

“Transformational leadership and lecturer performance: A sequential mediation model of work motivation, affective commitment, and entrepreneurial orientation in Indonesian private universities”

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TRANSFORMATIONAL LEADERSHIP AND LECTURER PERFORMANCE: A SEQUENTIAL MEDIATION MODEL OF WORK MOTIVATION, AFFECTIVE COMMITMENT, AND ENTREPRENEURIAL ORIENTATION IN INDONESIAN PRIVATE UNIVERSITIES

Abstract

This study responds to the limited understanding of how transformational leadership is associated with lecturer performance through psychological and behavioral mechanisms in higher education. Focusing on private universities in Indonesia, it examines a sequential mediation model involving work motivation, affective commitment, and entrepreneurial orientation. A cross-sectional quantitative survey was conducted from March to June 2025 using a non-probability purposive sample of 174 full-time lecturers. Data were collected through structured questionnaires with validated scales and analyzed using structural equation modeling (SEM) with AMOS. The results indicate that transformational leadership is positively associated with work motivation ($\beta = 0.417, p < 0.001$) and affective commitment ($\beta = 0.200, p < 0.001$). Work motivation is positively associated with affective commitment ($\beta = 0.705, p < 0.001$), while affective commitment is positively associated with entrepreneurial orientation ($\beta = 0.462, p = 0.015$). Entrepreneurial orientation is also positively associated with lecturer performance ($\beta = 0.171, p = 0.007$). However, the results do not support a direct association between work motivation and entrepreneurial orientation ($p = 0.251$) or between affective commitment and lecturer performance ($p = 0.374$). The sequential mediation results suggest that transformational leadership is indirectly associated with entrepreneurial orientation through work motivation and affective commitment, and that work motivation is indirectly associated with lecturer performance through affective commitment and entrepreneurial orientation. These findings highlight the relevance of a sequence between psychological and behavioral aspects in explaining lecturer performance while avoiding causal claims beyond the cross-sectional research design.

Keywords

commitment, entrepreneurship, leadership, motivation,
performance, higher education

JEL Classification

M12, L26, I23

INTRODUCTION

Private higher education institutions face mounting pressure to ensure academic quality, research productivity, community engagement, and institutional competitiveness. In Indonesia, this pressure is particularly high for private universities, as their sustainability is heavily reliant on lecturers' ability to fulfill multiple academic roles, including teaching, research, community service, and participation in institutional development. Therefore, lectur-

er performance is not only an individual work result but also a strategic condition for institutional credibility, student learning quality, and long-term competitiveness (Andriani et al., 2024; Kusumawijaya, 2019).

In this sense, leadership is relevant because academic leaders create the meaning, direction, and climate of lecturers' work. Transformational leadership is usually associated with vision, intellectual stimulation, and individualized consideration, which may reinforce lecturers' willingness to put effort and be attached to their institutions (Yildiz & Gul, 2016; Reza, 2019; Lin & Shiqian, 2018; Wiseman et al., 2018; Sumardi et al., 2016). But the scientific problem is not only whether transformational leadership is related to performance. The more specific question is how psychological states related to leadership and entrepreneurial academic behavior account for lecturer performance in a context in which lecturers are expected to be motivated, committed, innovative, proactive and responsive to institutional change.

Most of the extant research has investigated leadership, motivation, commitment, entrepreneurial orientation and performance as separate or interrelated constructs. This is a conceptual limitation in the lecturer context. Work motivation is the energy and persistence that lecturers put into their academic duties, in addition to their affective commitment, which constitutes the emotional bond they have to institutional goals. Lecturers are increasingly expected to initiate new teaching approaches, develop research collaborations, and contribute to institutional innovation, which adds a behavioral dimension of entrepreneurial orientation (Ismail et al., 2012; Rahim & Lajin, 2017; Meilani & Ginting, 2018). However, the role of these variables as an ordered psychological-behavioral process is not specified, particularly in Indonesian private universities.

Therefore, the scientific problem is that the rationale for why transformational leadership affects the lecturer's performance is limited if the relationship is analyzed through motivation, affective commitment, and entrepreneurial orientation as opposed to through a basic straight association. It is important to address this problem because a direct leader-performance explanation might miss the fact that lecturers' performance depends on whether motivation and emotional connection turn into entrepreneurial academic actions. Clarifying this process can help strengthen the theoretical discussion on leadership and lecturer performance, and can help private universities in designing leadership practices more in line with the realities of academic work.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The academic writing is on employee performance within the framework of the interaction between the conditions in the organization and the individual personality traits. The organizational and behavioral aspects such as leadership style, motivation, organizational commitment, and entrepreneurial spirit can influence the performance of lecturers in colleges and universities. Lecturers are expected to contribute not only to teaching, but also to research, sharing of knowledge, and involvement in the community. Hence, the study of the determinants of lecturer performance has become an increasingly important issue for univer-

sities that want to improve institutional competitiveness and academic excellence (Pradhan & Jena, 2017; Anyalor et al., 2018). The dimension of lecturer performance in Indonesia has been determined by the Ministry of State Apparatus Empowerment and Bureaucratic Reform Regulation Number 17 of 2013 concerning Functional Positions of Lecturers and Their Credit Points. This regulation has lecturer performance dimensions: research, education and teaching, community service, and supporting efforts.

Work motivation is a psychological determinant of employee behavior that has obtained considerable focus in organizational studies. This internal process energizes and directs individuals to work toward achieving work-related goals (Ryan & Deci, 2017). Ch (2024) defined the dimensions of work

motivation, including regulation, intrinsic motivation, introjected regulation, and extrinsic motivation. Based on the self-determination perspective, individuals exhibiting elevated intrinsic motivation are inclined to exhibit heightened degrees of involvement and persistence in their work tasks (Gagné et al., 2015). Motivated personnel are inclined to illustrate elevated levels of commitment, perseverance, and proactivity in their professional conduct (Van den Broeck et al., 2016). Lecturers may put more effort into preparing lessons, conducting research, and serving their institution (Ghaffari et al., 2017; Sinani, 2016). Moreover, motivation can stimulate creative and innovative behavior by encouraging people to try new ways and to experiment with different methods in their jobs.

Affective commitment is another important factor affecting the attitude and behavior of employees in organizations. It is characterized as the emotional bond people develop with their organization and the degree to which they align their beliefs and objectives with those of the organization (Kumari & Afroz, 2013; Farrukh et al., 2017). Marta et al. (2021) reported that work motivation significantly influences organizational commitment, particularly its affective component. Employees with emotional attachment to their organizations show greater loyalty and contribute more actively to organizational progress (Beheshtifar & Herat, 2013). Affective commitment is positively correlated with many desirable organizational results encompassing work performance, work engagement, and organizational citizenship behavior (Kim et al., 2013). In higher educational institutions, lecturers with emotional attachment to their universities can show higher dedication to teaching, research, and academic service.

Another widely focused-upon factor in organizational research is entrepreneurial orientation. An entrepreneurial orientation comprises behavioral patterns of proactiveness, risk-taking, and innovativeness to explore new opportunities (Anderson et al., 2015; Wales, 2016). As Aarakit and Kimbugwe (2015) argue, entrepreneurial orientation is manifested in individuals within organizations who take risks, generate new product or service ideas, and turn those ideas into profitable businesses. Likewise, Rotich et al. (2015) associated entrepreneurial orientation with corporate-level strategic

processes that help entities attain competitive superiority. They emphasized the significance of entrepreneurial orientation in the achievement or collapse of a corporation. The entrepreneurial orientation concept now extends to the personal level, not just the corporate context (Suwarno et al., 2026a). People with a high entrepreneurial orientation exhibit a greater propensity for generating novel concepts, seeking new opportunities, and reacting proactively to environmental changes. Individuals with entrepreneurial characteristics can perform their roles more effectively (Suwarno et al., 2026b). Covin and Slevin (1989) identified the dimensions of entrepreneurial orientation, which include innovativeness, idea exploration, generation, promotion, and execution. These behavioral tendencies in academic institutions can motivate lecturers to pursue innovative teaching approaches, interdisciplinary research collaborations, and institutional innovations (Rahim & Lajin, 2017; Meilani & Ginting, 2018). Numerous investigations have exhibited a favorable association between entrepreneurial orientation and performance outcomes because entrepreneurial behavior generally enhances firms' adaptability and innovation (Covin & Wales, 2019; Aftab et al., 2024). However, some studies have identified inconsistent findings concerning this link, suggesting that other psychological processes may affect the influence of entrepreneurial orientation on employee performance (Soomro & Shah, 2019).

A multitude of studies have shown the association between work motivation and entrepreneurial orientation. For instance, Sarwani et al. (2022) have shown a positive influence of work motivation on entrepreneurial orientation. Thus, the greater the motivation, the more entrepreneurial initiative can be created. Another argument is that highly motivated people can turn creative ideas into reality (Nguyen & Doan, 2023). Ajzen's (1991) theory of planned behavior could also expand the link between work motivation and entrepreneurial orientation, as subjective norms, attitudes, and perceived behavioral control complement each other to influence intention, which then influences behavior. In this model, work motivation is attitudinal. Entrepreneurial orientation is intentional and behavioral, represented by proactivity, risk-taking, and creativity. The relationship can also be considered in the context of the expectancy theo-

ry (Vroom, 1964), which claims that people's expectations determine their actions. In the current situation, highly motivated people show a greater propensity to engage in innovative, proactive, and risk-taking behaviors, which can be defined as entrepreneurial orientation. Affective commitment affects entrepreneurial orientation. In this context, Valeau (2022) discovered a beneficial association between affective commitment and entrepreneurial orientation, indicating that a greater emotional bond with an organization increases entrepreneurial orientation. Likewise, Hernández-Linares et al. (2022) validated the positive effect of affective commitment on entrepreneurial orientation. Abdel Azeem (2018) also studied the impact of affective commitment on different aspects of entrepreneurial orientation. He affirmed that people with strong affective bonds are more likely to demonstrate proactiveness, innovativeness, and risk-taking in their organizations. It was also found that affective commitment has a significant impact on employee performance. For example, Suryaman (2018) found that affective commitment has a strong effect on employee performance, meaning employees with strong emotional ties to their organizations tend to perform better. Ani et al. (2020) found similar results among lecturers, where affective commitment, as a manifestation of emotional attachment to carry out the Tri Dharma of higher education, had a strong influence on lecturers' performance. Supriyanto (2018) found that affective commitment has a positive effect on lecturers' performance, with the feeling of belonging and dedication toward their institutions driving them to perform better.

Leadership is generally seen as one of the paramount determinants of employee attitudes and behavior. Transformational leadership is distinct as it inspires followers, promotes intellectual stimulation, and encourages employees to perform at higher levels (Yildiz & Gul, 2016; Reza, 2019). Transformational leaders articulate a vision that inspires, provide individual support, and stimulate creativity in followers' work. These behaviors foster intrinsic motivation and develop an emotional connection to the organization. Higher motivation, commitment, and job engagement of employees are related to transformational leadership (Lin & Shiqian, 2018; Wiseman et al., 2018; Sumardi et al., 2016). Theoretical explanations for these re-

lationships are based on organizational commitment theory, social exchange theory, and self-determination theory. These frameworks highlight that straightforward communication, trust-based relationships, and the satisfaction of demands for autonomy, competence, and connection enhance intrinsic motivation and loyalty (Blau, 1964; Ryan & Deci, 2000; Herscovitch & Meyer, 2002). Meta-analyses also show that transformational leadership is positively related to organizational and employee performance (Banks et al., 2016; Hoch et al., 2018).

A substantial corpus of studies examines the correlation between employee performance and leadership, but the core processes that explain how transformational leadership improves lecturer performance remain under-investigated. Most prior literature addressed the direct impacts of leadership on performance; in contrast, the internal psychological processes that might moderate this relation have received relatively less attention. Specifically, the combined roles of affective commitment, work motivation, and entrepreneurial orientation in explaining lecturers' performance in institutes of higher learning, there has been limited exploration.

Therefore, further exploration is needed to understand how these factors interact within academic environments. Exploring the sequential roles of affective commitment, work motivation, and entrepreneurial orientation may yield deeper insights into how transformational leadership contributes to lecturer performance. Accordingly, this paper aims to scrutinize the sequential mediation of affective commitment, work motivation, and entrepreneurial orientation in the association between transformational leadership and lecturers' performance in private universities.

The hypotheses were formulated based on the insights gained from the literature review:

- H1: *Transformational leadership affects work motivation.*
- H2: *Transformational leadership affects affective commitment.*
- H3: *Work motivation affects affective commitment.*

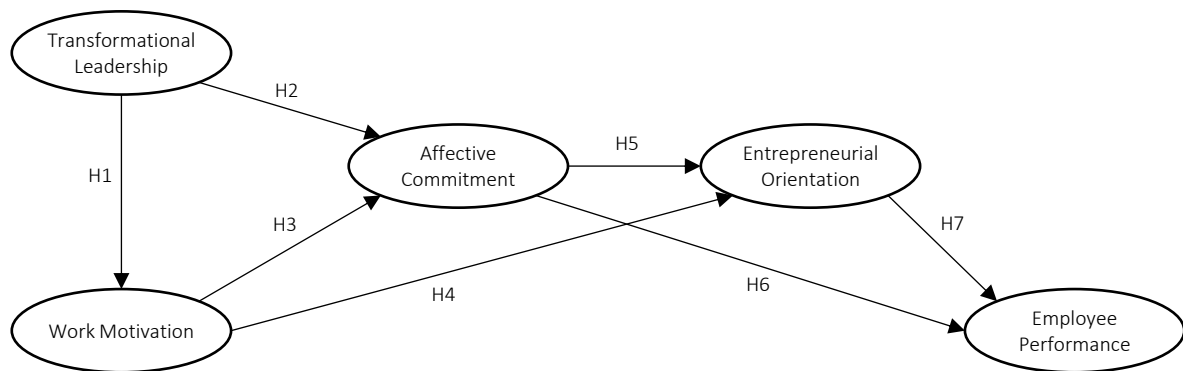


Figure 1. Study model

H4: Work motivation affects entrepreneurial orientation.

H5: Affective commitment affects entrepreneurial orientation.

H6: Affective commitment affects employee performance.

H7: Entrepreneurial orientation affects employee performance.

The conjunction of different theories produces a consistent conceptual framework (Figure 1) that explains correlations between research variables. According to self-determination theory, transformational leadership increases work motivation by satisfying fundamental psychological needs for competence, autonomy, and connection. Social exchange theory states that the support, trust, and attention from leaders create reciprocal relationships that encourage lecturers to enhance their contribution to the organization. The theory of organizational commitment explains motivation as a basis for affective commitment, characterized by a sense of belonging, emotional attachment, and loyalty to the organization, which increases lecturers' willingness to contribute sustainably. Affective commitment is seen as increasing intentions for innovative and proactive behaviors and willingness to take risks, which is reflected in entrepreneurial orientation in alignment with the theory of planned behavior. Expectancy theory explains that entrepreneurial orientation may result in enhanced performance if lecturers believe their efforts will result in substantial accomplishments, as well as career and organizational advancement

benefits. In this study, we propose a comprehensive multi-theoretical framework that integrates motivational, relational, affective, cognitive, and behavioral perspectives into a single model. This combination provides a more robust explanation: the influence of transformational leadership on lecturer performance operates through a sequential mediation process involving affective commitment, work motivation, and entrepreneurial orientation, yielding a more comprehensive understanding than using a single theory.

2. METHOD

This paper used a quantitative causal-associative design in an effort to analyze the interrelationships among transformational leadership, affective commitment, work motivation, entrepreneurial orientation, and lecturer performance. This analysis is based on the Indonesian context of private universities. A quantitative approach was used to analyze causality. The minimum sample size was 129 respondents in accordance with G*Power recommendations with effect size = 0.15, error probability = 0.05, power (1-err prob) = 0.95, number of tested predictors = 4, and total number of predictors = 4. We distributed the questionnaire to 33 private universities in West Java and Banten Region, and we got 174 respondents. Purposive sampling is when informants are deliberately selected for their ability to provide insight into a certain theme, concept, or phenomenon (Robinson, 2023). The inclusion criteria were that the participants were full-time faculty members with substantial classroom experience at the school involved. Data were collected using a

standardized online questionnaire from March to June 2025. The transformative leadership questionnaire was reviewed with the paradigm presented by Bass and Avolio (1993). The study evaluated work motivation using the model developed by Gagné et al. (2015), while affective commitment was evaluated using the models of Perreira and Berta (2016). To measure entrepreneurial orientation, the study incorporated the works of Covin and Slevin (1989) and de Jong and den Hartog (2010). The study examined instructor efficiency based on Regulation Number 17, issued by the Ministry of Administrative and Bureaucratic Reform (2013). Measurement and structural models were evaluated using AMOS, employing structural equation modeling (SEM). To assess the validity of the tool, factor loadings were examined and should exceed 0.40–0.45; for a sample of 150–200, this can be accepted (Hair et al., 2019; Tabachnick & Fidell, 2013). Reliability was assessed using Cronbach's Alpha and Composite Reliability, both of which were required to be greater than 0.60 (Hair et al., 2021; Heale & Twycross, 2015). Multiple indices, including CMIN/DF, RMSEA, GFI, and

TLI, were employed to assess the model's fit. All of these demonstrated that the model satisfies the criteria for an adequate fit.

Respondent profiles (Table 1) included gender, age, employment duration, educational attainment, permanent lecturer status, and academic functional role. Based on respondent profiles, most of this population were male (77.6%) and aged over 40 years (46%). Most participants had 6–10 years of experience (29.9%) and held a master's degree (89.1%). The trend showed that all respondents (100 percent) were full-time workers, and almost all had the academic rank of assistant professor (97.7%).

3. RESULTS

The instrument validity (Table 2) was assessed using the assumption that factor loading values exceeding 0.40–0.45 from a 150–200 sample can be accepted (Hair et al., 2019; Tabachnick & Fidell, 2013). Cronbach's Alpha was also applied to test the reliability of questionnaire items (Hair et al., 2019). It was according to the criterion that the

Table 1. Respondent profiles

Demographic	Frequency	Percentage
Gender		
Male	135	77.6%
Female	39	22.4%
Age		
26–30 years old	8	4.6%
31–35 years old	36	20.7%
36–40 years old	50	28.7%
>40 years old	80	46%
Working Period		
<= 5 years	13	9.5%
6–10 years	52	29.9%
11–15 years	47	27%
16–20 years	38	21.8%
>20 years	24	13.8%
Education Level		
Master	155	89.1%
Doctor	19	10.9%
Lecturer Status		
Permanent employee	174	100%
Not a permanent employee	0	0%
Academic Position		
Lecturer	0	0%
Assistant Professor	170	97.7%
Associate Professor	4	2.3%
Professor	0	0%

Table 2. Loading factors and reliability test

Item	Loading Factor	P Value	Cronbach's Alpha	Composite Reliability
TL1 (C8)	0.809	< 0.001	0.761	0.766
TL2 (C11)	0.620	< 0.001		
TL3 (C18)	0.749	< 0.001		
WM1 (D10)	0.437	< 0.001	0.652	0.701
WM2 (D15)	0.739	< 0.001		
WM3 (D16)	0.907	< 0.001		
AC1 (AC22)	0.437	< 0.001	0.678	0.683
AC2 (AC26)	0.708	< 0.001		
AC3 (AC27)	0.854	< 0.001		
EO1 (F1)	0.770	< 0.001	0.778	0.782
EO2 (F2)	0.767	< 0.001		
EO3 (F8)	0.685	< 0.001		
EP1 (G1)	0.627	< 0.001	0.764	0.808
EP2 (G2)	0.813	< 0.001		
EP3 (G4)	0.694	< 0.001		
EP4 (G5)	0.626	< 0.001		
EP5 (G6)	0.700	< 0.001		
EP6 (G11)	0.421	< 0.001		
EP7 (G15)	0.456	< 0.001		

Note: TL means Transformational Leadership; WM means Work Motivation; AC means Affective Commitment; EO means Entrepreneurial Orientation; EP means Employee Performance.

items were reliable when the Composite Reliability (CR) and Cronbach's Alpha exceeded 0.60 (Hair et al., 2022; Heale & Twycross, 2015).

The validity assessment indicated that the instrument was valid because most of the items assessed had a factor loading above 0.40, while only four had values marginally lower. Some indicators were removed because their factor loading scores were below 0.40, so they were not included in the next test. This step also helps obtain valid indicators for each variable that are relevant to the topic and purpose of the study. According to Hair et al. (2019), the validity test was also conducted within the specified threshold because the sample size was over 150 and nearly 200. The reliability test also ensured that the instrument was consistent since the Composite Reliability and Cronbach's Alpha of each variable were greater than 0.60.

Regarding the transformational leadership factor, the highest factor loading was recorded for item TL1 (0.809), which states, "The study program leaders discuss their most significant values and beliefs." This item was identified as the strongest contributor to the transformational leadership construct. For the work motivation variable, the highest loading appeared in item WM3 (0.907), which reads, "Lecturers do not know why they

work as lecturers. It is a waste of time." This item was coded in the opposite way. Likewise, for the affective commitment variable, item AC3 (0.854) attained the highest factor loading. This item was the opposite of the statement "Lecturers do not enjoy working at this university." The item EO1 (0.770) had the highest loading in the entrepreneurial orientation variable. It said, "As a lecturer, I like to try new and unusual things and am very interested in new and creative ideas." Finally, item EP2 (0.813), which says "Developing lecture materials," had the highest loading for the employee performance variable.

Table 3. Mean and standard deviation

Variable	Mean	SD
Transformational Leadership	4.01	0.59
Work Motivation	4.41	0.56
Affective Commitment	4.09	0.59
Entrepreneurial Orientation	4.07	0.61
Employee Performance	4.34	0.49

Table 3 illustrates that the standard deviation scores for all variables were lower than their means. This means that the data distribution was in an acceptable and stable range. The mean score interpretation for a 5-point Likert scale was as detailed below: 1.00–1.80 = very low, 1.81–2.60 = low, 2.61–3.40 = moderate, 3.41–4.20 = high, and

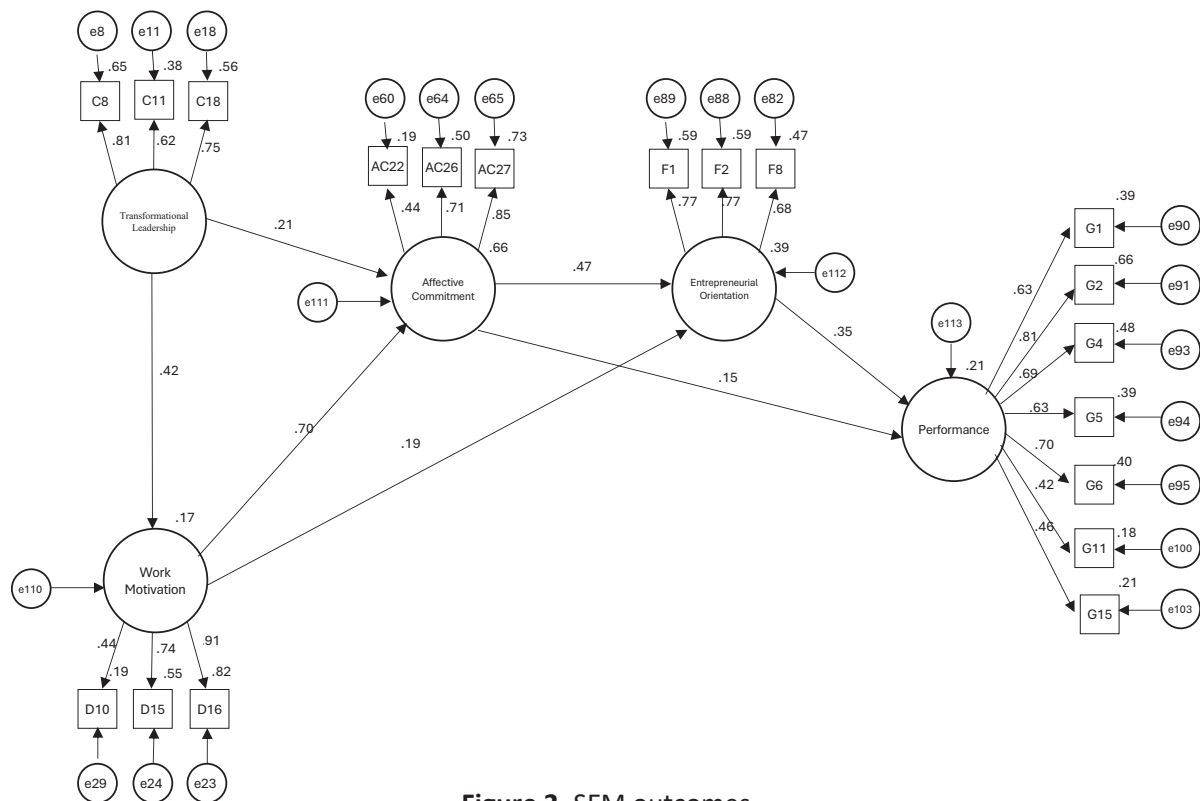


Figure 2. SEM outcomes

4.21–5.00 = very high. The findings indicated that the mean scores for transformational leadership, affective commitment, and entrepreneurial orientation were all high. Meanwhile, the average score of employee performance and motivation in the workplace is in the very high category.

The results of the model testing based on structural equation modeling (SEM) are shown in Figure 2 to evaluate the goodness-of-fit of the structural and measurement models. The measurement model in Table 2 shows the factor loadings of each indicator in their respective construct. Tables 4 and 5 present the goodness-of-fit indices and results of structural model testing.

The goodness-of-fit results are illustrated in Table 4. CMIN was 255.699, and the p-value was 0.00. The p-value is less than 0.05; however, the value of the CMIN/DF ratio is 1.998, which shows an excellent fit between the observed data and the hypothesized model, as values between 1 and 3 are acceptable (Arbuckle, 2013). However, CMIN by itself was not sufficient to estimate overall fit of the model, and therefore, additional fit indices were examined. The RMSEA value is 0.076, less than 0.08 as recommended (Arbuckle, 2013), and hence supports the adequacy of the model. The RMSEA is perhaps the most informative of the goodness-of-fit indices, because it measures the degree to which the model approximates the population

Table 4. Goodness-of-fit

Measurement	Req.	Score	Category
Chi-Square	≥ 0.05	0.00	Moderate Fit
GFI	> 0.9	0.869	Moderate Fit
RMSEA	< 0.08	0.076	Fit
ECVI	Smaller-better	1.975	Fit
NFI	> 0.8	0.804	Fit
TLI	> 0.8	0.867	Fit
RFI	> 0.8	0.766	Moderate Fit
IFI	> 0.8	0.891	Fit
AGFI	> 0.8	0.825	Fit

Table 5. Hypothesis testing

Hypothesis	Coef.	p (Value)	Conclusion
Transformational leadership → Work motivation (H1)	0.417	<0.001	Accepted
Transformational leadership → Affective commitment (H2)	0.200	<0.001	Accepted
Work motivation → Affective commitment (H3)	0.705	<0.001	Accepted
Work motivation → Entrepreneurial orientation (H4)	0.193	0.251	Not Accepted
Affective commitment → Entrepreneurial orientation (H5)	0.462	0.015	Accepted
Affective commitment → Performance (H6)	0.108	0.374	Not Accepted
Entrepreneurial orientation → Performance (H7)	0.171	0.007	Accepted

covariance matrix. Hypothesis-testing results are shown in Table 5.

Based on Table 5, transformational leadership had a statistically significant influence on work motivation with a positive coefficient of 0.417 and a p-value of < 0.001. The findings indicate that the more capable the leader is of motivating, inspiring, and empowering lecturers, the more intrinsic motivation lecturers have to work enthusiastically and responsibly. Moreover, transformational leadership also positively and significantly affected affective commitment with a coefficient of 0.200 ($p < 0.001$). This suggested that lecturers could be emotionally attached to particular institutions if they were led by people who cared, who gave substantial guidance, and who expressed a clear vision. Here, the correlation between affective commitment and work motivation yielded the highest coefficient of 0.705 ($p < 0.001$), indicating that the higher lecturers' commitment to the organization, the higher their motivation, which is emotionally

inclusive in relation to the fulfillment of organizational objectives.

In contrast, the correlation between work motivation and entrepreneurial orientation was determined to be inconsequential, and the coefficient was 0.193 ($p = 0.251$). This implies that motivation is not a direct factor that encourages entrepreneurial behavior among lecturers without other favorable conditions, such as an innovative organizational environment. Affective commitment, by contrast, positively and significantly influenced entrepreneurial orientation ($\beta = 0.462$, $p = 0.015$), meaning lecturers who possess an emotional bond with their organizations are more inclined to demonstrate entrepreneurial behavior such as innovation, proactivity, and forward-looking behavior. Conversely, the coefficient of affective commitment was not determined to have a substantial effect on performance, as demonstrated by the coefficient of 0.108 ($p = 0.374$), which implies that emotional attachment alone could not cause per-

Table 6. Mediation effects

Mediation Test	Associated path	Path coefficient/PC (Unstandardized Beta)	S.E. PC	S.E. Sobel	Z-Score	P (value)
TL → WM → AC	TL → WM	0.480	0.113	0.064	3.148	0.002
	TL → AC	0.138	0.062			
TL → AC → EO	TL → AC	0.422	0.090	0.068	1.646	0.099*
	AC → EO	0.374	0.124			
TL → WM → EO	TL → WM	0.480	0.113	0.085	1.106	0.268
	WM → EO	0.196	0.171			
WM → AC → EO	WM → AC	0.422	0.090	0.152	2.168	0.030
	AC → EO	0.785	0.321			
WM → AC → EO	WM → AC	0.422	0.090	0.152	2.168	0.030
	AC → EO	0.785	0.321			
AC → EO → P	AC → EO	0.785	0.321	0.073	1.816	0.069*
	EO → P	0.171	0.063			
WM → EO → P	WM → EO	0.196	0.171	0.031	1.055	0.291
	EO → P	0.171	0.063			

Note: TL means Transformational Leadership; WM means Work Motivation; AC means Affective Commitment; EO means Entrepreneurial Orientation; EP means Employee Performance.

formance improvement without the intervention of entrepreneurial action. Entrepreneurial orientation also had a positive and significant impact on performance, with a coefficient of 0.171 ($p = 0.007$), meaning lecturers' performance increases with their level of entrepreneurial orientation.

We also investigated the mediating variables, where the Sobel test was used to ascertain the indirect correlation between transformational leadership, affective commitment, work motivation, entrepreneurial orientation, and performance. The results of this mediation analysis are exhibited in Table 6.

The analysis shows that work motivation mediates the effect of transformational leadership on affective commitment, while affective commitment mediates the influence of transformational leadership and work motivation on entrepreneurial orientation. However, work motivation does not mediate the association between entrepreneurial orientation and transformational leadership. Furthermore, affective commitment acts as a mediator between work motivation and entrepreneurial orientation, and work orientation mediates the impact of affective commitment on performance. Unlike these observations, entre-

preneurial orientation did not mediate the association between affective commitment and performance. Tables 7 and 8 present additional findings from the sequential mediation test.

Table 7 shows the sequential mediation effect of work motivation and affective commitment on the correlation between transformational leadership and entrepreneurial orientation, implying that transformational leadership influenced entrepreneurial orientation through these two mediators in sequence. Similarly, Table 8 shows the sequential mediation effect of affective commitment and entrepreneurial orientation on the correlation between performance and work motivation, suggesting that work motivation affects performance through affective commitment and entrepreneurial orientation consecutively.

4. DISCUSSION

This present study shows that transformational leadership enhances work motivation (Hypothesis 1 is accepted), supporting the results of Zavaleta et al. (2025), Jensen and Bro (2018), Nguyen et al. (2019), Udin (2023), and Udin et al. (2023). The results show that there is a positive and signifi-

Table 7. Sequential mediation effect, test 1

Sequential Mediation Test	Associated path (Indirect)	Effect	S.E.	Z-Score	p (value)
TL → WM → AC → EO	TL → WM → AC	0.203	0.064	3.148	0.002
	WM → AC → EO	0.331	0.152	2.168	0.030
	TL → WM → EO	0.159	0.082	1.931	>0.05
	TL → AC → EO				
	TL → AC → EO	0.331	0.152	2.186	<0.05
	TL → WM → EO	0.094	0.085	1.106	>0.05
Cumulative Effect (Sequential Mediation)		0.584	0.193	3.023	<0.05

Note: TL means Transformational Leadership; WM means Work Motivation; AC means Affective Commitment; EO means Entrepreneurial Orientation; EP means Employee Performance.

Table 8. Sequential mediation effect, test 2

Sequential Mediation Test	Associated path (Indirect)	Effect	S.E.	Z-Score	p (value)
WM → AC → EO → P	WM → AC → EO	0.331	0.144	2.301	<0.05
	AC → EO → P	0.134	0.074	1.817	>0.05
	WM → AC → P	0.018	0.013	1.407	>0.05
	WM → EO → P				
	WM → EO → P	0.034	0.032	1.056	>0.05
	WM → AC → P	0.094	0.085	1.106	>0.05
Cumulative Effect (Sequential Mediation)		0.128	0.063	2.024	<0.05

Note: TL means Transformational Leadership; WM means Work Motivation; AC means Affective Commitment; EO means Entrepreneurial Orientation; EP means Employee Performance.

cant effect of transformational leadership on lecturer's work motivation. The finding adds to the growing body of literature on the importance of transformational leadership in organizations that have high information flows, especially in higher education. Most prior studies on academic motivation have studied individual factors, such as professional identity and intrinsic motivation to teach (He et al., 2022; Wasityastuti et al., 2018; Xu et al., 2023). Recent studies have emphasized the role of corporate leadership in shaping the motivation dynamics of lecturers. The findings suggest that leadership styles that are characterized by the ability to motivate, empower and develop a collaborative academic environment can improve teachers' commitment and intrinsic motivation toward the institution.

These results contribute to theory by enhancing and broadening the understanding of transformational leadership within higher education. The paper demonstrates that transformational leadership elevates organizational performance and significantly influences lecturers' work motivation by fostering an inspiring, collaborative, and empowering academic environment. Furthermore, this research enhances the current corpus of literature on work motivation by highlighting that lecturer motivation is shaped not just by individual factors, but by situational factors, particularly the quality of organizational leadership. Consequently, these findings extend the applicability of transformational leadership theory in knowledge-intensive organizations and point out the significance of leadership as a tactical instrument for cultivating intrinsic motivation among academic personnel.

Further, transformational leadership has a significant and positive impact on affective commitment (Hypothesis 2 is accepted). The study suggests that leaders who communicate an inspiring vision, individualize attention to each organizational member, and facilitate each member's development can improve members' emotional attachment to the institution. This finding is consistent with previous research that shows the influence of transformational leadership on affective commitment (Wiseman et al., 2018; Lin & Shiqian, 2018; Sumardi et al., 2016). The result is consistent with organizational commitment theory (Blau, 1964), social exchange theory (Herscovitch & Meyer,

2002), and self-determination theory (Ryan & Deci, 2000). Some studies suggest that contextual considerations, such as organizational culture or reward systems, could affect the association between organizational commitment and transformational leadership (Hoch et al., 2018). Our finding, however, shows that the link is strong in the domain of higher education institutions. This is consistent with the characteristics of long-lasting responders who may internalize organizational principles and develop closer ties with their institutions. This paper extends the theory by identifying the effect of transformational leadership on affective commitment as not solely a structural issue but also a psychological approach, such as intrinsic motivation, trust-based social relations, and internalizing organizational values in higher education institutions.

The results suggest that work motivation has a positive effect on the affective commitment of lecturers (Hypothesis 3 is accepted); thus, work motivation is an important factor in developing a sentimental bond with the organization. The result is congruent with Meyer and Allen's (1991) theory of organizational commitment and self-determination theory (Ryan & Deci, 2000). This finding is also in alignment with various empirical studies showing that work motivation significantly contributes to increased work engagement and emotional commitment to organizations (Kuvaas et al., 2017; Olafsen et al., 2018; Van den Broeck et al., 2021). In particular, the results align with those of Marta et al. (2021) and Sinani (2016), who showed that an individual's understanding of work goals and work meaning can increase emotional investment in the organization, thereby strengthening affective commitment to the institution. In the academic environment, the development of work motivation and affective commitment is reflected through autonomy in carrying out academic activities, opportunities for professional competency development, and collaborative relationships in the scientific community. This result provides a conceptual enhancement through fortification and expansion of the application of the triadic framework of organizational commitment from Meyer and Allen (1991) and self-determination theory (Ryan & Deci, 2000) in the context of higher education. The findings show that work motivation not only plays a role as a factor that improves

individual performance but is also the main psychological mechanism that encourages the formation of affective commitment through the internalization of work goals and meanings, thereby strengthening lecturers' emotional attachment to the institution. Furthermore, this research broadens the scope of the two theories by demonstrating that, for lecturers, fulfilling psychological needs, such as having autonomy in performing the activities of higher education, opportunities to develop professional competencies, and fostering collaborative relationships within the academic community, strengthens intrinsic motivation and ultimately increases affective commitment. Thus, this paper offers empirical proof that the mechanism of affective commitment formation, as described by the theory of organizational motivation and commitment, also applies to knowledge-intensive organizations. This finding enriches the academic discourse on the origins of organizational commitment and expands the generalization of both theories to the academic environment, which has different work characteristics, values, and goals compared to business organizations.

Work motivation does not have a significant influence on entrepreneurial orientation (Hypothesis 4 is rejected), indicating that an individual's drive to work well does not automatically foster the emergence of innovative, proactive, and risk-taking behaviors in an academic context. This paper adds to the understanding that entrepreneurial orientation is not just a function of internal motivational drivers but is also considerably shaped by the organizational environment and the structure of work that allows individuals to exercise their creativity and initiative. In the literature on organizational entrepreneurship, entrepreneurial orientation is generally conceptualized as the product of interactions between human traits and the organizational environment that sustains risk-taking and innovation (Lumpkin & Dess, 1996). Therefore, even with a motivation to work, a bureaucratic work environment, indistinct job roles, and restricted scope for experimenting could impede the development of an entrepreneurial attitude. Moreover, work motivation more frequently leads to better job performance and dedication to work than directly influencing entrepreneurial behavior (Ryan & Deci, 2000; Frese & Gielnik, 2014). Therefore, the finding demonstrates that the connection between work motivation and entrepreneurial orientation is indirect and may be affected by factors such as

organizational support, job autonomy, or affective loyalty to institutions. The result is academically relevant, as it enhances the body of literature by proving that in the domain of higher education, improving the entrepreneurial orientation of lecturers is not enough to improve work motivation alone, but it needs an organizational ecosystem that legitimizes innovation, experimentation, and the initiation of entrepreneurial ventures within the academic setting.

The finding indicated that affective commitment positively affected entrepreneurial orientation, thereby accepting Hypothesis 5. This finding indicates that an individual's emotional affiliation with the organization acts as a psychological process that initiates the emergence of innovative, proactive, and opportunity-oriented behaviors. This result aligns with theory that individuals possessing elevated affective commitment are inclined to be more courageous, proactive, and creative in supporting organizational success, thereby strengthening entrepreneurial orientation, such as innovation, initiative, and the courage to take opportunities (Lumpkin & Dess, 1996). This finding aligns with prior research demonstrating that emotional attachment to organizations enhances an individual's tendency to act innovatively and to be oriented toward organizational development (Abdel Azeem, 2018; Valeau, 2022; Hernández-Linares et al., 2022). Furthermore, we add to the organizational entrepreneurship literature by showing that entrepreneurial orientation is influenced not only by structural factors such as strategy, resources, and leadership (Covin & Wales, 2019), but also by individual psychological factors manifested in affective commitment. Put differently, emotional attachment to the organization is a psychological foundation that can increase the individual's tendency to take initiative, look for new opportunities, and contribute to organizational innovation in a sustainable fashion. Therefore, this finding confirms that strengthening affective commitment influences organizational loyalty and has a crucial position in encouraging the advancement of entrepreneurial orientation, which can improve the organization's capacity for adaptation and innovation in the face of increasingly competitive environmental dynamics.

Another trend observed was that affective commitment has no influence on performance (Hypothesis 6 is rejected). Affective commitment to an orga-

nization does not always lead to improved outcomes. This discovery diverges from the outcomes of prior research (Suryaman, 2018; Ani et al., 2020; Supriyanto, 2018). Attitudinal theory suggests that feelings are related to emotional bonds, motivation, and the tendency to act. Good workplace behaviors result from motivation to act, not from feelings; they are action-directed rather than emotion-driven. The finding suggests that affective commitment has no influence on performance, thereby enhancing attitude theory by illustrating that emotional attachment to the organization does not necessarily result in improved performance. This finding affirms that while affective commitment fosters an affiliation and allegiance, enhancements in performance are primarily influenced by motivation to act and actual work behaviors rather than merely emotional connections. This study enhances the literature on organizational commitment by highlighting that the association between affective commitment and performance is contextual and likely affected by factors such as motivation, leadership, or organizational culture. Consequently, affective commitment should be regarded as a psychological prerequisite that must be actualized in practice to enhance performance.

The results support Rahim and Lajin (2017), Ismail et al. (2012), and Meilani and Ginting (2018), as an entrepreneurial mind can enhance performance (Hypothesis 7 is accepted). Open-minded lecturers tended to be more successful, particularly in developing instructional resources. This showed a tendency toward higher acceptance of novel teaching methods. The situation also suggests that many educators can focus more on classroom teaching than on academic research. The trend may be due to some participants not being permanent or having high academic status, even though most were assistant professors. Consequently, Indonesia needs to work harder to conduct research that will enhance its education system. The theoretical contribution of this finding is to support the idea that an entrepreneurial mindset plays a critical role in improving individual performance, especially in higher education. The research showed that lecturers who have an entrepreneurial mindset are more open to innovation, more flexible in the development of resources, and more receptive to new teaching methodologies. This finding further extends the previous empirical evidence, indicating that the entrepreneurial mindset is not only appli-

cable in the business context but also improves academic performance through adaptability, innovation, and learning new and better ways to learn.

The research investigated the connections among the components of the model. A new approach to analysis was also employed to examine the connections among entrepreneurial orientation, emotional attachment to the job, work motivation, and transformational leadership. The findings indicated that emotional attachment and work motivation mediated the relationship between transformational leadership and entrepreneurial orientation. This demonstrates the association among the factors, with transformational leadership having the capacity to enhance job satisfaction and work motivation in the environment and thus creating an entrepreneurial spirit. This result aligns with previous research conducted by Zavaleta et al. (2025), Jensen and Bro (2018), Nguyen et al. (2019), Udin (2023), and Udin et al. (2023), who find that transformational leadership has a positive impact on employee motivation. The results were also consistent with the reports of Marta et al. (2021), Sinani (2016), Valeau (2022), Kusumawijaya (2019), and Abdel Azeem (2018), which identified an association between work motivation and affective commitment, and between entrepreneurial orientation and affective commitment.

The next step in the mediation analysis was to analyze the association between lecturer performance, orientation toward entrepreneurship, work motivation, and affective commitment. The analysis revealed that work motivation influences lecturer performance through affective commitment and entrepreneurial orientation. This suggested that highly motivated lecturers could improve their teaching performance by enhancing their attachment to work and ability to think entrepreneurially. The finding agreed with the results of Abdel Azeem (2018) and Hernández-Linares et al. (2022), who investigated the correlation between affective commitment and work motivation. This trend also aligns with research linking emotional commitment to entrepreneurial orientation, as reported by Valeau (2022), Hernández-Linares et al. (2022), and Abdel Azeem (2018). Moreover, Rahim and Lajin (2017), Ismail et al. (2012), and Meilani and Ginting (2018) also concentrated on the effect of an entrepreneurial mindset on academic performance in academic institutions.

CONCLUSION

This study explored the relationships between transformational leadership, work motivation, affective commitment, entrepreneurial orientation, and lecturer performance in private higher education institutions in Indonesia. The findings indicated that transformational leadership has a positive relationship with work motivation and affective commitment, and work motivation has a strong relationship with affective commitment. Affective commitment is positively correlated with entrepreneurial orientation. Entrepreneurial orientation is positively correlated with lecturer performance. Work motivation is not directly related to entrepreneurial orientation, and affective commitment is not directly associated with lecturer performance. The mediation results should be interpreted carefully. The evidence supports the role of work motivation in mediating the association between transformational leadership and affective commitment, and the role of affective commitment in connecting motivation with entrepreneurial orientation. The sequential mediation results suggest two ordered patterns: transformational leadership is indirectly associated with entrepreneurial orientation through work motivation and affective commitment, and work motivation is indirectly associated with lecturer performance through affective commitment and entrepreneurial orientation. However, the results must not be understood as conclusive proof that transformational leadership directly or fully improves lecturer performance through the entire chain of work motivation, affective commitment, and entrepreneurial orientation. The data indicate indirect associations within a cross-sectional model rather than causal confirmation.

The results contribute to the discussion of lecturers' performance by showing that psychological readiness and entrepreneurial academic behavior should be considered together. Motivation and affective commitment seem to be important conditions, but not sufficient by themselves to produce higher performance unless they are accompanied by innovative, proactive, and opportunity-oriented academic behavior. The findings for private universities suggest that leadership development should be embedded in an academic environment that encourages experimentation, research collaboration, new teaching methodologies, and institutional initiatives.

This study has several limitations. They include the cross-sectional survey design and non-probability purposive sampling, which preclude causal inference and limit generalizability. The sample was also not homogeneous in terms of academic rank, level of education, and gender; the majority of the respondents were assistant professors, master's degree holders, and male lecturers. Future research should use longitudinal or multi-wave designs, probability or stratified sampling when possible, and more balanced samples across academic rank, institutional type, and region. Future research could also include contextual variables such as organizational support, work autonomy, innovation climate, and institutional resources to explain when motivation and affective commitment are more likely to translate into entrepreneurial academic behavior and lecturer performance.

AUTHOR CONTRIBUTION

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REFERENCES

1. Aarakit, S. M., & Kimbugwe, K. (2015). The relationship between intrapreneurial orientation and firm performance. *Global Advanced Research Journal of Social Science (GARJSS)*, 4(1), 6-10. Retrieved from <https://garj.org/articles/8213996503082015>
2. Abdel Azeem, M. T. (2018). Measuring the mediating role of entrepreneurial orientation on the relationship between affective organizational commitment and organizational responsiveness: A study of Egyptian incubated startups in ICT sector. *Scientific Journal for Economic & Commerce*, 48(3), 625-685. <https://doi.org/10.21608/JSEC.2018.39421>
3. Aftab, J., Veneziani, M., Sarwar, H., & Ishaq, M. I. (2024). Entrepreneurial orientation and firm performance in SMEs: The mediating role of entrepreneurial competencies and moderating role of environmental dynamism. *International Journal of Emerging Markets*, 19(10), 3329-3352. <https://doi.org/10.1108/IJO-EM-07-2021-1151>
4. Anyalor, M., Nwali, A. C., & Agbionu, U. C. (2018). Employee engagement and performance of lecturers in Nigerian tertiary institutions. *Journal of Education & Entrepreneurship*, 5(2), 69-87. Retrieved from <https://hdl.handle.net/10520/EJC-155082e137>
5. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
6. Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, 36(10), 1579-1596. <https://doi.org/10.1002/smj.2298>
7. Andriani, C., Zona, M. A., & Thaib, I. (2024). Entrepreneurial orientation, business performance, and traditional leadership style. *Cogent Business and Management*, 11(1), Article 2302194. <https://doi.org/10.1080/23311975.2024.2302194>
8. Ani, Y., Fajar, E. S., Teni, L., & Doni, P. A. (2020). The lecturer's performance: Mediation of commitment. *International Journal of Scientific and Technology Research*, 9(6), 146-152. Retrieved from <https://ijstr.org/final-print/jun2020/The-Lecturers-Performance-Mediation-Of-Commitment.pdf>
9. Arbuckle, J. L. (2013). *Amos (Version 22.0)* [Software]. SPSS/IBM. Retrieved from https://public.dhe.ibm.com/software/analytics/spss/documentation/amos/22.0/en/Manuals/IBM_SPSS_Amos_User_Guide.pdf
10. Banks, G. C., McCauley, K. D., Gardner, W. L., & Guler, C. E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. *The Leadership Quarterly*, 27(4), 634-652. <https://doi.org/10.1016/j.leaqua.2016.02.006>
11. Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17(1), 112-121. Retrieved from <http://www.jstor.org/stable/40862298>
12. Beheshtifar, M., & Herat, B. H. (2013). To promote employees commitment via perceived organizational support. *International Journal of Academic Research in Business and Social Sciences*, 3(1), 306-313. Retrieved from https://hrmars.com/papers_submitted/9452/to-promote-employees-commitment-via-perceived-organizational-support.pdf
13. Blau, P. M. (1964). Justice in social exchange. *Sociological Inquiry*, 34, 193-206. <http://dx.doi.org/10.1111/j.1475-682X.1964.tb00583.x>
14. Ch, H. (2024). Work motivation and organizational commitment among IT employees. *International Journal for Research in Applied Science and Engineering Technology*, 12(5). <https://doi.org/10.22214/ijraset.2024.62388>
15. Covin, J. G., & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10, 75-87. <http://dx.doi.org/10.1002/smj.4250100107>
16. Covin, J. G., & Wales, W. J. (2019). Crafting high-impact entrepreneurial orientation research: Some suggested guidelines. *Entrepreneurship Theory and Practice*, 43(1), 3-18. <https://doi.org/10.1177/1042258718773181>
17. de Jong, J., & den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23-

36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
18. Farrukh, M., Chong, W. Y., Mansori, S., & Ramzani, S. R. (2017). Intrapreneurial behavior: The role of organizational commitment. *World Journal of Entrepreneurship, Management, and Sustainable Development*, 13(3), 243-256. <https://doi.org/10.1108/WJEMSD-03-2017-0016>
19. Frese, M., & Gielnik, M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 413-438. <https://doi.org/10.1146/annurev-orgpsych-031413-091326>
20. Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., van den Broeck, A., Aspel, A. K., Bellerose, J., Benabou, Ch., Chemolli, E., Güntert, S.T., Halvari, H., Indiyastuti, D.L., Johnson, P.A., Molstad, M.H., Naudin, M., Ndao, A., Olafsen, A.H., Roussel, P., Wang, Zh., & Westbye, C. (2015). The multidimensional work motivation scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology*, 24(2), 178-196. <https://doi.org/10.1080/1359432X.2013.877892>
21. Ghaffari, S., Shah, I. M., Burgoyne, J., Nazri, M., & Salleh, J. R. (2017). The influence of motivation on job performance: A case study at Universiti Teknologi Malaysia. *Australian Journal of Basic and Applied Sciences*, 11(4), 92-99. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2969825
22. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning. Retrieved from <https://www.cengage.uk/c/multivariate-data-analysis-8e-hair-babin-anderson-black/9781473756540/?searchIsbn=9781473756540>
23. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Dank, N.P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R* (1st ed.). Springer. <https://doi.org/10.1007/978-3-030-80519-7>
24. He, W., Tian, G., Li, Q., Liu, L. B., & Zhou, J. (2022). Examining the relationships between student teacher professional identity tensions and motivation for teaching: Mediating role of emotional labor strategies in China. *Sustainability*, 14(9), Article 12727. <https://doi.org/10.3390/su141912727>
25. Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18(3), 66-67. <https://doi.org/10.1136/eb-2015-102129>
26. Hernández-Linares, R., López-Fernández, M. C., Naranjo-Sánchez, M. J., & Fielden, L. V. (2022). Affective and emotional determinants of entrepreneurial orientation within family firms. In I. Management Association (Ed.), *Research Anthology on Strategies for Maintaining Successful Family Firms* (pp. 794-818). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-6684-3550-2.ch036>
27. Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474-487. <https://doi.org/10.1037/0021-9010.87.3.474>
28. Hoch, J., Bommer, W., Dulebohn, J., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, 20(10), 1-26. <https://doi.org/10.1177/0149206316665461>
29. Ismail, N. N. H. N., Mahmood, R., & Rahim, R.A. (2012). The relationship between intrapreneurial orientation and job performance among academicians in Malaysian public universities. In *Proceedings of ASEAN Entrepreneurship Conference* (pp. 91-100). Retrieved from <https://ir.uitm.edu.my/id/eprint/12550/1/12550.pdf>
30. Jensen, U. T., & Bro, L. L. (2018). How transformational leadership supports intrinsic motivation and public service motivation: The mediating role of basic need satisfaction. *American Review of Public Administration*, 48(6), 535-549. <https://doi.org/10.1177/0275074017699470>
31. Kim, W., Kolb, J. A., & Kim, T. (2013). The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review*, 12(3), 248-276. <https://doi.org/10.1177/1534484312461635>
32. Kumari, N., & Afroz, N. (2013). The impact of affective commitment in employee life satisfaction. *Global Journal of Management and Business Research Interdisciplinary*, 13(7), 24-30. Retrieved from https://globaljournals.org/GJM-BR_Volume13/4-The-Impact-of-Affective-Commitment.pdf
33. Kusumawijaya, I. K. (2019). The antecedent of entrepreneurial orientation: An entrepreneurial commitment view. *International Review of Management and Marketing*, 9(6), 185-192. <https://doi.org/10.32479/irmm.8971>
34. Kuvaas, B., Buch, R., Weibel, A., Dysvik, A., & Nerstad, C. (2017). Do intrinsic and extrinsic motivation relate differently to employee outcomes? *Journal of Economic Psychology*, 61, 244-258. <https://doi.org/10.1016/j.joep.2017.05.004>
35. Lin, L., & Shiqian, W. (2018). The mediating effect of organizational commitment on leadership type and job performance. *Journal of World Economic Research*, 7(1), 14-20. <https://doi.org/10.11648/j.jwer.20180701.12>
36. Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172. <https://doi.org/10.5465/amr.1996.9602161568>
37. Marta, I. A., Supartha, I. W., Dewi, I. G., & Wibawa, I. M. (2021). Job enrichment, empowerment, and organizational commitment: The mediating role of work motivation and job satisfaction. *Journal of Asian Finance, Economics and Business*, 8(1), 1031-1040. <https://doi.org/10.13106/jafeb.2021.vol8.no1.1031>

38. Meilani, A., & Ginting, G. (2018). The variables and dimensions of entrepreneurial orientation perceived by lecturer of higher education institutions. *Review of Integrative Business and Economics Research*, 7(suppl_2), 404-410. Retrieved from https://buscompress.com/uploads/3/4/9/8/34980536/riber_7-s2_uk18-112_404-410.pdf
39. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
40. Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia. (2013). *Regulation of the minister of state for administrative reform and bureaucratic reform No. 17 of 2013 concerning the functional positions of lecturers and their credit scores*. Retrieved from <https://lldikti4.kemdikisaintek.go.id/download/peraturan-menteri-pendayagunaan-aparatur-negara-dan-reformasi-birokrasi-nomor-17-tahun-2013-tentang-jabatan-fungsional-dosen-dan-angka-kreditnya/>
41. Nguyen, H. M., Mai, L. T., & Huynh, T. L. (2019). The role of transformational leadership toward work performance through intrinsic motivation: A study in the pharmaceutical field in Vietnam. *Journal of Asian Finance Economics*, 6(4), 201-212. <https://doi.org/10.13106/jafeb.2019.vol6.no4.201>
42. Nguyen, T. P. L., & Doan, H. X. (2023). Psychological empowerment and employees' creativity in Vietnam telecommunications enterprises: The mediating role of creative process engagement and intrinsic motivation. *International Journal of Emerging Markets*, 18(9), 3264-3282. <https://doi.org/10.1108/IJOEM-01-2021-0080>
43. Olafsen, A. H., Deci, E. L., & Halvari, H. (2018). Basic psychological needs and work motivation: A longitudinal test of directionality. *Motivation and Emotion*, 42(2), 178-189. <https://doi.org/10.1007/s11031-017-9646-2>
44. Perreira, T., & Berta, W. (2016). Using focus groups to modify the workplace affective multidimensional questionnaire (WACMQ) for use in health care. *Journal of Health and Human Services Administration*, 39(3), 407-424. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/29389100/>
45. Pradhan, R. K., & Jena, L. K. (2017). Employee performance at workplace: Conceptual model and empirical validation. *Business Perspective and Research*, 5(1), 1-17. <https://doi.org/10.1177/2278533716671630>
46. Rahim, H. L., & Lajin, N. F. M. (2017). The effect of entrepreneurial orientation towards job performance among lecturers. *International Academic Research Journal of Business and Technology*, 3(1), 1-5. Retrieved from https://www.iarjournal.com/wp-content/uploads/BT_2017_1_1-5.pdf
47. Reza, M. H. (2019). Components of transformational leadership behavior. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 5(3), 119-129. Retrieved from <https://eprajournals.com/IJMR/article/1310/abstract>
48. Robinson, R. S. (2023). Purposive sampling. In F. Maggino (Ed.), *Encyclopedia of Quality of Life and Well-Being Research*. Cham: Springer. https://doi.org/10.1007/978-3-031-17299-1_2337
49. Rotich, A. K., Wanjau, K. L., & Namusonge, G. (2015). Moderating role of entrepreneurial orientation on the relationship between relationship lending and financial performance of manufacturing SMEs in Kenya. *European Journal of Business and Management*, 7(18), 198-209. Retrieved from <https://www.iiste.org/Journals/index.php/EJBM/article/view/23201/23760>
50. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78. <https://doi.org/10.1037/0003-066X.55.1.68>
51. Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press. <https://doi.org/10.1521/978.14625/28806>
52. Sarwani, S., Suprihadi, H., Feriswara, D., Lestari, D. S., & Listyawati, L. (2022). Covid-19 pandemic moderating the influence of competence, work motivation and entrepreneurship orientation on business performance and sharia perspective. *Ikonomika: Jurnal Ekonomi Dan Bisnis Islam*, 7(2), 283. <https://doi.org/10.24042/febi.v7i2.15693>
53. Sinani, J. (2016). Motivational factors and organizational commitment of the educational institution's employee. *Journal of Educational and Social Research*, 6(1), 89-93. <https://doi.org/10.5901/jesr.2016.v6n1p89>
54. Soomro, B. A., & Shah, N. (2019). Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance. *South Asian Journal of Business Studies*, 8(3), 266-282. <https://doi.org/10.1108/SAJBS-12-2018-0142>
55. Sumardi, Yusuf, A. E., & Meitientje, N. N. Q. (2016). The implication of organizational culture and transformational leadership enhancement toward organizational commitment. *International Journal of Managerial Studies and Research (IJMSR)*, 4(9), 35-41. <http://dx.doi.org/10.20431/2349-0349.0409004>
56. Supriyanto. (2018). The effect of service leadership, affective commitment, and work motivation to the lecturer's performance and the quality of service in faculty of teachers training and education Lambung Mangkurat University Banjarmasin. In *Proceedings of the 1st International Conference on Educational Assessment and Policy* (vol. 2, pp. 86-97). Retrieved from <https://pdfs.semanticscholar.org/dd8b/7caa93181d7747e651a7f5d0ad2f1e2f8bae.pdf>
57. Suryaman, S. (2018). Indonesian private university lecturer performance improvement model to improve a sustainable organization

- tion performance. *International Journal of Higher Education*, 7(1), 59-68. <https://doi.org/10.5430/ijhe.v7n1p59>
58. Suwarno, H. L., Margaretha, Y., & Zirho, R. K. (2026a). Eudaimonic well-being and parental influence on student's entrepreneurial orientation and intention. *Humanities and Social Science Letters*, 14(1), 202-219. <https://doi.org/10.18488/73.v14i1.4700>
59. Suwarno, H. L., Malinda, M., & Jocelyn, V. (2026b). Enhancing the scope of startup activities through eudaimonic well-being: The role of mediation of entrepreneurial self-efficacy. *International Review of Management and Marketing*, 16(6), 327-335. <https://doi.org/10.32479/irmm.24085>
60. Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson Education. Retrived from https://ndl.ethernet.edu.et/bitstream/123456789/27657/1/Barbara%20G.%20Tabachnick_2013.pdf
61. Udin, U. (2023). A mediation-moderation model of transformational leadership and intrinsic work motivation for nurturing employee performance. *Journal of Social Economics Research*, 10(2), 22-33. <https://doi.org/10.18488/35.v10i2.3321>
62. Udin, U., Dharma, R. D., Dananjoyo, R., & Shaikh, M. (2023). The role of transformational leadership on employee performance through organizational learning culture and intrinsic work motivation. *International Journal of Sustainable Development and Planning*, 18(1), 237-246. <https://doi.org/10.18280/ijstdp.180125>
63. Valeau, P. (2022). Commitment-based persistence in the face of venture decline: Towards a renewed approach to small business orientation. *Entrepreneurship and Regional Development*, 35(3-4), 366-381. <https://doi.org/10.1080/08985626.2022.2152107>
64. Van den Broeck, A., Ferris, D., Chang, C-H., & Rosen, C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, 42(5), 1195-1229. <https://doi.org/10.1177/0149206316632058>
65. Van den Broeck, A., Howard, J. L., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. *Organizational Psychology Review*, 11(3), 240-273. <https://doi.org/10.1177/20413866211006173>
66. Vroom, V. H. (1964). *Work and motivation*. Wiley. Retrieved from <https://www.wiley.com/en-us/shop/psychology-general/work-and-motivation-p-9780787900304>
67. Wales, W. J. (2016). Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal: Researching Entrepreneurship*, 34(1), 3-15. <https://doi.org/10.1177/0266242615613840>
68. Wasityastuti, W., Susani, Y. P., Prabandari, Y. S., & Rahayu, G. R. (2018). Correlation between academic motivation and professional identity in medical students in the Faculty of Medicine of the Universitas Gadjah Mada Indonesia. *Educacion Medica*, 19(1), 23-29. <https://doi.org/10.1016/j.edumed.2016.12.010>
69. Wiseman, N., Ngirande, H., Setati, S. T., & Zhuwao, S. (2018). Transformational leadership and employee organisational commitment in a rural-based higher education institution in South Africa. *SA Journal of Human Resource Management*, 16(10), Article a984. <https://doi.org/10.4102/sajhrm.v16i0.984>
70. Xu, L., Duan, P., Ma, L., & Dou, S. (2023). Professional identity and self-regulated learning: The mediating role of intrinsic motivation and the moderating role of sense of school belonging. *SAGE Open*, 13(2), 1-11. <https://doi.org/10.1177/21582440231177034>
71. Yildiz, S., & Gul, R. (2016). The effect of leadership style on the organizational culture: Evidence from Turkey. *European Journal of Business and Management*, 8(9), 51-58. Retrieved from <https://iiste.org/Journals/index.php/EJBM/article/view/29565/30358>
72. Zavaleta, G. A., Lopez, M. A. S., Gallegos, W. L. A., Chuquizuta, D. E. A., & Hernandez, R. (2025). Transformational leadership to improve the intrinsic satisfaction of public workers in northern Peru. *Humanities and Social Sciences Letters*, 13(4), 1331-1343. <https://doi.org/10.18488/73.v13i4.4498>