

A Test of Greenhaus and Allen (2011) Model on Work-Family Balance

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Abstract The aim of the present study is to test the Greenhaus and Allen (2011) model on work-family balance (WFB). The model was tested using a survey based methodology. An online questionnaire was administered and data was collected from academicians from higher education institutes in India (492 samples) and USA (293 samples). Partial least square structural equation modeling (PLS SEM) results showed that work-family conflict and work-family facilitation predicted job and family satisfaction. Similarly both types of satisfactions (job and family) predicted feelings of WFB, which in turn results in life satisfaction. In both samples, the model was found to have adequate predictive relevance and goodness of fit with the data. Thus, academicians working in higher educational institutions in India and USA can attain work-family balance by achieving job and family satisfaction. Similarly, job and family satisfaction decreased and increased due to conflict and facilitation respectively. Finally, this work showed that if academicians can achieve balance between work and family, they can attain satisfaction in life as a whole.

Keywords Work-family conflict · Work-family facilitation · Work-family balance · Job satisfaction · Family satisfaction · Life satisfaction

Introduction

Balancing personal and academic life remains a critical issue for the faculty. Recently a Higher Education Research Institute Faculty Survey conducted in United States of America shows that only 32 % of the faculty believe that they have achieved healthy balance between their academic and personal life. Also in the study by Watanabe and Falci (2014) indicated that there is significant scope for research in work-family balance domain with respect to academia. In many of the universities and academic institutions in India the working time is between 40 and 60 h a week (Pattusamy and Jacob 2015). In India to the best of our knowledge only one study exists to study work-family balance (WFB) in academia, in the study the authors had established the mediating role of WFB in the relationship between work-family conflict (WFC) and job and family satisfaction (Pattusamy and Jacob 2015). The context of the present study is different from the findings of Pattusamy and Jacob (2015), because here we conceptualize WFB as outcome of job and family satisfaction and also include life satisfaction as overall outcome. Still there exist a need to study faculty WFB in Indian context.

Two views exist among work-family researchers on the concept of WFB. One view is conceptualization of work-family balance as a distinct construct from WFC and work-family enrichment (WFE) or work-family facilitation (WFF) (Greenhaus and Allen 2011; Greenhaus et al. 2012; Wayne et al. 2004). Scholars subscribing to the other view argue that concepts of WFC and WFE are essential to capture the multidimensionality of WFB (Grzywacz and Carlson 2007; Aryee et al. 2005). According to Grzywacz and Carlson (2007) WFB is defined as “accomplishment of role-related expectations that are negotiated and shared between an individual and his or her role-related partners in

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the work and family domains”. According to Greenhaus and Allen (2011) WFB is defined as “an overall appraisal of the extent to which individuals effectiveness and satisfaction in work and family roles are consistent with their life values at a given point in time”.

Earlier studies on WFB have used both approaches to test new theories (e.g., Greenhaus et al. 2012; Aryee et al. 2005; Ferguson et al. 2012). Greenhaus et al. (2012) have tested WFB as an outcome of WFC. Aryee et al. (2005) multidimensionally conceptualized WFB using WFC and WFF. More recently, Haar (2013) showed that work-life conflict and work-life enrichment are predictors for work-life balance. Greenhaus and Allen (2011) described a conceptual model wherein work and family role characteristics can have indirect impact on feelings of WFB through WFC and WFE. In specific no study has examined job and family satisfaction as predictor for WFB. Overall, based on the above mentioned definition and description, no research evidence exists in academic literature to empirically test the Greenhaus and Allen (2011) hypothesis, and there exists a strong need to test this assumption empirically in the context of work-family research.

Background and Review of Literature

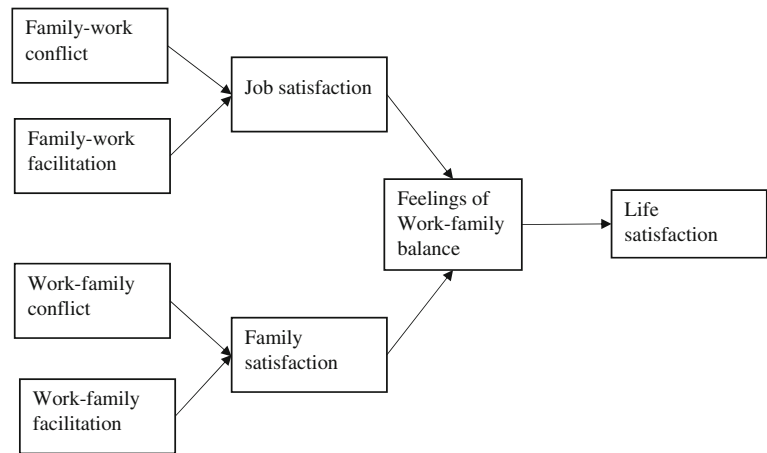
WFC is defined as “a form of inter role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus and Beutell 1985, p. 77). Work–family enrichment specifies the conditions under which work and family are associated rather than becoming enemies (Greenhaus and Powell 2006). Frone (2003) argued that less WFC and high work–family enrichment are equal to WFB. However, different scientists have argued that WFB is the outcome of both directions (work to family and family to work) of WFC and WFF (Carlson et al. 2009; Haar 2013). Greenhaus and Allen (2011) describe a model wherein the feelings of balance are produced by an interaction of effectiveness and satisfaction in the work and family domains with life values. WFC and WFE play prominent roles in the WFB model because they can diminish (in the case of WFC) or enhance (in the case of WFE) performance and satisfaction in a highly valued role, thereby having indirect effects on feelings of balance. In their model, Greenhaus and Allen postulated that work and family related resources can reduce WFC and increase WFE, which in turn promotes effectiveness and satisfaction in both roles and then finally, results in feelings of balance. Additionally they noted that career-and-family centered people feel adjusted only when they are profoundly compelling and fulfilled in both roles in light of the fact that anything less would be conflicting with the dual centrality of both roles Fig. 1.

Consequences of Work-Family Conflict, Work-Family Facilitation

WFC is a two-directional construct, with work-to-family conflict (W-to-FC) and family-to-work conflict (F-to-WC). According to the definition of Greenhaus and Beutell (1985), W-to-FC is the demand or role pressures from work domain that affects family domain activities and F-to-WC as being vice versa. Past studies on WFC have focused on the different negative and positive consequences of W-to-FC and F-to-WC on organizational and psychological outcomes (Eby et al. 2005). Many researchers have however, focused on the consequences of work on family and the reverse, i.e. effect of family on work has been neglected (Eby et al. 2005). Similarly work-family facilitation has two distinct constructs, work-to-family facilitation (W-to-FF) and family-to-work facilitation (F-to-WF). W-to-FF is defined as “occurring when one’s involvement in work provides skills, behaviors, or positive mood which positively influences the family”. F-to-WF is defined as “occurring when one’s involvement in family results in positive mood, support, or a sense of accomplishment that helps him or her cope better, work harder, feel more confident, or reenergized for one’s role at work” (Wayne et al. 2004).

W-to-FC and F-to-WC have negative consequences on work and family domain variables. Meta-analysis results show that, there exists a negative relationship between W-to-FC and F-to-WC on job and family satisfaction (Amstad et al. 2011; Shockley and Singla 2011; Michel et al. 2009). The role pressures or demands generated in work interfere with family activities and the demands or role pressures generated within the family interfere with work activities. Recent studies have shown that there exists a negative relationship between WFC and WFB, and positive relationship between WFE and WFB (Carlson et al. 2009; Greenhaus et al. 2012; Haar 2013). Similarly, past studies suggest that the relationships between W-to-FC and F-to-WC and job and family satisfaction are negative and there exists a cross domain effect (work to family or family to work) and direct domain effect (work to work or family to work) (Michel and Clark 2009; Lu et al. 2009; Boyar and Mosley 2007).

However, W-to-FF and F-to-WF have positive relationship with job and family satisfaction. This is because, the energy or involvement generated or produced in work or family domain helps the individual manage the other domain (work or family) activities effectively. Meta-analysis evidence also suggests that there exist positive relationships among W-to-FF and F-to-WF and job and family satisfaction (Shockley and Singla 2011). Empirical studies on these relationships have produced the same result (Aryee et al. 2005; Hill 2005; Lu et al. 2009; Voydanoff 2005). Based on this past evidences, we also expect that both directions of work to family conflict and

Fig. 1 Theoretical model

facilitation will predict family satisfaction and family to work conflict and facilitation will predict job satisfaction.

Job Satisfaction, Family Satisfaction and Work-Family Balance

Job satisfaction can be defined as the pleasurable emotional state that results from an individual appraisal of one's job. On the other hand family satisfaction is the extent to which an individual is satisfied with his or her family life or situation (Rathi and Barath 2013). Previous studies on WFC and WFF have shown that lower conflict and higher facilitation or enrichment lead to job satisfaction (Carlson et al. 2011) and family satisfaction. Past studies on WFB have shown a positive relationship between job and family satisfaction. But all these studies had considered the two satisfactions as outcomes of WFB (Ferguson et al. 2012; Haar et al. 2014; Haar 2013). In Greenhaus and Allen (2011), the conceptual model feelings of WFB are viewed as an outcome of job and family satisfaction. This view suggests that career and family focused individuals feel balanced when they are highly satisfied and effective in their job and family roles. Any inconsistencies in the dual roles may lead to imbalance. We argue that achieving high satisfaction by having low conflict and high facilitation in both directions (work to family and family to work) can lead to better feelings of WFB.

Work-Family Balance and Life Satisfaction

Life satisfaction has been defined as a global assessment of a person's quality of life according to his chosen criteria (Diener et al. 1985). There is general consensus amongst scholars that this work-family balance is highly valued by employees across the world and it has important implications on the wellbeing and work productivity of people (Kossek et al. 2014; Haar et al. 2014). Regarding the benefits of WFB, past

research shows that individuals who attain balance in their work and family roles tend to feel satisfied in their life (Haar 2013; Haar et al. 2014). We believe that individuals who perceive high feelings of balance may be more satisfied in their life because they are participating in role activities that are salient to them (Greenhaus et al. 2003). In the present study we also expect that highly balanced individuals tend to be more satisfied in their life.

Based on the above mentioned arguments and research results, we expect that W-to-FC and W-to-FF will predict family satisfaction. Similarly, F-to-WC and F-to-WF will predict job satisfaction. And then job and family satisfaction will predict WFB. Finally WFB will result in life satisfaction.

Method

The present study is based on a survey based methodology and recent studies on work-family balance also used the same methodology (Greenhaus et al. 2012; Ferguson et al. 2012). The data has been collected from teaching faculty of higher education institutions in India and United States of America (USA). We created an online questionnaire to collect the answers from the participants. An email request was sent to the academic population and participants were asked to forward the email to their colleagues and academic community friends. In India 572 responses were received and 80 samples were deleted due to large number of missing values. In USA 308 responses were received and 15 samples were deleted due to large number of missing values. Finally 492 samples from India and 293 samples from USA were used for the analysis.

All the measures in the present study have used seven point Likert scale format (7 = Strongly disagree to 1 = Strongly agree). Negatively scored items were reverse coded for the analysis. In both studies, items of the same scale were used to measure latent constructs. The reliability values of all the constructs used in the study are presented in Table 2.

Work-Family Conflict

Work-family conflict was measured using 10 items developed by Netemeyer et al. (1996). This scale has two directional dimensions (work-to-family conflict and family-to-work conflict). A sample item for work-to-family conflict is “*Due to work-related duties, I have to make changes to my plans for family activities*” and for family-to-work-conflict is “*The demands of my family or spouse/partner interfere with work-related activities*”.

Work-Family Facilitation

WFF was measured using an 8-item scale developed by (Wayne et al. 2004). An example item for W-to-FF is “*The things I do at work help me deal with personal and practical issues at home*” and F-to-WF is “*Talking with someone at home helps me deal with problems at work*”.

Work-Family Balance

WFB was measured using the scale used by Allen and Kiburz (2012) (e.g., “*I am able to balance the demands of my work and the demands of my family*,”; “*I experience a high level of work–family balance*,”; “*I am satisfied with the balance I have achieved between my work life and my family life*.”).

Job Satisfaction

Three items from Michigan Organizational Assessment Questionnaire (Cammann et al. 1979) was used to assess global job satisfaction. The sample item is “*All in all I am satisfied with my job*”.

Family Satisfaction

The three-items scale developed by Edwards and Rothbard (1999) is generally used to measure family satisfaction and it had been recently used in WFC research. A sample item is “*My family life is very enjoyable*”.

Life Satisfaction

The five-items scale developed by Diener et al. (1985) were used to measure life satisfaction. The sample item is “*The conditions of my life are excellent*”.

Control Variables

We included gender, age, marital status, number of children in the family and traveling time in Indian sample. Also in the USA sample we have included gender, age, marital status, number of children and race/ethnicity as control variables.

These variables have already been used as control variables in the previous studies (Zhang et al. 2015; Haar 2013).

Data Analysis

We used partial least square structural equation model (PLS-SEM) using Smart PLS-3 (Ringle et al. 2014) to test the theoretical model. This approach has several advantages over other tools like Covariance based SEM: (i) less restrictive assumptions about the data (e.g., non-normality), (ii) capability of handling complex relationships among the constructs and (iii) constructs with fewer items (Hair et al. 2011, 2013). As recommended by Hair et al. (2014), bootstrapping (5000 resamples) was used to generate the standard errors and t-statistics for hypothesis testing.

Results

We tested two separate models on WFB and used two country samples. Both country samples results are presented simultaneously (left side India and right side USA). Table 1 shows the demographic profiles and descriptive statistics of the two country samples.

Common Method Bias

To assess the extent of the common method bias or variance, an exploratory factor analysis without rotation was conducted. The results of Harman’s one factor test revealed that the first factor does not produce more than 50 % variance. Furthermore, in the present study, methodological remedies were followed: (i) ordering the scales from dependent to independent and (ii) ensuring anonymity and confidentiality. In addition to Harman’s single factor test, we incorporate a common method factor into the measurement model along with the eight factors of substantive interest to the study. We specified the method factor to be uncorrelated with the other constructs and allowed each item to load on the method factor (MF) as well as its respective underlying factor (Podsakoff et al. 2012, 2003). We have conducted four confirmatory factor analysis for both the samples two of them using MF and other two without using MF. Both the models have obtained reasonable fit with the data (Indian sample without MF: $\chi^2 = 984.56$, $df = 406$, p value = .000, $\chi^2/df = 2.42$, CFI = .94, RMSEA = .05, Indian sample with MF: $\chi^2 = 747.36$, $df = 375$, p value = .000, $\chi^2/df = 1.99$, CFI = .96, RMSEA = .04, RMR = .07, USA sample with MF: $\chi^2 = 834.65$, $df = 465$, p value = .000, $\chi^2/df = 1.79$, CFI = .953, RMSEA = .05 USA sample without MF: $\chi^2 = 968.21$, $df = 499$, p value = .000, $\chi^2/df = 1.94$, CFI = .94, RMSEA = .05) (Lance et al. 2010). Based on this

Table 1 Demographic profiles and descriptive statistics of the two country samples

Sample characteristics	India	USA
Gender (Male)	62.6 %	38.8 %
Average Age (Years)	37.83	49.93 %
Average Total work experience	13.12	24.08 %
Average work experience in the present organisation	7.33	Not collected
Marital status (Married)	81.5 %	74.1 %
Children at home	75.4 %	38.4 % Non response – 5.4 %
Education	Master Degree - 51.4 % Ph.D - 48.0 % Non response - .6 %	Bachelors – 5.8 % Master Degree – 27.2 % Ph.D – 66.3 % Non response - .7 %
Nature of employment	Private - 71.5 % Government - 22.8 % Semi-Government – 2.2 % Non response – 3.5 %	Not collected
Average total transport time in minutes	86.62	Not collected
Race/Ethnicity	Not collected	White/Caucasian – 86.4 % Black/African American – 4.8 % Asian/Indian – 3.4 % American Indian/Pacific Islander – 1 % Hispanic/Latino - 1.7 % Others – 2.7 %

statistical test and procedural remedies, the present study is free from common method bias (Podsakoff et al. 2012, 2003).

Measurement Model

Tables 2 and 3 shows evidence for reliability, composite reliability, convergent and discriminant validity of all the reflective latent constructs.

As shown in Table 2 the standardized loadings of all the reflective measures were greater than .7 except three items in WFF (Henseler et al. 2009). The construct reliability and composite reliability were also within the acceptable limit of greater than .70 (Hair et al. 2009). The AVE values for all the constructs exceeded .5, and support convergent validity (Henseler et al. 2009).

Table 3 presents the discriminant validity of the reflective constructs used in the present study, as the square root of AVE for each of the construct is greater than the correlations and supporting discriminant validity (Henseler et al. 2009; Fornell and Larcker 1981). Recently Henseler et al. (2015) proposed a new approach for assessing discriminant validity using Heterotrait-monotrait (HTMT) ratio of correlations, because Fornell and Larcker (1981) criterion may not reliably detect the adequate discriminant validity in many research situations. According to HTMT ratio criterion, in both samples and models, the HTMT ratio value is less than the cut-off .85 value. In the present study we have produced adequate discriminant validity using both approaches. Finally, as far as standardized root mean residual (SRMR) is concerned, in both

models, the data were fit adequately with the theoretical model, because we have obtained less than the threshold value of .08 (Hair et al. 2009).

Hypothesis Testing

Table 4 shows the standardized path co-efficient (β) of the relationships that exist among the constructs in the theoretical model. The relationships between F→WC and job satisfaction (India; $\beta = -.13$, $t = 2.99$), and F→WF and job satisfaction (India; $\beta = .37$, $t = 6.91$, USA; $\beta = .25$, $t = 4.05$) were significant. F→WC and job satisfaction were not significant in the USA sample ($\beta = -.12$, $t = 1.89$). Similarly the relationships between W→FC and family satisfaction (India; $\beta = -.13$, $t = 3.12$, USA; $\beta = -.30$, $t = 5.92$) and W→FF and family satisfaction (India; $\beta = .39$, $t = 8.56$, USA; $\beta = .16$, $t = 2.62$) were significant.

There exist a positive relationship between job satisfaction and WFB (India; $\beta = .23$, $t = 4.54$, USA; $\beta = .17$, $t = 2.78$) and family satisfaction and WFB (India; $\beta = .44$, $t = 8.94$, USA; $\beta = .48$, $t = 9.23$). Finally as expected, there is a positive relationship between WFB and life satisfaction (India; $\beta = .60$, $t = 16.39$, USA; $\beta = .54$, $t = 11.46$) in both the samples.

The Cohen's f square value is used to find the impact of the exogenous variable on the endogenous variable. In the present study, WFB was found to have a high impact on life satisfaction. Similarly we found moderate impact for family satisfaction on WFB.

Table 2 Measurement model: Loadings, t-value, Construct reliability (CR), Cronbach's Alpha (α) and Average Variance Extracted (AVE) (India | USA)

Construct/Indicators	Loadings	t-value	CR	α	AVE
Family Satisfaction			.96 .98	.93 .96	.88 .93
FS1	.94 .96	158.24 149.79			
FS2	.94 .97	86.36 232.81			
FS3	.93 .97	102.32 189.64			
Family-Work Conflict			.92 .91	.89 .88	.70 .67
F-to-WC1	.84 .75	37.08 10.71			
F-to-WC2	.84 .76	37.96 8.81			
F-to-WC3	.86 .82	36.13 11.46			
F-to-WC4	.81 .87	23.57 14.94			
F-to-WC5	.83 .87	33.42 13.7			
Job Satisfaction			.88 .92	.79 .88	.71 .80
JS1	.94 .92	102.77 64.73			
JS2	.91 .91	62.35 50.52			
JS3	.65 .85	12.52 19.11			
Life Satisfaction			.93 .93	.90 .91	.76 .74
LS1	.87 .90	44.7 60.66			
LS2	.91 .89	92.25 53.71			
LS3	.91 .91	91.78 74.67			
LS4	.80 .83	33.39 34.35			
LS5	NA .75	NA 22			
Work-Family Balance			.94 .97	.92 .96	.81 .86
WFB1	.90 .94	78.66 87.3			
WFB2	.88 .93	46.26 79.96			
WFB3	.91 .92	82.92 67.84			
WFB4	.91 .96	67.75 157.87			
WFB5	NA .90	NA 71.39			
Work-Family Conflict			.92 .94	.90 .92	.70 .76
W-to-FC1	.76 .89	14.3 53.39			
W-to-FC2	.87 .92	23.55 80.69			
W-to-FC3	.89 .88	27.22 42.27			
W-to-FC4	.92 .92	27.88 87.64			
W-to-FC5	.73 .76	11.66 21.18			
Work-Family Facilitation			.90 .82	.85 .70	.69 .53
W-to-FF1	.81 .71	32.17 6.93			
W-to-FF2	.89 .83	58.21 14.56			
W-to-FF3	.79 .58	31.68 4.87			
W-to-FF4	.83 .77	33.6 8.97			
Family-Work Facilitation			.87 .81	.81 .70	.63 .52
F-to-WF1	.75 .57	21.41 5.53			
F-to-WF2	.72 .80	18.68 15.22			
F-to-WF3	.86 .79	45.16 14.45			
F-to-WF4	.84 .68	34.08 9.13			

All the t-values were obtained with the bootstrapping procedure (5000 samples and are significant at 0.01 level. SRMR: India = .05, USA = .06

Table 5 shows the R square, Q square and Global goodness of fit (GoF) values for both samples. Conflict and facilitation variables extracted 17 % (India) and 11 % (USA) on job satisfaction. Similarly for family satisfaction, the variables were

18 % (India) and 15 % (USA). Finally both satisfaction variables were 33 % (India) and 26 % (USA) on WFB. WFB showed 36 % (India) and 27 % (USA) on life satisfaction. The predictive relevance of the model can be assessed using

Table 3 Discriminant validity (\sqrt{AVE} in bold)

Constructs	1	2	3	4	5	6	7	8
1. Family satisfaction	.94 .97	-.28	.51	.36	.75	.54	-.34	.22
2. Family-to-Work Conflict	-.26	.83 .82	-.27	-.18	-.28	-.41	.47	-.05
3. Family-to-Work Facilitation	.53	-.22	.80 .72	.28	.44	.35	-.20	.51
4. Job Satisfaction	.39	-.22	.40	.84 .89	.51	.34	-.29	.37
5. Life Satisfaction	.81	-.29	.52	.47	.87 .86	.54	-.34	.26
6. Work-Family Balance	.53	-.31	.48	.40	.60	.90 .93	-.70	.30
7. Work-to-Family Conflict	-.18	.63	-.12	-.15	-.19	-.38	.84 .87	-.22
8. Work-to-Family Facilitation	.40	-.14	.65	.43	.45	.51	-.13	.83 .73

Below the diagonal Indian sample correlation values and above the diagonal are USA correlation values. | = Indian Sample | USA Sample

Q square value. For the present study in both samples the Q square value was found to be above the 0 cut-off (Hair et al. 2014). The GoF can be computed using the geometric mean of the average communality and the average R^2 . GoF is used to determine the predictive power of the theoretical model (Tenenhaus et al. 2005). The GoF is computed using the following formula:

$$GoF = \sqrt{AVE} \times \sqrt{R^2}$$

The GoF values for both samples were found to be .43 (Indian sample) and .39 (USA sample) ($GoF_{Small} = 0: 10$, $GoF_{Medium} = 0: 25$, $GoF_{Large} = 0: 36$). In both samples, the theoretical model has adequate predictive power.

Discussion

The main goal of the present study is to partially test and validate the conceptual model proposed by Greenhaus and Allen (2011). In their review, they raised few questions, such as, what are the factors determining feelings of WFB, satisfaction in work and family domains a stronger or weaker predictor of feelings WFB than effectiveness, and presented a model with alternative perspective of WFB on low conflict and high enrichment. The effect of WFB on psychological and

physical outcomes was also discussed. In the present study we partially tested the proposed theoretical model by Greenhaus and Allen (2011) with an extension by adding life satisfaction as the outcome of WFB using academic samples from two countries (India and USA). Findings show that there exists a support for the proposed theoretical model in the present study for both samples. We have captured the determinants of WFB and factors contributing satisfaction in both domains.

As proposed in the theoretical model, two directions of conflict and facilitation affect job and family satisfaction and result in positive feelings of balance. Finally, feelings of balance positively influence life satisfaction. As per our expectation, lower W-to-FC of academicians reduces family satisfaction and F-to-WC reduces job satisfaction. Similarly higher the W-to-FF leads to better satisfaction in the family and higher the F-to-WF leads to better the job satisfaction (Boyar and Mosley 2007; Zhang et al. 2015). In the present study, we found cross over effects of conflict and facilitation on job and family satisfaction, and there may be a chance of the existence of the direct domain effect. Further, based on the proposed relationship, we found that both job and family satisfaction produces feelings of balance of the academicians.

Greenhaus and Allen model proposed that high effectiveness and satisfaction leads to feelings of balance. But we found that irrespective of effectiveness, satisfaction in both domains produces feelings of balance. This is a new insight for the current literature on WFB, that effectiveness may lead

Table 4 Path coefficient, t-value and f square values R square and Q square values

Relationship among the constructs	β	t-value	f square
Family satisfaction → Work-family balance	.44 .48	8.94 9.23	.24 .29
Family-to-work conflict → Job satisfaction	-.13 -.12	2.99 1.89 ^{ns}	.02 .01
Family-to-work facilitation → Job satisfaction	.37 .25	6.91 4.05	.15 .06
Job satisfaction → Work-family balance	.23 .17	4.54 2.78	.06 .03
Work-family balance → Life satisfaction	.60 .54	16.39 11.46	.55 .41
Work-to-family conflict → Family satisfaction	-.13 -.30	3.12 5.92	.02 .10
Work-to-family facilitation → Family satisfaction	.39 .16	8.56 2.62	.17 .02

^{ns} Non significant

Table 5 R square, Q square and GoF values

	R Square	Q Square	GoF
Family satisfaction	.18 .15	.15 .12	.43 .39
Job satisfaction	.17 .11	.11 .06	
Life satisfaction	.36 .27	.27 .21	
Work-family balance	.33 .26	.26 .27	

to WFB or may produce some of positive and negative outcomes to the organization (e.g., organizational commitment and stress) and family (e.g., wellbeing in the family and family stress). Also in the Greenhaus and Allen (2011) review, they pointed out that life values may moderate the relationship between effectiveness and satisfaction, and WFB.

Although the feelings of balance enhance life satisfaction of academicians, the determinants of balance and balance showed considerable variance towards life satisfaction. Recently Haar et al. (2014) found a positive relationship between WFB and life satisfaction with 33 % explained variance. In the present study, we have obtained 36 % variance for the Indian sample and 27 % for the USA sample. One possible explanation for this finding is that, in Indian academic culture, WFB produces higher satisfaction in peoples' life than in the American culture. Future studies may incorporate some of the cultural variables as moderator between these relationships.

One main contribution of the present study is that we strengthened the existing WFB literature by examining antecedents. We believe that this empirical support will extend future researches on WFB, and this is important because WFB, as a concept, is distinct from conflict and facilitation. Past studies on WFB considered conflict and enrichment as direct predictors of WFB (Carlson et al. 2009; Haar 2013; Haar et al. 2014). In the present study, we establish conflict and facilitation as indirect predictors of WFB through job and family satisfaction. Since we did not test any mediation effect, we may not be able to conclude about the indirect effect in these relationships. This is also the first study to partially test the Greenhaus and Allen model and explore life satisfaction as an outcome of WFB. Moreover, we provide evidence based on the western sample and an academic population, the latter being very rare in academic work-family literature (Eby et al. 2005). To our knowledge no research evidence exists in India to use the measures developed in western literature for measuring WFB and testing this theoretical model in Indian culture. Finally, this is the first study to use job and family satisfaction as a predictor of WFB. Previous study has used these two satisfactions as outcomes of WFB (Carlson et al. 2009).

Our findings imply that achieving WFB may hold the key to greater life satisfaction of academicians. We have also found that conflict and facilitation influences job and family satisfaction negatively and positively respectively, which in

turn affects the feelings of balance. Academic institutions should therefore invest time and money to promote WFB among academicians by providing flexible benefits and resources (e.g., support) to reduce their conflict and increase facilitation (Allen 2001; Ferguson et al. 2012; Zhang et al. 2015). From a practical view, endorsing training programs for employees to improve functioning or performance at work and home would be a more appealing investment than programs helping them manage conflicts created by work's interference with family or family interference with work. They can also periodically evaluate the conflict, facilitation or enrichment levels to recognize present feelings of WFB. The management can also encourage co-workers and superiors to provide support to their subordinates and colleagues, so that everyone can enhance their balance.

While the present study tested the theoretical model using samples from two countries, the limitation is the cross-sectional, self-reported nature of the data. However, this approach has been widely used in the past literature on WFB (Carlson et al. 2009; Ferguson et al. 2012; Greenhaus et al. 2012; Haar 2013; Haar et al. 2014). Future studies can alleviate this limitation by conducting longitudinal or diary studies. Another limitation of the present study is that, while the Greenhaus and Allen model has proposed the influence of direct and indirect work and family experiences and dispositional characteristics on satisfaction, we have not employed any of these variables. Future studies may circumvent this limitation by considering any of these variables in theoretical models. The final limitation of the present study is that the psychological and psychical outcomes of WFB and moderating effect of life values between WFB and satisfaction and effectiveness, proposed by Greenhaus and Allen have not been considered. Scholars of WFB research can consider this suggestions for future studies.

Despite this limitation, the present study provides empirical validation of Greenhaus and Allen (2011) model using samples from two countries (India and USA). The take-home finding from this work is that family satisfaction is a main factor that influences WFB more than job satisfaction, which in turn it increases life satisfaction among academicians.

Compliance with Ethical Standards

Funding No grant was obtained for this study.

Conflict of Interest The authors declare that they have no conflict of interest.

Research Involving Human Participants The present study was a part of the doctoral level research of the first author. Hence, prior ethical approval was granted by the doctoral committee and the Centre for Research, Anna University, India to pursue this study from the Institution where in the researcher was registered.

Informed Consent "Informed consent was obtained from all individual participants included in the study."

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