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AGILE LEADERSHIP IN A VUCA WORLD: MEDIATING AND MODERATING PATHWAYS TO INNOVATIVE WORK BEHAVIOR AND TURNOVER INTENTIONS

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Abstract

The modern organizational environments that are characterized by volatility, uncertainty, complexity, and ambiguity (VUCA) require a different leadership style than the hierarchical one that can allow maintaining employee well-being and encourage innovation (Bennett and Lemoine, 2014). This study examined the relationship between Agile Leadership and Turnover Intention as well as innovative Work Behavior (IWB) based on the Job Demands Resources (JD-R) theory (Demerouti et al., 2001), the Conservation of Resources (COR) theory (Hobfoll, 1989) and the Social Exchange Theory (SET) (Blau, 1964). Particularly, the study focused on mediating the role of Job Satisfaction and moderating the role of Job Embeddedness within the framework of higher education institutions in Pakistan. The quantitative cross-sectional design was used, with 180 employees of higher education institutions as the sample and the analysis performed through Partial Least Squares Structural Equation Modeling (PLS-SEM) with 5,000 bootstrap samples using SmartPLS 4. The measurement model was found to have sufficient reliability (Cronbach α of between .792 and .960; composite reliability of between .864 and .965) and convergent validity (AVE of between .581 and .696). Confirmation of discriminant validity was done using the HTMT criterion and all the values were less than the conservative value threshold of 0.85. The obtained results of the structural model indicate that Agile Leadership is positively and significantly related to Job Satisfaction (β = .357, $p < .001$), whereas Emotional Demands are negatively related to Job Satisfaction (β = -.325, $p < .001$). Job Satisfaction, in its turn, is a positive predictor of Innovative Work Behavior (β = .218, p = .003) and a negative predictor of Turnover Intention (β = -.234, p = .002). Job Embeddedness shows that it has a significant negative direct impact on Turnover Intention (β = -.313, p = .001) and non-significant impact on Innovative Work Behavior (β = .141, p = .081). The mediation analysis indicates that Job Satisfaction plays a significant mediating role in the relationships between Agile Leadership and both IWB (β = .078, p = .019) and Turnover Intention (β = -.084, p = .007). Nonetheless, the

effect of the job embeddedness x job satisfaction on Turnover Intention was not significant (β = -.034, p = .540) indicating that job embeddedness does not mediate the relationship between job satisfaction and turnover intention in this case. The results are relevant to the JD-R theory because they indicate that Agile Leadership is a crucial job resource in emotionally demanding contexts of higher education and help to understand the conditions of boundaries within which Job Embeddedness is effective. The moderation effect is found to be non-significant that contradicts existing beliefs of embeddedness as a cross-cutting buffer. It emphasizes the importance of intrinsic job satisfaction over structural attachment in retention choices in more specifically education sector's context of developing economies.

INTRODUCTION

The VUCA Imperative

The contemporary organizational world is becoming volatile, uncertain, complex, and ambiguous (VUCA), which forces organizations to reorganize their leadership strategies on a continuous basis (Bennett & Lemoine, 2014). The hierarchical models of leadership with strict control and centralized decision-making are not the best models to be used in such environments, especially in industries where the emotional and operational demands are high.

The idea of agility which initially developed in the Agile Manifesto of the software development (Beck et al., 2001) has transformed into an extended organizational capacity that focuses on responsiveness, flexibility, and people-oriented leadership (Denning, 2018). Agile Leadership is such a change, with a focus on empowerment, collaboration, and flexibility instead of command-and-control strategies (Akkaya et al., 2020). Agile leadership practices are especially relevant in the higher education sector of developing economies like Pakistan where institutions are constrained in resources, bureaucratic, and increasingly subject to quality and innovation demands.

Problem Statement and Research Context

Employee disengagement, emotional exhaustion, and turnover intention remain significant issues in the state-owned organizations and institutions of Pakistan (Khan et al., 2017; Diko and Saxena, 2023). The burden of interpersonal relationships, stresses of work, and lack of institutional resources are increasing emotional pressures on higher education institutions, especially (Grandey et al., 2005). The faculty and administrative personnel in these institutions have to juggle complicated stakeholder demands with the fact that they do not usually have the institutional support they need to sustain engagement and creativity.

Although Agile Leadership has gained more and more popularity in the managerial discussion, the existing body of empirical literature on its applicability to the situation in developing countries in the public sector is limited (Aftab et al., 2022). Moreover, other researchers have often neglected the psychological processes by which leadership affects employee performance and other significant boundary conditions like Job Embeddedness (Mitchell et al., 2001). The current research fills these gaps by exploring how Agile Leadership and Emotional Demands affect innovation and retention by using Job Satisfaction as a mediator and testing the conditional influence of Job Embeddedness as a moderator.

Theoretical Framework

Job Demands–Resources (JD-R) Theory

The JD-R theory assumes that job demands and job resources balance determine the well-being and performance of employees (Demerouti et al., 2001). Job demands, such as Emotional Demands, demand persistent psychological effort and may result in strain and burnout in case of insufficiency of resources (Bakker and Demerouti, 2014). Job resources on the other hand promote motivation, engagement and

satisfaction. The JD-R model directs two basic processes: (1) health-impairment pathway is the process where resource demands drain energy and health, and (2) motivational pathway is the process where resources provoke satisfaction and good results. Agile Leadership has been theorized in this study as a very important job resource, which improves autonomy, competency, and psychological safety.

Conservation of Resources (COR) Theory

The COR theory believes that people endeavor to gain, defend, and maintain treasured assets (Hobfoll, 1989). In the case of Emotional Demands threatening the resources of a job, stress and withdrawal behaviors like turnover intention follow. Agile Leadership can also help to prevent loss of resources by supporting, clarifying roles, and empowering, thus breaking the cycle of loss (Hobfoll et al., 2018).

Social Exchange Theory (SET)

The Social Exchange Theory is based on the notion that workplace relations are guided by the concept of reciprocity (Blau, 1964). Employees are more likely to return the favor and behave positively through the attitudes and behaviors that are helpful and fair, such as work behavior that is innovative, and commitment to the organization.

Literature Review and Hypotheses Development

Agile Leadership and Job Satisfaction

Agile Leadership is more flexible, empowering, and facilitative than hierarchical (Sochova, 2020). The empirical evidence indicates that agile leaders develop the psychological safety and autonomy that subsequently lead to job satisfaction and intrinsic motivation (Edmondson, 2019; Akkaya et al., 2020). Higher education settings, where faculty autonomy and professional identity play key roles in work experience, should have a positive relationship between leadership and adaptive capacity and collaborative decision-making and employee satisfaction.

H1: Agile Leadership has a positive effect on Job Satisfaction

Emotional Demands and Job Satisfaction

Emotional Demands are the emotional effort involved in dealing with emotions in the work interactions (Xanthopoulou, 2010). Prolonged emotional work in service-based careers like teaching and policing has been invariably associated with reduced job satisfaction and heightened withdrawal desires (Maslach and Jackson, 1981; Bakker and Demerouti, 2022). Emotional demands may seriously diminish satisfaction in institutions of higher learning where faculty members are often involved in emotionally charged relationships with students, peers, and administrators.

H2: Emotional Demands negatively predict Job Satisfaction.

Job Satisfaction as a Mediator

Job satisfaction is a positive affective condition that is brought about by the appraisal of job experiences (Locke, 1976). It is a proximal psychological process in the JD-R framework that converts the job resources and demands into behavioral outcomes. Employees who are satisfied will tend to be more innovating and would not tend to pull out of the organization.

According to the previous research, leadership increases innovation and decreases turnover via satisfaction and job demands vice versa (Karasek et al., 1998; Bakker and Demerouti, 2022). In this way, job satisfaction is an important mediating variable between agile leadership, as well as emotional requirements and employee outcomes.

H3a: Job Satisfaction mediates the relationship between Agile Leadership and Innovative Work Behavior.

H3b: Job Satisfaction mediates the relationship between Agile Leadership and Turnover Intention.

Job Embeddedness as a Boundary Condition

Job Embeddedness refers to the set of forces that keep employees in their organization such as links, fit and perceived sacrifice (Mitchell et al., 2001). Embeddedness can also reinforce the

effect of satisfaction on retention especially in situations where mobility is limited (Crossley et al., 2007). Recent evidence has however indicated that the moderating effect of embeddedness might be context-specific and its efficacy might be reduced in high-stress situations where dissatisfaction dominates structural attachment.

H4: Job Embeddedness moderates the relationship between Job Satisfaction and Turnover Intention.

According to Ng & Feldman (2010) high job embeddedness promotes innovative work behavior by strengthening social networks for idea sharing and increasing employees' motivation to innovate in order to retain their roles and associated benefits (Khan et al., 2025).

H5: Job Embeddedness has a positive impact on Innovative Work Behavior.

Moreover, job embeddedness has been largely identified as an imperative in minimizing the turnover intention of employees. Highly embedded employees establish a high level of interpersonal connection, sense a greater fit in their job setting, and expect more sacrifices in case they leave, which in turn discourages withdrawal behaviours (Mitchell et al., 2001; Crossley et al., 2007). In line with the Social Exchange Theory, embedded employees will stay longer with their organization because of the social and psychological investments that they have in the company, thus reducing the desire to quit.

H6: Job Embeddedness negatively predicts Turnover Intention.

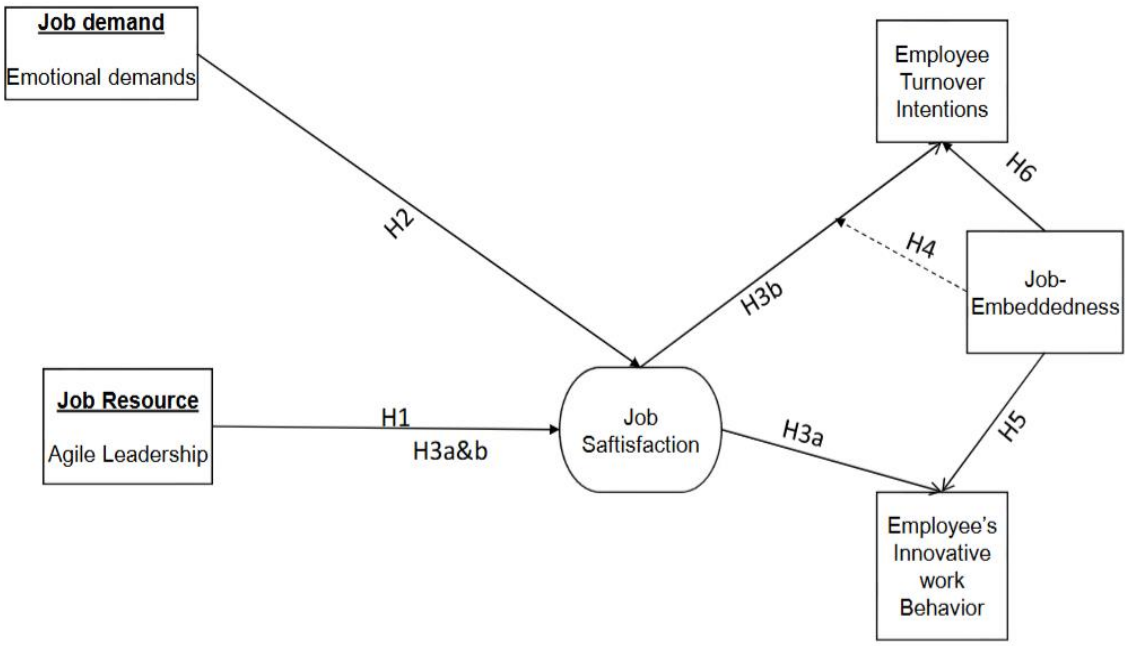


Figure 1Conceptual Framework

Methodology

Research Design and Sample

The research design used in this study is a quantitative, cross-sectional research design as it was used to test the hypothesized relationships of Agile Leadership, Emotional Demands, Job Satisfaction, Job Embeddedness, Innovative Work Behavior, and Turnover Intention. When it is needed to test theoretically based relationships and mediation-moderation models in organizational settings, the cross-sectional design is suitable (Hair et al., 2019).

The study setting included Pakistani institutions of higher learning, which is a highly emotional environment with strict bureaucracies and scarce resources (Khan et al., 2017). One hundred and eighty employees were sampled using a convenience sampling method and structured questionnaires were used to collect data. This is a large enough sample size to perform PLS-SEM analysis. It meets the commonly accepted rule of thumb of ten times the largest number of structural paths leading to an endogenous construct in the model (Hair et al., 2021). More rigorously, it also surpasses the minimum number of observations required by the inverse-square-root method (Kock and Hadaya, 2018), which is approximately 140 observations for 80% statistical power and 5% significance level for the smallest statistically significant path coefficient observed in the model ($\beta \approx .21$), and the achieved sample of 180 observations comfortably exceeds this threshold.

Measurement Instruments

Measurement of all constructs was conducted using already established validated scales with responses being recorded in five-point Likert scales. A 12-item adapted scale of Akkaya et al. (2020) was used to measure Agile Leadership (AL), including dimensions of flexibility, competence, team orientation, and change orientation. Emotional Demands (ED) were measured on a 5-item scale which was adapted by Xanthopoulou (2010). Job satisfaction was measured using a global multi-item scale(A 5-item) adapted from Brayfield and Rothe (1951), as utilized by Agho et al. (1992). (Agho et al., 1992; D'Arcy et al., 2014). The scale used to measure innovative Work Behavior (IWB) consisted of 6 items created by Janssen (2000). Turnover intention was measured using a four-item scale adapted from Mobley et al. (1977), capturing employees' thoughts, intentions, and job search behaviors.

Data Analysis Technique

SmartPLS 4 was used to perform the Partial Least Squares Structural Equation Modeling (PLS-SEM). Pls-sem was chosen because of its appropriateness in research that is based on prediction, its ability to address complex models with mediation and moderation, and its ability to withstand non-normal data distributions (Hair et al., 2021). Bootstrapping procedure used 5,000 subsamples and two-tailed test of significance at the.05 level. The analysis was carried out in two phases: (1) during the first stage the measurement model was assessed to determine the reliability and validity, and (2) during the second stage the structural model was tested to determine the hypothesized relationships, mediation and moderation effects.

Results

Descriptive Statistics

Table 1 shows the descriptive statistics of the indicator variables in the present study. All the questions were recorded on a 5-point Likert (1 = Strongly Disagree to 5 = Strongly Agree) and the sample consisted of 180 participants of higher education institutions in Pakistan. The average Agile Leadership indicators scores were between 3.53 and 3.94 indicating a moderate to high perceived agile leadership. The average of the Emotional Demands items was 3.18-3.41 showing a moderate emotional demand. The means of Job Satisfaction indicators were between 3.56 and 3.87 and the means of Innovative Work Behavior were between 3.47 and 3.93. The average of Job Embeddedness indicators was between 3.52-3.92 and Turnover Intention means were between 2.97 to 3.30. The skewness values were consistently negative with constructs, which indicated a slight inclination to higher ratings.

Table 1: Descriptive Statistics Summary by Construct (N = 180)

Construct	Items	Mean Range	SD Range	Min	Max
Agile Leadership (AL)	12	3.53–3.94	1.10–1.31	1	5
Emotional Demands (ED)	5	3.18–3.41	1.25–1.35	1	5
Job Satisfaction (JS)	5	3.56–3.87	1.11–1.29	1	5
Innovative Work Behavior (IWB)	6	3.47–3.93	1.05–1.27	1	5
Job Embeddedness (JE)	6	3.52–3.92	1.15–1.33	1	5
Turnover Intention (TOI)	4	2.97–3.30	1.26–1.32	1	5

Note. All items measured on a 5-point Likert scale.

Measurement Model Assessment

The measurement model was tested in terms of internal consistency reliability, convergent validity, and discriminant validity in accordance with the recommendations of Hair et al. (2021).

Reliability and Convergent Validity

The results of construct-level reliability and convergent validity are provided in Table 2. The values of all Cronbach alpha were above the threshold of .70 (Nunnally and Bernstein, 1994) with the highest value of .960 (AL) and the lowest value of .792 (TOI). Internal consistency was verified with values of composite reliability (rho c) between .864 and .965. The values of AVE were between .581 (ED) and .696 (AL), all of which were above the .50 point and which validated convergent validity (Fornell and Larcker, 1981).

Table 2: Construct Reliability and Convergent Validity

Construct	Cronbach's α	Composite Reliability (rho_c)	rho_a	AVE
AL	.960	.965	.962	.696
ED	.820	.873	.840	.581
IWB	.876	.906	.895	.616
JE	.906	.928	.913	.682
JS	.854	.895	.857	.632
TOI	.792	.864	.827	.614

Note. AL = Agile Leadership; ED = Emotional Demands; IWB = Innovative Work Behavior; JE = Job Embeddedness; JS = Job Satisfaction; TOI = Turnover Intention; AVE = Average Variance Extracted.

Outer Loadings

The entire outer loadings were above the.70 mark, with a range of.634 (ED1) to.901 (AL3). The least loading was on ED1 (.634), but since it was less than.708, it was not dropped because it did not enhance AVE and the item was part of the content validity. Table 3 shows the outer loadings of both indicators.

Table 3: Outer Loadings

Indicator	Loading	t-statistic	P
AL1	.836	34.126	< .001
AL2	.862	44.651	< .001
AL3	.901	52.260	< .001
AL4	.818	30.580	< .001
AL5	.823	30.556	< .001
AL6	.827	28.185	< .001
AL7	.829	31.796	< .001
AL8	.828	34.091	< .001
AL9	.854	36.548	< .001
AL10	.763	23.276	< .001
AL11	.842	32.310	< .001
AL12	.824	31.492	< .001
ED1	.634	8.545	< .001
ED2	.777	19.695	< .001
ED3	.832	26.517	< .001
ED4	.752	15.773	< .001
ED5	.803	22.415	< .001
IWB1	.767	16.347	< .001
IWB2	.807	20.678	< .001
IWB3	.807	19.305	< .001
IWB4	.857	30.259	< .001
IWB5	.735	12.051	< .001
IWB6	.729	14.602	< .001
JE1	.756	18.817	< .001
JE2	.848	32.257	< .001
JE3	.836	32.002	< .001
JE4	.871	40.615	< .001
JE5	.812	26.663	< .001
JE6	.826	31.926	< .001
JS1	.821	29.626	< .001
JS2	.814	26.485	< .001

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JS3	.813	27.949	< .001
JS4	.795	24.026	< .001
JS5	.727	17.731	< .001
TOI1	.872	38.265	< .001
TOI2	.730	13.850	< .001
TOI3	.771	17.336	< .001
TOI4	.755	15.833	< .001

Note. All loadings significant at $p < .001$. Bootstrap n = 5,000.

Discriminant Validity (HTMT)

Discriminant validity was measured using the Heterotrait-Monotrait (HTMT) ratio (Henseler et al., 2015). All the HTMT values were less than the conservative .85 value, which supports the fact that the constructs were empirically different as shown in Table 4.

Table 4: Heterotrait-Monotrait Ratio (HTMT)

	AL	ED	IWB	JE	JS	TOI
ED	.106	–				
IWB	.405	.228	–			
JE	.413	.085	.224	–		
JS	.422	.410	.290	.341	–	
TOI	.284	.313	.185	.433	.368	–

Note. All HTMT values below .85 conservative threshold.

Structural Model Assessment

Collinearity Assessment

The values of inner model VIF were between 1.008 and 1.133, which is much lower than the 5.0 threshold, which means that collinearity is not relevant in the structural model (Hair et al., 2021).

Coefficient of Determination (R^2)

The R^2 values were .253 for Job Satisfaction, .189 for Turnover Intention, and .086 for Innovative Work Behavior (Table 5). According to Cohen's (1988) benchmarks, these represent small to moderate effects. The R^2 adjusted values were .245 (JS), .175 (TOI), and .075 (IWB).

Table 5: Coefficient of Determination (R^2)

Endogenous Variable	R^2	R^2 Adjusted
Job Satisfaction (JS)	.253	.245
Turnover Intention (TOI)	.189	.175
Innovative Work Behavior (IWB)	.086	.075

Effect Size (f^2)

Effect sizes (f^2) were evaluated following Cohen's (1988) guidelines, where .02, .15, and .35 represent small, medium, and large effects, respectively. As shown in Table 6, Agile Leadership had a medium effect on Job Satisfaction (f^2 = .169), Emotional Demands had a medium effect on Job Satisfaction (f^2 = .140), and Job Embeddedness had a small-to-medium effect on Turnover Intention (f^2 = .107). The remaining effects were small.

Table 6: Effect Sizes (f^2)

Relationship	f^2	Effect Size
AL → JS	.169	Medium
ED → JS	.140	Medium
JE → IWB	.020	Small
JE → TOI	.107	Small–Medium
JE × JS → TOI	.002	Negligible
JS → IWB	.047	Small
JS → TOI	.060	Small

Model Fit

The saturated model had a standardized root mean square residual (SRMR) of.049, which is less than the recommended.08 by Hu and Bentler (1999) signifying a good model fit. The estimated model SRMR was.076 that is slightly high but still within acceptable limits of PLS-SEM implementation (Henseler et al., 2016).

Path Coefficients (Direct Effects)

Table 7 presents the direct path coefficients from the bootstrapping analysis with 5,000 subsamples. Agile Leadership had a significant positive effect on Job Satisfaction (β = .357, t = 5.787, p < .001), supporting H1. Emotional Demands had a significant negative effect on Job Satisfaction (β = –.325, t = 6.092, p < .001), supporting H2. Job Satisfaction significantly predicted both Innovative Work Behavior (β = .218, t = 2.944, p = .003) and Turnover Intention (β = –.234, t = 3.149, p = .002). Job Embeddedness had a significant negative effect on Turnover Intention (β = –.313, t = 5.077, p < .001), supporting H6, but its effect on Innovative Work Behavior was non-significant (β = .141, t = 1.746, p = .081), failing to support H5. The interaction term (JE × JS → TOI) was non-significant (β = –.034, t = 0.612, p = .540), indicating that H4 was not supported. Table 7 shows the direct path coefficients of the bootstrapping analysis of 5,000 subsamples. Agile Leadership positively influenced Job Satisfaction (β =.357, t = 5.787, p <.001) and H1 was accepted. Job Satisfaction was negatively impacted by Emotional Demands (β = -.325, t = 6.092, p = .001), which supports H2. Job Satisfaction was a significant predictor of Innovative Work Behavior (β =.218, t = 2.944, p = .003) and Turnover Intention (β = -.234, t = 3.149, p = .002). The influence of Job Embeddedness on Turnover Intention (β = -.313, t = 5.077, p = .001) was significant, which supports H6, whereas the effect on Innovative Work Behavior was not significant (β =.141, t = 1.746, p = .081), which does not support H5. The interaction term (JE × JS → TOI) was not significant (β = -.034, t = 0.612, p = .540), which means that H4 was rejected.

Table 7: Path Coefficients (Direct Effects)

Path	β	M	SD	t	p	Decision
AL → JS	.357	.364	.062	5.787	< .001	Supported
ED → JS	–.325	–.334	.053	6.092	< .001	Supported
JE → IWB	.141	.147	.081	1.746	.081	Not Supported
JE → TOI	–.313	–.323	.062	5.077	< .001	Supported
JE × JS → TOI	–.034	–.034	.055	0.612	.540	Not Supported
JS → IWB	.218	.229	.074	2.944	.003	Supported
JS → TOI	–.234	–.236	.074	3.149	.002	Supported

Note. Bootstrap n = 5,000; two-tailed test. β = path coefficient; M = sample mean; SD = standard deviation.

Mediation Analysis (Specific Indirect Effects)

The specific indirect effects are shown in Table 8. Agile Leadership had a significant mediating effect on Turnover Intention (β = -.084, t = 2.691, p = .007) and Innovative Work Behavior (β =.078, t = 2.339, p = .019) through Job Satisfaction. On the same note, the indirect effects of Emotional Demands via Job Satisfaction on Turnover Intention (β =.076, t =2.624, p = .009) and Innovative Work Behavior (β = -.071, t =2.549, p = .011) were both significant. These findings favour H3a and H3b.

Table 8: Specific Indirect Effects (Mediation)

Indirect Path	β	SD	t	p	95% CI
AL → JS → TOI	–.084	.031	2.691	.007	[–.149, –.028]
AL → JS → IWB	.078	.033	2.339	.019	[.023, .154]
ED → JS → TOI	.076	.029	2.624	.009	[.025, .140]
ED → JS → IWB	–.071	.028	2.549	.011	[–.134, –.025]

Note. CI = confidence interval (percentile bootstrap). Bootstrap n = 5,000.

Summary of Hypotheses Testing

Table 9: Summary of Hypotheses Testing

Hypothesis	Statement	Result
H1	AL → JS (+)	Supported
H2	ED → JS (–)	Supported
H3a	AL → JS → IWB (mediation)	Supported
H3b	AL → JS → TOI (mediation)	Supported
H4	JE × JS → TOI (moderation)	Not Supported
H5	JE → IWB (+)	Not Supported
H6	JE → TOI (–)	Supported

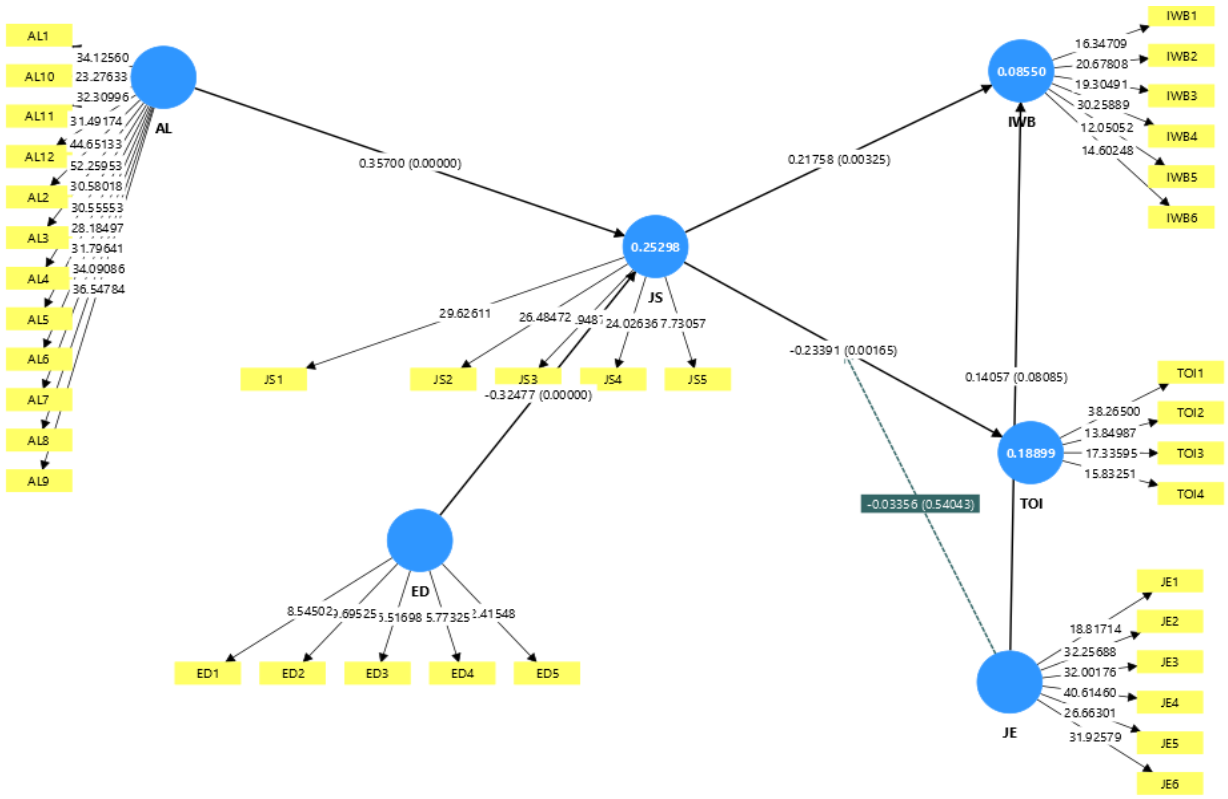


Figure 2 Structural model results depicting path coefficients, significance levels (p-values), and explained variance (R^2) for endogenous constructs.

Discussion

This paper analyzed how Agile Leadership is a major job resource that can influence employee results in the context of higher education in Pakistan using the Job Demands-Resources (JD-R) model that was supplemented with the Conservation of Resources (COR) theory and the Social Exchange Theory (SET). The results are empirical proof that the psychological resources that are brought about by leadership play a central role in promoting innovation and turnover intention in emotionally stressful higher education contexts.

Agile Leadership and the Motivational Pathway

Agile Leadership was also reported to have a significant predictive value of Job Satisfaction (β =.357, p <.001) in line with the motivational pathway of JD-R theory (Demerouti et al., 2001; Bakker and Demerouti, 2014). This moderate-sized effect suggests that the focus of agile leaders on autonomy, competence, and psychological safety has a positive impact on the affective appraisal of work among employees. The result confirms the earlier conceptualizations of agile leadership as an empowering and facilitative style that is opposite to the traditional command-and-control leadership (Akkaya et al., 2020; Denning, 2018). Agile leadership practices seem to be rather responsive to the faculty and staff expectations in the higher education setting, where professional autonomy is highly regarded.

Emotional Demands and the Health-Impairment Pathway

Emotional Demands became a strong negative predictor of Job Satisfaction (β = -.325, p <.001) which is in line with the health-impairment pathway of JD-R theory. Employees in emotionally stressing professions in the higher education such as teaching, mentoring, and administrative duties, are forced to

constantly manage their emotions, and this drains the psychological resources and leads to a lack of satisfaction (Maslach & Jackson, 1981; Xanthopoulou, 2010). The fact that Emotional Demands have an indirect effect on IWB and TOI via Job Satisfaction and not directly through direct behavioral means, emphasizes the point that emotional strain has an effect on the two areas through the reduction of affective work experiences, but not through direct behavioral processes.

Job Satisfaction as the Key Psychological Mechanism

One of the greatest theoretical contributions of the study is that Job Satisfaction is indeed a powerful mediator between Agile Leadership and Emotional Demands on one side, and employee outcomes on the other. The mediation results suggest that Agile Leadership has a significant effect on IWB (β =.078, p = .019) and TOI (β = -.084, p = .007) by influencing Job Satisfaction. Likewise, Emotional Demands have an indirect impact on results via satisfaction. The results are consistent with the previous studies that have identified satisfaction as a key factor in determining employee behavior (Locke, 1976; Karasek et al., 1998) and also generalize the findings to the higher education sector in a developing economy.

The Non-Significant Moderation Effect of Job Embeddedness

Among the interesting results of this research, there can be identified the non-significant interaction effect of Job Embeddedness and Job Satisfaction on Turnover Intention (β = -.034, p = .540). Although this outcome is opposite to the proposed buffering effect of embeddedness, it is a valuable addition to the theoretical framework. It indicates that within the emotionally charged environment of Pakistani institutions of higher learning, the structural forces that both instill employees (organizational connections, community networks, and perceived sacrifice) do not contribute substantially to the retention impact of job satisfaction. Instead, it seems that dissatisfaction prevails in structural attachment decision making, in terms of staying or leaving, suggesting that embeddedness is not enough to deter turnover intentions in case the employees are dissatisfied.

This result questions the applicability of the embeddedness theory to other settings and indicates that in the context of high emotional requirements and low organizational support intrinsic work satisfaction is a stronger determinant of retention than structural embeddedness. This interpretation is further supported by the conditional direct effects analysis: the negative relationship between Job Satisfaction and Turnover Intention was significant at all levels of Job Embeddedness (at -1 SD: β = -.200, p = .017; at mean: β = -.234, p = .002; at +1 SD: β = -.267, p = .007), which means that the relationship between the two remains stable across all levels of Job Embeddedness. This pattern can be understood in the light of several aspects of the study context. The external mobility of faculty and administrative staff in public universities in Pakistan is relatively limited, and the links and perceived-sacrifice dimensions of embeddedness may be indicative of limited alternatives rather than a discretionary attachment that can actively counteract dissatisfaction. Furthermore, the norms of tenure and job security that are common in public-sector institutions can separate structural embeddedness from the motivation to stay on the job: employees may be structurally embedded but still develop turnover intentions, and embeddedness does little to protect against turnover. These conditions indicate that, in the context of resource-poor, emotionally challenging public institutions, retention is more a function of satisfaction with the work experience than of the presence of retention mechanisms, and that interventions to reduce turnover should focus on improving the work experience.

Direct Effects of Job Embeddedness

Job Embeddedness showed a significant direct negative impact on Turnover Intention (β = -.313, p <.001), which confirms the hypothesis that, the more employees feel that they are fitting in their organization, there are links between them and sacrifice, the less they will want to leave. The impact of Job Embeddedness to Innovative Work Behavior was however, insignificant (β =.141, p = .081). Although the direction of the effect is theoretically expected, the insignificance of the results indicates

that embeddedness alone is not a sure way to creative and innovative behavior. The motivational resources that may be necessary to facilitate innovation are proximal, including psychological safety and satisfaction created by leadership, but not structural attachment.

Implications

Theoretical Implications

This study contributes to JD-R theory by placing Agile Leadership as a key job resource which triggers the motivational pathway in high-demand higher education environments. It provides a better understanding of the mediating role of Job Satisfaction as the key psychological mechanism that converts the leadership and demands into employee outcomes. Importantly, the non-significant moderation effect of Job Embeddedness refines embeddedness theory by implying that the buffering effect of embeddedness is context dependent and may not be true in emotionally demanding public-sector settings. This discovery contradicts the notion that structural attachment is always a force that leads to satisfaction-based retention and calls for context-sensitive theorizing in organizational behavior studies.

This paper extends the JD-R theory by adding Agile Leadership as one of the most important job resources that triggers the motivational pathway in higher education environments where the job demands are high, which clarifies the mediating role of Job Satisfaction as the main psychological process through which leadership and demands are transformed into employee outcomes. Notably, the non-significant moderation effect of Job Embeddedness helps to refine the embeddedness theory by indicating the buffering role of embeddedness to be context-specific and may not be applicable in emotionally challenging environments in the public-sector. . The discovery contradicts the assumption that structural attachment is always a rise in satisfaction-based retention, and underscores the importance of contextual theorizing in the research on organizational behavior.

Practical Implications

To policymakers and higher education administrators, the findings are important in supporting the need to build the Agile Leadership competencies of institutional leaders. The focus of leadership development programs must be on the flexibility, empowerment, and facilitative decision-making, not on strict hierarchical strategies. Since Job Satisfaction is central, employee satisfaction should be periodically measured as a leading indicator of innovation potential and risk of turnover by the institutions. Participative decision-making, recognition programs, and constructive feedback are some of the interventions that are likely to bring in high returns. Additionally, the organizations are recommended to actively deal with Emotional Demands by providing psychological support services, work-life balance programs, and workload standards. Even though Job Embeddedness can be used to decrease turnover intentions directly, retention strategies cannot be based only on structural attachment but should be accompanied by the practices that increase the level of satisfaction.

Limitations and Future Directions

A number of limitations need to be recognized. To begin with, the cross-sectional design does not allow causal inferences, longitudinal or experimental designs would be more convincing on the argument of directionality. Second, the sample size of 180 respondents is sufficient in PLS-SEM, but it restricts the generalizability. The value of R^2 of IWB (.086) indicates that other predictors other than the variables under investigation might be required to provide a more detailed explanation of the innovative behavior. Third, the common method bias is also a possibility since the study relied on self-report measures. Fourth, the study is limited to the institutions of higher education in Pakistan and generalization across cultures is needed. Future studies must also investigate these relationships over time, include objective outcome measures, and investigate other possible moderators of organizational culture and perceived organizational support.

Conclusion

In this study, it is presented that Agile Leadership is a key job resource that facilitates innovation and lowers turnover intention in Pakistani institutions of higher learning. Based on the JD-R framework, the

findings show that Agile Leadership has a positive effect on the employee outcomes based on the improvement of Job Satisfaction, which is the most important psychological mechanism of the relationship between leadership and behavior. Emotional Demands decrease employee performance by decreasing satisfaction whereas Job Embeddedness decreases turnover intention but does not mediate the relationship between satisfaction and turnover. The non-significant moderation effect is also a significant contribution that puts the universal applicability of the embeddedness theory into question and emphasizes the role of intrinsic satisfaction in retention decisions in emotionally challenging contexts of the public sector. These results highlight the need to have leadership behaviours in higher education that promote the intrinsic quality of work experiences of employees in order to achieve sustainable innovation and retention.

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