

Faculty Job Satisfaction in Higher Education: A Systematic Review of Empirical Studies through Herzberg's Two-Factor Theory

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Abstract. This paper examines faculty job satisfaction in higher education by systematically reviewing empirical studies through Herzberg's Two-Factor Theory. It clarifies how motivator (intrinsic) and hygiene (extrinsic) factors, alongside institutional and demographic variables, shape faculty motivation and retention. A structured literature review was conducted across Scopus, and several other digital data. Forty-five sources were synthesized. Results show that motivators such as recognition, autonomy, and intellectual challenge are central to satisfaction, while hygiene factors such as salary, workload, and governance structures primarily prevent dissatisfaction. Institutional support (e.g., mentoring, workload policies) moderates these effects, while variations in rank, gender, and cultural context create meaningful differences in faculty experiences. This study integrates Herzberg's framework with complementary theories (Expectancy Theory, Job Characteristics Model, Self-Determination Theory) to propose a synthesized conceptual model of faculty job satisfaction. The synthesis extends Herzberg's framework by situating motivators and hygiene factors within institutional, demographic, and cultural contexts.

Keywords: Herzberg, Higher education faculty, Hygiene factors, Job satisfaction, Motivators,

1. INTRODUCTION

1.1. Problem Statement

Faculty members in higher education occupy multifaceted roles that encompass teaching, research, service, and administrative responsibilities. These overlapping demands directly shape their professional motivation and job satisfaction. Herzberg's Two-Factor Theory, which distinguishes between motivators (intrinsic factors such as recognition, achievement, and autonomy) and hygiene factors (extrinsic conditions such as pay, policies, and supervision), have been widely used to analyze workplace experiences across sectors. However, its application in higher education reveals complexities that challenge its traditional dichotomy.

Empirical studies highlight that faculty motivation is influenced not only by Herzberg's intrinsic and extrinsic factors but also by contextual elements such as career stage, institutional structures, and sociocultural environments. For example, assistant professors often face tenure pressures, associate professors encounter mid-career stagnation, and full professors emphasize autonomy and legacy-building. Moreover, gender, race, and diversity dynamics contribute to disparities in satisfaction, with women and underrepresented minorities often reporting inequitable workloads and limited advancement opportunities. Cultural contexts further complicate the framework, as the same factors can be perceived differently across countries and institutions.

Despite these insights, a comprehensive synthesis of empirical studies applying Herzberg's theory to higher education faculty remains limited. Addressing this gap provides a clearer understanding of how motivation and satisfaction vary across ranks, contexts, and demographics, thereby offering actionable insights for institutions seeking to improve faculty retention and workplace climate.

1.2. Purpose of the Study

The purpose of the study is to synthesize empirical research on faculty job satisfaction and motivation through the lens of Herzberg's Two-Factor Theory. By reviewing and integrating studies conducted in higher education institutions across diverse contexts, this paper aims to:

- 1. Identify the primary motivator and hygiene factors influencing faculty job satisfaction.
- 2. Examine how these factors vary across academic ranks (assistant, associate and full professors).
- 3. Explore how institutional support systems, such as governance structures, recognition practices, and workload policies, shape faculty motivation.
- 4. Consider the influence of diversity and cultural contexts on how motivator and hygiene factors are experienced by faculty.

This synthesis emphasizes secondary analysis of existing studies, rather than primary data collection, and positions Herzberg's framework as a flexible model that must adapt to the evolving realities of higher education.

1.3. Significance of Study

Faculty motivation and job satisfaction are central to institutional effectiveness, shaping teaching quality, research productivity, and organizational stability. Small and mid-sized universities, in particular, face challenges in retaining talented faculty when financial resources and opportunities for advancement are limited. By systematically reviewing empirical studies, this paper contributes to both theory and practice in three significant ways:

- 1. Theoretical Contribution: It tests the boundaries of Herzberg's framework in higher education by highlighting its applicability and limitations in diverse institutional and cultural contexts.
- 2. Practical Contribution: It identifies actionable insights for institutional leaders and HR professionals to design policies that address faculty needs across career stages and demographics.
- **3.** Policy Relevance: It offers evidence-based recommendations for workload management, equity initiatives, and support structures that can enhance faculty satisfaction and retention.

1.4. Research Questions

- 1. What is the primary motivator (intrinsic) and hygiene (extrinsic) factors influencing faculty job satisfaction in higher education institutions, as interpreted through Herzberg's Two-Factor Theory?
- 2. How do faculty members across different academic ranks (assistant, associate, and full professors) experience and prioritize these factors?
- 3. In what ways do gender, diversity, and cross-cultural perspectives shape variations in faculty motivation and satisfaction?
- 4. How does institutional support, including workload distribution, recognition practices, and governance structures affect faculty motivation and retention?

2. LITERATURE REVIEW

2.1. Theoretical Foundations of Job Satisfaction

Understanding the foundational theories of job satisfaction is critical for framing this research. Over the decades, scholars have developed multiple perspectives, from motivational theories to depositional approaches, that explain why employees feel satisfied or dissatisfied at work.

2.1.1. Herzberg's Two-Factor Theory

Herzberg et al. (1959) proposed the distinction between motivators (intrinsic) and hygiene factors (extrinsic). Motivators such as recognition and achievement enhance satisfaction, while hygiene factors like pay or working conditions prevent dissatisfaction but do not necessarily create satisfaction. This theory has been influential in organizational studies but also subject to criticism. For example, Blegen's (1993) meta-analysis of nursing studies found that hygiene factors like supervision and pay correlated significantly with satisfaction, challenging Herzberg's strict separation.

2.1.2. Cognitive and Expectancy-Based Theories

Vroom's (1964) Expectancy theory emphasizes that individuals are motivated when they believe effort will lead to performance and valued rewards. Locke's (1976) Value theory further argues that satisfaction occurs when job outcomes align with personal values. These theories highlight the role of individual cognition and goal orientation, which is especially relevant for faculty whose expectations about recognition, autonomy, and professional growth shape their overall motivation.

2.1.3. Job Design Enrichment Models

Hackman and Oldham's (1976) Job Characteristics Model (JCM) proposes that five aspects of work design – skill variety, task identity, task significance, autonomy, and feedback – that strongly influence internal work motivation. Empirical studies have validated the importance of autonomy and feedback in professional roles, including academia, where faculty often values independence in teaching and research (Fried & Ferris, 1987). Such findings extend Herzberg's model by showing how job design directly affects satisfaction.

2.1.4. Personality and Dispositional Perspectives

Beyond structural factors, personality has also been shown to shape satisfaction. Deci and Ryan's (1985) Self-Determination Theory underscores the need for autonomy, competence, and relatedness in sustaining motivation. In a meta-analysis, Judge and Bono's (2001) found that Core Self-Evaluations (CSE), including self-esteem, locus of control, and emotional stability serve as significant predictors of job satisfaction. Similarly, Staw et al. (1986), in a longitudinal study, found dispositional factors to be consistent predictors of satisfaction across time, reinforcing the importance of individual differences.

2.1.5. Critiques and Integrated Models

While each theory offers valuable insights, none alone fully captures the complexity of job satisfaction. Spector (1997) emphasized that job satisfaction is multidimensional, shaped by both environmental conditions and individual predispositions. Scholars increasingly advocate for integrative approaches that combine structural, cognitive, and dispositional perspectives. Placing Herzberg's model within this broader theoretical context ensures a more holistic understanding of faculty motivation in higher education.

2.2. Applications for Herzberg's Two-Factor Theory in Higher Education

Herzberg's Two-Factor theory has been applied across diverse sectors such as healthcare manufacturing, and corporate settings; however, its application in higher education remains a growing area of scholarly interest. Faculty members work in a uniquely autonomous yet demanding environment where intrinsic and extrinsic factors intertwine in complex ways. Research indicates that motivators such as professional autonomy, academic freedom, recognition, and meaningful work are closely linked to satisfaction among university faculty (Abualrub & Al-Zaru, 2008; Oshagbemi, 1997).

At the same time, hygiene factors including unclear promotion criteria, bureaucratic structures, inefficient compensation, and lack of administration support, often contribute dissatisfaction (Daly & Dee, 2006; Smerek & Peterson, 2006). Despite high levels of intrinsic motivation tied to the intellectual and creative aspects of academic work, these extrinsic challenges can undermine overall morals.

Herzberg's framework has proven useful for distinguishing between these influences. For example, Ellickson and Logsdon (2002) found that hygiene factors primarily shaped dissatisfaction, whereas motivators fostered engagement and fulfillment among public-sector employees, including educators. Yet, subsequent research has challenged rigid separation, suggesting overlap in some cases. Pay and job security, for instance, can function both as hygiene and motivator factors depending on faculty career stage, institutional type, and personal values (Khan et al., 2014).

The higher education context therefore requires adaptation of Herzberg's model to account for the diversity of academic roles and responsibilities. Faculty in teaching-intensive institutions may prioritize recognition and workload balance, whereas those in research-focused universities may emphasize opportunities for scholarly growth and autonomy. Nevertheless, the Two-Factor Theory continues to provide an insightful framework for evaluating faculty satisfaction and institutional climate.

2.3. Empirical Studies on Herzberg's Two-Factor Theory

Table 1: Summary of Key Empirical Studies.

Author(s) & Year	Study context	Participants	Method	Key findings	Relevance
Herzberg, Mausner, & Snyderman (1959)	Engineers & accountants, U. S.	203 professionals	Critical Incident Technique	Established motivator vs. hygiene distinction – forers of the two-factor theory.	Lays theoretical groundwork for all subsequent exploration.
Blegen (1993)	U. S nurses	Meta-analysis (48 studies)	Quantitative	Hygiene factors (e.g. pay, conditions) also directly correlated with satisfaction, challenging Herzberg's binary model.	Underscores overlap between hygiene and motivators, especially meaningful in academic settings.
Kovach (1987)	IT professionals	Employees at multiple levels	Survey	Advancement motivator and job security hygiene valued differently by rank.	Highlights contextual sensitivity of Herzberg's factors.
Lundberg et al. (2009)	Swedish seasonal workers	236 employees	Mixed methods	Both extrinsic and intrinsic factors contributed to satisfaction.	Supports a more nuanced application of Herzberg's theory.
Gawel (1997)	U.S. educators	Literature synthesis	Review	Motivators like recognition outweighed hygiene in educational contexts.	Supports Herzberg's relevancy in academic environments.
Tella et al. (2007)	Nigerian academic libraries	100 personnel	Survey	Both motivators and hygiene factors impacted satisfaction.	Demonstrates Herzberg's utility in diverse academic settings.
Miah & Hasan (2022)	Bangladeshi private university faculty	92 faculty members	Survey	Autonomy and academic freedom increased satisfaction, poor pay dampened it.	Brings contemporary, South Asian higher- education context to the literature.
Viray & Velasquez- Fajanela (2023)	Rural Alaska teachers	30 educators	Mixed methods	Highlighted complex, overlapping effect of motivators and hygiene factors on satisfaction and retention.	Challenges strict dichotomy in Herzberg's model with real world evidence.

Throughout decades of study, researchers have both reaffirmed and complicated Herzberg's Two-Factor Theory. The original research (Herzberg et al., 1959) drew a string line between motivators and hygiene factors. But later work, like Blegen (1993)'s meta-analysis, showed that what Herzberg labeled as hygiene factors could also foster satisfaction, not just prevent dissatisfaction.

Sector and rank matter. Kovach (1987)'s survey of IT professionals revealed how job security could act as a motivator for senior employees. Lundberg et al. (2009)' findings further argued for a flexible understanding of the theory recognizing the real-world complexity of satisfaction drivers across job types.

Education focused studies reinforce this nuance. Gawel (1997) and Tella et al. (2007)'s investigations show that motivators like recognition often carry more weight among educators, though inadequate hygiene factors can still dampen morale. Miah and Hasan (2022)'s study offers a contemporary look at Bangladeshi faculty, spotlighting how autonomy and freedom, the key motivators counterbalance poor institutional support.

The most striking evidence comes from Viray & Velasquez-Fajanela (2023)'s research in Alaska, which portrays the messy reality of motivation in isolated teaching environments. Their mixed methods findings confirm that motivators and hygiene factors overlap in practice, meaning Herzberg's model must be interpreted with flexibility.

These empirical studies collectively affirm the continued relevance of Herzberg's framework while urging researchers to adapt it contextually whether for higher education faculty or educators in diverse institutional settings.

2.4. Motivation and Job satisfaction in Higher Education Faculty

Motivation and job satisfaction among higher education faculty have long been a focal point in organizational and educational research. Faculty roles are uniquely structured, requiring a balance of teaching, research, service and governance responsibilities. Consequently, the factors that drive faculty motivation are often more complex than those influencing employees in corporate or industrial contexts.

Empirical studies consistently demonstrate that intrinsic motivators such as autonomy, intellectual challenge, and recognition play a central role in faculty satisfaction. Johnsrud and Rosser (2002) found that autonomy over teaching and research was one of the strongest predictors of satisfaction among full-time faculty. Their longitudinal analysis indicated that faculty who felt supported in their intellectual pursuits were more likely to remain committed to their institutions. This finding directly aligns with Herzberg's motivator factors, particularly achievement and the work itself.

On the other hand, extrinsic or hygiene factors remain critical in preventing dissatisfaction. Tack and Patitu (1992) highlighted that inequitable compensation and opaque promotion process were persistent sources of dissatisfaction, particularly among early-career faculty and women. While such factors may not directly increase satisfaction, their absence undermines retention and morale.

Differences also emerge across academic ranks. Zhou and Volkwein (2004) showed that assistant professors often valued tenure-track clarity and development opportunities, while full professors prioritized recognition and leadership support. These rank-specific findings suggest that Herzberg's framework must be adapted to the varied contexts within academia.

Workload pressures further complicate job satisfaction. Winefield et al. (2003) found that heavy teaching loads, administrative demands, and research expectations contributed significantly to burnout, particularly in research-intensive universities. Even when intrinsic motivators were present, inadequate time and resources diminished overall satisfaction.

Leadership and departmental climate have also been identified as significant influences. Lambert et al. (2001) emphasized the role of chairs and deans in shaping motivation through communication, participatory leadership, and supportive feedback. Their findings highlight the interplay of intrinsic motivators with extrinsic institutional structures in fostering satisfaction.

Taken together, the literature underscores that Herzberg's Two-Factor Theory provides a valuable foundation for understanding faculty motivation and job satisfaction. However, its application in higher education requires a nuanced approach that recognizes variations across academic ranks, workload demands, and institutional culture. Intrinsic motivators such as autonomy and recognition must be balanced with adequate extrinsic support, including fair policies, compensation, and leadership engagement. Tailoring these strategies to the realities of academic life is essential for fostering sustainable satisfaction and retention among faculty.

2.5. Rank-Specific Differences in Faculty Motivation and Job Satisfaction

2.5.1. Assistant Professors

Assistant professors often operate under the pressure of balancing teaching, research, and service while simultaneously striving for tenure. Empirical studies consistently show that pre-tenured faculty experience heightened stress due to role ambiguity and academic demands (Johnsrud & Rosser, 2002). Mentorship, recognition, and institutional support become key motivators during this career stage.

Findings from the COACHE survey conducted by Collaborative on Academic Careers in Higher Education at Harvard illustrate that tenure clarity, a collegial work environment, and support for work life integration significantly influence job satisfaction among assistant professors (COACHE, 2014). Even though the COACHE data is not tied to a formal journal article, it is an institutional source often cited in studies on faculty satisfaction, highlighting how clear expectations, collegiality, and balance make a tangible difference for early-career academics.

In addition, Trower and Gallagher (2010) emphasize that pre-tenured faculty desire transparency in tenure processes, supportive departmental cultures, and recognition for their contributions. Their work reinforces the importance of clear pathways for professional growth, complementing the COACHE survey findings.

Likewise, Sharma and Jyoti (2009), studying faculty in the Indian context, observed that job insecurity and inequitable compensation were persistent dissatisfiers among early-career academics, aligning closely with Herzberg's hygiene factors.

Taken together, these findings suggest that both intrinsic motivators (growth opportunities, recognition) and key extrinsic supports (tenure clarity, collegiality, and fair compensation) are particularly critical at the assistant professor level.

2.5.2. Associate Professors

Associate professors, though more secure in their positions, often report mid-career stagnation, reduced institutional support, and a lack of recognition compared to early-career and senior faculty. O'Meara et al. (2008) highlighted that mid-career faculty frequently struggle with balancing professional growth with heightened service and administrative responsibilities. Baldwin et al. (2008) similarly noted that associate professors face "career plateauing", which contributes to declining motivation despite greater autonomy.

These mid-career challenges emphasize the need for institutional policies that promote leadership opportunities, research support, and recognition. Herzberg's theory partially explains this phenomenon: motivators such as achievement and responsibility continue to matter, but dissatisfaction often stems from inadequate support structures and unclear advancement pathways – hygiene issues that institutions sometimes overlook at this stage.

2.5.3. Full Professors

Full professors, having attained the highest academic rank, often focus on institutional influence, intellectual legacy, and autonomy. Herzberg's motivators, particularly recognition, achievement, and the intrinsic satisfaction of scholarly work, become increasingly significant at this stage. Volkwein and Zhou (2003) found that senior faculty reported greater satisfaction when they had opportunities for continued intellectual engagement and departmental leadership. However, they also noted that administrative burdens and lack of institutional appreciation could undermine morale.

Finkelstein et al. (2016) further observed that full professors were not immune to dissatisfaction, particularly when systemic changes in higher education limited their leadership contributions. This suggests that while motivators dominate in shaping satisfaction, hygiene factors such as bureaucratic overload and diminished resources can erode morale even among the most senior academics.

2.5.4. Synthesis

Recognizing these rank-specific patterns is vital for designing effective interventions that support faculty across the academic hierarchy. Assistant professors require clarity, stability, and recognition. Associate professors need mid-career growth opportunities and institutional validation and full Professors value autonomy and legacy-building but remain vulnerable to bureaucratic dissatisfaction. Herzberg's framework, when applied flexibly, highlights that the same factor (e.g., recognition, advancement, workload) may operate differently depending on rank and context. This reinforces the need to view motivation and job satisfaction as dynamic and career-stage dependent rather than uniform across the academic profession.

2.6. Cross-Cultural Perspectives on Job Satisfaction and Motivation

Cultural context plays a central role in shaping how faculty members interpret and respond to motivator and hygiene factors, complicating the universal application of Herzberg's Two-Factor Theory. While Herzberg suggested a relatively consistent distinction between motivators and hygiene factors, empirical evidence indicates the cultural norms influence the relative weight assigned to these factors across regions and institutions.

For example, Tay and Diener (2011) found that employees' well-being and job satisfaction are closely tied to culturally grounded expectations. In collectivist societies, such as India and China, hygiene factors like job security, interpersonal harmony, and organizational support are often perceived as motivators, since they align with the value placed on stability and group cohesion. In contrast, in individualist contexts such as the United States, motivators like autonomy, recognition, and personal achievement remain the dominant drivers of satisfaction. This cultural variation highlights the need to move beyond a one-size-fits-all interpretation of Herzberg's model.

Empirical studies further reveal how cultural dimensions such as power distance and uncertainty avoidance shape job satisfaction. Farh et al. (2007) observed that in high power-distance cultures, employees were less likely to express dissatisfaction even when hygiene factors were weak, reflecting hierarchical respect and reluctance to challenge authority. Similarly, Wong et al. (2003), in their comparative study of Hong Kong and U. S. workers, reported that while U. S. employees emphasized recognition and autonomy, Hong Kong participants prioritized harmony and security, underscoring culturally contingent interpretations of motivation.

More recent studies have extended these insights into higher education contexts. For example, Chaiprasit and Santidhirakul (2011), examining faculty at Thai universities, found that intrinsic motivators such as achievement and responsibility were linked to satisfaction, but extrinsic supports like administrative fairness and collegiality played an equally important role, blurring Herzberg's original dichotomy. In the Middle Eastern context, AI-Asfour and Khan (2014) reported that faculty in Saudi Universities highlighted job security and institutional support as critical motivators, factors traditionally classified as hygiene elements in Herzberg's model. These findings suggest that cultural norms can redefine the boundaries of motivators and hygiene factors.

Taken together, these empirical perspectives affirm that Herzberg's Two-Factor Theory provides a useful starting framework, but its application across diverse cultural contexts requires adaptation. For institutions with multicultural faculty, such as many global universities, understanding cultural nuances in how satisfaction and motivation are experienced becomes essential to fostering inclusion and supportive academic environments.

2.7. Gender and Diversity Perspectives in Faculty Job Satisfaction

Faculty job satisfaction is shaped not only by motivator and hygiene factors, but also by gender, race, and other intersecting identities. Empirical research consistently shows that women and underrepresented minorities experience distinctive patterns of satisfaction and dissatisfaction that are tied to institutional practices, invisible labor, and workplace climate.

Several studies document gendered patterns in faculty experiences. For example, women faculty frequently report heavier service loads, lower perceptions of fairness in promotion, and greater work-life conflict – all factors that contribute to lower satisfaction or higher turnover intentions (Johnsrud & Rosser, 2002; Callister, 2006). Misra et al. (2011) describe the "ivory ceiling" of service work showing how women (especially at the associate level) perform disproportionate service and mentoring labor that is undervalued in promotion decisions. Those extra, often invisible responsibilities act as hygiene burdens that erode job satisfaction even where intrinsic motivators remain high.

Race and ethnicity introduce further complexity. Research finds that faculty of color frequently perceive weaker institutional support, more experiences of exclusion, and greater service expectations tied to diversity work, all of which negatively affect satisfaction (Xu, 2008; Settles at el., 2006). Studies also show that flexibility stigma and differential expectations can harm retention and well-being for women in STEM and other fields (Cech & Blair-Loy, 2014).

A recurrent recommendation in the literature is stronger, identity-informed mentoring and institutional recognition of service and diversity labor. Empirical and qualitative work on mentoring for female faculty of color highlights mentoring approaches that acknowledge identity, acculturation, and structural barrier, not just conventional "research mentoring", as crucial for retention and satisfaction (Hsieh & Nguyen, 2020).

Taking together, these findings indicate that Herzberg's motivator/hygiene distinction remains useful as a starting point, but universities must account for gendered and racialized institutional practices (workload allocation, promotion criteria, mentoring, climate) to meaningfully address faculty satisfaction and retention.

2.8. Synthesis

Having reviewed empirical studies across different contexts, including historical foundations, applications of Herzberg's theory, empirical investigations in higher education, cross-cultural perspectives, and gender and diversity dimensions, this section synthesizes the main insights relevant to faculty motivation and job satisfaction.

Across the literature, Herzberg's distinction between motivators (e.g., recognition, autonomy, intellectual challenge) and hygiene factors (e.g., salary, policies, workload balance) remains a useful analytical lens. However, empirical evidence consistently shows that these categories are not static. Motivators and hygiene factors interact in complex, content-dependent ways: what functions as a motivator in one setting may operate as a hygiene factor in another. For example, job security emerges as a motivator in collectivist or resource-constrained environments, while autonomy is emphasized in individualist and research-intensive contexts.

Furthermore, faculty rank, cultural background, and demographic characteristics shape how satisfaction is experienced. Assistant professors often prioritize tenure clarity and mentoring, mid-career faculty seek recognition and advancement opportunities, and full professors value autonomy and institutional influence. Similarly, women and underrepresented minorities frequently face systemic inequities that alter the weight of hygiene factors such as workload balance and compensation. These variations underscore the limits of applying Herzberg's framework universally without contextual adaptation.

Taking together, the literature affirms that Herzberg's Two-Factor Theory provides a valuable starting framework but must be flexibly interpreted to address the lived realities of faculty across diverse institutional, cultural, and demographic contexts. This synthesis highlights both the enduring relevance of Herzberg's insights and the gaps in existing research, laying the foundation for the research design presented in Section III.

3. RESEARCH DESIGN

3.1. Purpose of the Present Study

Building on the literature review, the primary purpose of the present study is to synthesize empirical research on faculty job satisfaction and motivation through the lens of Herzberg's Two-Factor Theory. The study aims to identify how motivator (intrinsic) and hygiene (extrinsic) factors have been observed in higher education settings, how these factors differ by academic rank, and how institutional, diversity, and cultural contexts shape faculty experiences. The synthesis is intended to clarify where Herzberg's model is supported or challenged in the academic context and produce actionable insights for institutional practice and policy.

3.2. Research Questions

This study is guided by the following research questions:

- 1. What is the primary motivator (intrinsic) and hygiene (extrinsic) factors influencing faculty job satisfaction in higher education institutions, as interpreted through Herzberg's Two-Factor Theory?
- 2. How do faculty members across different academic ranks (assistant, associate, and full professors) experience and prioritize these factors?
- 3. In what ways do gender, diversity, and cross-cultural perspectives shape variations in faculty motivation and satisfaction?
- 4. How does institutional support, including workload distribution, recognition practices, and governance structures affect faculty motivation and retention?

These questions are designed to align directly with the themes developed in Section II and to focus the synthesis on rank-specific, institutional, and equity-related dimensions of faculty job satisfaction.

3.3. Research Method

This study employs a systematic empirical synthesis – a structured literature review – designed to identify, evaluate, and integrate findings from peer-reviewed empirical studies on Herzberg's Two-Factor Theory in the context of higher education faculty job satisfaction. The approach emphasizes transparency and rigor, following widely recognized guidelines for systematic reviews.

3.3.1. Search Strategy

• Databases searched: Scopus, Web of Science, ERIC, PsycINFO, JSTOR, Google Scholar, and the XXX University (Nash Library) catalog.

3.3.1.1. Keywords snd Boolean Combinations

- "Herzberg" OR "Two-Factor Theory" AND "Faculty" OR "academic staff" OR "higher education"
- "Job satisfaction" AND "motivation" AND "faculty"
- "Assistant professor" OR "associate professor" OR "full professor" AND "job satisfaction"
- Additional terms: "workload", "tenure", "recognition", "retention", "gender", "diversity", "cross-cultural".

3.3.2. Inclusion and Exclusion Criteria

- Included: Peer-reviewed empirical journal articles (quantitative, qualitative, or mixed methods) that investigate job satisfaction or motivation among higher education faculty and report findings relevant to Herzberg's motivator-hygiene framework.
- Excluded: Non-empirical opinion essays, book chapters without original data, unpublished dissertations unless widely cited, and studies unrelated to higher education faculty.

3.3.3. Screening and Selection Procedure

- Stage 1: Titles and abstracts screened for relevance to job satisfaction, higher education, and Herzberg's framework.
- Stage 2: Full-text review conducted to confirm eligibility and extract key data.
- Documentation: A PRISMA-style flow chart records the number of studies identified, screened, excluded, and included.

3.3.4. Data Extraction and Coding

Each study was reviewed for:

- 1. Author(s) and year
- 2. Country/region
- 3. Study population (faculty rank, institution type, etc.)
- 4. Methodology used in each study (e.g., survey, interview, mixed methods, meta-analysis, etc.)

5. Key findings categorized into motivator factors (e.g., recognition, achievement, autonomy) and hygiene factors (e.g., salary, workload, institutional policies).

This structured approach ensures that the synthesis is comprehensive, replicable, and aligned with best practices for empirical literature reviews.

4. DATA COLLECTION, ANALYSIS, AND FINDINGS

4.1. Data Collection

The data for this study were derived exclusively from secondary sources, following a systematic literature review approach. A comprehensive search was conducted across databases including Scopus, Web of Science, ERIC, PsycINFO, JSTOR, Google Scholar, and the XXX (Nash) Library catalog. Search terms combined Herzberg's Two-Factor Theory with higher education, specific keywords such as faculty, academic staff, job satisfaction, motivation, workload, tenure, recognition, retention, gender, diversity, and cross-cultural. Boolean operators (e.g., AND, OR) were used to refine results.

The inclusion of criteria limited the dataset to peer-reviewed empirical studies and seminal theoretical works published in English. To ensure relevance, only studies focusing on faculty or higher education contexts were considered. Non-empirical opinion pieces, book chapters without original data, and unpublished dissertations were excluded.

In total, 43 sources were included in the synthesis. Of these, 35 were peer-reviewed journal articles reporting empirical findings, while the remaining works consisted of seminal theoretical publications (e.g., Herzberg, Hackman & Oldham, Vroom) and scholarly books providing essential conceptual grounding. This dataset offers both empirical depth and theoretical breadth, ensuring that the review captures not only documented patterns in faculty job satisfaction but also the frameworks used to interpret them.

4.2. Data Analysis

The analysis process followed structured procedures consistent with systematic literature reviews. After screening and final selection of the 45 sources, each study was reviewed in full text to extract information related to Herzberg's motivator and hygiene factors. A data extraction matrix was developed to organize findings by studying characteristics (author, year, country, institutional context, sample size, methodology) and by relevance to the research questions.

To ensure coherence, studies were coded according to the following categories:

- Motivator (intrinsic) factors: recognition, achievement, autonomy, intellectual challenge, opportunities for growth.
- Hygiene (extrinsic) factors: salary, workload, promotion processes, institutional support, governance structures.
- Career stage variations: assistant, associate, and full professor experiences.
- Diversity and cultural perspectives: gender, race, cross-cultural comparisons.
- Institutional support: workload distribution, mentoring, professional development, recognition practices.

Patterns and themes were identified using a qualitative synthesis approach, where recurrent findings across multiple studies were clustered to highlight convergence and divergence in faculty experiences.

Quantitative findings (e.g., survey results, statistical tests) were reported in narrative summaries, while qualitative findings (e.g., interviews, case studies) were analyzed for recurring themes.

Finally, the synthesis was structured to align with the research questions, ensuring that evidence was organized not only by Herzberg's framework but also by academic rank, diversity considerations, and institutional factors. This allowed the analysis to move beyond isolated findings toward a more integrated understanding of faculty job satisfaction across contexts.

4.3. Findings

The systematic review of 45 sources yielded insights that directly address the four guiding research questions of this study.

Research Question 1: What is the primary motivator (intrinsic) and hygiene (extrinsic) factors influencing faculty job satisfaction in higher education institutions, as interpreted through Herzberg's Two-Factor Theory?

Findings consistently affirmed Herzberg's distinction between motivators and hygiene factors, though with important contextual nuances. Motivators most frequently identified included intellectual challenge, autonomy in research and teaching, recognition from peers and administrators, and opportunities for professional growth. Hygiene factors centered on salary, workload, promotion processes, and institutional governance. Several studies reported overlap between the two categories, as certain hygiene factors (e.g., job security, collegiality) functioned as motivators in some cultural contexts, complicating Herzberg's original dichotomy.

Research Question 2: How do faculty members across different academic ranks (assistant, associate, and full professors) experience and prioritize these factors?

Rank-specific differences were evident across the reviewed studies. Assistant professors emphasized concerns with tenure-track pressures, heavy teaching loads, and limited recognition, suggesting that hygiene factors were more salient at early career stages. Associate professors frequently reported mid-career stagnation, dissatisfaction with promotion processes, and service overload, pointing to institutional structures as critical influences. Full professors generally expressed higher satisfaction, citing autonomy, intellectual engagement, and recognition of legacy as primary motivators, though some also reported frustration with governance and institutional bureaucracy.

Research Question 3: In what ways do gender, diversity, and cross-cultural perspectives shape variations in faculty motivation and satisfaction?

Gender and diversity emerged as significant dimensions in faculty job satisfaction. Women faculty, particularly in STEM fields, frequently reported inequities in workload distribution, recognition, and advancement opportunities, aligning with hygiene-related dissatisfaction. Minority faculty were more likely to experience dissatisfaction related to institutional climate, invisible labor, and exclusion from networks of support, even while maintaining strong intrinsic motivation for research and teaching. Cross-cultural comparisons showed that faculty in collectivist contexts often valued job security, collegiality, and institutional support as motivators, while those in individualist contexts emphasized autonomy, achievement, and recognition. These findings underscore the intersectional and context-dependent nature of motivation and satisfaction.

Research Question 4: How does institutional support, including workload distribution, recognition practices, and governance structures affect faculty motivation and retention?

Institutional support was consistently identified as a pivotal determinant of satisfaction and retention across faculty ranks and contexts. Studies emphasized that fair workload policies, transparent promotion systems, and effective governance enhanced both hygiene and motivational satisfaction. Recognition practices, particularly formal acknowledgement of service and teaching contributions, were reported as crucial for sustaining motivation. Conversely, inadequate support structures and inequitable governance were repeatedly linked to dissatisfaction and turnover intentions.

Taking together, these findings suggest that while Herzberg's framework provides a useful lens for understanding faculty motivation, its categories are neither fixed nor universal. Faculty job satisfaction is shaped by an interplay of intrinsic motivators, extrinsic conditions, demographic and cultural variables, and institutional policies, highlighting the need for context-sensitive applications of Herzberg's theory in higher education.

5. DISCUSSION

5.1. Motivator and Hygiene Factors (RQ1)

The synthesis of 45 studies indicates that Herzberg's Two-Factor Theory remains a useful but imperfect lens for understanding faculty job satisfaction. Across higher education contexts, motivator factors such as recognition, intellectual challenge, autonomy, and opportunities for professional growth, consistently emerged as strong predictors of faculty satisfaction. Faculty who reported access to research opportunities, meaningful teaching experiences, and intellectual engagement were more likely to report higher levels of motivation and overall job satisfaction.

At the same time, hygiene factors such as workload, salary, governance processes, and promotion structures shaped faculty experiences in ways that often overshadowed motivators. When extrinsic conditions were perceived as inequitable or unstable, satisfaction declined even when motivators were present. This pattern reinforces Herzberg's argument that hygiene factors prevent dissatisfaction but, in academic contexts, they may also exert stronger influence than initially theorized, particularly when faculty perceive institutional support as inadequate.

5.2. Rank-Based Differences in Job Satisfaction (RQ2)

Findings also highlighted substantial variation across academic ranks. Assistant professors frequently reported high stress related to tenure expectations, ambiguous criteria for advancement, and imbalanced workloads dominated by teaching and service. Recognition and mentorship were identified as key motivators for this group, yet dissatisfaction often stemmed from uncertainty surrounding tenure policies and inequities in workload distribution.

Associate professors, by contrast, expressed challenges associated with mid-career stagnation, limited recognition, and fewer structured opportunities for advancement. While motivators such as autonomy in research and teaching provided meaning, lack of institutional acknowledgement contributed to plateaued satisfaction.

Full professors generally demonstrated the highest levels of satisfaction, emphasizing autonomy, legacy-building, and professional influence as critical motivators. However, hygiene factors such as administrative burdens or lack of institutional responsiveness still surfaced as sources of frustration. These rank-specific differences suggest that faculty job satisfaction cannot be addressed through uniform policies but instead require tailored approaches that account for career stage.

5.3. Gender, Diversity, and Cross-Cultural Perspectives

Gender, race, and cultural context significantly shaped how motivator and hygiene factors were experienced. Women and underrepresented minority faculty reported disproportionate dissatisfaction with workload balance, recognition, and advancement opportunities. The phenomenon of "invisible labor" – excessive service, mentoring, and administrative tasks – was especially salient among women and faculty of color, reducing time available for research and career advancement.

Cross-cultural perspectives revealed additional variation. In collectivist societies, hygiene factors such as job security collegial harmony, and administrative fairness were often perceived as motivators, reflecting the cultural importance of stability and community. In contrast, in individualist contexts such as the United States, motivators like autonomy, recognition, and intellectual challenge were more influential. High power-distance environments further complicated faculty satisfaction, as faculty were less likely to report dissatisfaction due to hierarchical norms, even when extrinsic conditions were weak. These findings underscore the faculty motivation is deeply context-dependent, requiring sensitivity to both cultural and demographic variables.

5.4. Institutional Support and Faculty Retention (RQ4)

Institutional support emerged as a cross-cutting determinant of job satisfaction and retention. Faculty who perceived equitable workload policies, transparent promotion processes, and strong recognition practices reported higher motivation and lower intentions to leave. Professional development opportunities and governance structures that encouraged participation were also associated with higher satisfaction across ranks and contexts.

Conversely, lack of institutional responsiveness, opaque decision-making, and inequitable recognition created environments where motivators lost their impact. Even highly motivated faculty reported intentions to leave when institutional support structures were weak. These patterns suggest that faculty retention strategies must address both motivators and hygiene factors simultaneously, with particular emphasis on transparent policies, supportive leadership, and recognition of diverse contributions.

5.5. Integrative Insights and Broader Implications

Taken together, these findings affirm that Herzberg's Two-Factor Theory provides a valuable conceptual framework, but its binary distinction between motivators and hygiene factors is insufficient to fully capture the complexity of faculty job satisfaction. Empirical evidence suggests that hygiene factors can act as motivators in certain contexts, that motivators may lose salience when extrinsic conditions are unstable, and that demographic and cultural variables reshape how factors are experienced.

For institutions, the implication is clear: faculty satisfaction cannot be addressed through uniform interventions. Tailored policies must account for academic rank, gender, diversity, and cultural differences, while simultaneously ensuring that core institutional supports — workload fairness, recognition, transparent governance — are in place. By adopting a holistic approach, institutions can enhance faculty motivation, foster equity, and improve retention.

6. POLICY IMPLICATIONS

6.1. Policy Recommendation 1: Ensure Equitable Workload Distribution

Institutions should adopt transparent workload policies that balance teaching, research, and service responsibilities across faculty ranks. Literature consistently shows that women, minority faculty, and associate professors disproportionately bear service and teaching loads, leading to dissatisfaction and burnout. Equitable workload policies will not only improve job satisfaction but also enhance retention and faculty productivity.

6.2. Policy Recommendation 2: Strengthen Recognition and Reward Systems

Recognition practices must move beyond research outputs to acknowledge mentoring, service, and leadership contributions. Studies highlight that "invisible labor" disproportionately affects women and underrepresented groups, who often receive little formal credit. Formal recognition in annual reviews, promotion criteria, and awards programs can address these inequities and improve faculty morale.

6.3. Policy Recommendation 3: Provide Career-Stage Tailored Professional Development

Assistant professors benefit from mentoring and tenure clarity, associate professors need mid-career advancement support, and full professors value opportunities for intellectual leadership and autonomy.

Career-stage – specific programs address these differing needs, ensuring that faculty remain motivated and engaged across their career.

6.4. Policy Recommendation 4: Advance Diversity, Equity, and Inclusion Initiatives

Institutions should embed DEI into faculty policies by ensuring equitable promotion opportunities, fair compensation, and inclusive governance. Empirical studies show that underrepresented groups often experience

systemic inequities in institutional support. Proactive DEI measures can strengthen faculty belonging and reduce attrition among marginalized groups.

6.5. Policy Recommendation 5: Support Flexible and Adaptive Work Practices

The rise of hybrid teaching, evolving research expectations, and post-pandemic work conditions call for policies that allow flexibility without penalizing faculty. Providing resources for hybrid instruction, encouraging flexible scheduling, and supporting work-life integration are crucial for sustaining motivation and job satisfaction in contemporary higher education.

7. THEORETICAL IMPLICATIONS

7.1. Defining a Theory

A theory is a system of interrelated constructs, definitions, and proportions that explains or predicts phenomena by specific relationships among variables (Kerlinger, 1973; Dubin, 1978). The value of a theory lies in its ability to (a) organize empirical findings, (b) generate testable hypotheses, and (c) provide generalizable explanations that guide action and further research (Whetten, 1989; Merton, 1968). Key features of a useful social-science theory:

- Conceptual clarity: clear definitions of constructs and boundaries.
- Parsimony: explains phenomena with as few proportions as necessary.
- Falsifiability/testability: generates hypotheses that can be empirically evaluated.
- Predictive/explanatory power: clarifies why certain outcomes occur.
- Generativity: suggests new research directions and practical interventions.

7.2. Major Theories Reviewed in the Paper (Brief Summaries)

Below are the principal theoretical frameworks used in the literature review; each provides a different lens for understanding faculty job satisfaction.

1. Herzberg's Two-Factor Theory (Herzberg, Mausner, & Snyderman, 1959)

Distinguishes hygiene (extrinsic) factors (salary, policies, supervision) that prevent dissatisfaction from motivator (intrinsic) factors (achievement, recognition, work itself) that promote satisfaction. Central to this paper as the organizing framework for coding motivators vs. hygiene factors.

2. Expectancy Theory (Vroom, 1964)

Focuses on individual cognitive evaluations: effort \rightarrow performance \rightarrow outcomes. Motivation depends on expectancy, instrumentality, and valence; useful for explaining when extrinsic rewards (or lack of them) will motivate behavior.

3. Job Characteristics Model (Hackman & Oldham, 1976)

According to this model, the design of a job, reflected in aspects like variety, identity, significance, autonomy, and feedback, creates the psychological conditions that support motivation and satisfaction. Helps explain how job design (teaching load, research autonomy) affects faculty motivation.

4. Self-Determination Theory (Deci & Ryan, 1985)

This theory argues that intrinsic motivation emerges when individuals' basic needs for autonomy, competence, and social connection are met. It also offers a contemporary account that overlaps with Herzberg's motivators but adds psychological process details.

7.3. Theory Synthesis

Synthesizing the theories reviewed in this study provides a more holistic framework for understanding faculty job satisfaction in higher education. Herzberg's Two-Factor Theory offers a foundational distinction between motivator (intrinsic) and hygiene (extrinsic) factors, but the literature demonstrates that faculty motivation is shaped by a wider constellation of influences that extend beyond this binary.

Expectancy Theory (Vroom, 1964) adds explanatory power by clarifying how faculty members' motivation is influenced by their perception that effort will lead to valued outcomes such as tenure, promotion, or research recognition. This complements Herzberg's framework by highlighting the role of individual expectations in linking extrinsic support (e.g., fair workload policies) to intrinsic outcomes (e.g., achievement and recognition).

In a higher education context, the Job Characteristics Model (Hackman & Oldham, 1976) underscores how elements of role design such as autonomy, variety of tasks, and perceived significance, parallel Herzberg's motivator factors. Faculty experiences described in empirical studies, particularly the importance of autonomy and intellectual challenge illustrate the overlap between JCM's core job dimensions and Herzberg's intrinsic factors.

Self-Determination Theory (Deci & Ryan, 1985) frames faculty motivation within the broader framework of meeting core psychological needs, particularly autonomy, competence, and relatedness. This perspective deepens Herzberg's framework by explaining why factors such as collegiality, mentoring, and recognition contribute so strongly to satisfaction and retention.

Taken together, these theories can be synthesized into an integrated framework in which faculty job satisfaction (Y) is shaped by both intrinsic motivators and extrinsic supports, moderated by career stage, institutional design, and cultural context. The resulting conceptual formula can be expressed as:

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

Where:

X1 = Motivators (Herzberg): recognition, achievement, autonomy, intellectual challenge.

X2 = Hygiene Factors (Herzberg): salary, workload, institutional policies, administrative support.

X3 = Expectancy (Vroom): clarity of outcomes, alignment of effort with rewards.

X4 = Job Characteristics (Hackman & Oldham): autonomy, task variety, task significance.

X5 = Psychological Needs (Deci & Ryan): autonomy, competence, relatedness.

7.3.1. Conceptual Diagram

The following conceptual diagram visually represents the relationship between these variables:

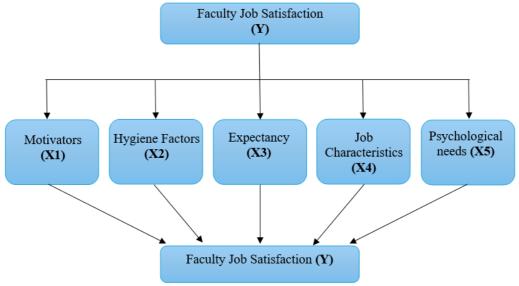


Figure 1: Factors Influence Faculty Job Satisfaction.

8. CONCLUSIONS

8.1. Brief Summary of the Conclusion

This study set out to synthesize empirical research on faculty job satisfaction in higher education through the lens of Herzberg's Two-Factor Theory. By reviewing 43 sources, including 35 peer-reviewed journal articles and several seminal theoretical works, the analysis has demonstrated that faculty motivation is a multifaceted phenomenon shaped by both intrinsic motivators and extrinsic hygiene factors, with important moderating influences from rank, institutional context and diversity,

Herzberg's distinction between motivators (recognition, autonomy, achievement, intellectual challenge) and hygiene factors (salary, workload, promotion clarity, institutional policies) remain useful but not absolute. Faculty at different career stages experience these factors differently: assistant professors prioritize tenure clarity and stability; associate professors emphasize opportunities for growth and recognition; and full professors value autonomy, leadership, and legacy building. Gender and diversity also play critical roles, as women and underrepresented minorities face disproportionate service burdens, inequities in advancement, and systemic barriers that heighten the impact of hygiene factors. Cross-cultural comparisons further reveal that motivators and hygiene factors are interpreted differently across region, what counts as "hygiene" in one context may serve as a primary motivator in another.

Institutional support emerged as a consistent theme that mediates the relationship between motivators, hygiene factors, and overall satisfaction. Clear governance structures, transparent promotion policies, mentoring, and recognition practices can mitigate dissatisfaction and amplify the positive effects of intrinsic motivators. Taken together, these findings affirm that Herzberg's framework remains a valuable starting point but requires contextual adaptation to reflect the lived experiences of contemporary faculty.

8.2. Future Research

Although this study provides a comprehensive synthesis, several areas warrant further investigation. First, more empirical work is needed to test the integrated model proposed in Section VII, particularly through large-scale, multi-institutional surveys that directly examine the interaction of motivators, hygiene factors, and institutional supports. Longitudinal studies would also be valuable for capturing how faculty satisfaction evolves

across different career stages, especially during transitions from associate or from associate to full professor.

Second, there is a need for greater cross-cultural research. Most existing studies are concentrated in the United States and a handful of other regions, leaving significant gaps in understanding faculty satisfaction in contexts such as South America, Africa, and parts of Asia. Comparative research could illuminate how cultural norms, and institutional traditions shape the interpretation of motivators and hygiene factors.

Third, diversity perspectives require deeper exploration, particularly intersectional analyses that account for how gender, race, and other identity markers combine to influence faculty experiences. For example, the compounded effects of race and gender on workload distribution and recognition remain under-examined. Finally, future research should integrate mixed methods approaches, combining quantitative measures of satisfaction with qualitative insights into lived experiences, to produce richer, more nuanced findings.

8.3. Limitations of Research

The conclusions of this paper are subject to several limitations. Most importantly, the study is based on a secondary synthesis of existing literature rather than primary data collection. While this approach provides breadth and allows integration across contexts, it also limits the ability to control methodological variations across the included studies. Differences in sample sizes, institutional settings, and operational definitions of "job satisfaction" may have influenced findings.

Additionally, the review is restricted to English-language publications, which may exclude relevant perspectives from non-English academic communities. Publication bias is another concern, as studies with significant findings are more likely to be published, potentially skewing the synthesis. Finally, while the paper aimed to capture diverse cultural and institutional contexts, the empirical base remains uneven, with some regions and populations underrepresented.

Despite these limitations, the review provides a valuable synthesis of current knowledge, highlights critical gaps, and offers an integrated framework that can guide both future research and institutional practice.

REFERENCES

Abualrub, R. F., & Al-Zaru, I. M. (2008). Job stress, recognition, job performance, and intention to stay at work among Jordanian hospital nurses. *Journal of Nursing Management*, 16(3), 227–236. https://doi.org/10.1111/j.1365-2834.2007.00810.x

Al-Asfour, A., & Khan, S. A. (2014). Workforce localization in the Kingdom of Saudi Arabia: Issues and challenges. *Human Resource Development International*, 17(2), 243–253. https://doi.org/10.1080/13678868.2013.836783

Baldwin, R., DeZure, D., Shaw, A., & Moretto, K. (2008). Mapping the terrain of mid-career faculty at a research university: Implications for faculty and academic leaders. *Change: The Magazine of Higher Learning*, 40(5), 46–55. https://doi.org/10.3200/CHNG.40.5.46-55

Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research*, 42(1), 36–41. https://doi.org/10.1097/00006199-199301000-00007

Callister, R. R. (2006). The impact of gender and department climate on job satisfaction and intentions to quit for faculty in science and engineering fields. *The Journal of Technology Transfer*, 31(3), 367–375. https://doi.org/10.1007/s10961-006-7208-y

Cech, E. A., & Blair-Loy, M. (2014). Consequences of flexibility stigma among academic scientists and engineers. Work and Occupations, 41(1), 86-110. https://doi.org/10.1177/0730888413515497

Chaiprasit, K., & Santidhiraku, O. (2011). Happiness at work of employees in small and medium-sized enterprises, Thailand. *Procedia – Social and Behavioral Sciences*, 25, 189–200. https://doi.org/10.1016/j.sbspro.2011.10.540

COACHE. (2014). The Collaborative on Academic Careers in Higher Education: Faculty job satisfaction survey. Harvard Graduate School of Education. https://coache.gse.harvard.edu/

Daly, C. J., & Dee, J. R. (2006). Greener pastures: Faculty turnover intent in urban public universities. *The Journal of Higher Education*, 77(5), 776–803. https://doi.org/10.1080/00221546.2006.11778944

Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Springer.

Dubin, R. (1978). Theory building. Free Press.

Ellickson, M. C., & Logsdon, K. (2002). Determinants of job satisfaction of municipal government employees. *Public Personnel Management*, 31(3), 343–358. https://doi.org/10.1177/009102600203100307

Farh, J. L., Hackett, R. D., & Liang, J. (2007). Individual-level cultural values as moderators of perceived organizational support–employee outcome relationships in China: Comparing the effects of power distance and traditionality. *Academy of Management Journal*, 50(3), 715–729. https://doi.org/10.5465/amj.2007.25530866

Finkelstein, M. J., Conley, V. M., & Schuster, K. H. (2016). The faculty factor: Reassessing the American academy in a turbulent era. Johns Hopkins University Press.

Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. Personnel Psychology, 40(2), 287–322. https://doi.org/10.1111/j.1744-6570.1987.tb00605.x

Gawel, J. E. (1997). Herzberg's theory of motivation and Maslow's hierarchy of needs. Practical Assessment, Research & Evaluation, 5(11). https://doi.org/10.7275/31qy-ea53

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16(2), 250–279. https://doi.org/10.1016/0030-5073(76)90016-7

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). The motivation to work. John Wiley & Sons.

Hsieh, B., & Nguyen, H. T. (2020). Identity-informed mentoring to support acculturation of female faculty of color in higher education: An Asian American female mentoring relationship case study. *Journal of Diversity in Higher Education*, 13(2), 169–180. https://doi.org/10.1037/dhe0000118

Johnsrud, L. K., & Rosser, V. J. (2002). Faculty members' morale and their intention to leave: A multilevel explanation. The Journal of Higher Education, 73(4), 518-542. https://doi.org/10.1080/00221546.2002.11777162

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and

- emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80–92. https://doi.org/10.1037/0021-9010.86.1.80
- Kerlinger, F. N. (1973). Foundations of behavioral research. Holt, Rinehart, and Winston.
- Khan, A. H., Nawaz, M. M., Aleem, M., & Hamed, W. (2014). Impact of job satisfaction on employee performance: An empirical study of autonomous medical institutions of Pakistan. *Journal of International Studies*, 7(1), 112–132. https://doi.org/10.14254/2071-8330.2014/7-1/11
- Kovach, K. A. (1987). What motivates employees? Workers and supervisors give different answers. Business Horizons, 30(5), 58-65. https://doi.org/10.1016/0007-6813(87)90082-6
- Lambert, E. G., Hogan, N. L., & Barton, S. M. (2001). The impact of job satisfaction on turnover intent: A test of a structural measurement model using a national sample of workers. *The Social Science Journal*, 38(2), 233–250. https://doi.org/10.1016/S0362-3319(01)00110-0
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1349). Rand McNally.
- Lundberg, C., Gudmundson, A., & Andersson, T. D. (2009). Herzberg's two-factor theory of work motivation tested empirically on seasonal workers in hospitality and tourism. *Tourism Management*, 30(6), 890–899. https://doi.org/10.1016/j.tourman.2008.12.003
- Merton, R. K. (1968). Social theory and social structure. Free Press.
- Miah, M. T., & Hasan, M. J. (2022). Impact of Herzberg two-factor theory on teachers' job satisfaction: An implication to the private universities of Bangladesh. *International Journal of Business and Management Research*, 10(1), 1–5. https://doi.org/10.37391/IJBMR.100101
- Misra, J., Lundquist, J. H., Holmes, E., & Agiomavritis, S. (2011). The ivory ceiling of service work. *Academe*, 97(1), 22–26. https://www.jstor.org/stable/25799863
- O'Meara, K., Terosky, A. L., & Neumann, A. (2008). Faculty careers and work lives: A professional growth perspective. ASHE Higher Education Report, 34(3), 1–221. https://www.researchgate.net/publication/287772897
- Oshagbemi, T. (1997). Job satisfaction profiles of university teachers. Journal of Managerial Psychology, 12(1), 27–39. https://doi.org/10.1108/02683949710164235
- Settles, I. H., Cortina, L. M., Malley, J., & Stewart, A. J. (2006). The climate for women in academic science: The good, the bad, and the changeable. *Psychology of Women Quarterly*, 30(1), 47–58. https://doi.org/10.1111/j.1471-6402.2006.00261.x
- Sharma, R. D., & Jyoti, J. (2009). Job satisfaction of university teachers: An empirical study. *Journal of Services Research*, 9(2), 51–80. https://www.researchgate.net/publication/286142423
- Smerek, R. E., & Peterson, M. (2007). Examining Herzberg's theory: Improving job satisfaction among non-academic employees at a university. Research in Higher Education, 48(2), 229–250. https://doi.org/10.1007/s11162-006-9042-3
- Spector, P. E. (1997). Job satisfaction: Application, assessment, causes, and consequences. SAGE Publications.
- Staw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. Administrative Science Quarterly, 31(1), 56-77. https://doi.org/10.2307/2392766
- Tack, M. W., & Patitu, C. L. (1992). Faculty job satisfaction: Women and minorities in peril. ASHE-ERIC Higher Education Reports. https://files.eric.ed.gov/fulltext/ED347950.pdf
- Tay, L., & Diener, E. (2011). Needs and subjective well-being around the world. Journal of Personality and Social Psychology, 101(2), 354–365. https://doi.org/10.1037/a0023779
- Tella, A., Ayeni, Ĉ. O., & Popoola, S. O. (2007). Work motivation, job satisfaction, and organisational commitment of library personnel in academic and research libraries in Oyo State, Nigeria. *Library Philosophy and Practice*. https://www.researchgate.net/publication/28157288
- Trower, C. A., & Gallagher, A. (2010). Trekking toward tenure: What pre-tenure faculty want on the journey. *Metropolitan Universities*, 21(2), 16–33. https://journals.indianapolis.iu.edu/index.php/muj/article/view/20436
- Viray, R. A. B., & Velasquez-Fajanela, J. V. (2023). The perennial exit of teachers from Alaska and the inadequacy of Herzberg Theory: A follow-up qualitative study. *International Journal of Educational Methodology*, 9(3), 509–524. https://doi.org/10.12973/ijem.9.3.509
- Volkwein, J. F., & Zhou, Y. (2003). Testing a model of administrative job satisfaction. Research in Higher Education, 44(2), 149-171. https://doi.org/10.1023/A:1022099612036
- Vroom, V. H. (1964). Work and motivation. Wiley.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? Academy of Management Review, 14(4), 490-495. https://doi.org/10.2307/258554
- Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). Occupational stress in Australian university staff:

 Results from a national survey. *International Journal of Stress Management*, 10(1), 51–63. https://doi.org/10.1037/1072-5245.10.1.51
- Wong, Y. T., Ngo, H. Y., & Wong, C. S. (2003). Antecedents and outcomes of employees' trust in Chinese joint ventures. *Asia Pacific Journal of Management*, 20(4), 481–499. https://doi.org/10.1023/A:1026391009543
- Xu, Y. J. (2008). Gender disparity in STEM disciplines: A study of faculty attrition and turnover intention. Research in Higher Education, 49(7), 607-624. https://doi.org/10.1007/s11162-008-9097-4
- Zhou, Y., & Volkwein, J. F. (2004). Examining the influences on faculty departure intentions: A comparison of tenured versus nontenured faculty at research universities using NSOPF-99. Research in Higher Education, 45(2), 139–176. https://doi.org/10.1023/B:RIHE.0000015693.38603.4c