strain: An evidence-guided approach to improve retention. *Journal of Nursing Management, 17*, 340–351. <https://doi.org/10.1111/j.1365-2834.2008.00852.x>
- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology, 12*(3), 193.
- Baltes, B. B., Clark, M. A., Chakrabarti, M. (2009). 16 work-life balance: The roles of work–family conflict and work–family facilitation. In Lingley, A., Harrington, S., Page, N. (Eds), *Handbook of positive psychology and work* (pp. 491–521). Oxford University Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191.
- Barnett, R. C., Hyde, J. S. (2001). Women, men, work, and family: An expansionist theory. *American Psychologist, 56*(10), 781.
- Best, S., Chinta, R. (2021). Work–life balance and life satisfaction among the self-employed. *Journal of Small Business and Enterprise Development*.
- Bhende, P., Mekoth, N., Ingallhalli, V., Reddy, Y. (2020). Quality of work life and work–life balance. *Journal of Human Values, 26*(3), 256–265.
- Coetzee, S., Klopper, H., Ellis, S., Aiken, L. (2012). A tale of two systems-Nurses practice environment, well being, perceived quality of care and patient safety in private and public hospitals in South Africa: A questionnaire survey. *International Journal of Nursing Studies, 50*. <https://doi.org/10.1016/j.ijnurstu.2012.11.002>
- Dhamija, P., Gupta, S., Bag, S. (2019). Measuring of job satisfaction: The use of quality of work life factors. *Benchmarking: An International Journal, 26*(3).
- Divinakumar, K., Bhat, P. S., Prakash, J., Srivastava, K. (2019). Personality traits and its correlation to burnout in female nurses. *Industrial Psychiatry Journal, 28*(1), 24.
- Edwards, J. R., Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review, 25*(1), 178–199.
- Farradinna, S., Halim, F. W., Sulaiman, W. S. W. (2019). The effects of positive spillover and work–family conflict on female academics’ psychological well-being. *Psikohumaniora: Jurnal Penelitian Psikologi, 4*(2), 129–142.
- Fornell, C., Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50.
- Gill, R. (2016). Scarcity of nurses in India: A myth or reality? *Journal of Health Management, 18*(4), 509–522.
- Greenhaus, J. H., Allen, T. D. (2011). *Work–family balance: A review and extension of the literature*.
- 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.

- Grzywacz, J. G. (2002). *Toward a theory of work–family facilitation* [Paper presentation]. 34th Annual Theory Construction and Research Methodology Workshop, Houston, TX.
- Grzywacz, J. G., Marks, N. F. (2000). Reconceptualizing the work–family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5(1), 111.
- Gupta, M., Shaheen, M., Das, M. (2019). Engaging employees for quality of life: Mediation by psychological capital. *The Service Industries Journal*, 39(5–6), 403–419.
- Hall, L. H., Johnson, J., Watt, I., Tsipa, A., O’Connor, D. B. (2016). Healthcare staff well-being, burnout, and patient safety: A systematic review. *PloS One*, 11(7), e0159015.
- Hammer, L. B., Cullen, J. C., Neal, M. B., Sinclair, R. R., Shafiro, M. V. (2005). The longitudinal effects of work–family conflict and positive spillover on depressive symptoms among dual-earner couples. *Journal of Occupational Health Psychology*, 10(2), 138.
- Hanson, G. C., Hammer, L. B., Colton, C. L. (2006). Development and validation of a multidimensional scale of perceived work–family positive spillover. *Journal of Occupational Health Psychology*, 11(3), 249.
- Heller, D., Watson, D. (2005). The dynamic spillover of satisfaction between work and marriage: The role of time and mood. *Journal of Applied Psychology*, 90(6), 1273.
- Iyer, R. D., Deshmukh, M. (2018). Moderating effect of workplace spirituality on role stressors and job satisfaction among Indian nurses. *Journal of Management and Public Policy*, 9(2), 15–30.
- Johnson, A. R., Jayappa, R., James, M., Kulnu, A., Kovayil, R., Joseph, B. (2020). Do low self-esteem and high stress lead to burnout among health-care workers? Evidence from a tertiary hospital in Bangalore, India. *Safety and Health at Work*, 11(3), 347–352.
- Kanter, R. M. (1989). Work and family in the United States: A critical review and agenda for research and policy. *Family Business Review*, 2(1), 77–114. <https://doi.org/10.1111/j.1741-6248.1989.00077.x>
- Karatepe, O. M., Azar, A. K. (2013). The effects of work–family conflict and facilitation on turnover intentions: The moderating role of core self-evaluations. *International Journal of Hospitality & Tourism Administration*, 14(3), 255–281. <https://doi.org/10.1080/15256480.2013.809987>
- Kesarwani, V., Husaain, Z. G., George, J. (2020). Prevalence and factors associated with burnout among healthcare professionals in India: A systematic review and meta-analysis. *Indian Journal of Psychological Medicine*, 42(2), 108–115.
- Kim, S. Y., Lee, J., Wester, S. R., Fouad, N. (2020). Do “manly” men believe other men are happier? Social comparison, masculine norms, and positive work–family spillover. *Psychology of Men & Masculinities*, 21(2), 251.
- Kossek, E. E., Valcour, M., Lirio, P. (2014). Organizational strategies for promoting work–life balance and wellbeing. *Work and Wellbeing*, 3, 295–319.
- Lee, D.-W., Hong, Y.-C., Seo, H., Yun, J.-Y., Nam, S., Lee, N. (2021). Different influence of negative and positive spillover between work and life on depression in a longitudinal study. *Safety and Health at Work*, 12(3), 377–383.
- Madhiwalla, N., Ghoshal, R., Mavani, P., Roy, N. (2018). Identifying disrespect and abuse in organisational culture: A study of two hospitals in Mumbai, India. *Reproductive Health Matters*, 26(53), 36–47.
- Masuda, A. D., McNall, L. A., Allen, T. D., Nicklin, J. M. (2012). Examining the constructs of work-to-family enrichment and positive spillover. *Journal of Vocational Behavior*, 80(1), 197–210.
- McNall, L. A., Masuda, A. D., Nicklin, J. M. (2009). Flexible work arrangements, job satisfaction, and turnover intentions: The mediating role of work-to-family enrichment. *The Journal of Psychology*, 144(1), 61–81. <https://doi.org/10.1080/00223980903356073>

- Nayak, T., Sahoo, C. K., Mohanty, P. K. (2018). Workplace empowerment, quality of work life and employee commitment: A study on Indian healthcare sector. *Journal of Asia Business Studies*, 12(2), 117–136.
- Neter, J., Wasserman, W., Kutner, M. H. (1983). *Applied linear regression models*. Richard D. Irwin. Inc.
- Pandey, J., Singh, M. (2019). Positive religious coping as a mechanism for enhancing job satisfaction and reducing work–family conflict: A moderated mediation analysis. *Journal of Management, Spirituality & Religion*, 16(3), 314–338.
- Perrone, K. M., Civiletto, C. L. (2004). The impact of life role salience on life satisfaction. *Journal of Employment Counseling*, 41(3), 105–116.
- Poelmans, S., Stepanova, O., Masuda, A. (2008). Positive spillover between personal and professional life: Definitions, antecedents, consequences, and strategies. In *Handbook of work–family integration* (pp. 141–156). Elsevier.
- Rashid, Wan, W., E. Nordin M., S., Omar, A., Ismail, I. (2011). Social support, work–family enrichment and life satisfaction among married nurses in health service. *International Journal of Social Science and Humanity*, 150–155. <https://doi.org/10.7763/IJSSH.2011.V1.26>
- Rhee, T., Zheng, F. (2019). The effects of work–family enrichment on job and life satisfaction of Korean employees. *International Journal of Financial Research*, 10, 138. <https://doi.org/10.5430/ijfr.v10n5p138>
- Saqib, J., Taleb, M., AlMeimar, R., Alhomaidan, H. T., Al-Mohaimed, A., AlMazrou, A., AlShaya, S. S., Saqib, N. (2020). Job insecurity, fear of litigation, and mental health among expatriate nurses. *Archives of Environmental & Occupational Health*, 75(3), 144–151.
- Shabir, S., Gani, A. (2020). Impact of work–life balance on organizational commitment of women health-care workers: Structural modeling approach. *International Journal of Organizational Analysis*, 28(4).
- Shastri, S., Shastri, S., Pareek, A., Sharma, R. S. (2021). Exploring women entrepreneurs’ motivations and challenges from an institutional perspective: Evidences from a patriarchal state in India. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(4).
- Siebert, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39(4), 567–578.
- Singh, T., Kaur, M., Verma, M., Kumar, R. (2019). Job satisfaction among health care providers: A cross-sectional study in public health facilities of Punjab, India. *Journal of Family Medicine and Primary Care*, 8(10), 3268.
- Sok, J., Blomme, R. J., De Ruiter, M., Tromp, D., Lub, X. (2018). Home to work spillover and turnover intentions: The mediating role of training and development practices. *European Journal of Training and Development*, 42(3/4), 246–265.
- Sousa, L., Lyubomirsky, S. (2001). Life satisfaction. *Encyclopedia of Women and Gender: Sex Similarities and Differences and the Impact of Society on Gender*, 2, 667–676.
- Stevanovic, P., Rupert, P. (2009). Work-family spillover and life satisfaction among professional psychologists. *Professional Psychology: Research and Practice*, 40, 62–68. <https://doi.org/10.1037/a0012527>
- 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.
- Thoits, P. A. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. *American Sociological Review*, 48(2), 174–187.

- Verma, A., Kishore, J., Gusain, S. (2018). A comparative study of shift work effects and injuries among nurses working in rotating night and day shifts in a tertiary care hospital of North India. *Iranian Journal of Nursing and Midwifery Research*, 23(1), 51.
- Vondracek, F. W., Schulenberg, J. E. (1986). Career development in adolescence: Some conceptual and intervention issues. *Vocational Guidance Quarterly*, 34(4), 247–254.
- Voydanoff, P. (2002). Linkages between the work–family interface and work, family, and individual outcomes: An integrative model. *Journal of Family Issues*, 23(1), 138–164.
- Wayne, J. H. (2009). Reducing conceptual confusion: Clarifying the positive side of work and family. *Handbook of Families and Work: Interdisciplinary Perspectives*, 105–140.
- Wilensky, H. L. (1960). Work, careers and social integration. *International Social Science Journal*, 12(4), 543–560.
- Wilkinson, M. (2013). *Work life balance and psychological well-being in men and women* [Doctoral dissertation].
- Wilson, W., Raj, J. P., Rao, S., Ghiya, M., Nedungalaparambil, N. M., Mundra, H., Mathew, R. (2020). Prevalence and predictors of stress, anxiety, and depression among health-care workers managing COVID-19 pandemic in India: A nationwide observational study. *Indian Journal of Psychological Medicine*, 42(4), 353–358.
- Wolfram, H.-J., Gratton, L. (2014). Spillover between work and home, role importance and life satisfaction. *British Journal of Management*, 25. <https://doi.org/10.1111/j.1467-8551.2012.00833.x>
- Yang, S.-B., Lee, K.-H. (2009). Linking empowerment and job enrichment to turnover intention: The influence of job satisfaction. *International Review of Public Administration*, 14, 13–24. <https://doi.org/10.1080/12294659.2009.10805152>
- Yayla, A., İlgin, E., Eskici V. (2021). The relationship of nurses' psychological well-being with their coronaphobia and work–life balance during the COVID-19 pandemic: A cross-sectional study. *Journal of Clinical Nursing*, 30(21–22), 3153–3162.
- Yucel, D. (2017). Work-to-family conflict and life satisfaction: The moderating role of type of employment. *Applied Research in Quality of Life*, 12(3), 577–591.
- Yusuf, S., Khan, S. A. (2018). Impact of work-life balance on life satisfaction among Qatar police personnel. *IAETSD Journal for Advanced Research in Applied Sciences*, 5(3), 420–424.
- Zhao, X. R., Qu, H., Ghiselli, R. (2011). Examining the relationship of work–family conflict to job and life satisfaction: A case of hotel sales managers. *International Journal of Hospitality Management*, 30(1), 46–54.