

Work-Life Balance and Faculty Outcomes: Implications for Institutional Performance in Delhi NCR Higher Education

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Abstract

Purpose: This paper analyses the association between work-life balance (WLB) and faculty performance outcomes (job satisfaction, occupational burnout, and organisational commitment) and how the three outcomes combined can affect institutional performance in higher education institutions (HEIs) within the Delhi National Capital Region (NCR). Based on the Conservation of Resources Theory (COR) and Job Demands-Resources (JD-R) model, a moderated-mediation model is hypothesized and confirmed.

Design/Methodology/Approach: A survey with full-time faculty (n=347) (selected among 18 HEIs in Delhi NCR) was conducted in a cross-sectional study using stratified random sampling. All constructs were used through validated scales. Structural equation modelling (SEM) and hierarchical regression with Baron and Kenny mediation steps were used for hypothesis testing. Results: WLB scales - temporal flexibility (TF), involvement balance (IB) and satisfaction balance (SB) have been found to significantly and positively predict job satisfaction ($R^2 = 0.41$) and organisational commitment ($R^2 = 0.38$), and negatively predict burnout ($R^2 = 0.34$). Taken together, faculty performance accounts for 43 percent of institutional performance (teaching quality, research productivity, and student satisfaction). Gender and institutional type (public vs. private) moderate the WLB-outcomes relationship.

Originality/Value: The research paper fills a great empirical gap by offering quantitative data to the Indian higher education scenario, which combines faculty well-being and institutional performance measurement. The results directly apply to the HR policy, academic administration, and accreditation standards within the Indian HEIs.

Keywords: work-life balance; faculty outcomes; job satisfaction; burnout; organisational commitment; institutional performance; higher education; Delhi NCR; JD-R model; COR theory

JEL Classification: I23, J24, J81, M12

1. Introduction

The Indian higher education sector has experienced a transformative growth in the last 20 years, and there are now more than 1,113 universities, compared to 712 in 2014-15, and more than 43 million students enrolled (AISHE, 2023). In this context of dramatic expansion, the faculty, the main source of knowledge, finds itself faced with increasing professional pressures: growing student-to-faculty ratios, increasing administrative burdens, research performance pressures necessitating NAAC, NIRF, and NBA accreditation systems, and the imperatives of blended and digital pedagogy implementation in the post-pandemic era. The Work-Life Balance (WLB) of faculty has been put in the limelight of institutional human resource management issues due to these convergent pressures. Work-life balance, in its broad sense or the capacity of an individual to fulfil the time, involvement, and satisfaction needs of both the work and personal life (Greenhaus et al., 2003; Clark, 2000) is becoming an increasingly recognised predictor of key organisational events such as employee retention, quality of service, and organisational effectiveness. Academically, poor WLB has been associated with high burnout, decreased organisational commitment, decreased teaching quality, and decreased research productivity - all of which have direct impacts on institutional performance indicators (Ogbogu, 2013; Padhi, 2021; Haar et al., 2014). Although there is a strong international body of literature on academic WLB, empirical studies in the Indian context of higher education are few and are largely qualitative in nature. The Delhi NCR area is especially relevant as a research site: this area is one of the largest clusters of higher education institutions in India, including central universities, deemed universities, state universities, and a mushrooming of private colleges and deemed-to-be universities. The area is

also marked by its high cost of living, high levels of commuting and competitive academic labour market; all factors that may worsen the WLB problem. However, there is yet no quantitative research to have measured the entire mechanism of WLB dimensions to faculty outcomes to institutional performance in this geography.

The current research paper fills this gap through three objectives that are interrelated. First, it looks at the direct impacts of three WLB dimensions, namely, temporal flexibility, involvement balance and satisfaction balance on faculty outcomes (job satisfaction, burnout and organisational commitment). Second, it attempts to nullify the mediated relationship between WLB and institutional performance via faculty results. Third, it examines how gender and institutional type (public vs. private) mediates the WLB-outcomes relationship. By so doing, the research places the theoretic basis of the Conservation of Resources (COR) Theory (Hobfoll, 1989) and the Job Demands-Resources (JD-R) model (Bakker and Demerouti, 2007) as the theoretical anchors.

The paper will be presented in the following way: Section 2 will review the literature related to the topic and formulate the research hypotheses. Section 3 explains the methodology used in research. In section 4, the results are given. The findings in theoretical and practical context are discussed in section 5. Section 6 ends with implications, limitations and future research directions.

2. Development of hypotheses and theoretical framework.

2.1 Theoretical Underpinnings

2.1.1 Conservation of Resources (COR) Theory

The Conservation of Resources Theory by Hobfoll (1989) presupposes that people are driven to obtain, maintain, defend, and nurture resources, such as time, energy, social support, and job satisfaction, and that when these resources are at risk, the resources are lost or do not occur after a major investment of resources, stress sets in. Academic demands In the academic setting, excessive work demands is a drain on resources that compromises individual and family resources, leading to a vicious cycle of resource depletion in the form of burnout, disengagement, and low job satisfaction. In contrast, the institutions that allow faculty to balance the allocation of resources in professional and personal life support resource gain spirals, which contribute to commitment and performance (Hobfoll and Freedy, 1993; Ten Brummelhuis and Bakker, 2012).

2.1.2 Job Demands-Resources (JD-R) Model

According to the JD-R model, employee well-being is predetermined by the interaction between job demands (physical, psychological, social, or organisational factors that demand persistent work) and job resources (factors that promote goal attainment, diminish demands, and trigger growth) (Bakker and Demerouti, 2007; Demerouti et al., 2001). The model creates two different processes that are related to each other, one of them is the health-impairment process, when high demands and insufficient resources cause burnout and another one is the motivational process, when rich resources promote engagement and commitment. WLB policies have been shown to act as a pivotal organisational resource, which moderates the pathway of demands-to-burnout and energises the pathway of resources-to-engagement, and therefore, the JD-R model is a fitting theoretical perspective to use in the current study.

2.2 Work-Life Balance and Dimensions.

The idea of WLB has developed an oversimplified dichotomy (work vs. family) into a multidimensional concept that encompasses the temporal, affective, and evaluative aspects. This research operationalises WLB in the three dimensions of: (a) Temporal flexibility (TF) - the extent to which faculty have the ability to allocate time equally between work and personal roles without one area crowding out the other; (b) Involvement balance (IB) - the extent to which faculty are equally satisfied with the result they achieve in both areas without one area crowding out the other; and (c) Satisfaction balance (SB) This 3D framework has been confirmed in previous research in the educational setting (Haar et al., 2014; Brough et al., 2014).

2.3 WLB and Faculty Outcomes

2.3.1 Job Satisfaction

The academic literature has continued to identify job satisfaction, which is a pleasurable affective state caused by appraisal of the job as satisfying the values (Locke, 1976), with WLB. In favourable WLB, faculty report greater intrinsic satisfaction with teaching, research, and mentoring activities because the lack of inter-role conflict has liberated cognitive and emotional resources to engage in professional activities (Haar et al., 2014; Luo et al., 2021). Research in Indian universities identifies that time pressures and bureaucratic work-related issues are the most prominent WLB stressors that decrease job satisfaction among faculty members, especially women (Padhi, 2021; Dhas and Karthikeyan, 2015).

H1: Temporal flexibility (H1a), involvement balance (H1b), and satisfaction balance (H1c) are positively and significantly associated with faculty job satisfaction.

2.3.2 Occupational Burnout

Academia faces eminent occupational hazard in burnout; a phenomenon that is characterised by emotional exhaustion, depersonalisation, and diminished personal accomplishment (Maslach and Jackson, 1981). Studies have always shown that WLB impairment increases the speed of resource drain and emotional burnout (Hobfoll, 1989), and inter-role conflict is a proximate predictor of burnout in educational environments (Skaalvik and Skaalvik, 2017; Montgomery et al., 2015). Pandey and Bhattacharya (2020) state that faculty working in private HEIs has a higher risk of burnout than that of faculty working in public institutions because of the increased workload expectations, and the lack of well-developed institutional support systems.

H2: Temporal flexibility (H2a), involvement balance (H2b), and satisfaction balance (H2c) are negatively and significantly associated with faculty burnout.

2.3.3 Organisational Commitment

Employee perceptions regarding organisational support to the work-life integration is important in shaping organisational commitment (OC) especially the affective dimension which represents the emotional attachment to and identification with the organisation (Meyer and Allen, 1991). Institutional practices that enable WLB are indicative of investments in the well-being of employees, which in turn evoke reciprocity norms (social exchange theory) that result in increased commitment and lower turnover intention (Eisenberger et al., 1986; Griggs et al., 2019). Perceived organisational support of personal life is a better predictor of affective commitment in the case of Indian faculty, compared to compensation (Singh and Nayak, 2015).

H3: Temporal flexibility (H3a), involvement balance (H3b), and satisfaction balance (H3c) are positively and significantly associated with faculty organisational commitment.

2.4 Faculty Outcomes and Institutional Performance.

The concept of institutional performance in higher education is a composite one, which involves quality of teaching and research output as well as satisfaction among the students (Brewer and Tierney, 2012; Ramsden, 2008). Faculty outcomes are the proxyminal human capital process by which performance at the institutional level is achieved. Contented and dedicated faculty would tend to spend discretionary time in curriculum development, student mentoring and scholarly production. On the other hand, faculty burnout has been found to have a negative impact on teaching performance and research productivity since it drains emotional resources (Skaalvik and Skaalvik, 2017; Halbesleben and Buckley, 2004). Organisational commitment also helps to keep down voluntary attrition and maintain institutional knowledge and relational capital that is important in accreditation performance (Meyer and Allen, 1997).

H4: Faculty job satisfaction (H4a), burnout (H4b, negative), and organisational commitment (H4c) are significantly associated with institutional performance.

2.5 Mediation: Mechanisms of Faculty Outcomes.

Based on the motivational process of the JD-R model, this paper hypothesizes that the relationship between WLB and institutional performance is mediated by faculty outcomes. WLB resources lessen burnout and promote satisfaction and commitment, which, respectively, translate into better teaching, research, and student experience. This mediated relationship has been partly empirically validated in the Western setting (Haar et al., 2014; Luo et al., 2021) but not in Indian HEIs.

H5: Faculty outcomes (job satisfaction, burnout, organisational commitment) mediate the relationship between WLB dimensions and institutional performance.

2.6 Moderation: Gender and Institutional Type

In academic institutions, gender makes a theoretically based moderator of the WLB-outcomes relationship, since the society has different expectations regarding care-giving activities. As a rule, women faculty members are more affected by spillover in family-to-work areas, which enhances the positive relationship between WLB resources and satisfaction and commitment (Haar et al., 2014; Dhas and Karthikeyan, 2015). The type of institutions (public vs. private) changes the accessibility of WLB-supportive resources systems: public HEIs tend to provide more job security and leave opportunities, whereas private ones tend to place more performance demands and have less formal systems of support (Pandey and Bhatt, 2020).

H6: Gender (H6a) and institutional type (H6b) moderate the relationship between WLB dimensions and faculty outcomes, such that the relationships are stronger for female faculty and faculty in private institutions.

3. Research Methodology

3.1 Research Design

A quantitative survey design of cross-section was used. Cross-sectional surveys suit testing relationships between clearly defined constructs in a population at one point in time (Creswell and Creswell, 2018). Although longitudinal data will help in the causal inference, cross-sectional method is congruent with the mainstream methodology in the studies of WLB and performance in HEIs (Haar et al., 2014; Brough et al., 2014).

3.2 Population and Sampling

The target population included full-time permanent or contractual faculty (Lecturers, Assistant Professors, Associate Professors, and Professors) who work in HEIs within the Delhi NCR including Delhi, Gurugram, Noida, Faridabad, and Ghaziabad. The study involved eighteen institutions including six central/state university, four deemed university, and eight private college/institutions. Stratified random sampling was used, with stratification based on the type of institution (public and private) and faculty designation. The calculation of a minimum sample size of 310 was made with G*Power 3.1, medium effect size ($f^2 = 0.15$), significance level 0.05, power $(1 - \beta) = 0.80$ with a correction factor of multiple regression of 10 predictors. Four hundred and twenty questionnaires were issued, 362 were received (response rate: 86.2%), out of which 347 could be useful, having been used to filter out either incomplete or careless responses (see Appendix A to see sample profile).

3.3 Measures

Validated multi-item scales on five-point Likert scales (1 = Strongly Disagree to 5 = Strongly Agree) were used to measure all constructs, and item wording was modified to fit the Indian academic context based on established procedures of back-translation (Brislin, 1970).

Work-Life Balance (WLB)

The scale of Haar et al. (2014) with 13 items (measuring three dimensions: Temporal Flexibility (5 items; e.g., 'I am able to manage my work and personal life schedules without significant conflict'), Involvement Balance (4 items; e.g., 'I am equally involved in both my work and personal life'), and Satisfaction Balance .

Job Satisfaction

Assessed through the 5-item sub-scale of Hackman and Oldham (1975) General Job Satisfaction (e.g., 'I am generally satisfied with my job as a faculty member'). This scale has shown a satisfactory level of reliability in schools (Haar et al., 2014).

Occupational Burnout

The Maslach Burnout Inventory-Educators Survey (MBI-ES) developed by Maslach et al. (1996) was modified (9 items (in Emotional Exhaustion and Depersonalisation sub-scales; e.g., 'I feel emotionally drained by my work'). Personal Accomplishment items were conflictingly scored. The higher the scores the more burnout.

Organisational Commitment

Meyer and Allen's (1997) 6-item Affective Commitment Scale was used (e.g., 'I feel a strong sense of belonging to this institution'). The most theoretically proximate type of commitment to WLB and performance outcomes is affective commitment.

Institutional Performance

A composite scale 12-item was constructed based on Ramsden (2008) and expert review (panel of 5 senior HEI administrators and 3 academic researchers) was applied to verify the scale. It measures three aspects: Teaching Quality (4 items; e.g., 'My teaching has been rated highly by students in the last 12 months on average), Research Productivity (4 items; e.g., 'I have published at least one peer-reviewed article in the last 12 months), and Student Satisfaction (4 items; e.g., 'Students in my courses report high levels of satisfaction). The three factors were verified using confirmatory factor analysis (CFI = 0.96, RMSEA = 0.057).

Control Variables

The control variables were age (continuous), years of teaching experience (continuous), academic designation (dummy-coded), and the number of courses taught per semester (continuous) because these are used in the previous literature (Pandey and Bhatt, 2020; Padhi, 2021).

3.4 Common Method Bias

Potential common method bias (CMB) was reduced by use of procedures and statistics. The questionnaire had WLB and outcome items separated by non-focal filler items and anonymity was guaranteed procedurally. The single-factor test of Harman was run statistically: one unrotated factor was found to explain 23.8% of total variance (far less than the 50% mark), and a Common Latent Factor (CLF) analysis in SEM showed that common method variance only explained less than 5% of item variance, meaning that CMB is not a major issue in this study (Podsakoff et al., 20

3.5 Analytical Strategy

The analysis of data was performed in SPSS 27.0 and AMOS 27.0. The analysis steps included: (1) descriptive statistics and bivariate correlations; (2) reliability test (Cronbachs alpha, McDonalds omega) and convergent and discriminant validity tests (AVE, CR, HTMT ratios) via CFA; (3) direct effects (H1-H4) in a hierarchical multiple regression; (4) mediation analysis (Throughout, there are reported effect sizes (f^2) and power estimates.

4. Results

4.1 Sample Profile

The demographic profile of the 347 respondents is found in table 1. The sample comprised 54.2% male and 45.8% female faculty. The highest number (38.6%), was in the 31-40 age bracket. Most (52.7) were named as Assistant

Professor, which corresponds to age structure of the faculty population in Delhi NCR. HEIs of public contributed 43.8 per cent of the respondents and the privates 56.2. The average years of teaching experience was 9.3 (SD = 5.7).

Table 1: Demographic Profile of Respondents (N = 347)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	188	54.2
	Female	159	45.8
Age	Below 30 years	52	15.0
	31-40 years	134	38.6
	41-50 years	107	30.8
	Above 50 years	54	15.6
Designation	Lecturer / Assistant Professor	183	52.7
	Associate Professor	97	28.0
	Professor	67	19.3
Institution Type	Public (Govt./Central/State)	152	43.8
	Private / Deemed	195	56.2
Experience	Below 5 years	89	25.6
	5-10 years	118	34.0
	11-20 years	96	27.7
	Above 20 years	44	12.7
Qualification	Ph.D.	241	69.5
	M.Phil. / NET Qualified	106	30.5

Source: Primary data collected through structured questionnaire survey (2023-24).

4.2 Descriptive Statistics, Reliability, and Validity

The results of Table 2 provide the mean, standard deviations, Cronbach alpha (α), McDonalds omega (ω), Average Variance Extracted (AVE), and Composite Reliability (CR) of each and every construct in the study. Cronbach alpha values all were greater than the 0.70 value suggested by Nunnally (1978) and internal consistency was supported by omega coefficients. The AVE values were between 0.52 and 0.67, which is below 0.50, which is the level of convergent validity (Fornell and Larcker, 1981). CR values were over the 0.70 standard in all constructs. All construct pairs had ratios of HTMT less than 0.85 that established discriminant validity (Henseler et al., 2015).

Table 2: Descriptive Statistics, Reliability, and Validity Indices

Construct	Items	M	SD	Skew	α	ω	AVE	CR
Temporal Flexibility (TF)	5	3.47	0.72	-0.31	0.83	0.84	0.53	0.87
Involvement Balance (IB)	4	3.29	0.68	-0.19	0.80	0.81	0.52	0.86
Satisfaction Balance (SB)	4	3.41	0.74	-0.27	0.82	0.83	0.55	0.85
Job Satisfaction (JS)	5	3.55	0.76	-0.44	0.85	0.86	0.57	0.88
Burnout (BO)	9	2.91	0.81	0.33	0.87	0.88	0.54	0.89
Organisational Commitment (OC)	6	3.38	0.70	-0.22	0.84	0.85	0.56	0.87
Institutional Performance (IP)	12	3.52	0.66	-0.37	0.91	0.92	0.67	0.93
Teaching Quality (TQ)	4	3.61	0.69	-0.41	0.82	0.83	0.59	0.85
Research Productivity (RP)	4	3.31	0.78	0.12	0.83	0.84	0.60	0.86
Student Satisfaction (SS)	4	3.64	0.71	-0.29	0.80	0.82	0.58	0.84

Note: M = Mean; SD = Standard Deviation; α = Cronbach's Alpha; ω = McDonald's Omega; AVE = Average Variance Extracted; CR = Composite Reliability. Skewness values within acceptable range (± 2.0). N = 347.

4.3 Bivariate Correlations

Table 3 shows the Pearson bivariate correlation table of all variables of the study. All WLB dimensions (TF, IB, SB) were positively and significantly correlated with job satisfaction ($r = 0.49, 0.43, 0.51$; all $p < 0.01$) and organisational commitment ($r = 0.41, 0.37, 0.44$; all $p < 0.01$), and negatively correlated with burnout ($r = -0.46, -0.39, -0.43$; all $p < 0.01$). Institutional performance composite was significantly and positively correlated with job satisfaction ($r = 0.52, p < 0.01$) and organisational commitment ($r = 0.48, p < 0.01$), and negatively with burnout ($r = -0.44, p < 0.01$). The values of Variance Inflation Factor (VIF) of all predictors were less than 3.5, which indicated that there was no multicollinearity.

Table 3: Bivariate Pearson Correlation Matrix (N = 347)

Variable	1	2	3	4	5	6	7
1. Temporal Flexibility (TF)	—						
2. Involvement Balance (IB)	.54**	—					
3. Satisfaction Balance (SB)	.58**	.49**	—				
4. Job Satisfaction (JS)	.49**	.43**	.51**	—			
5. Burnout (BO)	-.46**	-.39**	-.43**	-.51**	—		
6. Organisational Commitment (OC)	.41**	.37**	.44**	.56**	-.48**	—	
7. Institutional Performance (IP)	.39**	.34**	.42**	.52**	-.44**	.48**	—

Note: ** $p < 0.01$ (two-tailed). Diagonal entries represent AVE values. Bold correlations are significant at the 0.01 level.

4.4 Hypothesis Testing: Direct Effects (H1-H4)

The hierarchical multiple regression was carried out in two phases: Step 1 control variables (age, experience, designation, courses per semester) were included; Step 2 WLB dimensions got added. Table 4 gives the regression coefficients of faculty outcomes, and Table 5 of institutional performance.

Table 4: Hierarchical Regression Results — WLB Dimensions on Faculty Outcomes

Predictor	Job Satisfaction		Burnout		Org. Commitment	
	β	t	β	t	β	t
Step 1: Control Variables						
Age	.04	0.71	-.03	-0.52	.05	0.84
Years of Experience	.11*	2.04	-.08	-1.43	.09	1.67
Designation (ref: Lecturer)	.13*	2.31	-.10*	-1.97	.12*	2.19
Courses per Semester	-.06	-1.02	.09	1.61	-.04	-0.71
R² (Step 1)	.07		.06		.07	
Step 2: WLB Dimensions						
Temporal Flexibility (TF)	.27***	5.41	-.24***	-4.87	.21***	4.32
Involvement Balance (IB)	.18***	3.76	-.16**	-3.21	.15**	3.08
Satisfaction Balance (SB)	.31***	6.12	-.22***	-4.54	.26***	5.19
ΔR^2 (Step 2)	.34***		.28***		.31***	
Total R²	.41		.34		.38	

Adjusted R ²	.39		.32		.36	
F-statistic	24.63***		18.09***		21.87***	

Note: Standardised β coefficients reported. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. $N = 347$. VIF values ranged from 1.12 to 3.28, indicating no multicollinearity concerns.

The results in Table 4 support H1a, H1b, H1c (all WLB dimensions positively predict job satisfaction; $\beta_{TF} = 0.27$, $\beta_{IB} = 0.18$, $\beta_{SB} = 0.31$; all $p < 0.001$), H2a, H2b, H2c (all WLB dimensions negatively predict burnout; $\beta_{TF} = -0.24$, $\beta_{IB} = -0.16$, $\beta_{SB} = -0.22$; all $p < 0.01$), and H3a, H3b, H3c (all WLB dimensions positively predict organisational commitment; $\beta_{TF} = 0.21$, $\beta_{IB} = 0.15$, $\beta_{SB} = 0.26$; all $p < 0.001$). Satisfaction balance proved to be the best predictor of job satisfaction and organisational commitment, with temporal flexibility showing the greatest unique impact on burnout reduction.

Table 5: Hierarchical Regression — Faculty Outcomes on Institutional Performance

Predictor	β	SE	t	p	95% CI
Step 1: Control Variables	$R^2 = .05$				
Step 2: Faculty Outcomes					
Job Satisfaction	.34***	.061	5.57	.000	[.22, .46]
Burnout (reverse)	-.27***	.058	-4.65	.000	[-.38, -.16]
Organisational Commitment	.29***	.063	4.60	.001	[.17, .41]
ΔR^2 (Step 2)	.38***				
Total R ²	.43				
Adjusted R ²	.41				
F(7, 339)	36.64***				

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. $N = 347$. Standardised β coefficients. Controls included age, experience, designation, and courses per semester.

Table 5 affirms H4a (job satisfaction is a predictor of institutional performance; 0.34, $p < 0.001$), H4b (burnout is a predictor of institutional performance; -0.27, $p < 0.001$) and H4c (organisational commitment is a predictor of institutional performance; 0.29, $p < 0.001$). The three predictors of faculty outcome together predict a large incremental variance ($=0.38$) with the total model $R^2 = 0.43$.

4.5 Mediation Analysis (H5)

Procedures Hayes (2022) tested mediation with the PROCESS macro (Model 4) with 5,000 bootstrap samples. In Table 6, the indirect effects of dimensions of WLB on institutional performance are summarised in terms of each outcome in the faculty. All the indirect effects were statistically significant as shown by the 95% bootstrap confidence intervals that were not equal to zero.

Table 6: Mediation Analysis — Indirect Effects of WLB on Institutional Performance via Faculty Outcomes (Bootstrap N = 5,000)

IV → Mediator → DV	Mediator	Indirect Effect (ab)	SE	95% LLCI	95% ULCI
TF → [JS] → IP	Job Satisfaction	.091	.021	.053	.136
TF → [BO] → IP	Burnout	.065	.019	.031	.107
TF → [OC] → IP	Organisational Commitment	.061	.018	.028	.099
IB → [JS] → IP	Job Satisfaction	.073	.020	.038	.116
IB → [BO] → IP	Burnout	.046	.016	.018	.081

IB → [OC] → IP	Organisational Commitment	.054	.017	.024	.090
SB → [JS] → IP	Job Satisfaction	.105	.023	.063	.153
SB → [BO] → IP	Burnout	.063	.019	.030	.104
SB → [OC] → IP	Organisational Commitment	.075	.020	.038	.116

Note: TF = Temporal Flexibility; IB = Involvement Balance; SB = Satisfaction Balance; JS = Job Satisfaction; BO = Burnout; OC = Organisational Commitment; IP = Institutional Performance. IV = Independent Variable; DV = Dependent Variable. All indirect effects significant at $p < 0.05$ (95% BCa CI excludes zero). LLCI = Lower Limit Confidence Interval; ULCI = Upper Limit Confidence Interval.

H5 is completely supported. All pathways are partial in the mediation because the direct impacts of WLB dimensions on institutional performance were also found to be significant (albeit less so) on the inclusion of mediators. The strongest mediator between the three dimensions of WLB is job satisfaction.

4.6 Moderation Analysis (H6)

The moderation analysis of the interaction of gender and institutional type on the WLB-outcomes relationship is summarized in Table 7. In the case of parsimony, only the coefficients of interaction are given when they are significant.

Table 7: Moderation Analysis — Interaction Effects of Gender and Institutional Type

Interaction Term	Outcome	β	SE	t	p	ΔR^2
TF × Gender	Job Satisfaction	.14*	.061	2.29	.023	.019
SB × Gender	Organisational Commitment	.17**	.058	2.93	.004	.026
IB × Gender	Burnout	-.12*	.062	-1.94	.054	.014
TF × Institution Type	Job Satisfaction	.19**	.063	3.02	.003	.031
TF × Institution Type	Burnout	.22***	.059	3.73	.000	.042
SB × Institution Type	Organisational Commitment	.16*	.064	2.50	.013	.022

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Gender coded 0 = Male, 1 = Female. Institution Type coded 0 = Public, 1 = Private. Main effects and controls included in all models. Only significant interaction terms reported.

H6a is partly confirmed: gender plays a significant moderating role in TF-job satisfaction and SB-organisational commitment relations, and the impact of gender is stronger in female faculty (the Johnson-Neyman analysis revealed that there were significant moderations in the entire range of female respondents). H6b is perfectly justified: WLB dimensions have more significant impacts in private institutions, where comparatively less resources are allocated to baseline WLB, which aligns with the principle of resource gain, which is a part of the COR theory.

Table 8: Summary of Hypothesis Testing Results

H	Hypothesis	Key Statistic	Decision
H1a	TF → Job Satisfaction (+)	$\beta = .27, p < .001$	Supported
H1b	IB → Job Satisfaction (+)	$\beta = .18, p < .001$	Supported
H1c	SB → Job Satisfaction (+)	$\beta = .31, p < .001$	Supported
H2a	TF → Burnout (-)	$\beta = -.24, p < .001$	Supported
H2b	IB → Burnout (-)	$\beta = -.16, p < .01$	Supported
H2c	SB → Burnout (-)	$\beta = -.22, p < .001$	Supported

H3a	TF → Organisational Commitment (+)	$\beta = .21, p < .001$	Supported
H3b	IB → Organisational Commitment (+)	$\beta = .15, p < .01$	Supported
H3c	SB → Organisational Commitment (+)	$\beta = .26, p < .001$	Supported
H4a	Job Satisfaction → Inst. Performance (+)	$\beta = .34, p < .001$	Supported
H4b	Burnout → Inst. Performance (-)	$\beta = -.27, p < .001$	Supported
H4c	Org. Commitment → Inst. Performance (+)	$\beta = .29, p < .001$	Supported
H5	Faculty Outcomes mediate WLB → Inst. Performance (partial)	All 95% BCa CIs exclude 0	Supported
H6a	Gender moderates WLB → Outcomes	Selective β s significant	Partially Supported
H6b	Inst. Type moderates WLB → Outcomes	All significant at $p < .05$	Supported

5. Discussion

This study presents the first empirical quantitative analysis of the WLB-faculty outcomes-institutional performance channel in the higher education of Delhi NCR, which provides a number of substantively significant results that contribute to theory and practice.

5.1 WLB and Faculty Outcomes

All three WLB dimensions as significant predictors of job satisfaction, burnout, and organisational commitment is consistent with propositions of COR theory: faculty have sufficient temporal, involvement, and satisfaction resources that protect them against resource loss (burnout) and result in high affective levels (satisfaction and commitment). Compared effect sizes are also notable: satisfaction balance (= 0.31 of job satisfaction) has the most significant positive impact, which indicates that subjective evaluative balance (feeling equally satisfied in life and work areas) is more important than the objective time allocation. This result builds up the conceptualisation of Greenhaus et al. (2003) by showing that the evaluative WLB dimension is the most important in an academic context. The anti-correlation between WLB dimensions and burnout confirms trends observed in the European and Australasian academic settings (Skaalvik and Skaalvik, 2017; Montgomery et al., 2015) and bases them on the Indian HEI setting to the first time. The fact that the largest burnout-reduction effect is seen (= -0.24) with institutional administrators in particular implies that flexible scheduling (i.e., time-shifted office hours, asynchronous course delivery options, remote administrative meetings) can be the most cost-effective WLB intervention to prevent the burnout risk among the faculty in Delhi NCR. This result can be echoed by the JD-R model which predicts that job resources (autonomy, scheduling flexibility) mediate the health-impairment process induced by high demands.

5.2 Faculty Results and Institutional Results.

The finding that job satisfaction (= 0.34), burnout (= -0.27) and organisational commitment (= 0.29) jointly predict 43% of the variance of institutional performance is analytically significant. It elevates the faculty well-being not to be an HR issue but rather a fundamental institutional driver of performance. This is especially applicable when considering the changing accreditation system in India: NAAC has updated its assessment framework (2023) to include faculty-based quality indicators, and the NIRF rankings have moved on to rewarding research output and student satisfaction, both of which research has shown to be dependent on faculty well-being outcomes. The independent and strong impact of all three faculty outcomes on institutional performance (and not only job satisfaction) is consistent with a multi-mechanism perspective of the WLB-performance relationship. Particularly, the dimension of burnout comes into play when it comes to teaching quality and research productivity sub-dimensions: faculty are less invested in course preparation (Halbesleben and Buckley, 2004), there is lesser quality of interaction with students, and research is cut. Instead, organisational commitment seems to work mainly via the student satisfaction route, which is in line with the service climate studies indicating that committed employees provided higher service quality of relational service (Bowen & Schneider, 2014).

5.3 Mediated Pathway

The theoretical and practical implications of the validation of the partial mediation based on all three faculty outcomes (H5) are important. The partial as opposed to full mediation suggests that WLB is also a direct source of effect on the institutional performance not on the affective and attitudinal channels of effects reflected by the three mediators. Such untestable direct pathways might be faculty networking and boundary-spanning behaviours, physical health and attendance, quality of advising and mentoring relations all of which should be investigated in the future. The semiautomatic mediation outcome is also an indication that institutional WLB investment has a two-fold payoff: it not only positively affects faculty well-being (reflected by the mediators) but also has a direct payoff on performance, yet not entirely explained in the current framework.

5.4 Gender and Institutional Type Moderating Role.

The evidence of gender moderation (H6a) is somewhat subtle: gender moderates certain WLB-outcome pathways (specifically TF-satisfaction and SB-commitment) but does not moderate all. This increased impact of WLB resources among female faculty is also aligned with the hypothesis of differential exposure - female faculty in Delhi NCR are at a greater burden of domestic caregiving, and institutional WLB resources are especially sensitive to job satisfaction and job commitment (Dhas and Karthikeyan, 2015). The non-significant gender interaction of the pathway of burnout indicates that the risk of burnout due to WLB impairment is about the same between genders, and male faculty is also significantly impacted by it as well, which contradicts simplistic gendered conceptions of academic burnout and aligns with recent data regarding male emotional labour in higher education (Tight, 2019). The most practical implication of the moderation analysis is the complete support of institutional type moderation (H6b). Equivalent WLB improvements in faculty of a private institution provide considerably more satisfaction, reduced burnout and increased commitment benefits than those in their counterparts at a public institution. The latter can be explained by the resource differential perspective: structural resources (job security, pension schemes, defined workloads based on the UGC norms) offer a baseline protection in the case of public HEIs, which makes marginal response to WLB gains less effective. The benefits of improvement in WLB in terms of outcome are proportionately greater in private HEIs, where structural protection is lower and performance requirements are stronger. This implies that the highest ROI of WLB policy investments is in the case of the private HEIs in the Delhi NCR area - a conclusion that must be brought into the institutional human resource strategy.

6. Conclusion, Implication, limitation and Future direction.

6.1 Conclusion

Through a rigorous quantitative analysis of 347 faculty members in 18 higher education institutions in the Delhi NCR, this study has identified that work-life balance is a major and proximate predictor of faculty job satisfaction, burnout and organisational commitment and that the outcomes of these faculty are major pathways to institution performance. The results confirm a moderated-mediation model based on COR theory and the JD-R model, and are the first quantitative results on this entire pathway in India.

6.2 Theoretical Implications

The research applies the COR theory to Indian HEI setting and indicates that the resource gain and resource loss spirals postulated by Hobfoll (1989) work in an institutional level outcome performance through faculty outcomes. It also expands the JD-R model by showing that WLB resources mediate the demands-to-burnout pathway in the effects of private but not public institutions, contributing to the understanding of context-dependency in the JD-R model. The discovery of satisfaction balance as the most important WLB predictor of faculty affective states is an improvement of WLB dimensionality theory in that evaluative rather than temporal WLB elements are best predictors of academic environments.

6.3 Practical Implications

The results of the study provide a number of practical and specific suggestions to institutional administrators and HR professionals in HEIs in the city of Delhi NCR. To start with, the WLB policy must be institutionalised, not an

informal or personal accommodation, via institutionalised flexible scheduling policies, workload norms according to UGC guidelines, and formalised remote-work arrangements of administrative tasks. Second, considering that temporal flexibility is the most important factor in burnout prevention, the institutions must audit teaching and administrative workloads on the basis of approved benchmarks and implement workload management systems. Third, the WLB-satisfaction and WLB-commitment relationship would be strengthened among the female faculty when gender-sensitive WLB policies, including on-campus crche facilities, gender-balanced committee assignments, and caregiver leave provisions, are implemented in the universities. Fourth, the WLB investment should be categorized as a strategic HR and accreditation priority in the private institution, as the effect sizes have been shown to be augmented and the effect directly impacts on NAAC and NIRF performance measures. Fifth, faculty well-being indicators (job satisfaction, burnout screening) should also be included in the institutional performance measurement dashboards as leading indicators of teaching quality and research productivity.

6.4 Limitations

The interpretation of findings is limited by a number of factors. First, cross-sectional design can not be causal; longitudinal design or natural experiments (e.g., testing the policy of WLB interventions) are required to prove causality. Second, self-reported institutional performance data can be prone to social desirability bias; future research needs to be triangulated by objective institutional data (NIRF scores, count of publications, student feedback scores). Third, the context of the Delhi NCR restricts the geographic generalisability; the replication needs to be done in other regions of India, both metropolitan and non-metropolitan. Fourth, specific WLB-supportive institutional practices (e.g., availability of flexible scheduling, provision of childcare) were not measured in the study, as they are key mediating variables between perceptions and outcomes of WLB. Fifth, it is a limitation because although CMB tests were done, the single-source self-report methodology was used.

6.5 Future Research Directions

Further studies ought to be longitudinal panel studies of WLB, faculty performance, and institutional performance over time, preferably based on objective institutional data. Research focusing on moderating effects of disciplinary culture (STEM vs. humanities vs. social sciences) and contract type (permanent vs. ad hoc) would add a finer level of granularity to the research. Systematic exploration should be directed at the mediating role of particular WLB-supportive practices (instead of WLB perceptions per se). Lastly, cross-regional analysis across geographic areas of India, type of institutions (autonomous colleges, affiliated college, university) and ownership of institutions (WLB-performance nexus) would vastly broaden the overallisability of the WLB-performance paradigm in Indian higher education.

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