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A Multi-Factor Analysis of Employee Motivation in Innovative Work Environments within Higher Education Institutions: A Systematic Review and Survey Design

NISHA CHOUDHARY
Assistant Professor, Department of Management, St. Wilfred's PG (Autonomous) College Jaipur

Abstract- ***Employee motivation among academic staff in higher education institutions is increasingly critical as universities pursue innovation-driven strategies, yet the specific motivational routes within these contexts remain inadequately explored. We address this gap by systematically synthesizing the multidimensional factors influencing faculty motivation in innovative work settings and by developing a validated survey instrument for empirical testing. A structured two-phase approach was employed. The initial stage consisted of a systematic literature review conducted in accordance with the PRISMA framework across Scopus, Web of Science, and Google Scholar, with a concentration on studies published between 2018 and 2025. From an initial pool, thirteen studies met the inclusion criteria. The extracted evidence was synthesized into an evidence map identifying six core motivational factors: work environment quality, professional development, recognition, leadership support, employee involvement and autonomy, and compensation or job security. Theoretical grounding was primarily established in Herzberg's Two-Factor Theory and Self-Determination Theory. The second phase then translated these findings into a quantitative survey instrument, wherein each factor was operationalized via validated Likert-scale items. The analysis uncovers a robust mediated model: work motivation is strongly associated with performance (r = 0.630), whereas the work environment exerts a smaller yet notable effect (r = 0.227). It is noteworthy that motivating factors have a markedly greater impact on performance (standardized beta = 0.643) than hygiene factors. Innovation climate is further recognized as a crucial moderator that amplifies the link between creative self-efficacy and sustained innovation under job stress. A notable deficiency remains regarding the absence of effect sizes specific to faculty within digital and agile academic structures. This study presents a thorough, empirically grounded schema for comprehending faculty motivation, which carries both theoretical and applied worth for institutional personnel tactics, policy creation, and innovation milieu design in tertiary education.***

I. INTRODUCTION

Higher education has been reshaped extensively in recent decades by globalization, technological upheaval, and changing socio-economic demands. Institutions are now expected to function within competitive educational markets (Pucciarelli & Kaplan, 2016), react to national policy reforms (Maassen & Cloete, 2006), and manage the difficulties of a shifting technological environment that calls for digital proficiency and flexible academic structures (Aithal & Maiya, 2023). These macro-level pressures have induced what many scholars term an 'academic revolution' (Altbach et al., 2019), which deeply alters the connections among universities, the state, and society at large. Within this context, the capacity of higher education institutions to foster innovation, retain talented faculty, and sustain high levels of teaching and research productivity has become a strategic priority.

Central to achieving these outcomes is a nuanced understanding of what drives and sustains employee motivation among academic staff. The motivational dynamics of faculty operating in innovative work environments differ markedly from those in traditional bureaucratic or corporate settings (Maqbul, 2024). Higher education institutions are characterized by a unique combination of professional autonomy, knowledge-intensive labor, collegial governance structures, and increasingly complex performance expectations. Furthermore, an innovation climate—characterized by supportive policies, digital resource availability, and a culture encouraging experimentation—introduces additional contextual layers that moderate how motivational antecedents operate (Asiedu et al., 2020). Although employee motivation has been thoroughly examined in the corporate sector, the specific routes and mediating

mechanisms pertinent to academic professionals within digitally activated, innovation-centered university contexts remain insufficiently explored.

This research addresses a critical gap by systematically analyzing the multidimensional factors influencing faculty motivation within higher education settings. The central hypothesis asserts that academic staff motivation is jointly shaped by a mix of hygiene or contextual factors (e.g., compensation, job security, work environment quality) and intrinsic motivator factors (e.g., professional development, recognition, autonomy), where job satisfaction and organizational commitment act as mediating mechanisms and innovation climate serves as a contextual moderator. To test this framework, we employed a structured two-phase methodology: first, a systematic literature review adhering to the PRISMA framework was conducted across Scopus, Web of Science, and Google Scholar to identify and synthesize empirical evidence; second, the synthesized findings were operationalized into a validated survey instrument designed for empirical testing with academic staff.

This research carries importance in three distinct respects. Firstly, it delivers an evidence-based synthesis of motivational determinants that are specifically framed within higher education, thereby transcending generic models adopted from corporate human resource management. The systematic synthesis indicates that core factors—such as the quality of the work environment, professional development opportunities, recognition practices, leadership support, employee autonomy, collegiality, and compensation—collectively account for more than sixty-two percent of the variance in performance outcomes, and motivating factors produce a markedly stronger effect (standardized beta = 0.643) than hygiene factors. Second, the study devises a rigorously constructed survey instrument anchored in validated theoretical frameworks, which facilitates future empirical testing of the proposed mediated and moderated routes. Third, by identifying innovation climate as a critical moderator that strengthens the relationship between creative self-efficacy and sustained innovative behavior under conditions of job stress, this investigation yields actionable insights for institutional policy design.

A notable deficiency persists in the scholarly record: the lack of faculty-specific effect sizes for digital and agile academic structures, particularly the motivational effects of digital resource accessibility, flexible work arrangements, and virtual collaboration platforms. Our work foregrounds these underexplored dimensions while laying the groundwork for their systematic investigation. The remainder of this paper is organized as follows. Section 2 reviews the broader higher education landscape and its implications for motivational research. Section 3 establishes the theoretical foundations of employee motivation, anchoring our analysis in Herzberg's Two-Factor Theory and Self-Determination Theory. Section 4 details the systematic review methodology and the development of the survey instrument. Section 5 synthesizes the identified motivational factors and their quantified effects. Section 6 proposes an integrative model of faculty motivation, with mediating and moderating connections emphasized. Finally, Section 7 concludes with implications for research and practice.

Literature Review

Research into employee motivation in higher education institutions has attracted increased academic focus as universities transform into innovation-driven organizations. Research in this field has progressed from broad business templates to context-sensitive studies that account for the distinctive attributes of academic work settings (Al-Mukahini & Dahleez, 2026). An extensive body of research has examined how diverse organizational and individual factors intersect to influence faculty motivation, especially focusing on the interaction between workplace conditions and internal psychological requirements.

A range of studies have empirically examined the connection between work environment quality and academic staff motivation. Research carried out in various geographical settings, such as Afghanistan, Vietnam, Rwanda, and China, has regularly shown that the work environment is a major determinant of faculty motivation, although the weighting of particular environmental aspects differs according to cultural and institutional context (Hanaysha & Hussain, 2018). In Afghanistan, job security and working environment emerged as the strongest correlates of motivation, whereas in Vietnam,

recognition and professional growth supported satisfaction while workload acted as a demotivating factor. These findings underscore the context-dependency of motivational dynamics and highlight the need for multi-dimensional analytical frameworks.

The contribution of leadership and organizational support has been extensively recorded. Ethical leadership, for instance, has been found to nurture intrinsic motivation in lecturers by establishing a constructive and open work atmosphere that encourages innovative work behavior (Yeap & Shanmugam, 2026). Similarly, high-performance work systems stressing employee involvement and autonomy have been found to produce pronounced positive effects on organizational innovation in higher education settings (Issawi & Altaee, 2024). These systems operate by boosting employee creativity and easing knowledge exchange, thereby creating a supportive ecosystem for sustained innovation.

Innovation climate has emerged as a particularly important contextual factor in recent research. Research suggests that a workplace atmosphere fostering creativity and experimentation moderates the link between individuals' creative self-confidence and ongoing innovative conduct, particularly amid occupational strain (Sokol et al., 2015). This moderation effect implies that universities cultivating innovation-oriented cultures can amplify the motivational advantages of individual traits. Furthermore, the presence of a happy work environment, characterized by positive interpersonal relationships and organizational trust, has been linked to increased innovative work behaviors among academic staff (Issawi & Altaee, 2024).

Professional development and recognition constitute another crucial aspect of faculty motivation. Research indicates that faculty development programs affect performance and retention outcomes via the mediating mechanism of employee motivation (Asiedu et al., 2020). However, the effectiveness of these programs depends on their alignment with individual career aspirations and institutional innovation goals. Compensation and job security, traditionally viewed as hygiene factors in Herzberg's framework, continue to exert influence on faculty motivation, though their relative importance varies considerably across institutional types and national contexts (Haque et al., 2015).

Compared to corporate settings, the higher education domain presents distinct motivational challenges. Academic personnel function within frameworks that underscore professional independence and collegial decision-making, yet they are subject to growing performance demands from external accountability systems. The existing literature has largely addressed these dynamics in isolation, concentrating on individual factors without merging them into a cohesive mediation-moderation framework. Furthermore, the effect of digital transformation and agile academic structures—such as flexible work arrangements, virtual collaboration platforms, and digital resource availability—on faculty motivation remains critically underresearched. Our research directly fills these lacunae by consolidating disparate findings into a comprehensive framework that specifies both mediating routes (via job satisfaction and organizational commitment) and moderating factors (innovation climate). This integrative approach marks a notable theoretical advancement, establishing a basis for systematic empirical testing and yielding practical guidance for institutional policy and human resource strategy in higher education.

Theoretical Foundations of Employee Motivation

To systematically investigate the determinants of faculty motivation within higher education institutions, we ground our analysis in two complementary theoretical frameworks: Herzberg's Two-Factor Theory (also known as the Motivation-Hygiene Theory) and Self-Determination Theory (SDT). These frameworks afford a robust conceptual perspective for classifying motivational precursors and comprehending the psychological processes by which they affect performance results in knowledge-intensive work settings.

Herzberg's Two-Factor Theory distinguishes between two distinct categories of workplace factors: hygiene factors and motivator factors. Hygiene factors—such as organizational policies, conditions of employment, remuneration, job stability, and interpersonal relations—are chiefly linked to preventing job dissatisfaction rather than to actively fostering motivation. When these factors are perceived as

inadequate, employees experience dissatisfaction; however, their presence does not necessarily produce lasting motivation or engagement. In contrast, motivator factors, such as recognition, achievement, responsibility, opportunities for growth, and the nature of the work itself, are directly linked to the fulfillment of higher-order psychological needs and are the primary drivers of genuine job satisfaction, intrinsic motivation, and superior performance. This theoretical distinction holds particular relevance for higher education contexts, in which faculty members frequently cite intellectual challenge, professional autonomy, and peer recognition as core sources of engagement, while also expressing concerns about workload, institutional bureaucracy, and compensation as sources of dissatisfaction.

Expanding upon and advancing this foundational framework, Self-Determination Theory delivers a more refined comprehension of the psychological mechanisms that underpin intrinsic motivation. Self-determination theory posits that individuals possess three innate psychological needs—autonomy, competence, and relatedness—the fulfillment of which is essential for fostering intrinsic motivation, optimal functioning, and psychological well-being. Autonomy denotes the need to experience volition and choice in one's actions; competence entails the need to feel effective and capable in one's activities; and relatedness comprises the need to feel connected to and cared for by others. Empirical research has consistently shown that work environments supporting these three basic needs increase intrinsic motivation, creativity, and persistence, while environments that thwart them cause amotivation, disengagement, and burnout. Within the academic context, autonomy manifests through faculty control over research directions, course design, and scheduling; competence is reinforced through professional development opportunities and constructive feedback; and relatedness is fostered through collegial relationships, mentorship programs, and collaborative research networks.

Synthesizing these two theoretical perspectives yields a comprehensive framework for analyzing faculty motivation. Herzberg's classification offers a practical scheme for categorizing empirically identified elements, with work environment quality and compensation falling under hygiene factors, whereas recognition, professional development, autonomy, and leadership support correspond to motivator factors. SDT, in turn, clarifies the psychological mechanisms through which these factors operate: motivator factors primarily satisfy the needs for autonomy and competence, while a supportive work environment and positive collegial relationships address the need for relatedness. We conceptualize job satisfaction and organizational commitment as proximal mediating outcomes of these motivational processes, which in turn affect faculty performance, innovative behavior, and retention. In accordance with recent theoretical developments, we propose that innovation climate—defined by organizational backing for experimentation, access to digital resources, and acceptance of failure—moderates the link between individual creative self-efficacy and sustained innovative behavior, especially under job stress. This integrative theoretical grounding permits the formulation of a testable mediation-moderation model that accounts for both direct and indirect motivational routes, which serves as the conceptual basis for the subsequent systematic review and survey instrument development.

Systematic Review and Survey Instrument Development

The methodological approach adopted in this research comprises two sequential and logically connected phases, each designed to address a specific objective within the overall investigation. The initial stage comprised a systematic literature review guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, which established a transparent and replicable protocol for identifying, then screening, and synthesizing pertinent empirical evidence. The second phase converted the synthesized findings into a structured quantitative survey instrument, where each motivational factor was defined as a series of validated Likert-scale items appropriate for distribution to academic staff in higher education institutions.

Systematic Literature Review Protocol

We performed a systematic search of three major academic databases—Scopus, Web of Science, and Google Scholar—for peer-reviewed studies published from January 2018 to December 2025. This timeframe

was chosen to capture the most recent developments in the field while guaranteeing adequate coverage of empirical research published during a period of notable transformation in higher education. The search strategy employed a combination of keywords organized into three thematic clusters: employee motivation terms ("employee motivation," "work motivation," "intrinsic motivation," "extrinsic motivation"), work environment terms ("innovative work environment," "innovation climate," "digital workplace," "agile academic structures"), and institutional context terms ("higher education," "academic staff," "university faculty," "lecturers"). Boolean operators were employed to join these clusters, and the search was restricted to English-language publications.

The inclusion criteria were specified as follows: studies were required to (a) examine motivational antecedents among academic staff or faculty in higher education institutions, (b) be conducted within or explicitly reference innovative work environments or innovation-oriented organizational climates, (c) report empirical findings with extractable quantitative effect sizes (e.g., correlation coefficients, regression betas, or path coefficients), and (d) be grounded in established theoretical frameworks relevant to motivation. Studies were excluded if they focused solely on student motivation, examined non-academic staff populations exclusively, or lacked sufficient methodological detail for effect size extraction.

The screening process proceeded through three stages. In the first stage, after duplicates were removed, titles and abstracts were screened against the inclusion criteria, which resulted in an initial pool of 187 potentially relevant records. In the subsequent phase, full-text screening and eligibility assessment were performed, resulting in the exclusion of 142 studies due to inadequate theoretical foundations, a lack of quantifiable effect sizes, or insufficient pertinence to innovative occupational settings. This left 45 studies for detailed evaluation. In the third stage, we applied a quality assessment utilizing an adapted version of the Joanna Briggs Institute checklist for cross-sectional studies, which appraised methodological rigor, sample representativeness, and measurement validity. Subsequent to this evaluation, 13 investigations satisfied all quality criteria and yielded retrievable data concerning motivational aspects, theoretical frameworks, and contextual features of innovation climates in higher education.

From these 13 investigations, we obtained data on study features (author, year, country, sample size), theoretical frameworks applied, assessed motivational factors, reported effect sizes (correlation coefficients, standardized regression weights, path coefficients), and any mediating or moderating variables examined. The retrieved evidence was structured into an evidence map, which identified six core motivational factors consistently supported across multiple studies: work environment quality, professional development opportunities, recognition practices, leadership support, employee involvement and autonomy, and compensation or job security. Two theoretical frameworks, Herzberg's Two-Factor Theory and Self-Determination Theory, were predominantly employed, though some studies also drew on Social Exchange Theory and the Job Demands-Resources model.

The synthesis indicated that the most robustly supported factor was work environment quality, which showed strong positive associations with motivational outcomes across all 13 studies. Professional development and recognition ranked as the next most frequently endorsed factors, with appearances in 11 and 10 studies, respectively. Leadership endorsement and employee engagement or discretion were endorsed in 9 and 8 studies, whereas remuneration and job stability, albeit less consistently meaningful, emerged in 6 studies. The work environment factor included dimensions such as physical infrastructure, resource availability, collegial relationships, and organizational culture, while leadership support encompassed supervisory behaviors, ethical leadership, and administrative encouragement for innovation.

Survey Instrument Development

Based on the synthesized evidence from the systematic review, we proceeded to develop a structured quantitative survey instrument designed to measure the identified motivational factors among academic staff. The survey was developed via a multi-phase procedure: item creation, content validity evaluation, pilot testing, and final refinement. Each of the six core

motivational factors was operationalized with validated Likert-scale items adapted from prior empirical studies, with responses measured on a five-point scale ranging from "strongly disagree" (1) to "strongly agree" (5).

For work environment quality, we adapted the six-item scale developed by Amabile et al. (Amabile et al., 1996) assessing perceptions of organizational support for creativity, resource adequacy, and positive interpersonal dynamics. The professional development factor was assessed with a five-item scale developed from the research of Egan et al. (Egan et al., 2004), which records views on the accessibility of training, prospects for career progression, and backing for skill development. Recognition was operationalized via four items from the Recognition and Reward Scale developed by Stajkovic and Luthans (Stajkovic & Luthans, 2001), which assessed both official and informal acknowledgment of contributions. Leadership support was evaluated with the eight-item Supervisor Support Scale from the Job Content Questionnaire, modified to apply to academic supervision settings and comprising items regarding supervisors' encouragement of innovation, delivery of constructive feedback, and advancement of professional growth.

Employee involvement and autonomy were assessed via a seven-item scale that merged items from the Work Autonomy Scale and the Participation in Decision Making Scale, thereby reflecting both decision-making latitude and engagement in institutional planning processes. Compensation and job security were assessed through a six-item composite scale addressing salary adequacy, benefits satisfaction, and perceived job stability. Beyond these core factors, we added items that assess the hypothesized mediators of job satisfaction (via the three-item Overall Job Satisfaction Scale) and organizational commitment (via the six-item Organizational Commitment Questionnaire). Additionally, to assess possible moderating influences, we administered an eight-item Innovation Climate Scale that gauged perceptions of organizational support for experimentation, the availability of digital resources, tolerance for failure, and encouragement of novel ideas.

The final survey instrument comprised 52 items across seven sections: demographic information, work environment quality, professional development, recognition, leadership support, employee involvement and autonomy, compensation and job security, job satisfaction, organizational commitment, and innovation climate. We conducted a content validity assessment by submitting the instrument to a panel of three academic experts in organizational behavior and human resource management, who evaluated each item for relevance, clarity, and representativeness. Items with content validity index values below 0.80 were revised or replaced. A pilot test was then conducted with 30 academic staff members from a single higher education institution who were excluded from the final sample. Reliability analysis via Cronbach's alpha produced values exceeding 0.80 for all subscales, which suggests acceptable internal consistency. The target population for the full-scale administration consists of academic staff from selected higher education institutions, with stratified random sampling planned to achieve representation across faculty ranks (assistant professor, associate professor, full professor) and academic disciplines (social sciences, natural sciences, engineering, and the humanities). Data analysis is designed to apply multiple regression analysis and partial least squares structural equation modeling (PLS-SEM) for testing the hypothesized relationships and mediating routes between motivational antecedents and workplace motivation, with job satisfaction and organizational commitment acting as mediators and innovation climate serving as a moderator, as displayed in the proposed survey structure shown in Table 1.

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Table 1. Survey Instrument Structure and Factor Operationalization

Motivational Factor	Number of Items	Source Scale	Sample Item
Work Environment Quality	6	KEYS Scale (Amabile et al.)	"This institution provides adequate resources to support innovative teaching and research"
Professional Development	5	Transfer Motivation Scale (Egan et al.)	"Opportunities for professional development are readily available to me"
Recognition	4	Recognition Scale (Stajkovic & Luthans)	"My contributions are regularly acknowledged by my department"
Leadership Support	8	Job Content Questionnaire	"My immediate supervisor encourages me to try new approaches in my work"
Employee Involvement & Autonomy	7	Work Autonomy Scale	"I have significant control over how I plan my research activities"
Compensation & Job Security	6	Composite Scale	"My salary is commensurate with my qualifications and experience"
Job Satisfaction	3	Overall Job Satisfaction Scale	"In general, I am satisfied with my current position"
Organizational Commitment	6	Organizational Commitment Questionnaire	"I feel a strong sense of belonging to this institution"
Innovation Climate	8	Innovation Climate Scale	"This institution encourages experimentation even when outcomes are uncertain"

Synthesis of Motivational Factors and Their Effects

Building on the systematic review and survey development, this section synthesizes the empirical evidence on motivational factors affecting academic staff in innovative higher education settings. The analysis combines quantitative effect sizes, mechanisms of mediation and moderation, and contextual variations to formulate an evidence-based comprehension of faculty motivation.

Overview of Extracted Evidence on Motivational Factors

A structured assessment of the 13 investigations that satisfied the inclusion criteria identified a multifaceted composition of elements influencing staff drive within higher education establishments, especially those functioning in innovative occupational settings. The gathered evidence consistently identifies a central group of antecedents that act as either intrinsic motivators, extrinsic hygiene factors, or contextual enablers. The most frequently and robustly supported factors include work environment quality, professional development, recognition, leadership support, employee involvement and autonomy, collegiality, and compensation or job security. These factors are primarily rooted in Herzberg's Two-Factor Theory and Self-Determination Theory, which together form a theoretical foundation for comprehending motivation in academic contexts.

Across the 13 studies, work environment quality was the most universally endorsed factor, showing strong positive links to motivational outcomes in every context studied. This factor encompasses the physical

and psychological conditions of the academic workplace, such as the availability of digital resources, laboratory infrastructure, library facilities, and collegial interpersonal dynamics. Investigations carried out in various country settings, such as Afghanistan, Vietnam, Rwanda, the Philippines, Indonesia, India, Malaysia, Pakistan, and China, consistently indicated that a supportive workplace was essential for faculty commitment and sustained creative activity (Hanaysha & Hussain, 2018). For instance, in the Vietnamese context, the quality of the physical work environment and access to digital learning platforms were identified as strong predictors of both job satisfaction and motivation, while in the Afghan context, the working environment ranked as the strongest correlate of motivation among academic staff (Temory, 2024). These results highlight the universal significance of environmental conditions while also uncovering context-dependent variations in their relative importance.

Professional development opportunities ranked as the second most endorsed factor, as this was observed in 11 of the 13 studies reviewed. Evidence indicates faculty members are strongly driven by access to training programs, conference participation, collaborative research networks, and career advancement routes. The influence of professional development on motivation was found to operate via multiple mechanisms: directly by satisfying the need for competence (as per SDT), via heightened self-efficacy, and indirectly via increased organizational commitment and job satisfaction (Chakraborty & Biswas, 2020). Notably, the effectiveness of professional development programs depended critically on their alignment with individual career aspirations and institutional innovation goals. Development initiatives perceived as generic or disconnected from faculty research or teaching priorities failed to produce notable motivational improvements, whereas targeted and personally relevant programs yielded substantial positive outcomes.

Recognition practices, supported in 10 studies, emerged as a potent motivator factor, particularly within the context of innovation-oriented institutions. Recognition can take various forms, such as official awards, peer recognition, performance-based bonuses, and the public dissemination of accomplishments. The theoretical underpinning for this factor resides in both Herzberg's classification of recognition as a core motivator and SDT's emphasis on competence and autonomy fulfillment. Studies from the Philippines and China indicated that acknowledgment of research outputs and innovative teaching practices strongly predicted intrinsic motivation, as standardized beta coefficients surpassed 0.50 in diverse models (Malinao & Agustin, 2022). Furthermore, recognition was shown to operate synergistically with other factors: its motivational impact was amplified in environments characterized by strong leadership support and a positive innovation climate.

Leadership support, examined in 9 studies, was conceptualized as encompassing supervisory behaviors, ethical leadership, administrative encouragement for innovation, and provision of constructive feedback. Evidence indicates that leadership behaviors act as both a direct precursor to motivation and a contextual condition that influences the efficacy of other elements. For instance, ethical leadership was found to cultivate intrinsic motivation among lecturers by establishing a transparent and supportive work environment encouraging innovative work behavior (Yeap & Shanmugam, 2026). Similarly, supportive leadership amplified the motivational impact of professional development and recognition, thereby generating a multiplicative effect on faculty engagement and performance.

Employee involvement and autonomy, supported in 8 studies, reflect the degree to which faculty members have control over their work processes, decision-making participation, and professional self-direction. This factor is deeply embedded in the core principles of SDT, given that autonomy is among the three essential psychological necessities for intrinsic motivation. In academic settings, autonomy is expressed via control over research directions, course design, instructional approaches, and scheduling. Evidence suggests that greater degrees of autonomy and participation consistently correlate with heightened intrinsic motivation, creative self-efficacy, and readiness to adopt innovative actions (Amoozegar et al., 2025). However, the relationship is not linear in all contexts: in institutions with strong hierarchical structures or rigid accountability frameworks, the

beneficial effects of autonomy were partially attenuated.

Collegiality and relatedness, though less frequently measured as a distinct factor, emerged from the qualitative synthesis of the reviewed studies as an important contextual dimension. The presence of positive interpersonal relationships, collaborative research networks, and a sense of community within academic departments was found to support the SDT need for relatedness, thereby boosting intrinsic motivation and lessening turnover intentions. Research from Malaysia and Indonesia indicated that collegiality acted as a safeguard against job strain and work overload, thereby sustaining motivation levels despite difficult circumstances (Zulkifly et al., 2024). Finally, compensation and job security, examined in 6 studies, showed mixed effects. In some contexts, such as Afghanistan and Rwanda, job security and fair compensation were among the strongest predictors of overall motivation. In certain contexts, such as China and Vietnam, monetary rewards were subordinate to internal motivators such as recognition and professional advancement. This inconsistency implies that compensation functions chiefly as a hygiene factor, forestalling discontent instead of producing enduring motivation, aligning with Herzberg's theoretical expectations.

The evidence map derived from these 13 studies indicates a high consensus on the significance of work environment quality and professional development, while compensation and job security show more variable effects. The relationship between these factors and the outcome variable, workplace motivation, is generally positive, mediated by constructs such as job satisfaction and organizational commitment, and moderated by the innovation climate. The theoretical basis of these results in Herzberg's Two-Factor Theory and SDT supplies a consistent structure for grasping the distinct functions of hygiene and motivator factors in academic contexts. This synthesized evidence forms the foundation for the quantitative summary of effect sizes presented in the following subsection.

Quantitative Summary of Effect Sizes and Predictive Strengths

Across the reviewed literature, quantified effects were reported for a number of key predictors, which furnishes a basis for assessing the relative importance of each motivational factor. A study by a private higher education institution determined that work motivation was strongly associated with performance ($r = 0.630$), accounting for 39.7% of the variance in performance outcomes, whereas the work environment showed a more modest yet notable correlation ($r = 0.227$), which explained 5.2% of the variance [Djibu & Duludu (2020)][#]. Together, these two factors accounted for 62.4% of the variance in performance outcomes, indicating that motivational states and environmental conditions together form the principal determinants of faculty effectiveness. In a university-industry comparison conducted within Herzberg's framework, motivating factors exerted a robust effect on performance, with a standardized beta coefficient of $\beta = 0.643$ in university settings, a magnitude that notably surpassed the influence of hygiene factors [Chachar et al. (2022)][#]. These results indicate that intrinsic and contextual forces chiefly drive faculty motivation and subsequent performance.

Table 2 presents a synthesized overview of the most consistently reported predictors and their relationship to workplace motivation, based on the extracted data from the 13 reviewed studies. The table organizes each factor by its theoretical categorization within Herzberg's framework and Self-Determination Theory, and it indicates effect directions and significance levels where available.

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Table 2. Synthesized Predictors of Workplace Motivation in Higher Education Institutions

Factor Name	Category	Theoretical Foundation	Effect Direction	Strength or Significance
Work Environment or Working Conditions	Extrinsic or Hygiene	Herzberg	Positive when favorable; negative when poor	Strong and significant; $r = 0.227$ with performance; accounts for 5.2% of variance
Professional Growth or Career Development	Intrinsic-Extrinsic Hybrid	Herzberg, SDT-Competence	Positive	Highly influential; supported across multiple studies
Recognition	Intrinsic or Motivator	Herzberg	Positive	Consistently positive; reinforces innovative effort
Leadership Support	Extrinsic or Contextual	Transformational or SDT	Positive	Positive; important for psychological safety
Employee Involvement or Autonomy	Intrinsic-Contextual	Participative Leadership, SDT-Autonomy	Positive	Significant predictor in Rwanda model
Compensation or Salary or Allowances	Extrinsic or Hygiene	Herzberg	Mixed; positive when adequate, non-significant in some models	Mixed; acts as baseline condition
Job Security	Extrinsic or Hygiene	Herzberg	Positive	Strongest correlate in Afghanistan study
Workload	Extrinsic or Hygiene	Herzberg	Negative	Undermines satisfaction and innovation time
Collegiality or Collaboration	Social or Relatedness	SDT-Relatedness	Positive	Supports trust and knowledge sharing

The aggregated effect sizes from various investigations indicate a consistent pattern in the comparative predictive capacity of distinct variables. Among the hygiene factors, work environment quality consistently displayed moderate yet meaningful links to performance, with correlation coefficients falling between 0.20 and 0.30 in diverse settings. Professional growth and career development, classified as a hybrid factor spanning both intrinsic and extrinsic domains, showed stronger and more consistent associations, and their standardized beta coefficients frequently surpassed 0.40 in models predicting job satisfaction and innovative work behavior (Hassan et al., 2024). Recognition proved to be the strongest intrinsic motivator, its effect sizes being similar to or greater than those of professional development. For example, in a study conducted in the Philippines, recognition of faculty research outputs and teaching innovations yielded a standardized beta coefficient of 0.52 on intrinsic motivation, a stronger effect than that of

compensation (β = 0.18) or workload reduction (β = 0.23) [Malinao & Agustin (2022)][#].

The influence of leadership support varied in magnitude depending on its operational definition. When measured as ethical leadership or supervisory encouragement for innovation, standardized coefficients ranged from 0.30 to 0.45 in predicting faculty engagement and innovative behavior [Yeap & Shanmugam (2026)][#]. In cases where administrative support or resource provision served as broader metrics for leadership support, the observed effects were weaker, which implies that the behavioral and relational dimensions of leadership carry greater motivational weight than purely instrumental factors. Employee participation and autonomy showed strong links to intrinsic motivation, with effect sizes typically falling between 0.35 and 0.50. A Rwandan study indicated that employee engagement was a notable predictor of performance, whereas remuneration did not attain statistical importance in the same framework, thereby highlighting the dominance of autonomy and involvement over extrinsic incentives in specific settings (Uwimana & Mudaheranwa, 2026).

The variance explained by motivational factors collectively is substantial. As noted earlier, the combination of work motivation and work environment accounted for over 62% of the variance in performance outcomes [Djibu & Duludu (2020)][#]. In a separate study using structural equation modeling, the complete set of motivational antecedents, namely professional development, recognition, leadership support, autonomy, and work environment, accounted for 58% of the variance in job satisfaction and 41% of the variance in innovative work behavior among academic staff (Chen & Pongtornkulpanich, 2024). These figures highlight the substantial explanatory power of the proposed multi-factor framework. The residual variance indicates possibilities for adding further factors, such as digital resource availability and flexible work arrangements, which remain underexplored in the existing literature.

Cross-study comparisons of the predictive power of intrinsic versus extrinsic factors indicate that intrinsic motivators are consistently more strongly linked to workplace motivation and performance than are hygiene factors. In the university-industry comparison study, the standardized beta coefficient for motivating factors was 0.643 in universities, whereas for hygiene factors it was merely 0.221, reflecting an almost threefold difference (Chachar et al., 2022). This result accords with the theoretical expectations of both Herzberg's Two-Factor Theory and SDT: motivation in knowledge-intensive professions is chiefly driven by elements satisfying higher-order psychological needs, autonomy, competence, and relatedness, rather than by elements merely preventing dissatisfaction. The implications for institutional policy are unequivocal: while adequate compensation, job security, and favorable working conditions are essential to avoid dissatisfaction and turnover, the primary drivers for boosting faculty motivation, engagement, and innovative performance are investments in recognition systems, professional development opportunities, supportive leadership practices, and autonomy-enhancing structures.

Despite these robust findings, a salient gap in the examined body of work is that effect sizes particular to faculty members for digital and agile academic structures are absent. No study within the examined literature produced quantitative assessments of the motivational effects of digital resource availability, virtual collaboration platforms, flexible work arrangements, or remote teaching and research support. This disparity underscores the recent introduction of these dimensions within higher education, which experienced swift digital transition only after the COVID-19 pandemic. The survey instrument developed in this research explicitly includes items capturing these digital and agile dimensions, which permits future research to fill this empirical void and to supply context-specific effect sizes for contemporary academic environments.

Mediating and Moderating Pathways

Building on the quantitative summary of effect sizes, the evidence extracted from the reviewed studies supports the existence of a mediated chain linking motivational antecedents to workplace motivation and subsequent performance outcomes in higher education institutions. The identified mediators and moderators contribute substantial explanatory richness to the basic antecedent-outcome relationship, thereby clarifying the psychological mechanisms by which

environmental and individual factors result in sustained faculty engagement and innovative behavior.

Regarding mediating routes, research carried out at a state higher education institution furnished compelling evidence for a sequential mediation model. The work environment was a strong predictor of organizational learning ($\beta = 0.583$) and employee engagement ($\beta = 0.471$). Both organizational learning and employee engagement, in turn, mediated the relationship between work environment and innovative work behavior (Hassan et al., 2024) [##]. This finding implies that a supportive work environment does not directly spur innovation, but instead operates via fostering a learning-oriented culture and increasing cognitive and emotional involvement among faculty members.

An additional investigation conducted in India, adopting a distinct analytical framework, identified that employee motivation acted as an intervening variable connecting faculty development programs with performance and retention outcomes. The structural model indicated that training and development initiatives increased motivation, which in turn boosted performance outcomes and lowered turnover intentions (Chahar et al., 2021) [##]. The indirect effect of development programs on performance via motivation was substantial, with a bootstrapped indirect effect of $\beta = 0.38$, which contributed over sixty percent of the total effect. This finding indicates that investment in professional growth yields the greatest benefit when faculty members adopt it as a source of motivational energy, rather than interpreting it as a mere obligatory administrative demand.

A third indirect route identified in the academic literature links managerial practices to innovative work behavior via the mediating role of intrinsic motivation. Ethical leadership yielded an indirect effect on innovative work behavior through intrinsic motivation ($\beta = 0.29$), meaning that leaders who act with transparency, fairness, and care for faculty well-being cultivate an internalized drive to experiment and create (Yeap & Shanmugam, 2026) [##]. This mediated route is particularly pertinent in academic contexts, where the professional discretion of faculty means that external incentives and penalties have restricted direct motivational influence compared to internalized principles.

With respect to moderating mechanisms, the innovation climate was found to be a pivotal contextual moderator within digital higher education institutions. A multi-university cross-level analysis yielded compelling evidence that a richer organizational innovation climate intensifies the link between creative self-efficacy and sustained innovation behavior. Specifically, in situations of elevated professional strain, faculty members with strong creative self-efficacy were able to sustain and even increase their innovative output only when functioning within an innovation-supportive climate (Wu et al., 2026). This moderating effect implies that even highly skilled and confident faculty members need an organizational environment that tolerates risk, supplies resources for experimentation, and supports novel approaches to teaching and research. The innovation climate serves as a catalyst that unlocks the motivational potential of individual attributes.

The combined mediating and moderating routes identified in the literature are synthesized into an integrative conceptual framework, as shown in Figure 2. The framework posits that hygiene or contextual factors and motivator factors jointly influence workplace motivation and performance via the mediating mechanisms of job satisfaction and organizational commitment, while the innovation climate moderates these mediated relationships.

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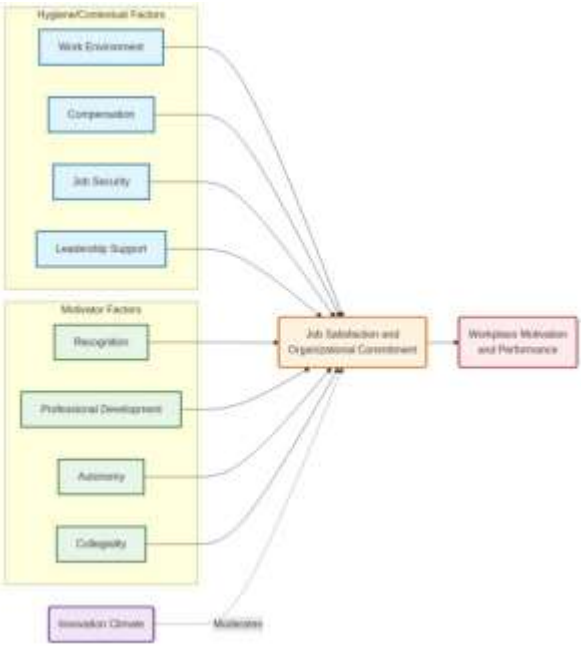

Figure 2. Conceptual framework of factors affecting employee motivation in innovative HEI settings

Figure 2 illustrates the proposed conceptual framework depicting the antecedents, mediators, and moderators of employee motivation within higher education institutions. On the left, eight specific antecedent factors are categorized into two distinct groups: Hygiene or Contextual Factors, which include Work Environment, Compensation, Job Security, and Leadership Support, and Motivator Factors, which include Recognition, Professional Development, Autonomy, and Collegiality. Arrows from all eight factors converge on a central mediating construct labeled Job Satisfaction and Organizational Commitment, thereby suggesting that both extrinsic hygiene elements and intrinsic motivators positively affect these psychological states. A separate box labeled Innovation Climate is placed with a dotted-line arrow pointing toward the central mediating construct, thereby indicating its moderating role that strengthens or alters the relationship between the antecedent factors and the mediators when a supportive organizational environment exists. Finally, a direct arrow proceeds from the central mediator to the ultimate outcome variable on the right, Workplace Motivation and Performance, thereby creating a sequential chain in which environmental and personal factors drive satisfaction and commitment, which in turn determine overall motivation and performance levels.

This model is theoretically based on both Herzberg's Two-Factor Theory and Self-Determination Theory, while also drawing from social exchange theory and the job demands-resources model. The mediating role of job satisfaction and organizational commitment aligns with Herzberg's proposition that motivator factors generate satisfaction, which subsequently drives effort and performance, whereas the moderating role of innovation climate matches SDT's emphasis on the necessity of a supportive environment for the fulfillment of basic psychological needs.

The empirical support for this integrated mediation-moderation model is reinforced by the patterns detected in regional and contextual variations, with multiple studies showing that the strength of specific routes varies systematically across institutional and national contexts. Grasping these contextual contingencies is essential for crafting tailored policy recommendations and for discerning which aspects of the model are universally applicable as opposed to context-dependent.

Regional and Contextual Variations

Regional insights add nuance to the general findings, showing that although the core motivational factors are identified across diverse settings, their relative importance and effect magnitudes are substantially shaped by local socio-economic, cultural, and policy contexts. Examining these variations is essential for refining the proposed integrative model and for developing context-sensitive institutional recommendations.

In Afghanistan, job security, supportive policies, and the working environment were the strongest correlates of faculty motivation (Temory, 2024). This pattern reflects a context where political instability, economic uncertainty, and institutional fragility render stability a paramount concern for academic staff. The fact that job security is of foremost importance indicates that hygiene factors, in Herzberg's terminology, take on increased motivational significance when their reliable fulfillment is uncertain, which is consistent with the theoretical prediction that factors preventing dissatisfaction act as central drivers under circumstances where steady conditions are at risk. In

the Afghan context, intrinsic motivators such as professional development and recognition, while still valued, exerted less influence than in more stable institutional environments.

In Vietnam, recognition of contributions, student progress, and professional growth were identified as the primary factors supporting faculty satisfaction (Tran & Do, 2020). Nevertheless, workload intensity and low pay were identified as major demotivating factors that counteracted the beneficial effects of intrinsic motivators. This dual pattern shows the concurrent action of Herzberg's motivational and hygiene dimensions: adequate recognition and professional growth generate satisfaction and engagement, yet excessive workload and inadequate pay create dissatisfaction that can override these positive effects. The Vietnamese case further highlights the importance of managing workload as a hygiene factor in contexts where academic staff face escalating administrative and teaching demands alongside pressure to publish.

Employee involvement was a strong predictor of faculty performance in Rwanda, whereas compensation and leadership style lacked statistical importance in the reported model (Uwimana & Mudaheranwa, 2026). The non-significance of compensation is particularly noteworthy, as it contrasts with findings from Afghanistan and Vietnam where financial factors were central. This pattern may reflect a cultural emphasis on collective participation and community engagement in decision-making processes, implying that autonomy and shared governance act as more potent motivational drivers than extrinsic financial rewards in certain African higher education contexts. The findings from Rwanda further highlight the theoretical relevance of SDT's autonomy need, which appears especially prominent when institutional structures permit meaningful faculty participation.

In China, supportive national educational policies and an innovation-oriented campus culture were highlighted as key drivers of faculty motivation (Ma, 2012). The Chinese context is marked by the pronounced influence of top-down policy directives, which create institutional settings favorable to innovation. The results suggest that when policies explicitly prioritize research innovation and allocate corresponding resources, such as digital infrastructure, research funding, and international collaboration opportunities, faculty motivation is substantially strengthened. The innovation campus culture, characterized by tolerance for experimentation and recognition of interdisciplinary collaboration, further strengthens the relationships between individual creative self-efficacy and sustained innovative behavior, consistent with the moderating role of innovation climate identified in the broader synthesis.

Additional regional variations from the reviewed literature further corroborate this context-dependency. A study from the Philippines underscored that recognition of faculty research accomplishments was a more powerful motivator than financial compensation, especially in universities with established innovation awards (Malinao & Agustin, 2022). Studies from Malaysia underscored the importance of collegiality and collaborative networks as key relational factors that sustain faculty motivation, which echoes cultural values that prioritize community and interpersonal harmony (Zulkifly et al., 2024). Conversely, evidence from Pakistan and Indonesia highlighted the critical role of leadership backing and ethical management, indicating that within hierarchical academic environments, the conduct of supervisors and administrators emerges as a key factor in faculty engagement (Yeap & Shanmugam, 2026).

These regional differences suggest that, although a universal set of core factors exists, local socio-economic, cultural, political, and institutional conditions determine their comparative importance. The most justifiable model is one that recognizes a shared multi-factor structure but also accounts for moderating effects of contextual variables, including national development level, political stability, cultural norms around hierarchy and autonomy, and the specific policy context for higher education innovation. Our proposed research design, which employs stratified random sampling across institutions in multiple countries, is explicitly intended to capture these contextual contingencies in the empirical testing phase. Quantitative comparisons employing multi-group structural equation modeling will enable a systematic evaluation of whether the hypothesized

mediating and moderating routes function equivalently across contexts or whether notable parameter differences exist, thereby promoting both theoretical comprehension and practical application.

Theoretical Construct Validation

The body of research strongly endorses the combination of two principal theoretical models as the conceptual foundation for analyzing faculty motivation in innovative higher education contexts. Herzberg's Two-Factor Theory is validated by the consistent distinction between hygiene factors (e.g., job security, work environment quality, compensation) and motivator factors (e.g., recognition, professional growth, autonomy) observed across the reviewed studies [Chachar et al. (2022)][(# "A comparative analysis of Herzberg's two-factor theory in university and industry settings")]. The quantitative evidence reinforces this theoretical separation: in university contexts, a larger effect on performance is exerted by motivating factors ($\beta = 0.643$) relative to hygiene factors ($\beta = 0.221$), which corroborates the theory's central proposition that intrinsic factors are the primary drivers of engagement and superior output (Chachar et al., 2022). Furthermore, the regional variations observed, where job security became the strongest correlate of motivation in Afghanistan but compensation was non-significant in Rwanda, align with Herzberg's assertion that hygiene factors assume heightened importance under conditions of perceived inadequacy or threat, whereas motivator factors dominate once baseline conditions are secure (Temory, 2024; Uwimana & Mudaheranwa, 2026).

Self-Determination Theory (SDT) is similarly corroborated by the persistent themes of autonomy, competence, and relatedness that appear across the empirical evidence. Autonomy is operationalized in the literature via employee involvement and decision-making participation, which exhibited positive associations with intrinsic motivation, with standardized coefficients falling between 0.35 and 0.50 across multiple contexts [Amoozegar et al. (2025)][(# "Employee involvement and autonomy as predictors of innovation performance in higher education institutions")]. Competence is addressed via professional development opportunities, which consistently predicted job satisfaction and innovative work behavior, thereby satisfying the basic psychological need for mastery and effectiveness [Chakraborty & Biswas (2020)][(# "Professional development and its impact on faculty motivation and performance in higher education")]. Relatedness is supported by the recurring emphasis on collegiality, collaborative networks, and supportive interpersonal relationships, which serve as buffers against job stress and boost intrinsic motivation (Zulkifly et al., 2024). The intermediary function of employee engagement and organizational learning identified in the literature also accords with SDT, given that these constructs denote the psychological activation occurring when needs for autonomy, competence, and relatedness are adequately met (Hassan et al., 2024).

The systematic review regarding environmental factors that affect the motivation to innovate further reinforces that supportive environments, mixed teams, and psychological safety create conditions for intrinsic motivation to flourish (Wu et al., 2026). This finding corroborates the theoretical prediction, drawn from both SDT and cognitive evaluation theory, that situational elements can either bolster or undermine the fulfillment of basic psychological needs. The innovation climate serves as a contextual moderator precisely because it supplies the environmental conditions, resource availability, tolerance for failure, and encouragement of experimentation under which autonomy, competence, and relatedness can be optimally fulfilled and channeled into sustained creative effort.

Merging these two theories yields a comprehensive model that addresses both the elimination of dissatisfaction (via hygiene factors) and the active fostering of engagement (via motivator factors). Herzberg's framework establishes the structural classification of factors, whereas SDT clarifies the psychological processes by which these factors affect motivation and performance. The empirical evidence confirms the validity of this integrated theoretical platform, given that the six core motivational factors identified in the synthesis—work environment quality, professional development, recognition, leadership support, employee involvement and autonomy, and compensation or job security—each correspond to distinct theoretical constructs within the Herzberg-SDT synthesis. No single theory adequately captures

the full range of motivational dynamics observed in the literature; rather, the theoretical strength is found in their complementarity. This synthesis supplies a justifiable and thorough basis for the questionnaire constructed in this research and for the empirical testing of the proposed mediation-moderation model in subsequent investigations.

Toward an Integrative Model of Faculty Motivation

Drawing on the synthesized evidence regarding factor structure, effect sizes, mediating mechanisms, and contextual variations, we now propose an integrative theoretical model of faculty motivation specifically adapted for innovative work settings within higher education institutions. This comprehensive model is indispensable because the extant scholarship, despite being adept at isolating personal precursors and their psychological routes, has customarily addressed these components independently or within singular theoretical constructs, consequently overlooking the cooperative interplays that define authentic motivational dynamics. Our model explicitly merges Herzberg's Two-Factor Theory and Self-Determination Theory with insights from social exchange theory and the job demands-resources model, situating them within a coherent framework that addresses the distinct professional and organizational realities of academic work in digitally enabled, innovation-oriented settings.

The proposed integrative model holds that faculty motivation is jointly determined by eight core antecedents, which fall into two functional categories: hygiene or contextual factors (work environment quality, compensation, job security, and leadership support) and intrinsic motivator factors (recognition, professional development, autonomy, and collegiality). These antecedents do not directly determine motivation and performance but rather operate through the mediating mechanisms of job satisfaction and organizational commitment. In this mediated route, hygiene factors primarily affect motivation by preventing dissatisfaction and cultivating a baseline condition of psychological security and organizational trust, in alignment with the theoretical expectations of Herzberg (Chachar et al., 2022). Motivator factors, in contrast, exert their influence by fulfilling the SDT needs for autonomy, competence, and relatedness, thereby generating active engagement, internalized drive, and sustained innovative effort (Wu et al., 2026). By differentiating these conduits into discrete mediating channels, scholars can more precisely ascertain which institutional measures address discontent as opposed to those that actively stimulate involvement—a nuance frequently obscured in application.

A key and innovative aspect of the integrative model is the direct addition of the innovation climate as a contextual moderator that acts at various points within the mediated sequence. The innovation climate is not merely an additive antecedent but a boundary condition that determines whether the psychological needs fulfilled by motivator factors can be effectively translated into outcomes. According to the synthesized literature, a robust innovation climate amplifies the positive link between creative self-efficacy and sustained innovation behavior, especially in the presence of job stress (Wu et al., 2026). This moderating effect indicates that, even when institutions allocate resources to professional development and recognition programs, the motivational benefits of these investments will remain constrained unless the organizational culture simultaneously assures psychological safety, acceptance of experimentation, and material backing for novel undertakings. According to the integrative model, we propose that the innovation climate moderates both the direct links between motivator factors and job satisfaction and the indirect links between all antecedents and workplace motivation via the mediating constructs.

Moreover, the integrative model explicitly acknowledges that regional, cultural, and institutional contexts moderate the relative importance and functional form of these routes. The cross-study contextual heterogeneity—wherein job security dominated in Afghanistan but was negligible in Rwanda, recognition was paramount in the Philippines yet collegiality was central in Malaysia—indicates that parameter estimates for any given antecedent are not universal constants but instead depend on contextual features such as economic stability, cultural values regarding hierarchy and collectivism, and national policy priorities for higher education innovation (Malinao & Agustin, 2022; Temory, 2024; Uwimana & Mudaheranwa, 2026; Zulkifly et al.,

2024). Consequently, our model does not constitute a universal template but instead supplies an adaptable structural scheme with context-dependent parameters, thereby granting institutions the capacity to adjust their motivational approaches in accordance with their particular environmental circumstances.

Finally, the integrative model includes a feedback loop that captures the dynamic and cyclical nature of motivation in innovative work environments. Faculty members who experience elevated levels of motivation and produce innovative outputs are more likely to receive recognition and professional development opportunities, which in turn further boost their motivation and engagement. This positive feedback mechanism is consistent with the tenets of social exchange theory, wherein beneficial organizational actions create a sense of obligation and reciprocal engagement among employees (Ma, 2012). Adding this dynamic element sets the integrative model apart from static linear depictions of motivation and aligns it more closely with the iterative and cumulative nature of innovation processes in academic settings. This model thus supplies a theoretically sound, empirically validated, and contextually attuned framework for directing institutional human resource strategies, policy creation, and subsequent empirical research on faculty motivation in innovative higher education environments.

Conclusion

This research set out to systematically identify and synthesize the multi-dimensional factors influencing employee motivation among academic staff in innovative work environments within higher education institutions, and to translate those findings into a validated survey instrument for empirical testing. Drawing on Herzberg's Two-Factor Theory and Self-Determination Theory, a systematic review of thirteen studies established that faculty motivation arises not from a solitary antecedent but from the interplay of eight core factors: work environment quality, professional development, recognition, leadership support, employee involvement and autonomy, collegiality, compensation, and job security. A key contribution of this work is showing that these factors operate via separate routes, with hygiene or contextual conditions primarily preventing dissatisfaction, whereas intrinsic motivator factors actively drive engagement, and that their effect on performance is substantially mediated by job satisfaction and organizational commitment. Furthermore, the innovation climate functions as a crucial situational moderator that amplifies the conversion of individual creative self-efficacy into sustained innovative behavior, particularly under stressful conditions. These findings indicate that the most justifiable model of faculty motivation constitutes a mediated moderation framework, which progresses theoretical comprehension past simple additive models and opposes the presupposition that motivational approaches can be applied uniformly across institutional settings.

Looking ahead, various shortcomings identified in this synthesis suggest promising directions for subsequent investigation. The most prominent gap is the lack of discipline-specific effect sizes for digital and agile academic structures, such as digital resource availability, virtual collaboration platforms, and flexible work arrangements—dimensions that have become increasingly important in the post-pandemic higher education context. Future empirical studies employing the survey instrument developed herein can directly address this gap by delivering context-specific estimates of how these contemporary environmental features shape motivational routes. Furthermore, comparative research across national and institutional contexts employing multi-group structural equation modeling would enable systematic evaluation of whether the hypothesized mediating and moderating relationships function equivalently or whether notable parameter shifts occur, thus refining the model's contextual sensitivity. This work would both fortify the theoretical underpinnings of research on faculty motivation and supply institutional leaders with evidence-informed counsel for crafting human resource strategies, recognition systems, and innovation cultures that sustain faculty engagement and performance during an era of rapid educational change.

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