INTRINSIC AND EXTRINSIC MOTIVATION IN ACADEMIA: A MIXED-METHOD EXPLORATION OF MOTIVATIONAL DRIVERS

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Abstract: *Research on intrinsic and extrinsic motivation has long shown that, while still popular, extrinsic rewards are mostly ineffective, especially in cognitive and creative tasks. To further research intrinsic and extrinsic motivation, we focused on universities, where tasks are largely cognitive and creative. This article presents a mixed-method literature review on intrinsic and extrinsic motivation in academia. By synthesizing findings from empirical studies employing both quantitative and qualitative approaches, this research highlights how motivational factors influence performance, job satisfaction, and teaching practices in universities. The analysis draws on recent literature (2017–2024), selected for methodological rigor and relevance to higher education personnel. The review identifies core themes such as: the mediating role of quality culture, the importance of psychological need satisfaction, and the connection between intrinsic motivation and engaged pedagogies. Implications for institutional leadership, academic policy, and directions for future research are also discussed.*

Keywords: *intrinsic motivation, extrinsic motivation, higher education, quality culture, mixed-method.*

JEL Classification: *M12, l23.*

1. Introduction

The distinction between intrinsic and extrinsic motivation remains a central theme in motivation theory, particularly in organizational psychology and educational research. While intrinsic motivation refers to doing an activity for its inherent satisfaction (Deci & Ryan, 1985), extrinsic motivation pertains to actions driven by external rewards or obligations (Matei & Abrudan, 2010). In the higher education sector, understanding how these motivational orientations affect academic staff and students' performance, and satisfaction is essential to ensure institutional development.

This paper represents a continuation of the research conducted and published in 2016 (Matei & Abrudan, 2016). The previous study focused on undergraduate

students' motivational profiles and their academic performance using a mixed-method approach involving surveys and focus groups. The current study builds on that foundation by shifting the focus from students to include higher education employees, while maintaining the dual lens of intrinsic and extrinsic motivation and employing mixed-method analysis. This sequel aims to broaden the understanding of motivational dynamics within academic institutions by exploring how these factors influence performance, satisfaction, and engagement in the post-2017 educational landscape.

2. Methodology

This study employed a qualitative systematic literature review approach, aimed at synthesizing empirical evidence on intrinsic and extrinsic motivation among higher education employees. The review process was structured and iterative, involving the identification, selection, and critical appraisal of peer-reviewed research studies aligned with predefined inclusion criteria.

Relevant literature was sourced from major academic databases and institutional repositories. Search terms included combinations of keywords such as *intrinsic motivation*, *extrinsic motivation*, *academic staff*, *faculty motivation*, *mixed methods*, and *higher education*. To ensure a balance between depth and recency, the search was limited to studies published between 2017 and 2024 (published after our previous paper (Matei & Abrudan, 2016)).

The following inclusion criteria were applied:
- Empirical studies employing a mixed-methods design, integrating both quantitative and qualitative data collection and analysis techniques.
- A clear focus on higher education staff and students.
- Methodological rigor, as evidenced by the use of validated instruments, transparent sampling, and clearly articulated data analysis procedures.

A total of 54 studies were initially identified through keyword-based searches. After screening titles and abstracts for relevance and eliminating duplicates, 32 full-text articles were assessed for eligibility. Of these, 15 studies met all inclusion criteria related to topic focus, methodological rigor, and publication source. The remaining studies were excluded due to a lack of mixed-method design, limited applicability to higher education, or insufficient empirical depth. Although this process was not conducted under a formal PRISMA protocol, it followed the same principles of transparency and replicability.

3. Results and Discussion

3.1. Main results

The key insights derived from the synthesis are threefold. First, intrinsic motivation is consistently associated with enhanced performance, innovation in pedagogy, job satisfaction, and psychological well-being among higher education employees. Second, intrinsic motivation is supported and sustained by the fulfilment of core psychological needs—autonomy, competence, and relatedness—as well as

by a strong institutional quality culture. Third, while extrinsic motivation (e.g., rewards, recognition, and job security) contributes to short-term engagement and satisfaction, it exerts a weaker and less durable influence on long-term professional development and academic performance.

Figure no. 1 (below) presents a conceptual diagram synthesizing the main findings of the analysed studies. The diagram facilitates the visual demonstration of the interconnections between intrinsic and extrinsic motivation, psychological needs,
institutional culture, and various performance outcomes in the higher education context.
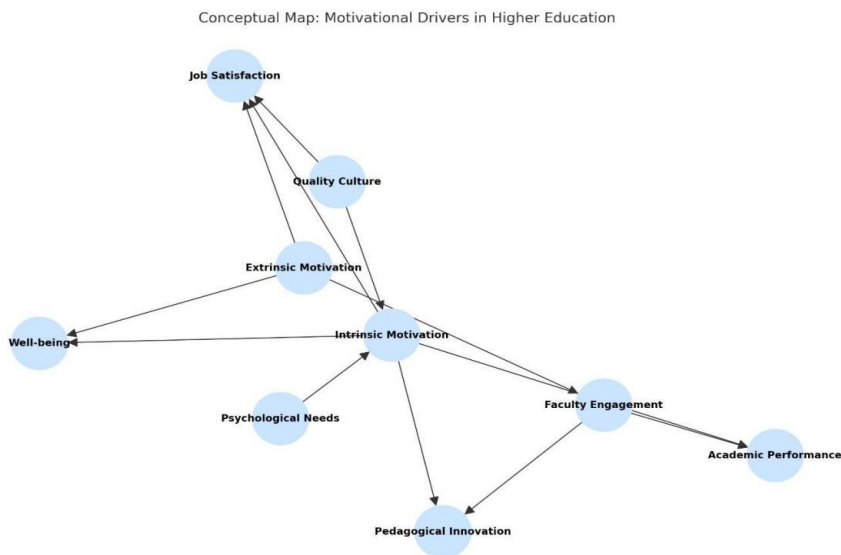
Figure no. 1 Conceptual diagram visualizing the synthesized insights from your literature review. Blue nodes represent core constructs (motivation types, outcomes, institutional factors). Arrows indicate direction of influence, based on findings from the 15 studies.
Source: own representation

The conceptual model presented in Figure 1 synthesizes the dominant themes emerging from the 15 studies summarized in Table 1. Each node and connection in the diagram reflects recurring relationships identified in the reviewed literature—for instance, the influence of intrinsic motivation on job satisfaction and pedagogical innovation, or the mediating role of quality culture. The figure and table provide a visual and comparative overview of how various motivational constructs interact to influence academic performance and engagement in higher education.

Table no. 1 includes an overview of the 15 empirical studies comprised in this review. The table outlines main characteristics of each study, including author(s), year of publication, country of focus, methodological design, and key findings. This comparative summary highlights the geographical spread, mixed-method designs, and primary motivational constructs investigated. The table represents the grounds for the thematic analysis presented in the following discussion sections

Table no. 1. *Overview of Selected Studies (2017–2024)*

No.	Author(s)	Year	Country	Methods Used	Key Findings
1.	McManus, Haddock-Fraser, &	2017	UK	Survey + Interviews	Institutional choice driven by both rational (extrinsic) and value-based (intrinsic) motivations
2.	Rands				
3.	Appelbaum & Corpus	2020	USA	Surveys + Interviews	Identified five motivational profiles among undergraduates
4.	Jhantasana, Chanta	2021	Thailand	Survey + PLS-SEM	Intrinsic motivation improves job satisfaction
5.	Canlı	2021	Turkey	Survey + Interviews	Teachers are driven more by intrinsic than extrinsic factors
6.	Chism, Kanyon N	2021	USA	Surveys + Interviews	Research motivations are influenced by intrinsic and extrinsic factors
7.	Ratelle, F., Guay, F., et al.	2021	Canada	Surveys + Cluster Analysis	Identified stable self-determined motivation profiles; differences observed by age and gender
8.	Morgan, Amy Rose	2022	USA	Surveys + Academic Records	Higher intrinsic motivation positively related to grades; moderate extrinsic motivation beneficial
9.	Howard, J. L., Gagné, M., & Bureau, J. S.	2022	Canada	Latent Profile + Interviews	Identified student motivation profiles; autonomous motivation linked to engagement and well- being
10.	Iqbal, Razalli, & Taib	2023	Pakistan	Survey + SEM	Intrinsic motivation predicts performance via quality culture
11.	Gaglio, Matt	2023	USA	Survey + Qual Interviews	Psychological needs boost intrinsic motivation
12.	Van den Broeck, Hermans, et al.	2023	Belgium	Surveys + Thematic Analysis	Faculty motivation (autonomous vs. controlled) linked to performance, engagement, and emotional exhaustion
13.	Tuma, F., & Muhammed, A.	2023	Iraq	Survey + Interviews	Found that intrinsic motivation strongly affects academic staff's performance; extrinsic motivation more linked to short-term engagement
14.	Vallerand, Robert & Chichekian, Tanya & Paquette, Virginie	2023	Canada	Surveys + Interviews	Passion influences motivation and goal pursuit in educational settings
15.	Anderson, Olivia & Boswell, Caroline & Gresham, Morgan & Smith- Sherwood, Dawn & Laye, Matthew	2024	USA	Survey + Interviews	Intrinsic motivation linked to engaged pedagogies
	Ye, X.	2024	China	Surveys + Interviews	Demographics influence intrinsic vs. extrinsic motivation among EFL learners

Source: *own representation*

3.2. Intrinsic Motivation, Performance and Satisfaction – discussion

A wide range of recent studies have explored the complex dynamics of intrinsic and extrinsic motivation across educational contexts, with particular attention to their influence on performance, satisfaction, and pedagogical outcomes.

Anderson et al. (2024) conducted a mixed-methods study to explore how intrinsic motivation and external pressures influence faculty adoption of engaged learning pedagogies in capstone experiences (CEs). The research revealed that instructors who develop and teach CEs are highly intrinsically motivated, with their perceptions of the value and interest in CEs serving as primary motivators. Faculty with higher intrinsic motivation levels were more likely to implement evidence-based pedagogical approaches, receive greater recognition from colleagues, and have access to more teaching resources. These findings underscore the importance of supporting intrinsic motivation to enhance teaching practices and, consequently, student outcomes in higher education.

Canlı (2021) investigates the teaching motivations of educators using a convergent parallel mixed-methods design, combining quantitative survey data with qualitative interviews. The study finds that intrinsic motivation outweighs extrinsic motivation among participating teachers, who cite internal drivers such as a love for teaching, the desire to support student development, and the emotional satisfaction of witnessing student growth. Conversely, extrinsic motivators like salary and job security were reported as less influential. The qualitative results underscore the importance of professional autonomy, recognition, and emotional investment in teaching, while also identifying demotivators such as excessive workload and bureaucratic limitations. The study calls for policies that enhance intrinsic motivation and minimize systemic barriers.

Chism (2020) explores how participation in an early childhood endorsement program contributes to the development of leadership competencies. While not explicitly framed in terms of motivational theory, the study highlights broader themes of professional identity, role clarity, and internalized leadership—constructs closely tied to intrinsic motivation.

Gaglio (2023) applies Self-Determination Theory (SDT) to examine how teacher evaluation systems influence intrinsic motivational outcomes. Findings suggest that when evaluations support autonomy, competence, and relatedness, teachers exhibit stronger intrinsic motivation. In contrast, controlling or unsupportive evaluation frameworks diminish motivation and job satisfaction, highlighting the critical role institutional structures play in supporting or suppressing psychological need fulfilment.

Iqbal, Razalli, and Taib (2023) examine how intrinsic and extrinsic motivation influence higher education performance among faculty, mediated by the presence of a strong quality culture. Their findings demonstrate that intrinsic motivation substantially enhances performance, particularly when reinforced by an institutional culture oriented toward quality. Extrinsic motivation alone was not a significant predictor of long-term performance, implying that internal motivational structures must be prioritized in faculty development strategies.

Jhantasana (2021), using advanced statistical analysis, explores how intrinsic and extrinsic motivation relate to job satisfaction among Thai university staff. The study confirms that intrinsic motivation has a direct and sustained impact on

satisfaction, while extrinsic factors serve as secondary contributors. This finding aligns with broader evidence emphasizing personal growth and meaningful engagement as critical motivational levers in academic workplaces.

Studies on students and faculty alike (e.g., Ratelle et al., 2021; Howard et al., 2022) emphasize the existence of diverse motivational profiles across gender, age, and context. Ratelle, Guay, Mercier, and Duchesne (2021) investigate self-determined motivation profiles among undergraduate students, identifying demographic influences such as gender and age on the distribution of motivational types. Their work highlights the value of designing context-sensitive interventions that reflect the motivational diversity of learners. In a related student-centered perspective, Howard, Gagné, and Bureau (2022) employ a person-centered methodology to identify five distinct student motivation profiles: Knowledge-Oriented, Controlled, Multifaceted, Unmotivated, and Hedonist. The Knowledge-Oriented profile—rooted in autonomous motivation—correlates most strongly with academic achievement and psychological well-being, suggesting that tailored motivational interventions could significantly improve student outcomes.

Tuma and Muhammed (2023) contribute to this conversation by analyzing faculty motivation at Tishk International University. Their findings reaffirm the predominance of intrinsic motivators—such as passion for teaching and professional growth—over extrinsic factors like compensation and job security, although the latter still play a role in shaping engagement.

Vallerand, Chichekian, and Paquette (2023) focus on the concept of passion in education, describing its dual role in enhancing engagement, persistence, and academic performance. The authors distinguish between harmonious passion, which aligns with intrinsic motivation, and obsessive passion, which may lead to maladaptive outcomes.

Van den Broeck, Hermans, and Lens (2023) further substantiate the centrality of motivation in higher education, demonstrating that faculty motivation—particularly autonomous forms—correlates positively with teaching quality, emotional well-being, and student engagement. Both intrinsic and extrinsic factors are relevant, though intrinsic drivers exert a more enduring and transformative influence.

Ye (2020) examines motivation among Chinese junior secondary EFL learners, revealing how intrinsic factors significantly shape success in language acquisition. Variations in motivation were influenced by demographic and educational contexts, suggesting the need for differentiated pedagogical strategies.

Research highlights the consistent and significant role of intrinsic motivation in promoting sustained performance, engagement, and well-being across educational levels and roles. While extrinsic motivation remains relevant—particularly in supporting short-term goals and satisfaction—it is the internalization of purpose, autonomy, and passion that most effectively drives long-term educational success. These findings support a shift toward motivation-sensitive policies and practices, especially those grounded in Self-Determination Theory, as a means of enhancing both educator effectiveness and student outcomes.

4. Implications for Higher Education Management

Central to the implications for Higher Education Management is the consistent evidence that intrinsic motivation—fuelled by autonomy, purpose, competence, and relatedness—exerts a far greater and more sustainable impact on faculty and student outcomes than extrinsic incentives alone.

Grounded in Self-Determination Theory, multiple studies (e.g., Gaglio, 2023; Canlı, 2021; Van den Broeck et al., 2023) underscore that motivation is significantly enhanced when institutional environments support autonomy, competence, and relatedness.

Higher education management should prioritize the fulfilment of psychological need by:

a) designing professional development pathways that offer choice, mastery, and meaningful collaboration,

b) avoiding overly prescriptive evaluation frameworks and

c) encouraging mentorship structures and peer learning communities to satisfy the need for relatedness.

Institutional culture emerged as a powerful mediator of performance and motivation (Iqbal et al., 2023). Leaders should work toward embedding a quality culture that aligns individual values with institutional mission, emphasizing excellence in teaching, research, and service.

While extrinsic motivation (e.g., salary, promotions) remains relevant, especially in contexts with limited resources (Jhantasana, 2021; Tuma & Muhammed, 2023), it should complement rather than substitute intrinsic motivation. As shown by Vallerand et al. (2023) and Anderson et al. (2024), harmonious passion—a deep, autonomous love for teaching—drives pedagogical innovation and persistence. To cultivate such engagement, management can: provide flexibility and support for faculty to develop signature pedagogies and reduce bureaucratic burdens that stifle creativity and increase emotional exhaustion.

Evaluation processes that are rigid, compliance-driven, or punitive undermine motivation and professional identity (Gaglio, 2023; Chism, 2020). Institutions should instead: a) emphasize developmental feedback, peer collaboration, and reflective practice and b) ensure evaluation frameworks are transparent, fair, and aligned with psychological need satisfaction.

Higher education management must transition from traditional, control-based models to motivation-enhancing ecosystems—environments that value autonomy, support internal purpose, and promote a shared culture of excellence. Such strategic alignment will not only increase job satisfaction and retention but also drive innovation, effectiveness, and institutional resilience.

5. Theoretical Contributions

Our review extends the application of Self-Determination Theory (SDT) in higher education by synthesizing empirical evidence across diverse institutional and cultural contexts. While SDT's core canons—autonomy, competence, and relatedness—are widely recognized, this study demonstrates how these

psychological needs are shaped and amplified by institutional structures such as quality culture and evaluation systems. Furthermore, the findings support a nuanced understanding of motivation as a continuum rather than a dichotomy. Several reviewed studies (e.g., Howard et al., 2022; Ratelle et al., 2021) emphasize the existence of blended motivational profiles, suggesting that hybrid forms of motivation can coexist and interact with contextual factors. This perspective refines earlier theoretical models by highlighting the dynamic, institutionally embedded nature of motivation in academic environments.

6. Limitations and Future Research

This review focused on a specific period and primarily English sources from major academic databases and institutional repositories. The authors state that the analysis was not exhaustive. Articles published in other languages or journals not included in the selected databases were not included in the analysis. The cultural context was not considered in carrying out the analysis. Further research should explore cultural contexts and long-term effects.

7. Conclusion

This review confirms that **intrinsic motivation is a fundamental and consistent driver** of academic staff satisfaction, performance, and engagement in higher education institutions. Across the 15 mixed-method studies analyzed, intrinsic factors such as personal fulfilment, passion for teaching, commitment to student success, and alignment with institutional values were repeatedly linked to enhanced pedagogical innovation, greater well-being, and sustained professional performance.

While extrinsic motivators—such as salary, job security, and external recognition— do play a complementary role, their influence is generally short-term and conditional, often lacking the transformative impact of intrinsic drives. As shown in studies such as those by Canlı (2021), Jhantasana (2021), and Iqbal et al. (2023), extrinsic motivation may support performance when integrated with a strong quality culture, but cannot substitute the deep engagement fostered by autonomy, competence, and purpose.

Another critical insight from the review is the mediating role of institutional structures, such as quality culture and evaluation systems. Studies grounded in Self-Determination Theory (e.g., Gaglio, 2023; Van den Broeck et al., 2023) demonstrate that motivation is not solely an individual construct—it is shaped and sustained by the organizational environment. When faculty perceive that their psychological needs are acknowledged and respected, their intrinsic motivation flourishes. In contrast, rigid, top-down policies can undermine motivation and diminish job satisfaction.

The use of mixed-method approaches in the reviewed literature has proven particularly valuable. These methodologies provide a more nuanced understanding of motivational dynamics, capturing both quantitative patterns and the subjective

experiences behind them. They also allow for the identification of diverse motivational profiles among both educators and students, as emphasized by Ratelle et al. (2021) and Howard et al. (2022), enabling tailored interventions.

In conclusion, higher education institutions must reimagine motivation not as a fixed trait, but as a dynamic outcome of well-designed environments, respectful leadership, and responsive evaluation systems. By investing in the conditions that nurture intrinsic motivation—autonomy, mastery, relatedness, and meaning—universities can build more resilient, innovative, and satisfied academic communities. These findings hold strategic value for educational policymakers, human resource developers, and institutional leaders seeking to enhance faculty engagement and institutional effectiveness in the long term.

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