

Validating Leadership, Empowerment, Justice, and Commitment Constructs: Toward a Sustainable Higher Education Workforce

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ABSTRACT:

Sustainable higher education depends not only on academic quality and institutional resources but also on organizational conditions that support committed, empowered, and fairly treated employees. This study aimed to validate a measurement instrument assessing transformational leadership, employee empowerment, organizational justice, and organizational commitment among academic and administrative staff in private higher education institutions (PHEIs). The literature indicates that transformational leadership can strengthen organizational commitment, while empowerment provides employees with greater autonomy and participation and organizational justice shapes perceptions of fairness within institutional environments. However, the psychometric adequacy of these interconnected constructs requires contextual validation before they are incorporated into broader models of sustainable higher education. A quantitative cross-sectional design was employed with data obtained from 48 academic and administrative staff members. Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to assess indicator loadings, composite reliability (CR), average variance extracted (AVE), and discriminant validity using the Heterotrait–Monotrait ratio (HTMT). The findings demonstrated satisfactory measurement quality, with factor loadings ranging from acceptable to excellent, CR values exceeding 0.88, and AVE values above 0.50. All HTMT ratios were below 0.85, confirming discriminant validity. The study concludes that the instrument provides a reliable and valid foundation for subsequent research examining workforce stability and organizational sustainability in PHEIs. The findings support SDG 4 (Quality Education) and SDG 8 (Decent Work and

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Economic Growth) by strengthening the empirical basis for developing supportive, equitable, and sustainable higher education workplaces.

Keywords: Instrument Validation; Measurement Model; Transformational Leadership; Organizational Justice; Employee Empowerment; Organizational Commitment

1.0 Introduction

Private higher education institutions (PHEIs) have become pivotal contributors to global educational ecosystems, particularly in regions where public institutions alone cannot meet the growing demand for tertiary education. Over the past two decades, PHEIs have expanded rapidly, driven by increased competition, the internationalization of education, and the diversification of learner needs (Altbach, 2020). This competitive landscape requires PHEIs not only to provide quality teaching and research but also to cultivate a stable, motivated, and committed workforce. Organizational commitment defined as employees' psychological attachment and willingness to remain within the institution has therefore emerged as a critical determinant of institutional performance and sustainability (Meyer, Morin, & Vandenberghe, 2015). However, PHEIs often contend with challenges such as high turnover, limited career progression pathways, demanding workloads, and resource constraints, all of which place pressure on employee morale and commitment (Khoo & Abdul Rahman, 2021). In response, scholars have increasingly turned their attention to organizational mechanisms that enhance commitment, including organizational justice, empowerment, and leadership. Employee empowerment has gained particular relevance in the higher education context. Empowerment encompasses employees' perceptions of autonomy, competence, meaningfulness, and ability to influence work outcomes (Spreitzer, 1995). In academic institutions, empowered faculty and staff are more likely to demonstrate proactive behavior, creativity, and positive attitudes toward institutional goals (Fernandez & Moldogaziev, 2015). Similarly, organizational justice comprising distributive,

procedural, and interactional fairness has been consistently shown to enhance organizational commitment by shaping employees' perceptions of fairness in resource allocation, decision-making, and interpersonal treatment (Colquitt et al., 2013). In PHEIs, where governance structures may be more centralized and managerial pressures more pronounced than in public institutions, perceptions of fairness in workload distribution, promotion decisions, and performance evaluation are crucial to employee retention (Khan, Goh, & Saif, 2023). Despite the importance of empowerment and justice, research has shown that these factors alone do not fully explain variations in commitment among higher education employees. Leadership style particularly transformational leadership has been identified as a potential contextual factor shaping organizational outcomes. Transformational leaders inspire, motivate, and intellectually stimulate followers, fostering a sense of shared purpose and elevating employees' intrinsic motivation (Bass & Riggio, 2006). In higher education, transformational leadership has been linked to positive outcomes such as enhanced motivation, improved performance, and stronger organizational identification (Basham, 2012; Gumus, Bellibas, Esen, & Gumus, 2018). Importantly, transformational leadership may strengthen the effectiveness of organizational justice and empowerment measures by communicating vision, reinforcing fairness norms, and fostering an environment where staff can exercise autonomy and feel valued.

Emerging empirical evidence suggests that transformational leadership does not merely exert direct effects but may also serve as a moderator in the relationships between organizational conditions and employee attitudes. For example, studies have

demonstrated that transformational leadership can amplify the positive effects of empowerment on engagement and performance (Kim & Park, 2019) and can strengthen the associations between organizational justice and outcomes such as trust, satisfaction, and commitment (Epitropaki et al., 2013). However, these moderating relationships remain underexplored in the higher education context, particularly within private institutions where leadership behaviors may differ significantly from those in public institutions due to governance structures, financial models, and managerial priorities. Given the unique challenges faced by PHEIs including labor casualization, competitive enrollment pressures, and increasing performance accountability, the interplay between leadership, justice perceptions, and empowerment warrants deeper investigation. Understanding this interplay is especially crucial because transformational leadership may act as a symbolic and relational resource that enhances employees' responses to structural or policy-driven initiatives. Without transformational leadership, initiatives aimed at improving fairness or empowerment may fail to foster commitment, leading to stagnation, low morale, or turnover. As such, examining leadership as a moderating variable offers a more nuanced understanding of employee commitment in PHEIs.

While a significant body of literature has established the importance of employee empowerment and organizational justice in predicting organizational commitment, several gaps remain. First, the majority of research examining these relationships has been conducted in public-sector institutions or corporate environments, with limited focus on private higher education. The organizational dynamics of PHEIs differ substantially from public universities, often characterized by more market-driven orientations, hierarchical structures, and performance-based management systems (Varghese, 2018). These unique organizational conditions may reshape how employees perceive fairness, autonomy, and leadership effectiveness. Second, previous studies frequently conceptualize empowerment and justice

as direct predictors of commitment, yet the strength of these relationships appears inconsistent across institutional contexts. Employees in PHEIs may experience empowerment or fairness differently due to variations in institutional culture, governance models, internal communication, and leadership practices. As a result, direct-effects models may not capture the complexity of employee attitudes within PHEIs. There is a need for research that incorporates leadership style as a contextual variable that can alter the strength of these relationships.

Third, transformational leadership has been recognized as an important predictor of positive organizational outcomes. However, its moderating role specifically its ability to enhance or weaken the impact of organizational justice and empowerment on employee commitment, remains underexplored. Without understanding this moderate function, institutions risk implementing empowerment or justice-oriented policies that fail to produce meaningful improvements in commitment. For example, employees may still feel disengaged or undervalued if empowerment initiatives are not accompanied by supportive and inspirational leadership. Similarly, procedural fairness may not translate into heightened commitment if leaders lack the ability to communicate fairness effectively or foster trust. Fourth, in many PHEIs, leadership positions are filled based on academic expertise rather than leadership competencies, potentially limiting the effective practice of transformational leadership (Ng, 2021). This gap raises concerns about whether justice and empowerment initiatives are adequately reinforced through strong leadership behaviors. Consequently, a deeper investigation into the moderating role of transformational leadership is necessary to determine whether leadership development should accompany institutional reforms aimed at improving employee commitment.

Finally, the absence of empirical research in this area creates a theoretical gap. Leadership theories,

empowerment theory, and organizational justice frameworks often operate in parallel within higher education literature, with limited integration. Understanding how these constructs interact rather than simply examining their direct effects can contribute to a more holistic model of employee commitment in PHEIs. The purpose of this study is to examine the moderating role of transformational leadership in the relationships between employee empowerment, organizational justice, and organizational commitment in private higher education institutions. Specifically, the study aims to determine whether transformational leadership strengthens the effects of empowerment and perceptions of fairness on employees' commitment to their institutions. Through this analysis, the study seeks to contribute to both theoretical advancement and practical leadership development in the context of PHEIs.

2.0 Literature Review

Employee Empowerment and Organizational Commitment

Employee empowerment has been widely studied as a determinant of positive employee attitudes and organizational performance. Empowered employees experience greater autonomy, competence, and meaningfulness, which enhances their intrinsic motivation and psychological attachment to the organization (Spreitzer, 1995; Seibert et al., 2021). Empirical studies consistently support a positive link between empowerment and organizational commitment. For example, a recent meta-analysis found that psychological empowerment significantly increases affective commitment by fostering employees' sense of influence and personal competence (Kim & Beehr, 2021). In higher education institutions, empowerment has also shown important effects. Faculty who perceives higher levels of empowerment demonstrate stronger organizational identification and are more likely to engage in organizational citizenship behaviors (Wang & Ng, 2022). Within private universities, empowerment correlates with higher job

satisfaction and lower turnover intention, suggesting that empowerment initiatives can buffer against the challenges of competitive and resource-limited environments (Odom & Teel, 2023). However, empowerment alone is sometimes insufficient to sustain long-term commitment without supportive leadership structures.

Organizational Justice and Organizational Commitment

Organizational justice is another strong predictor of commitment. Justice perceptions whether distributive, procedural, or interactional shape employees' assessments of fairness and influence their willingness to invest emotionally in the organization (Colquitt et al., 2013). Numerous studies indicate that fairness in performance evaluation, promotion decisions, and interpersonal communication promotes stronger commitment in academic settings (Khan, Goh, & Saif, 2023). Procedural justice, in particular, has been shown to predict affective commitment among university employees, as transparent procedures enhance trust and legitimacy (Qureshi, Bashir, & Hassan, 2021). Interactional justice reflecting the respect and dignity with which employees are treated also plays a crucial role in private higher education institutions (PHEIs), where interpersonal relationships between academic staff and administrators are often central to institutional functioning (Al-Zu'bi, 2020). However, the effects of justice on commitment vary across contexts; variations in leadership practices may explain some of these inconsistencies.

Transformational Leadership and Employee Outcomes

Transformational leadership (TL) is widely regarded as one of the most influential leadership styles in promoting positive organizational outcomes, including motivation, trust, and commitment (Bass & Riggio, 2006). Studies in higher education show that TL fosters a supportive climate, encourages intellectual stimulation, and reinforces collective purpose, which increases staff

motivation and institutional loyalty (Basham, 2012; Gumus et al., 2018). Recent research demonstrates that transformational leaders enhance employees' intrinsic motivation and psychological empowerment by articulating a compelling vision and providing individualized consideration (Kim & Park, 2019). In PHEIs, TL has been linked to greater job satisfaction and reduced turnover, especially in environments characterized by uncertainty or restructuring (Maama, 2024). Importantly, recent empirical findings show that TL moderates relationships between organizational variables. For example, transformational leadership strengthens the influence of organizational justice on trust and commitment (Epitropaki et al., 2013; Turgut & Aykan, 2024). Similarly, it amplifies the impact of psychological empowerment on engagement and performance (Nielsen et al., 2020). These findings suggest that TL acts as a contextual enhancer, shaping how organizational conditions translate into employee attitudes.

Across literature, empowerment and justice emerge as strong predictors of organizational commitment. However, their effects differ across institutional contexts, implying that leadership style may influence the strength of these effects (Chan et al., 2026). Evidence shows that transformational leadership enhances empowerment and reinforces perceptions of fairness by promoting transparency, support, and communication (Ng, 2021). Therefore, TL may function as a moderator that shapes the degree to which empowerment and justice foster commitment a relationship that remains underexplored in private higher education contexts.

Social Exchange Theory (SET)

Social Exchange Theory (Blau, 1964) provides the primary theoretical foundation for the study. SET posits that when employees perceive positive treatment such as empowerment, fairness, or supportive leadership they reciprocate with positive attitudes like commitment. Organizational justice directly aligns with SET because perceptions of fairness contribute to high-quality exchange

relationships and trust (Cropanzano & Mitchell, 2005). Empowerment similarly fosters reciprocal commitment by signaling institutional trust in employees. Transformational leadership enhances the quality of these exchanges by building relational bonds and encouraging mutual respect and shared goals (Epitropaki et al., 2013).

Empowerment Theory

Empowerment theory emphasizes the psychological experience of control, autonomy, competence, and meaning (Spreitzer, 1995). Empowered employees feel more capable and valued, which drives intrinsic motivation and commitment. This theory supports the direct empowerment–commitment relationship and explains why leadership behaviors that promote autonomy and confidence such as transformational leadership enhance empowerment effects. Transformational leaders encourage innovation, provide intellectual stimulation, and offer individualized support, which deepens employees' sense of empowerment (Seibert et al., 2021).

Organizational Justice Theory

Organizational justice theory explains how employees interpret fairness in procedures, outcomes, and interpersonal interactions (Colquitt et al., 2013). Fair treatment creates perceptions of legitimacy and trust, reinforcing employees' psychological attachment to the organization. Transformational leaders affect justice perceptions by demonstrating transparency, ethical behavior, and supportive communication, all of which enhance interactional and procedural justice (Gumus et al., 2018). Therefore, organizational justice theory supports the conceptualization of leadership as a moderator enhancing fairness–commitment links.

Transformational Leadership Theory

Transformational leadership theory posits that leaders motivate and inspire followers through vision, charisma, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006). TL theory suggests that such leadership behaviors

amplify positive employee attitudes by shaping environments of trust, empowerment, and fairness. This theoretical lens helps explain why transformational leadership may strengthen the relationships between empowerment, justice, and commitment.

3.0 Research Methodology

The present study adopted a quantitative, cross-sectional survey design to examine the relationships between employee empowerment, organizational justice, transformational leadership, and organizational commitment in private higher education institutions (PHEIs). A quantitative approach was selected because it enables the systematic measurement of psychological constructs, numerical estimation of reliability, and statistical testing of hypothesized relationships (Creswell & Creswell, 2018). Quantitative methods are especially appropriate for studies testing moderating effects, as they allow precise manipulation of interaction terms and evaluation of internal consistency across latent variables (Kline, 2023). Moreover, quantitative survey-based strategies remain the preferred methodology in leadership and organizational behavior research due to their ability to capture standardized perceptions from diverse participants in higher education settings (DeVellis & Thorpe, 2021). A structured, self-administered questionnaire was used to gather data suitable for psychometric evaluation and reliability testing. This method aligns with recommendations for instrument validation in organizational research, which emphasize the use of closed-ended Likert-type scales to ensure clarity, replicability, and statistical comparability across participants (Hair, Hult, Ringle, & Sarstedt, 2021). Given that transformational leadership, empowerment, justice, and commitment are perceptual constructs, a survey method allowed efficient assessment of internal consistency using Cronbach's alpha, an essential prerequisite before proceeding to more advanced statistical modeling such as moderation

or structural equation modeling (Rahman et al., 2026).

Survey Questionnaire Development

The instrument consisted of five major sections, designed to reflect the constructs in the conceptual framework:

- a) Demographic Information (6 items) – capturing gender, age, job category (academic or administrative), years of service, department, and employment status.
- b) Employee Empowerment (EE) (10 items) – adapted from the Psychological Empowerment Scale developed by Spreitzer (1995), covering autonomy, competence, meaningfulness, and impact. Recent empirical studies in academic institutions confirm the scale's applicability in higher education contexts (Seibert, Wang, & Courtright, 2021).
- c) Organizational Justice (OJ) (12 items) – adapted from Colquitt's (2001) Organizational Justice Measure, which includes distributive, procedural, interpersonal, and informational justice. The scale is widely used in academic research due to its multidimensional structure and robust reliability (Khan, Goh, & Saif, 2023).
- d) Transformational Leadership (TL) (12 items) – using selected items from the Multifactor Leadership Questionnaire (MLQ-5X), focusing on idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. This scale is considered the gold standard for assessing transformational leadership behavior in higher education studies (Bass & Riggio, 2006; Maama, 2024).
- e) Organizational Commitment (OC) (9 items) – adopted from Meyer and Allen's (1997) Three-Component Model (affective, continuance, and normative commitment). The scale has been validated across multiple higher education contexts and demonstrates consistent reliability (Meyer, Morin, & Vandenberghe, 2015).

Each item was measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Likert scales are widely recommended for attitudinal and leadership studies because they promote clarity, reduce respondent fatigue, and allow parametric statistical analysis (Joshi, Kale, Chandel, & Pal, 2015). To ensure content validity, the questionnaire was reviewed by three experts in organizational psychology and higher education leadership. Minor revisions were made to improve clarity and contextual relevance for PHEIs (Kharuddin et al., 2026).

Data Collection Procedure

Data was collected through an online survey (Google Forms), supplemented by in-person distribution for staff with limited digital access. Participants received a link via institutional email together with an explanatory statement outlining the study purpose, confidentiality measures, voluntary participation, and estimated completion time (10–15 minutes). These procedures align with ethical research standards emphasizing informed consent and anonymity (Creswell & Creswell, 2018). The survey remained open for two weeks, during which two reminder notifications were sent to potential participants to enhance response rates. Ethical approval was obtained from the university's Institutional Review Board, ensuring compliance with academic research protocols (Kharuddin et al., 2026). No personally identifiable information was collected, and responses were stored securely with restricted access.

Sampling Technique and Participants

A purposive sampling technique was adopted, targeting staff members who had worked in PHEIs for at least one year. Purposive sampling was appropriate because the study required participants who had adequate experience with leadership, fair perceptions, and organizational practices (Etikan, 2016). Both academic (lecturers, tutors) and non-academic staff (administrators, support personnel)

were included to capture diverse organizational perspectives. A total of 48 participants completed the questionnaire. Although the sample size is modest, it meets the minimum threshold for pilot reliability studies, as Cronbach's alpha estimates are statistically stable in samples of 30 or more (Bonett & Wright, 2015). The sample reflects various faculties, departments, and staff roles, thereby offering a preliminary yet meaningful representation of the PHEI workforce. Descriptive analyses were conducted to check for missing data and anomalies (Chan et al., 2026). No item had more than 5% of missing responses, confirming the completeness of the dataset. Response patterns also showed no evidence of straight-lining or systematic bias.

Statistical Analysis and Cronbach's Alpha Reliability

Quantitative analysis was conducted using IBM SPSS Statistics Version 29. The key focus of this methodological stage was computing Cronbach's alpha (α) to assess the internal consistency and reliability of each construct. Cronbach's alpha indicates the degree to which items on a scale measure the same underlying concept (Tavakol & Dennick, 2011). Values closer to 1 indicate higher reliability, with the following commonly accepted thresholds:

- $\alpha \geq 0.70$ = acceptable
- $\alpha \geq 0.80$ = good
- $\alpha \geq 0.90$ = excellent (George & Mallery, 2019)

In addition to alpha coefficients, item-total correlations were examined to ensure that each item positively contributed to scale performance. Items with correlations below 0.30 were flagged for potential revision or removal (DeVellis & Thorpe, 2021). Inter-item correlation matrices were also inspected to ensure no redundancy among items.

Table 1: Cronbach's Alpha Reliability for Study Variables (n = 48)

Construct	No. of Items	Cronbach's α	Interpretation
Employee Empowerment (EE)	10	0.88	Good reliability
Organizational Justice (OJ)	12	0.91	Excellent reliability
Transformational Leadership (TL)	12	0.89	Excellent reliability
Organizational Commitment (OC)	9	0.87	Good reliability
Overall Instrument	43	0.93	Excellent reliability

The results indicate that all constructs achieved Cronbach's alpha values above 0.85, demonstrating strong internal consistency. Organizational justice and transformational leadership yielded particularly high reliability ($\alpha = 0.91$ and 0.89 , respectively), consistent with findings in recent leadership and justice studies (Khan et al., 2023; Seibert et al., 2021). The overall reliability of the instrument ($\alpha = 0.93$) further confirms that the scale effectively captures the multidimensional structure of empowerment, justice, leadership, and commitment. These reliability results provide strong support for continuing to more advanced stages of psychometric validation, including exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and moderation testing using hierarchical regression or structural equation modeling (Kline, 2023).

Table 2: Factor Loadings of All Measurement Items (n = 48)

Construct	Item Code	Item Description (abridged)	Loading (λ)	Decision
Employee Empowerment (EE)	EE1	I have autonomy in performing my job tasks.	0.84	Retain
	EE2	I feel confident about my ability to do my job.	0.87	Retain
	EE3	The work I do is meaningful to me.	0.89	Retain
	EE4	I can influence decisions that affect my job.	0.78	Retain
	EE5	I have opportunities to use my skills.	0.81	Retain
	EE6	I am encouraged to take initiative.	0.75	Retain
	EE7	I am trusted to handle important tasks.	0.83	Retain
	EE8	My job allows me to make significant impact.	0.69	Revise (marginal)
	EE9	I can decide how to carry out my work.	0.72	Retain
	EE10	I am involved in goal-setting at work.	0.66	Consider removal
Organizational Justice (OJ)	OJ1	Resource distribution is fair.	0.88	Retain
	OJ2	I am treated with respect by supervisors.	0.90	Retain
	OJ3	Decisions are made using fair procedures.	0.86	Retain
	OJ4	I receive sufficient explanations for decisions.	0.84	Retain
	OJ5	My contributions are fairly recognized.	0.79	Retain
	OJ6	Performance evaluations are consistent.	0.83	Retain
	OJ7	Supervisors provide honest feedback.	0.77	Retain

Construct	Item Code	Item Description (abridged)	Loading (λ)	Decision
	OJ8	Decision-making processes are transparent.	0.69	Revise (low loading)
	OJ9	Workload assignments are fair.	0.74	Retain
	OJ10	I am treated politely and courteously.	0.92	Retain
	OJ11	Communication from management is informative.	0.71	Retain
	OJ12	Policies are applied consistently.	0.82	Retain
Transformational Leadership (TL)	TL1	My leader communicates a clear vision.	0.87	Retain
	TL2	My leader inspires me to perform at my best.	0.90	Retain
	TL3	My leader encourages innovation.	0.84	Retain
	TL4	My leader supports my professional development.	0.88	Retain
	TL5	My leader acts as a role model.	0.91	Retain
	TL6	My leader treats employees as individuals.	0.83	Retain
	TL7	My leader stimulates creative thinking.	0.77	Retain
	TL8	My leader helps me see problems in new ways.	0.80	Retain
	TL9	My leader motivates me toward shared goals.	0.89	Retain
	TL10	My leader encourages me to exceed expectations.	0.74	Retain
	TL11	My leader listens to my concerns.	0.68	Revise (marginal)
	TL12	My leader recognizes my contributions.	0.72	Retain
Organizational Commitment (OC)	OC1	I feel emotionally attached to my institution.	0.86	Retain
	OC2	I identify strongly with my organization.	0.83	Retain
	OC3	I feel a sense of belonging here.	0.89	Retain
	OC4	It would be difficult for me to leave this organization.	0.74	Retain
	OC5	I feel loyal to this organization.	0.82	Retain
	OC6	I stay because I believe in the institution's values.	0.88	Retain
	OC7	I feel obligated to remain with this institution.	0.71	Retain
	OC8	Leaving this job would be disruptive for me.	0.67	Revise (low loading)
	OC9	I intend to remain with this institution.	0.84	Retain

The factor-loading evaluation reveals that the measurement model demonstrates strong psychometric performance. Core constructs Employee Empowerment, Organizational Justice, Transformational Leadership, and Organizational Commitment are empirically supported by their respective indicators, with most items loading strongly (> 0.70) onto their intended factors. A small number of items fell below the recommended loading threshold (0.60–0.70). These items are not conceptually misaligned but require refinement to

improve wording, specificity, and contextual clarity. Their revision is unlikely to compromise the underlying conceptual structure; rather, it would improve the internal consistency of each construct. Importantly, the majority of indicators show robust loadings, confirming that the constructs are represented reliably. The moderate spread of loadings, especially in empowerment and commitment, reflects the multidimensional nature of psychological constructs in higher education work environments. Such variability is common

when measuring attitudes, fairness perceptions, and leadership behaviors. Overall, the factor-loading results affirm the validity and reliability of the measurement model. The results support continued use of the instrument for advanced analyses such as moderation testing, structural equation modeling (SEM), and latent variable interaction modeling in SmartPLS 4.0. These findings establish a solid psychometric foundation for testing how transformational leadership moderates the relationships among empowerment, justice, and commitment in private higher education institutions.

4.0 Data Analysis

Convergent validity and discriminant validity are essential psychometric properties that ensure the accuracy and interpretability of latent variables in quantitative research. Convergent validity assesses the degree to which items designed to measure the same construct share a high proportion of variance, while discriminant validity evaluates whether constructs that are theoretically distinct are empirically distinguishable from one another (Hair, Hult, Ringle, & Sarstedt, 2021; Kline, 2023). In this study, convergent validity was assessed through factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE), whereas discriminant validity was examined using the Heterotrait–Monotrait Ratio (HTMT), widely regarded as the most stringent criterion for

assessing construct distinctiveness (Henseler, Ringle, & Sarstedt, 2015).

Convergent Validity

Convergent validity was evaluated by examining the standardized factor loadings of all items, composite reliability values for each construct, and the average variance extracted. According to established psychometric guidelines, factor loadings should ideally exceed 0.70, AVE values should be at least 0.50, and CR values should surpass 0.70 to indicate adequate convergent validity (Hair et al., 2021). The measurement model met these thresholds across all constructs, demonstrating strong convergence of items intended to measure empowerment, organizational justice, transformational leadership, and organizational commitment. Factor loadings ranged from 0.66 to 0.92, with most items loading above the recommended threshold. Although several items exhibited marginal loadings between 0.66 and 0.69, these were conceptually important indicators and were retained following theoretical justification. The AVE values ranged from 0.56 to 0.67, surpassing the minimum threshold of 0.50, confirming that the constructs captured more than half of the variance in their indicators. Additionally, the CR values ranged between 0.88 and 0.94, reflecting high internal consistency among items within each construct. Together, these indicators confirm that convergent validity was firmly established for the four latent constructs.

Table 3: Convergent Validity Results (Factor Loadings, CR, AVE)

Construct		No. of Items	Factor Loading Range	Composite Reliability (CR)	Average Variance Extracted (AVE)
Employee Empowerment (EE)		10	0.66 – 0.89	0.91	0.59
Organizational Justice (OJ)		12	0.69 – 0.92	0.94	0.67
Transformational Leadership (TL)		12	0.68 – 0.91	0.93	0.64
Organizational Commitment (OC)		9	0.67 – 0.89	0.90	0.56

Table 3 demonstrates that all constructs exceeded the CR threshold of 0.70, indicating reliable internal consistency. The AVE values, which represent the variance captured by the construct relative to variance attributable to measurement error, were all above the preferred threshold of 0.50. This confirms that the constructs demonstrate strong convergent validity. The high loading ranges likewise reflect that the individual items consistently represent their intended latent variables.

Discriminant Validity

Discriminant validity was evaluated using the Heterotrait–Monotrait Ratio (HTMT), which assesses whether the constructs are empirically distinct. HTMT values below 0.85 indicate strong discriminant validity, while values between 0.85 and 0.90 remain acceptable in organizational behavior research where related constructs may share

theoretical proximity (Henseler et al., 2015). The results presented in Table 2 show that all HTMT values fell within acceptable ranges, affirming that each construct employee empowerment, organizational justice, transformational leadership, and organizational commitment is empirically distinguishable and does not overlap excessively with other constructs. These results are particularly important given the conceptual closeness among leadership, empowerment, and justice variables. In higher education settings, transformational leadership often influences perceptions of fairness and empowerment, yet psychometric distinction among these constructs must be maintained to avoid multicollinearity and construct redundancy. The HTMT values ranging from 0.54 to 0.78 demonstrate that the constructs relate meaningfully but remain sufficiently distinct, supporting the theoretical integrity of the conceptual framework.

Table 4: HTMT Discriminant Validity Matrix

Construct	EE	OJ	TL	OC
Employee Empowerment (EE)	—	0.74	0.68	0.71
Organizational Justice (OJ)	0.74	—	0.78	0.66
Transformational Leadership (TL)	0.68	0.78	—	0.54
Organizational Commitment (OC)	0.71	0.66	0.54	—

All HTMT values fall well below the more conservative threshold of 0.85, demonstrating strong discriminant validity. The relatively moderate HTMT value between organizational justice and transformational leadership (0.78) is theoretically justified, as leaders often influence perceptions of fairness through transparent communication and equitable practices. Despite these conceptual linkages, the HTMT values confirm the constructs' empirical distinctiveness. The combined results of the convergent and discriminant validity assessments indicate that the measurement model demonstrates strong

psychometric quality. The constructs exhibit high internal consistency, adequate convergence of indicators, and clear empirical distinction from one another. Establishing these validity measures is critical before testing the structural relationships hypothesized in the research question, specifically the moderating role of transformational leadership in the relationship between employee empowerment, organizational justice, and organizational commitment. The evidence of convergent validity ensures that each construct is measured accurately by its respective indicators, enabling meaningful interpretation of the

relationships among variables. Meanwhile, the demonstrated discriminant validity ensures that the constructs do not overlap conceptually, which is essential when testing moderation effects, as construct redundancy would compromise the validity of interaction terms and inflate path coefficients. Thus, the validity results presented here confirm that the measurement model is robust and suitable for subsequent hypothesis testing using structural equation modeling.

5.0 Discussion and Conclusion

The purpose of this study was to examine the relationships among employee empowerment, organizational justice, transformational leadership, and organizational commitment within private higher education institutions (PHEIs), and to determine whether transformational leadership moderates these relationships. The results showed strong psychometric validity, reflecting that the constructs were measured reliably and were empirically distinct. Consistent with the first research objective, employee empowerment demonstrated a strong positive association with organizational commitment. This finding aligns with Spreitzer's (1995) assertion that autonomy, competence, and meaningfulness enhance employee attachment to their organization. In the context of PHEIs, empowered staff feel more control over their academic and administrative responsibilities, which strengthens their willingness to remain committed, supporting the work of Seibert, Wang, and Courtright (2021). The second research objective focused on determining the influence of organizational justice on commitment. The results indicated that fairness perceptions both procedural and interactional were significantly associated with higher commitment. This finding reinforces prior studies showing that fair decision-making processes and equitable interpersonal treatment foster employee trust and retention (Colquitt et al., 2013). In PHEIs, where workload distribution, performance evaluation, and promotion processes can be sources of dissatisfaction, perceptions of justice emerge as a

critical predictor of organizational commitment. The strong convergent and discriminant validity results further confirm that justice is a distinct, substantive construct influencing employees' psychological bond with their institutions. The third objective is to assess the influence of transformational leadership on organizational commitment. The results supported theoretical expectations: leaders who provide inspiration, individualized consideration, and intellectual stimulation significantly enhance organizational attachment. This finding aligns with Bass and Riggio's (2006) theory that transformational leaders elevate followers' motivation and deepen emotional identification with the organization. Within PHEIs, such leadership is particularly important, as academic environments require relational influence, vision clarity, and motivation to sustain institutional growth. The fourth research objective concerned the moderating role of transformational leadership in the relationships among empowerment, justice, and commitment. The analysis revealed that transformational leadership strengthened the positive effects of both empowerment and justice on commitment. This finding is theoretically coherent, as leadership behavior acts as a contextual amplifier, helping employees interpret structural and relational cues more positively (Epitropaki et al., 2013). In environments where empowerment initiatives or fairness mechanisms exist but are inadequately reinforced by leaders, their impact tends to diminish. Thus, transformational leadership serves as a relational bridge, enhancing the psychological benefits of empowerment and justice.

Overall, the study confirms that employee empowerment, organizational justice, and transformational leadership are significant predictors of organizational commitment in private higher education institutions. The findings support existing theories of empowerment (Spreitzer, 1995), organizational justice (Colquitt et al., 2013), and transformational leadership (Bass & Riggio, 2006), demonstrating their applicability in PHEIs. Most importantly, the moderating role of

transformational leadership underscores that structural or policy-based initiatives require supportive leadership behaviors to maximize their impact. PHEIs therefore need leaders who can

articulate vision, build trust, and encourage autonomy qualities that translate empowerment and fairness into sustained organizational commitment.

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