

The Path to Wellbeing: The Role of Work-Family Conflict, Family-Work Conflict and Psychological Strain

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Abstract—Although considerable amount of research has attested to the link between work-to-family conflict (WFC) and family-to-work conflict (FWC) and psychological strain and wellbeing, there is a paucity of research investigating the phenomenon in the context of social workers. Moreover, very little is known about the impact of WFC and FWC in developing countries. The present study investigated the mediating effect of psychological strain on the relationship between WFC and FWC with wellbeing of social workers in India. Our findings show that WFC and FWC are influential antecedents of wellbeing; their influence is both direct on psychological strain, and indirect on wellbeing transmitted through psychological strain. Implications of the findings are discussed.

Keywords—Family-to-work conflict, psychological strain, wellbeing, work-to-family conflict.

I. INTRODUCTION

WELLBEING of employees has been the focus of increasing amounts of scholarship in recent years, driven by the dramatic changes occurring in the work environments of organizations [1], [2]. The process of globalization, advances in technology, increased competition, work intensification, diversification of the workforce, increased number of women in the workforce, and the blurring of boundaries between work and family are some of the changes that have impacted the work environments [3], [4]. Scholars have raised concerns over the extent to which work and family roles have become intertwined, and the emotions, attitudes and behaviours originating in one domain (e.g., work or family) can spill over and have a positive or negative effect on experiences in other domain (e.g., family or work) [5]. In recent years, research attention has focused on work-to-family conflict and family-to-work conflict as key antecedents of employee wellbeing in many industrialized

nations [6], [7]. However, Aycan [8] noted that the majority of research on work-family conflict has been conducted in Western industrialized countries, and called for investigation of the phenomenon in developing countries.

The challenges associated with managing conflict at the interface of work and family are critical to social work practice, which is widely acknowledged as a demanding and a stressful occupation [9], [10]. However, there is a paucity of research investigating work-family conflict and its impact on the wellbeing of social workers in both industrialized and developing nations [11]. In India the situation is even more concerning. The changing social demographics over the last two decades have seen a growing number of dual earner families with more women entering the workforce. However, India largely remains a traditional society where the patterns of family life and role-structures remain unchanged. Women on average, still have responsibility for the family including tasks such as cooking, providing care for children and other related house-hold tasks [12]. Thus, the increasing participation of women in paid work alongside unpaid responsibilities at home such as caring for children, in some cases grandchildren, ageing parents/relatives has put increased burden on them to juggle work and family lives [13], [14]. In one of the few studies examining work-family conflict among employed couples in India, Kalliath and Kalliath [15] reported widespread experience of work-family conflict and its negative consequences including stress, and reduced time with family. The present study will extend the previous qualitative work by focusing on the direct and indirect role of work-family conflict, family-work conflict on psychological strain and wellbeing experienced by social workers in India.

II. LITERATURE REVIEW

A. Theory

To develop a broader understanding of the dynamics at work-family interface, more recently researchers have drawn on ecological systems theory [16]. The ecological systems theory [17] conceptualizes the environment to be made up of four layers of hierarchical systems such as the micro system, mesosystem, exosystem, and the macrosystem. The microsystem is the most immediate level and is defined “as a place with particular physical features in which the participants engage in particular roles for particular periods of time” [17, p.514]. Within the context of work-family interface, Voydanoff [18] describes work and family as

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microsystems that provide for a number of activities and network of face-to-face relationships. These relationships can be positive or negative; they can be unidirectional or reciprocal. The next immediate layer is the mesosystem which consists of connections and interrelationships among the various microsystems in which an individual participates. These connections can be between an individual's work and family environment, family and the community (e.g. school), or work and the community. The nature of the relationships among the microsystems has an impact on an individual's role performance and wellbeing [19]. In the context of the present study, work-family conflict, family-work conflict, psychological strain and wellbeing can be viewed as microsystems, and the relationships between these variables can impact the wellbeing of individuals.

B. Work-Family Conflict (WFC) and Family-Work Conflict (FWC)

Work-family conflict is defined as 'a form of inter-role conflict in which the role pressures from work and family domains are mutually incompatible in some respect. That is, participation in the work (or family) role is made more difficult by virtue of participation in the family (or work) role' [20, p. 77]. Work-family conflict is conceptualised as bidirectional, that is, conflict can occur from the direction of work to family, resulting in work-to-family conflict (WFC), and from the direction of family to work, resulting in family-to-work conflict (FWC). Greenhaus and Beutell [20] identified three forms of conflict: time-based conflict, strain-based conflict and behaviour-based conflict. *Time-based conflict* occurs when a person devotes most of his or her time to demands in one domain (work or family) and does not have the necessary time needed to fulfil demands of roles in the other domain (work or family), which then go either unmet or met inadequately. *Strain-based conflict* occurs when strain experienced in one domain (work or family) makes it difficult for individuals to meet the demands of roles in the other domain. *Behaviour-based conflict* occurs when behaviours that are normally considered appropriate in one domain (work or family) are not appropriate for use in the other domain.

C. WFC, FWC, Psychological Strain and Wellbeing

There is growing empirical evidence of the negative consequences of WFC and FWC on the wellbeing of individuals. The link between WFC and FWC on work-related and family-related outcomes was investigated by Grant-Vallone and Donaldson [21] in a sample of 342 non-professional employees from the greater Los Angeles area. The results revealed that work-family conflict was an immediate and longitudinal predictor of employee's positive wellbeing. In a meta-analysis review of 356 studies investigating the consequences of WFC and FWC on outcomes, Amstad, et al. [6] found that both types of conflict showed strong relationships to psychological strain and wellbeing (measured by work satisfaction and family satisfaction). In a longitudinal investigation of employees

from 23 large organizations (N=691) O'Driscoll, Brough and Kalliath [22] found that FWC showed more consistent negative relationships with wellbeing at each time period.

Although there is considerable literature examining the direct effects of WFC and FWC on psychological strain and wellbeing, fewer researches has examined the mediating role of psychological strain in the relationship between WFC and FWC on wellbeing. Also, given that psychological strain is stressful and creates disequilibrium, thereby affecting wellbeing [23], it is reasonable to expect psychological strain to play a mediating role. As noted earlier, drawing on the ecological systems theory, Bronfenbrenner [17], Voydanoff [18] has argued that work and family are microsystems that are inter-connected at the level of mesosystem. Hence, the positive and negative influences of antecedents (e.g., WFC and FWC) are likely to impact outcomes (e.g., wellbeing) directly, as well as indirectly (e.g., through psychological strain).

The present study aims to fill two gaps in the literature: (a) to uncover the mediating role of psychological strain in the relationship between WFC, FWC, and wellbeing; and (b) given the paucity of non-Western studies on the impact of WFC and FWC on outcomes [8], we examine the role of WFC and FWC in both direct effects on outcomes, and the mediating effects through psychological strain in the context of an Indian sample of social workers. Following hypotheses were tested:

- Hypothesis-1: WFC (Time, Strain, and Behaviour) and FWC (Time, Strain, and Behaviour) will have direct effect on psychological strain and wellbeing
- Hypothesis-2: The influence of WFC (Time, Strain, and Behaviour) and FWC (Time, Strain, and Behaviour) on wellbeing will be mediated through psychological strain.

III. METHOD

Data for the study were collected from qualified social workers located in 15 major cities across India. In total 770 questionnaires were distributed, and of these 450 completed questionnaires were returned representing a response rate of 58%. Of the 450 returned questionnaires, 428 had usable data.

A. Sample

The sample (n=428) consisted of 54.0% females (n=231) and 46.0% males (n=197) of an average age of 35.6 years. The majority (80% n=343) were married, 18.5% (n=79) were single and never married, and 1.5% (n=6) were separated, divorced or widowed. Of the married sample, 59.8% (n=205) had a partner in full-time employment, 5.8% (n=20) in part-time employment, and 19.5% (n=67) were unemployed at the time of the survey. Forty-seven percent (n=201) reported having no children. Of those with children, the majority had fewer than four children, mean age being 12.33 years (SD= 6.3). Fifty-three percent (n=227) of the sample were providing care to family members other than their own children. Ninety-six percent (n=411) were in full-time employment working an average of 44 hours per week (SD=9.52) and spent an average

of 8.35 hours per week (SD=7.46) travelling to and from work. Outside of work hours, the respondents spent an average of 15.3 hours per week (SD=13.68) in unpaid work at home.

B. Measures

1. Work-to-Family Conflict and Family-to-Work Conflict

WFC and FWC were each measured using the nine-item Work-Family Conflict Scale [24], which measured all three forms of WFC and FWC. Example items for each form of conflict are: 'the time I must devote to my job/family keeps me from participating equally in household responsibilities and activities' (time-based conflict); 'the behaviour that is effective and necessary for me at work/home would be counterproductive at home/work' (behaviour-based conflict) and 'due to pressures at work/family, sometimes when I come home/work I am too stressed to do the things I enjoy' (strain-based conflict). Responses were measured on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree, with higher scores representing higher levels of conflict. The internal consistency of the scale in the present study ranged from .83 to .89.

2. Psychological Strain

The 12-item version of the General Health Questionnaire (GHQ-12) [25] was used to measure psychological strain. The GHQ-12 is a widely used measure of psychological strain that has consistently reported high levels of internal reliability in previous studies [26], [27]. Kalliath, O'Driscoll and Brough [28] conducted a confirmatory factor analysis of the GHQ-12 and found that a two-factor model provided the strongest fit with data. In the present study, we used one of the factors, namely the Psych Strain--Anxiety/Depression to measure psychological strain. An example item is: 'felt constantly under strain?' responding to a six-point scale where 0='never' and 5='all the time', with higher scores indicating higher levels of Psych Strain--Anx Dep. The internal consistency of the Psych Strain--Anxiety/Depression was .89.

3. Wellbeing

This was measured using Warr's [29] 12-item job/family related affective wellbeing scale: six items measuring positive feelings (comfortable, calm, relaxed, motivated, enthusiastic and optimistic) and six negative feelings (tense, anxious, worried, depressed, melancholic and unhappy). Respondents were asked to assess how often in the past three months their job/family had made them experience any of the twelve feelings. Responses were measured on a six point Likert scale with 1=never and 6=all the time. The internal consistency of the scale in the present study was .87.

4. Qualitative Data

The study included one open-ended question which provided respondents an opportunity to share their personal experiences of enrichment obtained from their participation in work and family roles. This question was part of the larger

survey which also included information on demographic and work-related characteristics of the respondents. The question asked was:

"What are some of the challenges you experience in managing your work and family demands?"

C. Analytic Procedures

The psychometric properties of the scales used in this study were assessed with confirmatory factor analysis and reliability analysis. Confirmatory factor analysis using AMOS (Version 20) was performed to assess how well the measurement model fits the data. The various fit indices that are used to assess model fit include a normed χ^2 (or χ^2 / degrees of freedom), Goodness-of-Fit Index (GFI) of at least .95, Comparative Fit Index (CFI) of at least .90, Root Mean Square Error of Approximation (RMSEA) of less than .05, Incremental Fit Index (IFI) of at least .90, Tucker Lewis Index of at least .90, and Non-normed Fit Index of at least .90 [30]. Given that previously developed measures are used in this study, confirmatory factor analysis is considered to be an appropriate analytic procedure. Reliability analysis was performed with the Cronbach's alpha [40], which is a measure of the internal consistency of a scale and a commonly accepted alpha coefficient in the extant literature is at least .70.

Once the psychometric properties of the scales were validated, structural equation modelling (SEM) was used to test the hypotheses. SEM is preferred over other predictive techniques such as regression analysis and path analysis because of its ability to account for measurement errors and test all the parameters simultaneously [30]. Bootstrapping is an increasingly popular method that is used to test the mediated relationship [32]. Basically, bootstrapping can take an infinite number of subsets from the dataset for analytical purposes without having to satisfy the normality requirement [33]. As recommended by Preacher and Hayes [34], 5000 bootstrap resamples with a 95% confidence interval is used.

The responses to the open-ended question were analyzed using thematic analysis.

IV. RESULTS

Means, standard deviations, bivariate correlations and Cronbach's alpha are presented in Table I. Bivariate correlations show that the study variables were significantly correlated and these were in the right direction. WFC-Time, WFC-Strain and WFC-Behaviour were negatively correlated with Wellbeing with correlations ranging from -.20 to -.32, $p < .01$. Likewise FWC-Time, FWC-Strain and FWC-Behaviour were negatively correlated with Wellbeing with correlations ranging from -.18 to -.34, $p < .01$. WFC-Time, WFC-Strain and WFC-Behaviour were also negatively correlated with PsychStrain with correlations ranging from -.17 to -.32, $p < .01$. Likewise FWC-Time, FWC-Strain and FWC-Behaviour were negatively correlated with PsychStrain with correlations ranging from -.30 to -.44, $p < .01$. Confirmatory factor analysis using 3 WFC variables (Time, Strain and Behaviour), psychological strain and wellbeing

showed a good fitting model ($\chi^2=425.66$, $df=179$; $TLI=.93$; $CFI=.94$; $RMSEA=.06$) (model 1). Similar CFA with 3 FWC variables (time, strain, and behaviour), psychological strain and wellbeing produced good fitting model ($\chi^2=450.72$, $df=179$; $TLI=.92$; $CFI=.94$; $RMSEA=.06$) (model 2). Given that we obtained good fitting measurement models, we proceeded to test two structural models to examine the mediating role of psychological strain in the relationship between WFC and wellbeing (model 1), and FWC and wellbeing (model 2).

Good fitting structural models were obtained with WFC as antecedents ($\chi^2=425.66$, $df=179$; $TLI=.93$; $CFI=.94$; $RMSEA=.06$) and FWC as antecedents ($\chi^2=450.72$, $df=179$; $TLI=.92$; $CFI=.94$; $RMSEA=.06$). Among the antecedents, both WFC (strain) and FWC (strain) were consistent predictors of psychological strain, but only FWC (strain) predicted wellbeing. In addition, FWC (time) and WFC (behavior) predicted psychological strain.

TABLE I
MEANS, STANDARD DEVIATIONS, CORRELATIONS, AND CRONBACH'S ALPHA OF KEY VARIABLES

VARIABLE	Mean	SD	1	2	3	4	5	6	7	8
1. WFC (Time)	3.19	0.99	.87							
2. WFC (Strain)	3.06	1.04	.48	.91						
3. WFC (Behaviour)	3.00	0.96	.38	.49	.88					
4. FWC (Time)	2.41	0.93	.24	.37	.30	.84				
5. FWC (Strain)	2.37	1.05	.27	.44	.33	.65	.90			
6. FWC (Behaviour)	2.70	0.90	.15	.33	.34	.48	.48	.82		
7. Psychological strain(Anx-Dep)	1.11	0.83	.16	.32	.28	.40	.43	.30	.72	
8. Wellbeing	4.16	1.03	-.20	-.34	-.37	-.44	-.49	-.30	-.41	.90

Note: $N=428$, Coefficients $< .20$ are significant at the $p < .01$ level and coefficients of at least $.20$ are significant at the $p < .001$ level. Cronbach's alphas are reported diagonally in bold

The indirect effects were tested using the bootstrapping method, a 95% confidence interval, and bootstrap resamples of 5000 [32]. The standardized indirect effects include WFC/FWC (Time) \rightarrow Wellbeing ($\beta=.02$, $p=.49$; $\beta=-.08$, $p<.05$); WFC/FWC (Behaviour) \rightarrow Wellbeing ($\beta=-.05$, $p<.01$; $\beta=-.03$, $p=.27$); WFC/FWC (Strain) \rightarrow Wellbeing ($\beta=-.10$, $p<.01$; $\beta=-.10$, $p<.01$). As the standardized coefficients in Fig. 1 show, the direct effects are partially supported; hence, Hypothesis 1 is partially supported. The influence of antecedents (WFC and FWC) on wellbeing was mediated by psychological strain) and psychological strain also had direct effect on wellbeing. Hence hypothesis 2 was accepted. Results of the structural models are presented in Fig. 1 below:

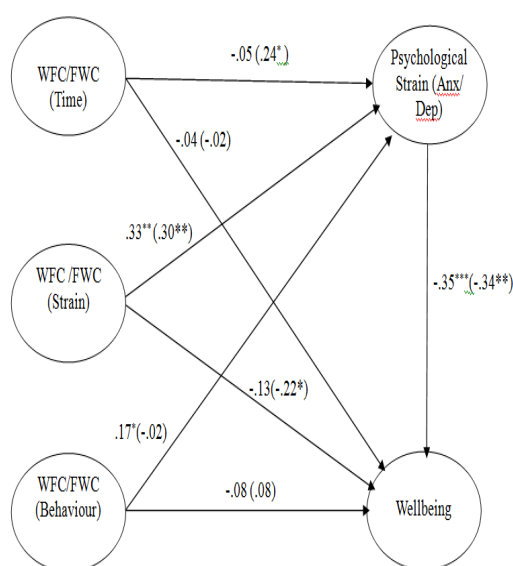


Fig. 1 Direct and mediated effects of WFC and FWC on psychological strain and wellbeing

The structural coefficients are presented on top of the arrow, model 1 coefficients first and model 2 coefficients in parenthesis. Among antecedents, WFC (Strain) and FWC (Strain) were direct and significant predictors of psychological strain. Other predictors of psychological strain were WFC (Behavior), and FWC (Time). Only FWC (Strain) predicted wellbeing. In both models, psychological strain reduced wellbeing experiences by social workers.

V.DISCUSSION

Employee wellbeing is the focus of increasing amounts of contemporary research driven by accumulating evidence that when employees have a sense of wellbeing, they perform better [35], are healthier [36], and happier [37]. While WFC and FWC have been extensively investigated as antecedents of wellbeing in Western industrialized nations, less research has been devoted to studying the phenomenon in developing nations. Social workers as an occupational group have been investigated in relation to their work stress experiences [10], [38], but the role of WFC and FWC in influencing psychological strain and wellbeing experiences have not been investigated either in Western industrialized countries [11], or in underdeveloped countries [8]. The present study contributes to the literature by providing evidence of the direct influence of WFC and FWC on the psychological strain and wellbeing of social workers in India. Our findings also confirm the mediating role of psychological strain in the relationship between WFC and FWC and wellbeing experienced by social workers in India.

Our study found that both WFC and FWC predicted psychological strain among social workers. However, not all antecedents were equally influential. WFC (strain) and FWC (strain) showed more robust direct effects on psychological

strain than other antecedents. FWC (time) and WFC (behaviour) were also predictors of psychological strain, but only FWC (strain) predicted wellbeing. This finding provides empirical evidence for the prevalence of both WFC and FWC among social workers in India, and consequently its impact on their psychological wellbeing. Our study contributes to the literature by providing preliminary evidence of the negative consequences of WFC, FWC and psychological strain on the wellbeing of social workers in India.

Allen, Herbst, Bruck, & Sutton [39], meta-analysis of 14 cross-sectional studies concluded that there was a direct positive association between WFC and psychological strain suggesting that pressures emanating at work flow into the family domains and adversely affected participation at home, which in turn contributed to psychological strain. Noor's [14] study supported FWC as a strong predictor of psychological strain among a sample of women. Noor partly attributed her findings to the view that women are generally responsible for tasks in the family domain despite their participation in the workforce and hence are likely to experience more FWC. What is significant about the present study is its investigation of the different forms of conflict (in both directions; work-to-family and family-to-work) and the findings that WFC/FWC (strain) among all the antecedents was the most robust predictor of increased psychological strain.

The mediation effects of psychological strain in the relationship between antecedents (WFC and FWC) and outcome (wellbeing) present interesting findings. We found partial support for the mediating effects of FWC (Time) and WFC (Behaviour) transmitted through psychological strain on the wellbeing of social workers. However, our most robust finding was the mediation effects of WFC/FWC (Strain) transmitted through psychological strain on the wellbeing of social workers. The combined influence of antecedents directly on psychological strain, and mediated through psychological strain on wellbeing attest to the importance of both antecedents in influencing the wellbeing of social workers, and the mediating role of psychological strain in the relationship between antecedents and wellbeing. An important implication of the present findings is that improvement in the psychological wellbeing of social workers cannot be accomplished solely by reducing WFC and FWC. While it is a common practice to rely on direct effects (e.g., via introduction of family-friendly policies to reduce work-family and family-work conflict), the presence of mediation effects point to the role played by indirect influences operating through psychological strain experienced by social workers.

Our findings support to Voydanoff's [18] argument based on the ecological systems theory [17] that work and family are microsystems (Work-to-family conflict and family-to-work conflict), and the nature of their relationship to the mediator variable psychological strain (i.e., positive relationship) can reduce the wellbeing experienced by social workers. The following comments extracted from responses provided to the open ended question provide deeper insights into the impact of WFC and FWC on the social worker's wellbeing:

"Due to office work I am unable to give due time towards the home hence leading to stress and high blood pressure." (Social worker, Counseling Services)

"At times it is very stressful and hampers required effect at work and vice versa. Success and failure has effect on family life." (Social worker, Domestic Violence Services)

"Pressure of work in family and work then create pressure on health." (Social work Supervisor, Child Protection Services)

The findings reported in the present study need to be considered in relation to three methodological limitations. *First*, the focus of our present study was limited to a set of antecedents (WFC and FWC) that influenced psychological strain and wellbeing. It is quite possible that we have not included other influential variables that may have impacted on the wellbeing of social workers. Hence, the findings of the present study must be read cautiously in relation to the work-life interface variables included in the present study. A *second* limitation of the present study is our reliance on single-source data that can result in common method variance. Although this limitation is often associated with survey methodology, Crampton and Wagner [31] showed that there is no strong evidence to suggest that self-report methods are in any way inflated. Finally, there could be the possibility of reciprocal relationships between WFC, FWC, psychological strain and wellbeing. Further studies with longitudinal data ought to be able to test this reciprocal hypothesis.

VI.CONCLUSION

The present study contributes to the literature on work-family interface by providing empirical evidence of direct effect of WFC, and FWC on psychological strain and wellbeing of social workers in India. The study also came up with evidence of mediated effects of psychological strain in the relationship between WFC and FWC on wellbeing. The study points to the need for developing organizational strategies that foster the wellbeing of employees, through better management of WFC and FWC experiences of employees; and recommend employment of strategies that will reduce psychological strain experienced by social workers. The study provides evidence that reducing WFC, FWC and psychological strain can be an effective organizational strategy to enhance the wellbeing of social workers.

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