

The Role of Entrepreneurial Academics, Competence, and Resilience in Enhancing International Entrepreneurial University Performance: Evidence from Indonesian Higher Education

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ABSTRACT

The transformation of higher education institutions into entrepreneurial universities has become a strategic response to globalization, knowledge-based economies, and innovation demands. This study aims to examine the direct and indirect effects of Entrepreneurial Academic (EA) and Entrepreneurial Competence (EC) on International Entrepreneurial University Performance (IEUP), with Entrepreneurial Resilience (ER) as a mediating variable. Utilizing a quantitative approach with Structural Equation Modeling–Partial Least Squares (SEM-PLS), the study analyzed data from 210 academic staff members in Indonesian universities. The findings reveal that both EA and EC significantly influence IEUP, either directly or through ER as a mediator. ER itself plays a crucial role in enhancing institutional performance by strengthening individuals' capacity to adapt, recover, and remain productive in the face of adversity. This study contributes to the theoretical integration of individual-level and institutional-level entrepreneurship and offers practical implications for human resource development and strategic policymaking in higher education. Strengthening entrepreneurial attributes and resilience among faculty is essential for universities seeking global competitiveness and sustainable innovation. Further research is encouraged to explore the role of leadership, policy alignment, and digital capability in supporting entrepreneurial transformation at the institutional level.

Keywords: Academic engagement, entrepreneurial competence, entrepreneurial resilience, entrepreneurial university, internationalization

Background

The rapid transformation of global higher education has urged universities to reposition themselves not only as institutions for knowledge dissemination but also as active agents of innovation, economic development, and entrepreneurial change. This paradigm shift is encapsulated in the evolving concept of the Entrepreneurial University (Etzkowitz, Webster, Gebhardt, & Terra, 2000), which advocates for higher education institutions to go beyond traditional teaching and research roles, embracing entrepreneurship as a core function. As universities face increasing pressure to demonstrate relevance, impact, and financial sustainability, the integration of entrepreneurial capacity into their institutional frameworks has become a strategic imperative.

In this context, the notion of International Entrepreneurial University Performance (IEUP) has gained prominence. IEUP refers to the extent to which a university is able to integrate entrepreneurial values and actions within an internationalized framework. It encompasses indicators such as global research

collaboration, startup incubation with international reach, cross-border industry partnerships, and the ability to commercialize innovations on a global scale (Guerrero et al., 2016; Clark, 1998). The performance of universities under this framework reflects their agility in responding to global challenges and their capability to nurture entrepreneurial ecosystems that transcend national boundaries.

However, while the entrepreneurial university model has been widely studied in the context of advanced economies, empirical insights from developing nations, especially in Southeast Asia, remain limited. In countries such as Indonesia, the transition toward entrepreneurial universities is often hindered by systemic barriers, including bureaucratic rigidity, limited innovation funding, and a lack of entrepreneurial competencies among academic staff. Moreover, the challenge of internationalization exacerbates these issues, as universities must navigate linguistic, cultural, and regulatory differences in engaging global networks (Altbach & Knight, 2007).

To address these challenges, scholars have emphasized the need to explore the determinants that influence IEUP, particularly those originating from internal organizational dynamics and individual academic behavior. Three key constructs have emerged as critical contributors: Entrepreneurial Academic (EA) behavior, Entrepreneurial Competence (EC), and Entrepreneurial Resilience (ER).

First, the role of Entrepreneurial Academics has gained increasing attention. Academics who engage in entrepreneurial activities—such as commercializing research, collaborating with industries, launching startups, or securing patents—play a pivotal role in driving institutional entrepreneurial performance. According to Abreu and Grinevich (2013), and Elliya (2021) entrepreneurial academics are not only knowledge creators but also active agents of knowledge transfer. Their involvement in industry partnerships, applied research, and entrepreneurial education can significantly shape a university's innovation ecosystem and its global standing.

Second, Entrepreneurial Competence comprises the knowledge, skills, and attitudes required to recognize and exploit entrepreneurial opportunities. These include creativity, leadership, risk-taking, financial literacy, and opportunity recognition (Lackeus, 2015). The possession and development of these competencies among faculty and students are essential for fostering an entrepreneurial culture within universities. In many cases, the absence of structured training and mentorship programs in developing countries limits the growth of such competencies among academics, resulting in suboptimal entrepreneurial outcomes.

Third, the concept of Entrepreneurial Resilience has emerged as a mediating factor that links individual capabilities to institutional performance. ER refers to the psychological and behavioral capacity to adapt, persist, and thrive amid adversity and uncertainty (Ayala & Manzano, 2014). In the volatile landscape of higher education—marked by funding cuts, policy changes, and global competition—resilience is indispensable. Academics and university leaders who exhibit resilience are more likely to pursue innovative ventures, sustain long-term collaborations, and recover from setbacks in entrepreneurial initiatives.

Despite the theoretical relevance of these constructs, existing studies often treat them in isolation. Limited research has explored the interplay between EA, EC, and ER and how they collectively contribute to IEUP. Moreover, there is a theoretical gap in understanding the mediating role of resilience in translating entrepreneurial behavior and competence into institutional performance outcomes. Filling this gap is vital for developing effective capacity-building strategies and institutional policies.

Empirically, there is a need for robust, context-specific evidence, particularly from developing countries, to inform policies that aim to enhance university entrepreneurship. Many existing frameworks have been derived from Western contexts, which may not be directly transferable due to cultural, economic, and institutional differences. As such, this study aims to bridge both the empirical gap and theoretical gap by developing and testing an integrated model of IEUP that incorporates EA, EC, and ER within a non-Western, emerging-economy context.

The findings of such research can provide valuable implications for university leaders, policy-makers, and educators. For instance, understanding how entrepreneurial resilience mediates the relationship

between academic behavior and university performance can guide the design of faculty development programs that focus on resilience-building alongside skill acquisition. Similarly, identifying competency gaps can inform curriculum design in entrepreneurship education, ensuring that both students and faculty are equipped with globally relevant skills.

In conclusion, the transformation toward entrepreneurial and internationalized universities is not merely a structural adjustment but a behavioral and cultural evolution. By unpacking the mechanisms through which individual academic attributes influence institutional outcomes, this study contributes to a more nuanced understanding of how universities in developing countries can strategically position themselves in the global knowledge economy.

Literature Review

1.1 Entrepreneurial Academic (EA)

The concept of entrepreneurial academic refers to individual academics who go beyond traditional roles of teaching and research to actively engage in entrepreneurial activities such as patenting, licensing, spin-offs, consulting, and industry collaboration (Abreu & Grinevich, 2013). These individuals serve as vital conduits in the "third mission" of universities, linking scientific research with societal and economic needs (Etzkowitz, 2003).

Empirical studies demonstrate that entrepreneurial academics are positively associated with institutional innovation output and reputation (Perkmann et al., 2013). Their engagement facilitates knowledge transfer, enhances applied research productivity, and often contributes to commercial and policy-relevant outcomes. For example, Goel and Grimpe (2013) found that entrepreneurial orientation among faculty strongly correlates with collaboration intensity and diversified funding sources.

In developing countries, however, the culture and incentives for academic entrepreneurship are still evolving. Institutional barriers such as rigid promotion criteria, limited industry networks, and bureaucratic norms often restrict faculty members from engaging in entrepreneurial ventures (Guerrero & Urbano, 2012). Thus, the presence of entrepreneurial academics is not only a reflection of individual initiative but also of institutional culture and support structures.

1.2 Entrepreneurial Competence (EC)

Entrepreneurial competence refers to the set of skills, knowledge, and attitudes necessary for identifying opportunities, mobilizing resources, and implementing value-creating activities (Man, Lau, & Chan, 2002). It includes creativity, innovation, opportunity recognition, risk management, financial literacy, and leadership. The European Commission's EntreComp Framework further highlights areas such as mobilizing others, valuing ideas, and coping with ambiguity as core entrepreneurial competencies (Bacigalupo et al., 2016).

Scholarly research suggests that the development of entrepreneurial competence in university environments significantly influences students' entrepreneurial intentions (Lorz, Mueller, & Volery, 2013) and faculty's ability to engage in commercialization (Siegel & Wright, 2015). Competence-based training, experiential learning, and cross-disciplinary collaboration are among the strategies proposed to enhance EC within academic settings.

Yet, a persistent gap exists between entrepreneurial education and practical competence. Many university programs emphasize cognitive learning over experiential application, resulting in a competence deficit. Furthermore, a lack of systemic support for training faculty in entrepreneurial pedagogy hinders the broader institutionalization of EC (Fayolle & Gailly, 2015).

1.3 Entrepreneurial Resilience (ER)

Resilience in entrepreneurship is defined as the ability to recover from setbacks, adapt to change, and persist through challenges (Ayala & Manzano, 2014). In academic settings, entrepreneurial resilience involves coping with research rejections, failed funding proposals, administrative pressures, and the uncertainties of commercialization. It encompasses psychological traits such as optimism, tenacity, and adaptability, as well as behavioral strategies like networking and continuous learning.

Research has increasingly highlighted ER as a critical success factor in sustaining innovation and entrepreneurship. For example, Shepherd et al. (2009) argued that resilience mediates the relationship between failure and learning, thereby influencing future entrepreneurial behavior. Similarly, Haynie et al. (2010) proposed that adaptive cognitive flexibility is a defining attribute of resilient entrepreneurs. In the university context, ER among faculty and leadership is essential to navigate institutional inertia, resistive culture, and evolving policy demands. However, the literature on ER in academic entrepreneurship remains scarce, particularly in non-Western environments. Developing a deeper understanding of how ER functions within university ecosystems is crucial for designing resilience-building programs and interventions.

1.4 International Entrepreneurial University Performance (IEUP)

IEUP represents a university's capability to perform as a global entrepreneurial institution. It reflects not just the internal dynamics of innovation but also how effectively a university leverages international networks, cross-border collaborations, and global entrepreneurial ecosystems (Clark, 1998; Guerrero et al., 2016). Performance indicators often include international patent applications, joint research with foreign partners, number of international start-ups incubated, and revenue from global ventures.

The literature points out that IEUP is determined by both internal capacities (such as EA, EC, and ER) and external factors (such as government policy, industry landscape, and international ranking systems) (Altbach & Knight, 2007). While studies in OECD countries have explored these interrelations extensively, there is a lack of models that reflect the realities of universities in emerging economies where structural constraints and institutional readiness vary greatly.

1.5 Conceptual Integration and Research Gap

Although EA, EC, and ER have been individually linked to university performance, few empirical studies have integrated these constructs into a comprehensive model of IEUP. Moreover, the mediating role of ER has received limited attention, despite its relevance in buffering the effects of institutional challenges. Most existing studies rely on data from Western contexts, limiting their applicability in diverse sociocultural environments.

Thus, this study aims to fill two main gaps: (1) the empirical gap in the investigation of IEUP in non-Western university settings, and (2) the theoretical gap in integrating EA, EC, and ER within a single structural model. Understanding how these variables interact can offer new perspectives for university leaders and policy-makers seeking to internationalize their entrepreneurial agenda.

Methodologi

This study uses a quantitative approach with the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method to analyze the relationship between Entrepreneurial Academic (EA), Entrepreneurial Competence (EC), Entrepreneurial Resilience (ER), and International Entrepreneurial University Performance (IEUP). SEM-PLS was chosen because it is able to handle models with many latent constructs and indicators, and is suitable for predictive exploratory research (Hair et al., 2020). The research population is lecturers in public and private universities in Indonesia who are involved in academic entrepreneurship activities and international collaboration. Sampling was done purposively with the criteria of experience in research, service, or industrial cooperation. The number of valid respondents analyzed was 210 people. The research instrument was a closed questionnaire with a Likert scale of 1-5, developed from previous literature: EA (Abreu & Grinevich, 2013), EC (Bacigalupo et al., 2016), ER (Ayala & Manzano, 2014), and IEUP (Guerrero et al., 2016). Construct validity is tested through loading factor, average variance extracted (AVE), and composite reliability (CR). Structural model tests were conducted to examine the relationship between variables and the mediating effect of ER, using bootstrapping of 5,000 samples. The outer and inner model tests confirm that the model built meets the criteria for adequate validity and reliability, with R^2 values, t-statistics, and significance indicating the relationship between constructs is statistically significant.

RESULT

1.6 Characteristic Responden

This study involved 297 respondents who were lecturers at UNESA. Based on the results of data collection in this study, the following is a description of the characteristics of respondents' gender, age and length of service.

Table 4.1 Description of Respondent Characteristics

Characteristics	Category	Frekuensi	Persentase
Gender	Male	174	58,6%
	Female	123	41,4%
Education	S2	195	65,7%
	S3	102	34,3%
Work Experience	< 5 years	117	39,4%
	6 - 15 years	99	33,3%
	> 16 years	81	27,3%
Academic Rank	Lecturer	105	35,4%
	Professor	9	3,0%
	Expert Assistant	147	49,5%
	Head Lecturer	36	12,1%
Age	< 30 years	60	20,2%
	31 - 40 years	129	43,4%

Source data : processed (2025)

The 210 respondents in this study consisted of permanent lecturers at various universities in Indonesia, both public and private, who have active involvement in academic entrepreneurship, research, and international collaboration activities. Based on demographic data, the majority of respondents were in the age range of 31-50 years (72%), reflecting a productive age group that is generally active in the tridarma of higher education. 58% of respondents were male and 42% were female. Judging from the last level of education, most respondents have completed doctoral education (S3) at 61%, while the rest have a master's degree (S2). This shows that most respondents have a strong and relevant academic background to understand and engage in research-based entrepreneurial activities. In terms of experience, around 68% of respondents have more than 10 years of experience in the academic world, and more than half of them have been involved in business incubation programs, innovation-based services, or industrial cooperation. This profile supports the assumption that respondents have sufficient competence and experience to objectively and reflectively assess the dynamics of entrepreneurial university performance at the international level.

1.7 Outer Model Testing

Outer model testing is carried out to confirm that all indicators measuring nurse motivation, caching, responsive culture, and patient safety implementation are valid and reliable. At this stage, an evaluation of convergent validity is carried out through the loading factor and AVE values to ensure that the indicators on each construct can measure the intended concept properly.

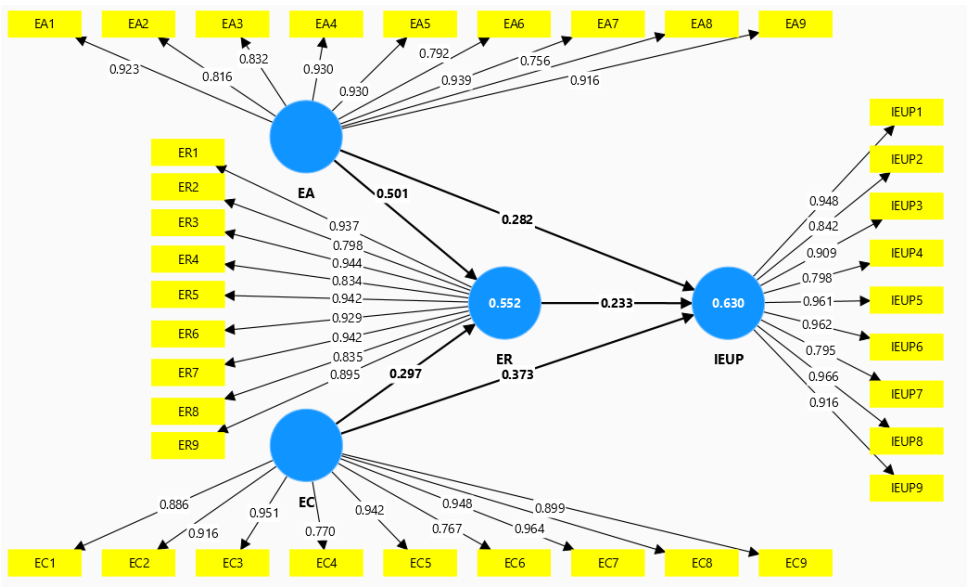


Figure 4.1 PLS SEM Model Estimation Results - algorithm

Table 4.2 Convergent Validity Testing Results

Variabel	Indikator	Outer loadings	Cut of Value	AVE	Cut Of Value	Validitas Konvergen
Entrepreneurial Academic	EA1	0,923	0,7	0,762	0,5	Valid
	EA2	0,816	0,7			Valid
	EA3	0,832	0,7			Valid
	EA4	0,930	0,7			Valid
	EA5	0,930	0,7			Valid
	EA6	0,792	0,7			Valid
	EA7	0,939	0,7			Valid
	EA8	0,756	0,7			Valid
	EA9	0,916	0,7			Valid
Entrepreneurial Competence	EC1	0,886	0,7	0,804	0,5	Valid
	EC2	0,916	0,7			Valid
	EC3	0,951	0,7			Valid
	EC4	0,770	0,7			Valid
	EC5	0,942	0,7			Valid
	EC6	0,767	0,7			Valid
	EC7	0,948	0,7			Valid
	EC8	0,964	0,7			Valid
	EC9	0,899	0,7			Valid

Entrepreneurial Resilience	ER1	0,937	0,7	0,804	0,5	Valid
	ER2	0,798	0,7			Valid
	ER3	0,944	0,7			Valid
	ER4	0,834	0,7			Valid
	ER5	0,942	0,7			Valid
	ER6	0,929	0,7			Valid
	ER7	0,942	0,7			Valid
	ER8	0,835	0,7			Valid
	ER9	0,895	0,7			Valid
International Entrepreneurial University Performance	IEUP1	0,948	0,7	0,814	0,5	Valid
	IEUP2	0,842	0,7			Valid
	IEUP3	0,909	0,7			Valid
	IEUP4	0,798	0,7			Valid
	IEUP5	0,961	0,7			Valid
	IEUP6	0,962	0,7			Valid
	IEUP7	0,795	0,7			Valid
	IEUP8	0,966	0,7			Valid
	IEUP9	0,916	0,7			Valid

Source: data processed (2025)

The analysis results in the Convergent Validity Table show that the Entrepreneurial Academic construct measured by nine indicators has an AVE value of 0.762 and all loading factor values are above 0.7. Because the loading factor value of all indicators > 0.7 and the AVE of the construct > 0.5, it is concluded that the nine indicators measuring the Entrepreneurial Academic construct are valid, so in the next test this construct will be measured using all these indicators. The Entrepreneurial Competence construct also shows similar results, with an AVE value of 0.804 and all indicators have a loading factor > 0.7, so all indicators are declared valid. Similarly, the Entrepreneurial Resilience construct consisting of nine indicators has an AVE of 0.804 and all loading factors are also > 0.7, so all indicators are considered valid. The International Entrepreneurial University Performance construct has the highest AVE value of 0.814, with all indicators showing a loading factor value above 0.7, which indicates that all indicators are valid. These results indicate that each construct in the model has good convergent validity. The AVE value that exceeds 0.5 indicates that more than 50% of the indicator variance is explained by the construct. Meanwhile, the loading factor value > 0.7 strengthens the reliability of each indicator in representing the measured construct. Thus, all constructs and indicators used are feasible.

1.8 Testing the Direct Effect

Table 4.3 Testing the Direct Effect

	Original sample (O)	T statistics (O/STDEV)	P values
EA -> ER	0,501	11,186	0,000
EA -> IEUP	0,282	5,057	0,000
EC -> ER	0,297	6,240	0,000
EC -> IEUP	0,373	7,031	0,000
ER -> IEUP	0,233	4,618	0,000

Source: data processed (2025)

Based on the results of the analysis, the following results are obtained:

1. EA → ER

The relationship between EA and ER has a path coefficient of 0.501 with a T-statistic of 11.186 and a p-value of 0.000. Because the p-value obtained is <0.05, it is concluded that the effect of EA on ER is significant. This means that an increase in EA will increase ER, conversely a decrease in EA will have an impact on decreasing ER. The results of this analysis prove that EA is a factor that affects ER.

2. EA → IEUP

The relationship between EA and IE University Performance has a path coefficient of 0.282 with a T-statistic of 5.057 and a p-value of 0.000. Because the p-value obtained is <0.05, it is concluded that the effect of EA on IEUP is significant. This means that an increase in EA will increase IEUP, while a decrease in EA will result in a decrease in IEUP. The results of this analysis prove that EA is a factor that affects IEUP.

3. EC → ER

The relationship between EC and ER has a path coefficient of 0.297 with a T-statistic of 6.240 and a p-value of 0.000. Because the p-value obtained is <0.05, then it is concluded that the effect of EC on ER is significant. This means that an increase in EC will increase ER, otherwise a decrease in EC will have an impact on decreasing ER. The results of this analysis prove that EC is a factor that affects ER.

4. EC → IEUP

The relationship between EC and IEUP has a path coefficient of 0.373 with a T-statistic of 7.031 and a p-value of 0.000. Because the p-value obtained is <0.05, it is concluded that the effect of EC on IEUP is significant. This means that an increase in EC will increase IEUP, while a decrease in EC will result in a decrease in IEUP. The results of this analysis prove that EC is a factor that affects IEUP.

5. ER → IEUP

The relationship between ER and IEUP has a path coefficient of 0.233 with a T-statistic of 4.618 and a p-value of 0.000. Because the p-value obtained is <0.05, it is concluded that the effect of ER on IEUP is significant. This means that an increase in ER will increase IEUP, conversely a decrease in ER will have an impact on decreasing IEUP. The results of this analysis prove that ER is a factor that affects IEUP.

1.9 Testing Indirect Influence

Table 4.4 Indirect Effect Test Results

	Original sample (O)	T statistics (O/STDEV)	P values
EA → ER → IEUP	0,117	4,122	0,000
EC → ER → IEUP	0,069	4,107	0,000

Sumber : data diolah (2025)

6. EA → ER → IEUP

The results of testing the indirect effect of EA on IEUP through ER show a significance of 0.117 with a path coefficient of 4.122 and a p-value of 0.000. Because the p-value obtained is <0.05, it is concluded that ER is proven to mediate the effect of EA on IEUP. An increase in EA will have an impact on increasing ER which in turn will have an impact on increasing IEUP.

7. EC → ER → IEUP

The results of testing the indirect effect of EC on IEUP through ER show a significance of 0.069 with a path coefficient of 4.107 and a p-value of 0.000. Because the p-value obtained is <0.05, it is concluded that ER is proven to mediate the effect of EC on IEUP. An increase in EC will have an impact on increasing ER which in turn will have an impact on increasing IEUP.

1.10 Coefficient of Determination and Simultaneous Effect Testing

Table. 4.5 Coefficient of Determination

	R-square	R-square adjusted	F Count (F Table)
Entrepreneurial Resilience	0,552	0,549	58,371
International Entrepreneurial University Performance	0,630	0,627	53,169
			-0,627

Source: data processed (2025)

The analysis results in Table 4.17 show that the Entrepreneurial Resilience (Y1) variable has an R² of 55.2%. This means that the variance of Entrepreneurial Resilience (Y1) can be explained by its exogenous variables by 55.2%, while the remaining 44.8% is explained by other factors outside the factors studied. Furthermore, the International Entrepreneurial University Performance (Y2) variable has an R² of 63.0%. This indicates that 63.0% of the variance of International Entrepreneurial University Performance (Y2) can be explained by the exogenous variables involved in the model, and the remaining 37.0% is explained by other factors not included in this research model.

Research Hypothesis Testing

Table 4.6 Hypothesis Testing Results

Hipotesis	Coef. Path	T Statistik	P Value	Conclusion
H1: EA → ER	0.501	11.186	0.000	accepted
H2: EA → IEUP	0.282	5,057	0.000	accepted
H3: EC → ER	0.297	6,240	0.000	accepted

H4: EC → IEUP	0.373	7.031	0.000	accepted
H5: ER → IEUP	0.233	4.618	0.000	accepted
H6: EA → ER → IEUP	0.117	4.122	0.000	accepted
H6: EC → ER → IEUP	0.069	4.107	0.000	accepted

Source: data processed (2025)

Discussion of Research Results Based on Hypotheses

- H1: EA has a significant effect on ER

The results of the analysis show that EA has a significant effect on ER with a path coefficient of 0.501 and a T value of 11.186 ($p = 0.000$). This finding indicates that lecturers who have active involvement in entrepreneurial activities-such as industry collaboration, commercialization of research results, and entrepreneurship training-are more resilient in facing academic challenges and uncertainty. This resilience is evident in their ability to recover from failure, adjust to new policies, and manage work pressures. This reinforces the arguments of Shepherd et al. (2009) and Ayala & Manzano (2014) that resilience is the result of experiences interacting with the real world and productive failure. In the academic environment, engagement with industry broadens lecturers' perspectives on risk and flexibility, thus fostering stronger mental and professional resilience.
- H2: EA has a significant effect on IEUP

EA is also shown to have a significant effect on IEUP with a coefficient of 0.282 and $T = 5.057$ ($p = 0.000$). This means that the higher the involvement of lecturers in entrepreneurial activities, the stronger the university's performance in terms of global networking, international publications, and international reputation. and participation in global projects. Etzkowitz (2003) stated that entrepreneurial academic is the motor of the third generation university that is able to combine the missions of education, research, and global entrepreneurship.
- H3 : EC has a significant effect on ER

The findings confirm that EC has a positive and significant effect on ER ($\beta = 0.297$; $T = 6.240$; $p = 0.000$). This suggests that competencies such as creativity, leadership, and risk management possessed by lecturers will increase their resilience in facing job challenges. Good competencies allow individuals to have self-confidence, adaptive ability, and pressure management skills. The financial literacy and legal knowledge that are part of EC also help lecturers manage failure and navigate the university's bureaucratic system. Bacigalupo et al. (2016) emphasized that competence is not just a matter of technical knowledge, but also the capacity to face uncertainty with a constructive attitude.
- H4: EC has a significant effect on IEUP

EC was also found to have a strong effect on IEUP with a coefficient of 0.373 and $T = 7.031$ ($p = 0.000$). Lecturers with high competence tend to be able to lead collaborative projects, write international grant proposals, and become student entrepreneurial trainers. This is in line with Lackéus' (2015) opinion that mastery of EC is a key condition for institutional success in driving innovation and generating economic value from academic activities. In the international context, this competency allows universities to be more active in the Erasmus+ program, ASEAN University Network, or publications in reputable journals.
- H5: ER has a significant effect on IEUP

The results showed that ER has a direct effect on IEUP ($\beta = 0.233$; $T = 4.618$; $p = 0.000$). Lecturers' resilience drives the university's success in maintaining competitiveness at the international level, especially when facing pressures such as regulatory changes, technological disruption, or global research competition. Resilient lecturers tend to continue to innovate and not give up on proposal failures, publication rejections, or funding barriers. This finding supports the literature from Haynie et al. (2010) which emphasizes the importance of adaptive cognition in the context of sustainable entrepreneurship.
- H6 : ER) mediates the relationship between EA and IEUP

The indirect effect from EA to IEUP through ER is significant with a coefficient of 0.117 and $T = 4.122$ ($p = 0.000$). This suggests that EA will not maximally improve IEUP if it is not supported by individual resilience. Although lecturers are involved in entrepreneurial activities, without resilience to face challenges such as failure or work pressure, the impact on institutional performance may decrease. Therefore, strengthening resilient capacity is important as a complement to entrepreneurship development.

7. H7: ER mediates the relationship between EC and IEUP

Similar to H6, ER is also a significant mediator between EC and IEUP ($\beta = 0.069$; $T = 4.107$; $p = 0.000$). Competence without resilience tends to be vulnerable to pressure or stagnation. This means that lecturers who have high competence but give up easily will not make an optimal contribution to the institution. This mediation underlines that the success of universities in adopting the global entrepreneurship model must consider the psychological and mental aspects of academic human resources.

Conclusion

This study concludes that EA and EC have a significant direct influence on ER and IEUP. In addition, ER proved to be an important mediator in strengthening the relationship between EA and EC to IEUP. These findings confirm that universities that want to improve global competitiveness must not only build competence and entrepreneurial orientation in academic human resources, but also instill resilience in the face of global disruption. Thus, strengthening the role of lecturers as academic entrepreneurs and innovative solution providers should be the main strategy of entrepreneurship-based universities.

Recommendations

1. Strengthening Entrepreneurial Academic

Universities provide training and mentoring programs to increase lecturers' entrepreneurial awareness and competence.

2. Development of Entrepreneurial Competence

The curriculum and tridharma activities need to focus on the formation of cross-cutting competencies such as innovative leadership, risk management, and global market literacy.

3. Establishment of Academic Resilience

Institutions are advised to integrate resilience modules in HR training, such as adaptive stress training, failure-based learning, and crisis management simulations.

4. IEUP Systemic Policy

The international performance of universities cannot be separated from internal HR factors. Therefore, it is necessary to have HR management strategies that are aligned with internationalist goals.

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