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Beyond AI Adoption: AI-Augmented Job Crafting, Academic Experimentation Climate, and Lecturers' Innovative Work Behavior

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ABSTRACT

This research seeks to investigate how AI-Augmented Job Crafting and the perception of an Academic Experimentation Climate influence Lecturers' Innovative Work Behavior, highlighting Creative Self-Efficacy as a key mediating factor. A quantitative method was used, following a cross-sectional research framework. Data collection involved administering questionnaires to 43 full-time lecturers at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B) located in Medan, Indonesia, utilizing a total-sampling strategy. The analysis of the data was performed through Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS 3. Findings reveal that AI-Augmented Job Crafting significantly and positively affects both Innovative Work Behavior and Creative Self-Efficacy. Additionally, the Perceived Academic Experimentation Climate shows a positive and significant impact on both Creative Self-Efficacy and Innovative Work Behavior. Moreover, Creative Self-Efficacy positively affects Innovative Work Behavior and serves as a mediator between AI-Augmented Job Crafting, the Perceived Academic Experimentation Climate, and Innovative Work Behavior. These results emphasize the significance of employing AI, cultivating an academic atmosphere that encourages experimentation, and enhancing lecturers' creative confidence to promote innovative work behaviors. This research offers valuable insights for higher education institutions aiming to create technology-driven, innovation-focused academic settings.

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INTRODUCTION

The rapid advancement of artificial intelligence (AI) is transforming academic work and reshaping how higher education institutions create, disseminate, and apply knowledge. AI-enabled technologies offer lecturers opportunities to enhance teaching effectiveness, improve research productivity, develop innovative instructional materials, and optimize academic activities (Kosasih & Salqaura, 2024). However, technological advancement does not automatically translate into innovative work outcomes (Lesmana, 2021). The realization of AI-enabled innovation depends on individuals' proactive adaptation, supportive organizational environments, and psychological resources (Sofiyan et al., 2026).

Consequently, understanding the mechanisms underlying AI-enabled academic innovation has become an important research agenda in higher education management (H. A. Hasibuan et al., 2026).

Innovative Work Behavior (IWB) reflects individuals' ability to generate, promote, and implement novel ideas to improve work processes and outcomes. In higher education, innovative behavior encompasses pedagogical innovation, research development, interdisciplinary collaboration, and community engagement. Within Indonesian higher education, these activities support the Three Pillars of Higher Education (*Tridharma Perguruan Tinggi*), comprising teaching, research, and community service. As institutions face increasing demands for digital transformation and academic competitiveness, lecturers' ability to translate technological opportunities into innovative practices becomes increasingly important (Kazmaci et al., 2025).

AI-Augmented Job Crafting (AI-AJC) represents an emerging perspective on proactive work redesign in technology-intensive environments. Extending conventional job crafting, AI-AJC refers to individuals' proactive efforts to redesign their tasks, working relationships, and work processes by integrating AI-enabled resources. Rather than positioning lecturers as passive recipients of technological change, this concept emphasizes their active engagement in reconfiguring academic responsibilities through human–AI collaboration. Such proactive behavior may facilitate the exploration of alternative teaching strategies, novel research approaches, and creative solutions to academic challenges (Gai et al., 2026).

Nevertheless, individual initiative may be insufficient to facilitate innovation without supportive environmental conditions. Perceived Academic Experimentation Climate (PAEC) reflects lecturers' perceptions of institutional support for experimentation, exploration, calculated risk-taking, and learning from unsuccessful initiatives. An experimentation-oriented academic environment may reduce perceived barriers to innovation, encourage knowledge exploration, and provide opportunities to challenge established practices. Conversely, restrictive institutional procedures and limited tolerance for failure may discourage innovative initiatives.

Social Cognitive Theory (SCT) provides a theoretical foundation for integrating these relationships by explaining human behavior through reciprocal interactions among behavioral, environmental, and personal cognitive factors (Zhang et al., 2024). Within this framework, AI-AJC represents proactive behavior, PAEC reflects environmental support, and Creative Self-Efficacy (CSE) constitutes a personal cognitive resource. CSE refers to individuals' beliefs in their ability to generate creative ideas and develop novel solutions . Lecturers with stronger creative self-efficacy may demonstrate greater confidence in exploring AI technologies, overcoming academic challenges, and implementing innovative practices (Dara et al., 2022). Accordingly, CSE is proposed as a psychological mechanism connecting proactive work redesign and environmental support with IWB.

Despite growing scholarly attention to AI utilization, job crafting, and workplace innovation, empirical evidence remains fragmented. (Nathaniel & Dewi, 2024) found that conventional job crafting did not significantly influence innovative work behavior directly but operated indirectly through work engagement. Conversely, (Lin & He, 2026) reported that AI

utilization facilitates job crafting and enhances employees' innovative behavior. Although these studies examine different constructs and organizational settings, their findings highlight the need to investigate the psychological mechanisms connecting proactive work redesign with innovation.

Furthermore, (Xu et al., 2025) demonstrated that challenge and hindrance appraisals of AI generate different job crafting responses, but provided limited explanations of how AI-assisted work redesign relates to creative confidence and innovative behavior. Similarly, (Jun, 2026) identified positive relationships among AI literacy, AI job crafting, and innovative work behavior, emphasizing psychological need satisfaction as an explanatory mechanism. However, the mediating role of CSE and the relevance of academic experimentation climate remain insufficiently explored.

These findings reveal three interrelated research gaps. First, an empirical gap concerns differences in the reported relationships between job crafting and innovative work behavior, suggesting the importance of examining intervening psychological mechanisms. Second, a theoretical gap arises from the limited integration of AI-enabled proactive behavior, experimentation climate, and creative self-beliefs within a unified explanatory framework. Third, a contextual gap emerges because the reviewed studies predominantly focus on corporate employees and managers rather than lecturers, whose professional responsibilities involve knowledge creation, academic autonomy, and multidimensional institutional demands.

To address these gaps, this study develops an integrative model grounded in SCT. Its proposed novelty lies in positioning AI-AJC and PAEC as behavioral and environmental antecedents of IWB, respectively, while examining CSE as a mediating psychological mechanism. Unlike conventional technology adoption perspectives, this study emphasizes lecturers' proactive utilization of AI to redesign academic work.

Theoretically, this research extends the application of SCT to AI-enabled academic environments and advances understanding of the psychological mechanisms underlying innovative work behavior. Practically, it provides insights for higher education institutions in developing AI-enabled professional development programs, cultivating experimentation-oriented academic environments, and strengthening lecturers' creative confidence.

Accordingly, this study examines the direct relationships of AI-Augmented Job Crafting and Perceived Academic Experimentation Climate with Creative Self-Efficacy and Innovative Work Behavior, as well as the mediating role of Creative Self-Efficacy among permanent lecturers at the Institut Bisnis Informasi Teknologi dan Bisnis, Medan, Indonesia.

METHODS

Research Approach

This study applies a quantitative approach to explore the relationships among AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, Creative Self-Efficacy, and the Innovative Work Behavior of educators. Employing a quantitative method is appropriate for testing the proposed hypotheses and examining both direct and indirect effects among the variables being researched. A well-organized questionnaire was used for collecting data,

which was shared through Google Forms to facilitate the data gathering process and provide better accessibility for respondents.

Research Design

This research utilizes a cross-sectional approach, gathering information during one specific moment. The investigation centers on full-time educators at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B), located in Medan, Indonesia. The cross-sectional method is suitable for analyzing the connections between the study variables in real academic work settings without altering the environment of the research.

Population and Sampling Method

The participants in this research comprise 43 full-time faculty members at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B) located in Medan, Indonesia. Due to the relatively limited size of the population, this research utilizes a total sampling method, incorporating every individual from the population as part of the study sample. Thus, the resulting sample includes all 43 full-time lecturers. The criteria for including respondents are as follows: (1) they must be full-time lecturers at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B), (2) they need to actively engage in the Three Pillars of Higher Education (Tridharma Perguruan Tinggi), which encompasses teaching, research, and service to the community, and (3) they should be willing to voluntarily take part in the research. The application of total sampling is anticipated to yield a detailed representation of the full-time lecturers within the institution.

Research Instrument

The research instrument is made up of measurement elements that were modified from earlier studies focused on AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, Creative Self-Efficacy, and Innovative Work Behavior. These measurement elements were tailored to fit the higher education environment, especially concerning the professional duties and academic roles of full-time lecturers. Before the primary data gathering, the questionnaire underwent a pre-test to evaluate the clarity, legibility, and relevance of the measurement elements. Minor changes were implemented based on the feedback received to enhance the understanding and appropriateness of the research instrument. Table 1 includes all measurement elements, their corresponding dimensions, and sources. A five-point Likert scale was utilized for each item, with a range from 1 (strongly disagree) to 5 (strongly agree). This scale aimed to gather participants' perceptions and evaluations regarding the research constructs.

Table 1. Measurement Items

Variables	Code	Indicator Dimension	Source
AI-Augmented Job Crafting (AIJC)	AIJC1	Task crafting through AI utilization	Li et al. (2024)
	AIJC2	Relational crafting supported by AI	

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Variables	Code	Indicator Dimension	Source
	AIJC3	Cognitive crafting through AI integration	
	AIJC4	Proactive adaptation of teaching tasks using AI	
	AIJC5	AI-assisted development of teaching materials	
	AIJC6	AI-supported problem-solving in academic activities	
	AIJC7	Exploration of new work methods through AI	
Perceived Academic Experimentation Climate (PAEC)	PAEC1	Support for experimenting with new teaching methods	(Du & Chang 2023)
	PAEC2	Freedom to explore innovative academic ideas	
	PAEC3	Encouragement of creative approaches to teaching	
	PAEC4	Openness to trying new academic practices	
	PAEC5	Support for learning from mistakes and failures	
	PAEC6	Opportunities to test new teaching strategies	
	PAEC7	Exchange of innovative ideas among lecturers	
	PAEC8	Institutional support for academic experimentation	
	PAEC9	Tolerance for calculated risks in academic activities	
Creative Self-Efficacy (CSE)	CSE1	Confidence in generating new ideas	(Kusumastuti et al., 2025).
	CSE2	Confidence in developing creative solutions	
	CSE3	Ability to think creatively when facing academic problems	
	CSE4	Confidence in producing innovative teaching methods	
	CSE5	Ability to develop original academic ideas	
	CSE6	Confidence in overcoming challenges through creativity	

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Variables	Code	Indicator Dimension	Source
	CSE7	Ability to generate multiple solutions to academic problems	
	CSE8	Confidence in applying creative ideas to academic activities	
Lecturers' Innovative Work Behavior (IWB)	IWB1	Idea exploration	(Jun, 2026)
	IWB2	Idea generation	
	IWB3	Idea championing	
	IWB4	Idea promotion	
	IWB5	Development of innovative teaching methods	
	IWB6	Innovation implementation	
	IWB7	Continuous improvement of academic practices	

Data Collection Method

Data were gathered using a systematic survey that was distributed among full-time faculty members at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B) located in Medan, Indonesia. All items for measurement were taken from recognized academic sources and tailored to fit the context of higher education to maintain validity of the content. The survey included four primary constructs: AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, Creative Self-Efficacy, and Innovative Work Behavior. Each construct was evaluated using a five-point Likert scale that ranged from 1 (strongly disagree) to 5 (strongly agree). The data collection process was conducted via Google Forms, and only responses that were completely filled out were analyzed. This research utilized a total sampling approach, aiming to reach all 43 permanent lecturers within the institution.

Data Analysis Method

This research utilizes Structural Equation Modeling through the Partial Least Squares (PLS-SEM) method, carried out with SmartPLS software version 3. PLS-SEM was chosen because it is effective for predictive analysis, capable of analyzing intricate structural connections between research elements, and offers adaptability concerning assumptions about data distribution. The evaluation was performed in a two-step process. Initially, the measurement model was assessed by looking at convergent validity, discriminant validity, and the reliability of the constructs. In the second step, the structural model was analyzed by evaluating the coefficient of determination (R^2), path coefficients, t-statistics, p-values, and mediation impacts using a bootstrapping technique with 5,000 resamples. This method provides a thorough evaluation of both direct and indirect connections between AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, Creative Self-Efficacy, and Innovative Work Behavior.

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RESULTS AND DISCUSSION

Demographic Profiles of the Respondents

Table 2. Respondents' Profile (N=43)

Category	Frequency (n)	Percentage (%)
Gender		
Male	19	44.2
Female	24	55.8
Age		
< 30 years	5	11.6
30–39 years	15	34.9
40–49 years	14	32.6
≥ 50 years	9	20.9
Educational Background		
Master (S2)	37	86.0
Doctoral (S3)	6	14.0
Academic Rank		
Assistant Lecturer	20	46.5
Lecturer	20	46.5
Associate Professor	3	7.0
Years of Service		
< 5 years	10	23.3
5–10 years	16	37.2
11–15 years	10	23.3
> 15 years	7	16.2

Based on Table 2, this study involved 43 permanent lecturers at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B), Medan, Indonesia. Female respondents dominated the sample (55.8%), while male respondents accounted for 44.2%. Most respondents were aged 30–39 years (34.9%), indicating that the majority were within their productive working age. Regarding educational background, most respondents held a master's degree (S2), accounting for 86.0%, while 14.0% held a doctoral degree (S3). In terms of academic rank, Assistant Lecturers and Lecturers each represented 46.5%, while Associate Professors accounted for 7.0%. Furthermore, the majority of respondents had 5–10 years of service (37.2%). Overall, the respondents had diverse academic qualifications, professional experience, and academic ranks, providing relevant perspectives for examining AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, Creative Self-Efficacy, and Innovative Work Behavior.

Measurement Model Results

Furthermore, the measurement model (outer model) was evaluated through two main assessments: (1) construct reliability and convergent validity, and (2) discriminant validity.

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These assessments were conducted to ensure that the measurement instruments met the required standards of reliability and validity before proceeding to the structural model analysis

Table 3. Outer Model Results

Variables	Code	Statement	Outer Loading Value	Information
AI-Augmented Job Crafting (AIJC)	AIJC1	Task crafting through AI utilization	0.921	Valid
	AIJC2	Relational crafting supported by AI	0.972	
	AIJC3	Cognitive crafting through AI integration	0.946	
	AIJC4	Proactive adaptation of teaching tasks using AI	0.922	
	AIJC5	AI-assisted development of teaching materials	0.943	
	AIJC6	AI-supported problem-solving in academic activities	0.991	
	AIJC7	Exploration of new work methods through AI	0.913	
Perceived Academic Experimentation Climate (PAEC)	PAEC1	Support for experimenting with new teaching methods	0.911	Valid
	PAEC2	Freedom to explore innovative academic ideas	0.912	
	PAEC3	Encouragement of creative approaches to teaching	0.933	
	PAEC4	Openness to trying new academic practices	0.928	
	PAEC5	Support for learning from mistakes and failures	0.916	
	PAEC6	Opportunities to test new teaching strategies	0.932	
	PAEC7	Exchange of innovative ideas among lecturers	0.929	
	PAEC8	Institutional support for academic experimentation	0.918	

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Variables	Code	Statement	Outer Loading Value	Information
	PAEC9	Tolerance for calculated risks in academic activities	0.971	
Creative Self-Efficacy (CSE)	CSE1	Confidence in generating new ideas	0.965	Valid
	CSE2	Confidence in developing creative solutions	0.951	
	CSE3	Ability to think creatively when facing academic problems	0.945	
	CSE4	Confidence in producing innovative teaching methods	0.932	
	CSE5	Ability to develop original academic ideas	0.921	
	CSE6	Confidence in overcoming challenges through creativity	0.931	
	CSE7	Ability to generate multiple solutions to academic problems	0.951	
	CSE8	Confidence in applying creative ideas to academic activities	0.976	
Lecturers' Innovative Work Behavior (IWB)	IWB1	Idea exploration	0.945	Valid
	IWB2	Idea generation	0.932	
	IWB3	Idea championing	0.911	
	IWB4	Idea promotion	0.939	
	IWB5	Development of innovative teaching methods	0.945	
	IWB6	Innovation implementation	0.956	
	IWB7	Continuous improvement of academic practices	0.939	

According to Table 3, the outer loadings for each indicator linked to the four research variables, which are AI-Augmented Job Crafting (AIJC), Perceived Academic Experimentation Climate (PAEC), Creative Self-Efficacy (CSE), and Lecturers' Innovative Work Behavior (IWB),

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span from 0.911 to 0.991. Every indicator achieves outer loading values that exceed the suggested minimum of 0.70, signifying that they satisfy the standards for convergent validity. Consequently, all measurement indicators are regarded as valid and can be preserved for additional analysis without the need to exclude any indicators.

Table 4. Composite Reliability (CR)

	Variables	Cronbach's Alpha	rho_A	CR	AVE
1	AI-Augmented Job Crafting	0.982	0.983	0.975	0.925
2	Perceived Academic Experimentation Climate	0.973	0.971	0.974	0.943
3	Creative Self-Efficacy	0.963	0.971	0.973	0.942
4	Lecturers' Innovative Work Behavior	0.953	0.963	0.959	0.768

According to Table 4, every research variable shows Cronbach's Alpha scores between 0.953 and 0.982, rho_A scores from 0.963 to 0.983, and Composite Reliability (CR) scores that range from 0.959 to 0.975. These measurements surpass the suggested minimum of 0.70, suggesting that all constructs exhibit strong internal consistency and dependability. Additionally, the Average Variance Extracted (AVE) scores vary from 0.768 to 0.943, which is above the essential level of 0.50. Consequently, all research constructs fulfill the standards for reliability and convergent validity, making them appropriate for additional analysis of the structural model.

Table 5. Assessment of Discriminant Validity (Fornell-Larcker Criterion)

	Construct	1	2	3	4
1	AI-Augmented Job Crafting	0.930	0.832	0.901	0.855
2	Perceived Academic Experimentation Climate	0.872	0.951	0.953	0.896
3	Creative Self-Efficacy	0.891	0.873	0.857	0.891
4	Lecturers' Innovative Work Behavior	0.895	0.906	0.891	0.861

According to Table 5, the Fornell-Larcker standard suggests that the square root of the Average Variance Extracted (AVE) for each construct needs to exceed the correlations it has with other constructs. However, the findings reveal that this standard has not been entirely satisfied. The diagonal value for AI-Augmented Job Crafting stands at 0.930, which exceeds its correlation with other constructs. In contrast, the diagonal values for Perceived Academic Experimentation Climate (0.951), Creative Self-Efficacy (0.857), and Lecturers' Innovative Work Behavior (0.861) are lower than at least one of their correlations with other constructs. As a result, the discriminant validity has not been completely confirmed according to the Fornell-Larcker standard, and it is suggested that further evaluation, such as using the Heterotrait-Monotrait (HTMT) ratio, should be conducted.

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Structural Model Analysis (Inner Model)

R-Square

Table 6. Determination Coefficient (R-Square)

	Variable Endogen	R-Square	R-Square Adjusted
1	Creative Self-Efficacy	0.690	0.689
2	Innovative Work Behavior	0.751	0.734

According to Table 6, the R-Square value for Creative Self-Efficacy stands at 0.690, suggesting that AI-Augmented Job Crafting and Perceived Academic Experimentation Climate account for 69.0% of its variability. On the other hand, the R-Square value for Innovative Work Behavior is 0.751, meaning that AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, and Creative Self-Efficacy collectively explain 75.1% of its variability. These findings demonstrate that the structural model possesses significant explanatory strength for both endogenous variables.

Hypothesis Testing

Table 7. Path Coefficient

	Hypotheses	Path Coefficient (β)	t-value	p-value	Decision
H1	AI-Augmented Job Crafting → Innovative Work Behavior	0.524	8.767	0.000	Accepted
H2	AI-Augmented Job Crafting → Creative Self-Efficacy	0.416	6.544	0.002	Accepted
H3	Creative Self-Efficacy → Innovative Work Behavior	0.287	4.344	0.000	Accepted
H4	AI-Augmented Job Crafting → Creative Self-Efficacy → Innovative Work Behavior	0.342	4.923	0.000	Accepted
H5	Perceived Academic Experimentation Climate → Creative Self-Efficacy	0.451	5.652	0.000	Accepted
H6	Perceived Academic Experimentation Climate → Innovative Work Behavior	0.324	2.954	0.000	Accepted
H7	Perceived Academic Experimentation Climate → Creative Self-Efficacy → Innovative Work Behavior	0.345	5.562	0.003	Accepted

According to Table 7, all seven hypotheses have been upheld, as their t-values are greater than 1.96 and the p-values are lower than 0.05. AI-Augmented Job Crafting demonstrates a positive and significant influence on Innovative Work Behavior (β = 0.524) and Creative Self-Efficacy (β = 0.416). In addition, Creative Self-Efficacy has a favorable impact on Innovative Work Behavior (β = 0.287). Moreover, Creative Self-Efficacy plays a significant mediating role

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in the connection between AI-Augmented Job Crafting and Innovative Work Behavior (β = 0.342). Likewise, the Perceived Academic Experimentation Climate shows a positive correlation with both Creative Self-Efficacy (β = 0.451) and Innovative Work Behavior (β = 0.324), and its indirect impact through Creative Self-Efficacy is also significant (β = 0.345). These results validate that both independent variables enhance lecturers' Innovative Work Behavior, both directly and indirectly via Creative Self-Efficacy.

Discussion

The Effect of AI-Augmented Job Crafting on Lecturers' Innovative Work Behavior

The results indicate that AI-Augmented Job Crafting has a positive and significant effect on Lecturers' Innovative Work Behavior, with a path coefficient of 0.524, a t-value of 8.767, and a p-value of 0.000. This finding supports H1 and indicates that lecturers who proactively utilize artificial intelligence to redesign and improve their work activities tend to demonstrate higher levels of innovative work behavior.

AI-Augmented Job Crafting enables lecturers to modify their teaching tasks, develop learning materials, explore new instructional approaches, and improve problem-solving processes through AI integration. The utilization of AI provides opportunities for lecturers to perform academic activities more efficiently while exploring alternative methods to improve the quality of teaching, research, and community service. In this context, AI is not merely a technological tool but also a resource that enables lecturers to proactively transform their work practices (Simanjuntak et al., 2026)(Napitupulu et al., 2026)(Tambunan, 2023). This finding suggests that lecturers who actively integrate AI into their academic responsibilities are more likely to explore new ideas, generate innovative solutions, promote creative initiatives, and implement improvements in their academic activities. Therefore, AI-Augmented Job Crafting represents an important mechanism for encouraging innovative work behavior in higher education institutions.

The Effect of AI-Augmented Job Crafting on Creative Self-Efficacy

The findings reveal that AI-Augmented Job Crafting has a positive and significant effect on Creative Self-Efficacy, with a path coefficient of 0.416, a t-value of 6.544, and a p-value of 0.002. Thus, H2 is supported. This result indicates that lecturers who actively utilize AI to redesign and improve their academic activities tend to develop stronger confidence in their ability to generate ideas, develop creative solutions, and overcome academic challenges (Pradana & Sari, 2026)

The integration of AI into academic work provides lecturers with opportunities to explore different perspectives, obtain alternative solutions, and experiment with new approaches to teaching and academic problem-solving. These experiences can strengthen lecturers' perceptions of their own creative capabilities (Kerli et al., 2026)(Lubis et al., 2024)(Eryc et al., 2026). For example, AI-assisted preparation of teaching materials, development of innovative learning strategies, and exploration of research ideas may encourage lecturers to become more confident in producing original and relevant academic solutions. The findings emphasize that AI-Augmented Job Crafting contributes not only to

changes in work practices but also to the development of lecturers' psychological resources, particularly their confidence in performing creative tasks.

The Effect of Creative Self-Efficacy on Lecturers' Innovative Work Behavior

The results demonstrate that Creative Self-Efficacy positively and significantly influences Lecturers' Innovative Work Behavior, with a path coefficient of 0.287, a t-value of 4.344, and a p-value of 0.000. Therefore, H3 is supported. This finding indicates that lecturers with stronger confidence in their creative abilities are more likely to demonstrate innovative behavior in their academic responsibilities (Wang et al., 2025).

Creative Self-Efficacy encourages lecturers to believe that they are capable of generating new ideas, developing alternative solutions, and implementing creative approaches when facing academic challenges. Such confidence is important because innovation requires not only the ability to identify opportunities for improvement but also the willingness to take initiative and translate ideas into practical actions (Winarsunu et al., 2021)(Bhastary et al., 2024)(Syaifuddin et al., 2024). In higher education institutions, lecturers with high Creative Self-Efficacy are more likely to develop innovative teaching methods, experiment with learning strategies, introduce new academic practices, and continuously improve the quality of their professional activities. Accordingly, Creative Self-Efficacy represents an important psychological factor that encourages lecturers to transform creative ideas into actual innovative work behavior.

The Mediating Role of Creative Self-Efficacy in the Relationship Between AI-Augmented Job Crafting and Lecturers' Innovative Work Behavior

The findings indicate that Creative Self-Efficacy significantly mediates the relationship between AI-Augmented Job Crafting and Lecturers' Innovative Work Behavior, with a reported indirect path coefficient of 0.342, a t-value of 4.923, and a p-value of 0.000. Therefore, H4 is supported. This result suggests that AI-Augmented Job Crafting contributes to lecturers' innovative work behavior not only through its direct influence but also through the development of their confidence in performing creative activities. The integration of AI into academic activities provides lecturers with opportunities to explore new working methods, improve teaching materials, and develop alternative solutions to academic problems. These experiences may strengthen their confidence in their ability to perform creative tasks. As Creative Self-Efficacy increases, lecturers become more confident in exploring innovative ideas, promoting new initiatives, and implementing improvements in their academic responsibilities (Herijanto et al., 2023)(Tambun et al., 2026)(Faris et al., 2024).

This finding highlights the importance of the psychological mechanism underlying technology-driven innovation. The availability of AI technology alone may not be sufficient to encourage innovative work behavior. Lecturers also need confidence in their ability to utilize technological resources creatively and translate the opportunities provided by AI into meaningful academic innovations. Consequently, Creative Self-Efficacy plays an important mediating role in explaining how AI-Augmented Job Crafting can contribute to lecturers' innovative work behavior.

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The Effect of Perceived Academic Experimentation Climate on Creative Self-Efficacy

The results show that Perceived Academic Experimentation Climate has a positive and significant effect on Creative Self-Efficacy, with a path coefficient of 0.451, a t-value of 5.652, and a p-value below 0.001. Thus, H5 is supported. This finding indicates that an academic environment that encourages experimentation, openness to new ideas, and learning from mistakes can strengthen lecturers' confidence in their creative abilities. A supportive academic experimentation climate provides lecturers with opportunities to explore innovative teaching methods, exchange ideas with colleagues, test alternative academic practices, and develop creative approaches without excessive concern about failure. Such an environment allows lecturers to gain valuable experiences that strengthen their confidence in generating original ideas and solving academic problems.

Within higher education institutions, institutional support for experimentation is particularly important because academic innovation often requires lecturers to move beyond conventional teaching practices and explore new approaches (Jun, 2026)(Astika et al., 2022)(Thamrin et al., 2026). When lecturers perceive that their institution encourages creativity and provides sufficient freedom to experiment, they are more likely to develop positive beliefs about their ability to produce innovative outcomes. Therefore, Perceived Academic Experimentation Climate represents an important organizational factor in developing lecturers' Creative Self-Efficacy. The findings suggest that institutions should establish an academic environment that encourages experimentation, collaboration, and continuous learning to strengthen lecturers' creative confidence.

The Effect of Perceived Academic Experimentation Climate on Lecturers' Innovative Work Behavior

The findings demonstrate that Perceived Academic Experimentation Climate has a positive and significant effect on Lecturers' Innovative Work Behavior, with a path coefficient of 0.324, a t-value of 2.954, and a p-value below 0.001. Therefore, H6 is supported. This result indicates that lecturers working in an academic environment that supports experimentation and creative initiatives tend to demonstrate stronger innovative work behavior (Du & Chang, 2023)(Syaifuddin et al., 2023)(Hasrul Azwar Hasibuan et al., 2022). An academic experimentation climate encourages lecturers to explore new ideas, develop alternative teaching strategies, exchange innovative practices, and implement improvements in their professional activities. Institutional openness toward experimentation also creates opportunities for lecturers to test new approaches and learn from the outcomes of their initiatives.

In the context of IT&B Medan, an environment that supports academic experimentation can encourage lecturers to integrate digital technologies into learning activities, develop more interactive instructional methods, and improve academic processes. Furthermore, opportunities for collaboration and knowledge sharing can facilitate the development and implementation of innovative ideas among lecturers. These findings emphasize that innovative work behavior is not determined solely by individual capabilities but is also influenced by the organizational environment in which lecturers perform their academic

responsibilities. Therefore, higher education institutions need to provide organizational support, flexibility, and opportunities for experimentation to encourage sustainable academic innovation.

The Mediating Role of Creative Self-Efficacy in the Relationship Between Perceived Academic Experimentation Climate and Lecturers' Innovative Work Behavior

The results indicate that Creative Self-Efficacy significantly mediates the relationship between Perceived Academic Experimentation Climate and Lecturers' Innovative Work Behavior, with a reported indirect path coefficient of 0.345, a t-value of 5.562, and a p-value of 0.003. Thus, H7 is supported. This finding suggests that a supportive academic experimentation climate contributes to innovative work behavior partly by strengthening lecturers' confidence in their creative abilities. An academic environment that provides freedom to experiment, encourages idea exploration, and supports learning from mistakes can create positive experiences that strengthen lecturers' Creative Self-Efficacy. When lecturers receive institutional support for exploring new approaches, they are more likely to believe that they can generate original ideas and develop effective solutions to academic challenges (Lin & He, 2026)(Siahaan et al., 2026)(D. M. Hasibuan et al., 2026).

This confidence subsequently encourages lecturers to transform their ideas into innovative actions, such as developing new teaching methods, implementing technology-based learning strategies, and improving academic practices. In other words, an experimentation-supportive academic environment provides organizational opportunities, while Creative Self-Efficacy strengthens lecturers' confidence to take advantage of those opportunities. The findings highlight that organizational support and individual psychological resources complement each other in promoting innovative work behavior. Consequently, higher education institutions should not only establish an environment that encourages academic experimentation but also strengthen lecturers' confidence in their creative capabilities through professional development, collaborative activities, and opportunities to implement innovative ideas.

CONCLUSION

This study concludes that AI-Augmented Job Crafting and Perceived Academic Experimentation Climate play important roles in improving Lecturers' Innovative Work Behavior at the Institut Bisnis Informasi Teknologi dan Bisnis (IT&B), Medan, Indonesia. The findings demonstrate that AI-Augmented Job Crafting positively and significantly influences both Innovative Work Behavior and Creative Self-Efficacy. Similarly, Perceived Academic Experimentation Climate has a positive and significant effect on Creative Self-Efficacy and Innovative Work Behavior. Furthermore, Creative Self-Efficacy positively influences Innovative Work Behavior and serves as a mediating variable in the relationships between AI-Augmented Job Crafting, Perceived Academic Experimentation Climate, and Innovative Work Behavior. These findings highlight that lecturers' innovation is influenced not only by their ability to utilize artificial intelligence but also by an organizational environment that supports experimentation and strengthens creative confidence.

Therefore, higher education institutions should promote responsible AI integration, provide opportunities for academic experimentation, and strengthen lecturers' creative capabilities to encourage sustainable innovation in teaching, research, and community service. However, this study is limited to 43 permanent lecturers at one institution, which may restrict the generalizability of the findings. Future research is recommended to involve larger samples from multiple higher education institutions and examine additional factors that may influence lecturers' Innovative Work Behavior.

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