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Academic Degree as a Predictor of Student Interest in Green University-Based Learning

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Abstract: This study aims to examine the influence of academic degrees on students' interest in green university-based learning processes. This means that this study can provide empirical evidence regarding the role of academic qualifications in supporting sustainability-oriented education at the university level. This study employed a mixed-methods approach with a sequential explanatory design. The quantitative phase was conducted through a survey of 132 students administered via a Likert-scale questionnaire, and the data were analyzed using simple linear regression to test the research hypotheses. The qualitative phase was conducted through in-depth interviews with selected participants, which were analyzed thematically to strengthen, validate, and enrich the quantitative results, thereby strengthening decision-making. The results show that academic degree has a positive and significant effect on student interest ($\beta = 0.766$; $p < 0.05$), with a coefficient of determination (R^2) of 0.598, indicating that 59.8% of the variation in student interest is explained by lecturer expertise. Furthermore, qualitative findings indicate that lecturers with higher academic degrees are perceived as more credible, systematic, and able to relate learning materials to sustainability issues, thereby increasing student engagement, motivation, and active participation in the learning process at the university. Lecturers' expertise, as reflected in their academic qualifications, plays a crucial role in increasing students' interest in sustainability-oriented learning. Therefore, improving lecturers' academic qualifications and strengthening their pedagogical competencies are strategic steps in supporting the implementation of green university-based learning in higher education. This situation indicates that the success of green university implementation is determined not solely by university policies and infrastructure but also by the quality of human resources.

Keywords: academic degree, student interest, green university, sustainability in higher education.

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INTRODUCTION

More than ever, universities have a critical responsibility to prepare a new generation of skilled, competitive, and sustainability-minded leaders. It is no longer enough to focus on academic quality; institutions must also weave sustainability values into the entire learning process. The "green university" concept emerged from this need, integrating environmental, social, and academic goals in higher education (Lozano et al., 2019; Filho et al., 2024). Being a green university is not just about managing the campus, like improving energy efficiency, handling waste, or using renewable energy. It also means rethinking the curriculum, research, and community service to focus on sustainable development. The UI GreenMetric World University Rankings provide a global framework for this, encouraging schools to adopt comprehensive sustainability policies and practices. Through metrics like green infrastructure, energy and climate change, water management, transportation, and education, universities are pushed to actively help achieve the Sustainable Development Goals.

A study by Rûtelionë et al. (2026) showed that green university initiatives substantially increased environmental self-identity and

positively influenced attitudes, subjective norms, and perceived behavioral control regarding waste sorting. Furthermore, environmental self-identity also significantly influenced attitudes, subjective norms, and perceived behavioral control.

Green university initiatives, which involve integrating sustainable education and implementing environmentally friendly infrastructure on campus, aim to reduce carbon footprints and raise student awareness (Pereira Ribeiro et al., 2021). Green university initiatives play a crucial role in sustainable development, facilitating social development by fostering community connections and knowledge to benefit society (Tangwanichagapong et al., 2017). Universities play a crucial role in today's society by fostering environmental and sustainability awareness among students and the wider community (Boca & Saraçli, 2019; Zhao & Cheah, 2023).

Green university initiatives increase environmental awareness and sustainable practices in higher education (Menon & Suresh, 2022). Terms such as "campus sustainability" and "university green initiatives" are used to evaluate sustainability efforts (Pereira Ribeiro et al., 2021; Fissi et al., 2021). Green university initiatives support sustainable practices (Wang et al., 2022) and enhance sustainability through research, innovation, and education (Kioupi & Voulvoulis, 2022). Universities play a role in environmentally friendly practices such as recycling, energy conservation, and emission reduction (Vázquez et al., 2020; Ebrahimi & North, 2016; Kwakwa et al., 2024). Green university initiatives can play a significant role in building and developing environmental self-identity. Yang et al. (2021) explain that programs that increase environmental awareness can change behavior toward greater pro-environmentalism and strengthen individuals' environmental self-identity. Furthermore, Roy (2023) explains that waste separation, the implementation of sustainable transportation, energy and water savings, and the promotion of social development can encourage participants to engage in environmentally friendly initiatives on campus.

Tu et al. (2026) show that subjective norms play a significant role in shaping intentions to engage in environmentally friendly consumption, exerting both positive and negative effects among college students in Taiwan and Thailand. This suggests that subjective norms reflect how a person perceives social expectations from those they consider important, such as family, friends, and reference groups. When a person perceives strong social support for environmentally friendly behavior, their intention to adopt environmentally friendly consumption will increase.

In the context of a Green University, the use of digital technology to support the learning process is essential for lecturers. For instance, Wijayanto et al. (2025) showed that interactive multimedia created with Canva significantly improved students' core skills, demonstrating how technology can make learning more effective. In another study, Azahari & Haridison (2025) found that digital technologies help connect learning to real-world local issues, though they caution that digital literacy is still a challenge. These studies suggest that successfully combining sustainability-focused education with new technology depends on the lecturers who design and deliver these experiences.

In the end, lecturers are the deciding factor in the quality and impact of the entire teaching and learning process in higher education. Lecturers function not only as conveyors of material but also as learning facilitators, knowledge developers, and change agents who instill sustainable values in students. The quality of lecturers, particularly their academic expertise, directly contributes to the achievement of learning objectives and the student learning experience (Darling-Hammond et al., 2020; OECD, 2021). Lecturers' expertise is often linked to their academic background, including their academic

degrees. Academic degrees reflect the lecturer's formal education, depth of mastery in the scientific field, and analytical and methodological abilities. Several studies have shown that lecturers with higher academic qualifications tend to have greater mastery of the material, a more systematic approach to learning, and the ability to link theory to practice and the latest scientific developments (Altbach et al., 2019; Tight, 2022).

On the other hand, student engagement in the learning process is an important indicator of successful learning in higher education. Student engagement is reflected through their interest in learning, attention, active participation, and enthusiasm during lectures. Students with high engagement tend to demonstrate greater cognitive and emotional engagement, positively impacting their understanding of the material and academic achievement (Fredricks et al., 2016; Bond et al., 2020). Jaya (2020) reports that fewer than 100% of lecturers can design learning materials on environmental health and implement them in the classroom. Fewer than 60% of students can produce environmental artwork and demonstrate problem-solving skills related to the surrounding environment.

The relationship between lecturer expertise and student engagement is becoming increasingly relevant in green university-based learning. Lecturers with strong academic expertise are considered better able to integrate sustainability, environmental, and social responsibility issues into course material in a contextual manner. When learning is connected to real-world sustainability issues, it becomes more relevant, and students naturally get more interested and involved (Wals & Benavot, 2020; Aleixo et al., 2021).

Several previous studies have shown that green university initiatives play a significant role in increasing students' environmental awareness and behavior through sustainability education, the provision of green infrastructure, and the implementation of sustainable practices on campus. These initiatives support carbon footprint reduction, strengthen sustainability research and innovation, and implement practices such as recycling, energy conservation, and emission reduction. (Rûtelionë et al., 2026; Pereira Ribeiro et al., 2021; Wang et al., 2022; Kioupi & Voulvoulis, 2022; Vázquez et al., 2020; Ebrahimi & North, 2016; Kwakwa et al., 2024).

So far, however, most research has focused on how a lecturer's teaching skills or professional background affects student outcomes. Less attention has been paid to whether their actual academic degree makes a difference, particularly within the setting of a green university. After all, universities often use academic degrees as a key measure of a lecturer's quality and as a tool for developing their teaching staff (Teichler, 2020; Shin & Harman, 2009).

This leaves a clear gap in what we know. We need to examine how a lecturer's credentials and academic background influence student engagement, especially as more universities implement campus-wide green initiatives. Understanding this relationship better would not only help expand theories of higher education but also give universities practical ways to manage and improve their sustainable learning programs. This study seeks to do just that, bringing together the perspectives of lecturer expertise, student engagement, and the green university model into a single framework.

Based on this description, this study aims to examine the influence of lecturers' academic degrees on students' interest in green university-based learning processes. The results of this study are expected to serve as a basis for universities in formulating policies to develop lecturers' academic qualifications and strengthen sustainability-oriented learning, thereby continuously improving the quality of higher education.

Unlike previous research that typically focuses on lecturers' overall pedagogical or

professional competence, this study specifically positions lecturers' academic degrees as indicators of their expertise and the academic quality of their teaching, particularly in the context of green university-based learning. There is surprisingly little research connecting a lecturer's academic degree and perceived expertise with student engagement. We hope this study can help build on the existing research in student engagement and continuing education. More than that, we want to better understand how a professor's qualifications actually shape the quality of the learning experience for students.

This research posits that a lecturer's expertise, as indicated by their academic degree, has a positive and significant influence on students' interest in learning at a green university. This means that the higher or more relevant the lecturer's academic degree, the greater the student's interest in studying in a green university environment. This condition indicates that lecturers with higher academic qualifications are perceived as having greater competence, credibility, and insight, thereby increasing student interest, attention, and motivation in the learning process, especially in areas related to sustainability and environmental issues.

The previously explained background description shows that this research has a model that can be visualized as follows.

Chen et al. (2020) explain that academic and professional qualifications are found in human resources and are developed through knowledge and abilities obtained through training. Sial (2005) argues that although lecturer credentials are important, professional educational training is more important because trained lecturers are generally considered to be more effective than untrained lecturers.

Literature Review and Hypothesis

In higher education, lecturers do more than just transfer knowledge; they are guides who play a significant role in engaging students in their learning. A lecturer's own academic and professional skills directly shape how students see their own education. It is no surprise that research consistently shows that when lecturers know their subject well, explain it clearly, and foster quality discussions, students become more interested and involved in their classes (Feihong et al., 2024).

One of the most visible markers of a lecturer's expertise is their academic degree. A higher degree usually points to a deeper command of a subject, stronger analytical skills, and more extensive research experience. These qualifications are thought to improve the quality of learning by helping lecturers present material in a more systematic, evidence-based way. While research by Mawardi et al. (2024) confirms that a lecturer's qualifications do contribute to the quality of learning, the actual impact can differ depending on the university or the students themselves.

From students' point of view, a lecturer's expertise often sparks their interest and passion for a subject. When students believe their lecturer is a true expert, they are more likely to trust them, which in turn boosts their motivation and encourages them to participate more actively. Studies have found that a lecturer's competence and professionalism have a clear positive effect on student interest, especially when paired with the right teaching methods (Kifli & Yunus, 2025).

This all ties back to psychological principles like Self-Determination Theory, which suggests that a student's inner drive to learn is heavily shaped by how competent they perceive their instructor to be. A lecturer's expertise, often signaled by their academic degree, can reinforce that perception, making students naturally more interested and engaged. Ultimately, a major review of the research by Feihong et al. (2024) confirms a consistent link: high-quality, supportive instructors lead to more engaged students in higher education.

Lecturer Expertise Based on Academic Degree

A lecturer's expertise is fundamental to the quality of learning in higher education. This expertise is often built on a strong formal education, including academic degrees that signify deep mastery of a subject, sharp critical-thinking skills, and the ability to convey that knowledge effectively to students. It stands to reason that higher academic degrees often correlate with stronger analytical abilities, a deeper theoretical understanding, and richer research experience, all of which directly enhance the quality of teaching (Altbach et al., 2021; Tight, 2022).

In a university setting, lecturers with advanced academic qualifications are better equipped to design courses that are well-structured, evidence-based, and aligned with the latest scientific discoveries. What is more, this level of academic expertise allows lecturers to connect their subject matter to pressing current issues, from global challenges such as sustainability and the environment to local concerns, which is vital to bringing the green university concept to life (Leal Filho et al., 2021; Aleixo et al., 2021).

Student Interest in the Learning Process

How invested a student is in their learning is one of the most important factors for success in higher education. You can see it in how interested they are, how well they pay attention, how much they participate in discussions, and their overall enthusiasm for what is happening in class. Students who are highly engaged tend to connect more deeply with the material on both a cognitive and emotional level, which, in turn, positively affects their understanding and academic success (Fredricks et al., 2021; Bond et al., 2020).

Recent research shows that engagement is not solely a matter of a student's personality; the instructor's quality and teaching style also play a significant role. When learning is tied to real-life situations, feels relevant, and incorporates global issues such as environmental sustainability, it can significantly boost a student's motivation and engagement (Wals & Benavot, 2020; OECD, 2021).

Green University-Based Learning

The whole idea behind a 'green university' is to make higher education a real force for building a more sustainable future. This is not just a surface-level change; it is about embedding environmental, social, and economic values into the university's DNA, from its official policies right down to the way students actually learn. In the classroom, this means lecturers are integrating topics such as sustainability, resource efficiency, and environmental responsibility directly into their courses and teaching styles (Lozano et al., 2020; Leal Filho et al., 2021).

When you teach this way, students can connect what they are learning to the real-world problems they will one day have to solve, which makes them far more interested and engaged. However, for this to really click, it all depends on having lecturers with deep expertise. They are the ones who can actually connect the dots between abstract theory and what sustainability looks like in practice (Aleixo et al., 2021; Wiek et al., 2022).

How a Lecturer's Academic Degree Shapes Student Interest

We all know a great lecturer can make or break a class. Their expertise, often reflected in their academic degree, is a huge part of what keeps students hooked. It comes down to the quality of their teaching, their knack for connecting theory to the real world, and their ability to make lessons memorable. Lecturers with advanced degrees ten to project more confidence and authority, which helps build credibility and naturally draws students in (Darling-Hammond et al., 2020; Shin & Harman, 2022).

Nowhere is this more important than in a green university. Here, a lecturer's deep knowledge enables them to weave sustainability into their courses in a way that feels both authentic and scientifically grounded. When students can clearly see how their coursework connects to real-world environmental challenges, the material becomes far more relevant and compelling, sparking their curiosity and encouraging them to participate (Wals & Benavot, 2020; Leal Filho et al., 2021).

In this study, we are not just looking at academic degrees as a formal qualification. We see them as a shorthand for credibility, which in turn shapes how students perceive a lecturer's competence. That perception is confirmed in the classroom through the lecturer's command of the material, the depth of their analysis, and their skill in connecting it all to current research and sustainability values.

This research positions academic degrees as a credential signal that influences students' perceptions of lecturer quality. This means that the influence examined in this research is more related to how students interpret and respond to these formal attributes, rather than to the lecturer's actual ability to teach. Therefore, academic degrees are understood as symbolic indicators that can shape students' expectations, beliefs, and attitudes in the learning process.

Essentially, a degree might be the initial signal of expertise, but it is the classroom experience that proves it. Based on this reasoning and the existing literature, we propose that a lecturer's expertise, indicated by their academic degree, has a meaningful impact on student interest, particularly at a green university. This leads to our study's hypothesis: H_1: A lecturer's expertise, as indicated by their academic degree, has a positive and significant influence on students' interest in learning at a green university.

Figure 1 shows the conceptual framework of this research. Student interest in learning has five indicators adopted from previous research.

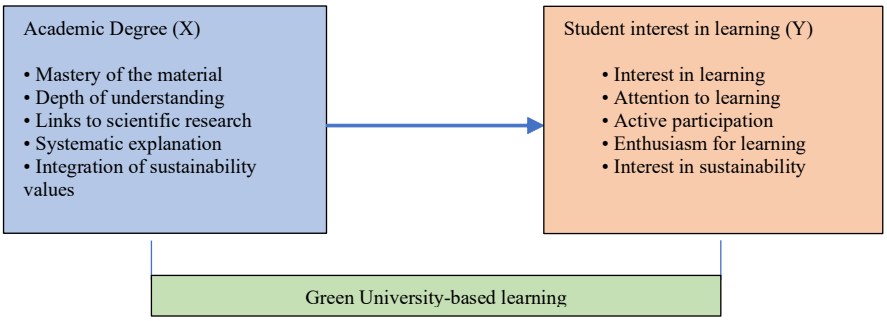

Figure 1. Conceptual framework

The interest in learning indicator was adopted from research Swarni et al. (2024). Furthermore, the attention-to-learning indicator is adapted from Kusharyadi et al. (2023). The active participation indicator is adapted from research by Swarni et al. (2024). The enthusiasm for learning indicator is adapted from research by Kassab et al. (2023). Finally, the interest in sustainability indicator adapts research by Tseng et al. (2020).

METHOD

Participants

This study included 132 students with sufficient statistical power who met the minimum requirements for regression analysis. The purposive sampling method involved students who had attended classes for at least one semester and had interacted with teachers with various academic degrees. To ensure that respondents really have relevant experience, the questionnaire

includes screening questions, such as: (1) "Have you ever been taught by more than one lecturer with different academic degrees (for example, Master's and Doctoral)?" and (2) "Please state the number of courses you have taken with lecturers who have different academic degrees."

This research was conducted at a university that implements the green university concept in its learning activities. This concept is reflected in various campus environmental policies and programs, such as reducing paper use through the digitalization of administrative and learning processes, waste management based on sorting and recycling, and implementing environmental education activities that involve students and faculty. The university also encourages integrating sustainability and environmental issues into the learning process and other academic activities. This is crucial for selecting research locations because it is relevant to the research objectives.

Data collection was conducted over a single academic period to ensure that students' perceptions of the learning process were up to date and relevant.

Research Design

This study employed a mixed methods approach with a sequential explanatory design, involving the initial collection and analysis of quantitative data, followed by the collection and analysis of qualitative data to deepen and explain the quantitative findings. This approach was chosen to gain a comprehensive understanding of the influence of lecturers' academic degrees on student interest in green university-based learning processes inhigher education.

Data collection technique

Data collection was carried out in two stages, namely:

1. The first stage is the collection of quantitative data using a closed questionnaire with a five-point Likert scale, which was distributed to students as research respondents.
2. The second stage is the collection of qualitative data through in-depth interviews with several selected students to further explore their perceptions regarding lecturer expertise, the integration of green university values, and their impact on interest in learning.

Student interest in learning has five indicators adopted from previous research. The interest in learning indicator was adopted from research by Swarni et al. (2024). Furthermore, the attention to learning indicator is adapted from the research of Kusharyadi et al. (2023). The active participation indicator is adapted from research by Swarni et al. (2024). The enthusiasm for learning indicator is adapted from research by Kassab et al. (2023). Finally, the interest in sustainability indicator adapts research by Tseng et al. (2020). The general characteristics of respondents in this study will be clearly described in Table 1 below:

Table 1. Respondent general profile

Category	Detail	Amount	Percentage (%)
Gender	Men	54	40.9%
	Women	78	59.1%
Semester Level	I	42	31.8%
	II	38	28.8%
	III	28	21.2%
	IV	24	18.2%
Academic Background	Management	76	57.6%
	Accounting	56	42.4%

Level of Exposure to Environmental Issues	Low	36	27.3%
	Moderate	58	43.9%
	High	38	28.8%

Source: processed data, 2026

Data Analysis Techniques

The collected data were analyzed using descriptive and inferential statistics. Descriptive analysis was used to characterize respondents and the tendencies of their responses to each research variable. Furthermore, an inferential analysis was conducted using simple linear regression to test the effect of lecturers' academic degrees on student interest in the learning process. Hypothesis testing was conducted at a 5% significance level.

Research Procedures

The research was conducted through several stages: developing research instruments, testing instruments, collecting data, processing data, and analyzing the results. Every stage of this study was conducted with meticulous care and a systematic approach, reflecting our commitment to ensuring the integrity, validity, and reliability of the findings. By maintaining this rigorous standard, we aim to provide insights that are not only scientifically sound but also truly reflective of the educational realities being explored.

■ RESULT AND DISCUSSION

This study aims to test and analyze the influence of lecturers' expertise, as perceived by students based on academic degrees, on students' interest in the green university-based learning process in higher education. The results of this study indicate that the model suitability test was met, as shown in Table 2, where the F test significance is < 0.05.

After the F test is fulfilled, the next step is to test the hypothesis. Based on Table 3, there is a significant positive association between a lecturer's expertise, measured by their academic degree, and student interest ($\hat{a} = 0.767$, $p < 0.05$).

Our findings show a clear connection: students are more engaged when they see their lecturers as experts, and a key sign of that expertise is their academic degree. Put simply, when students believe their instructors have strong credentials, they become more enthusiastic, focused, and involved in the class.

This idea is supported by signaling theory. Essentially, attributes like an academic degree act as a signal of quality that helps build trust. In a university setting, a lecturer's degree signals their professionalism and expertise, which makes students more confident in the learning process (Spence, 1973; Yilmaz, 2022).

From a Signaling Theory perspective, a lecturer's academic title can be understood as a signal to students about the teacher's quality, competence, and credibility. In conditions of asymmetric information, where students do not fully know lecturers' true abilities, academic degrees serve as an initial indicator that shapes expectations about the quality of learning.

The findings of this study indicate that the signal strength is limited. The coefficient of determination (R^2) value of 0.598 indicates that, although academic degrees have a significant influence, their contribution to explaining variation in student interest in learning is relatively moderate. This suggests that formal signals, such as academic degrees, do not always translate directly into high-quality learning experiences.

From a service perspective, this means a lecturer's expertise is a core part of the student's academic experience. Their degree is not just an administrative credential; it has a symbolic value

that shapes how students perceive the quality of their education. This aligns with the broader concept of service quality, which consistently emphasizes how users perceive the service they receive (Zeithaml et al., 2018).

What we found backs up a core idea in higher education: the more expertise a lecturer has, the better the quality of learning and the more engaged students become. It makes sense that instructors with advanced degrees are often better equipped to teach their subjects with more depth, encourage critical thinking, and show students why the material matters.

Universities play a crucial role in today's society by fostering environmental and sustainability awareness among students and the wider community (Boca & Saraçli, 2019; Zhao & Cheah, 2023). Chen et al. (2020) explain that academic and professional qualifications are found in human resources and are developed through knowledge and abilities obtained through training.

This naturally leads to students being more involved and participating more actively. Our results also echo recent work by Kim & Park (2022), who found a clear link between a lecturer's academic chops and students' interest in a course. Furthermore, Darling Hammond et al. (2020) also emphasized that lecturer academic quality is a key determinant of learning success in higher education.

Figure 2 shows a scatterplot showing a positive linear relationship between academic degree (X) and student interest (Y). The data points tend to follow the upward-sloping regression line. This indicates that the higher students' perceptions of lecturer expertise based on academic degrees, the higher their interest in green university-based learning. The figure also shows that the distribution of points near the regression line indicates a fairly strong relationship between the variables.

This also aligns with previous research, which has found that students tend to trust and respect lecturers with strong academic backgrounds, thereby creating a more engaging and productive classroom environment (Darling-Hammond et al., 2020). Ultimately, a lecturer's expertise is a key factor in getting students truly invested in their own learning.

Table 2. Goodness of fit model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	38.882	1	38.882	193.583	0.001
Residual	26.111	130	0.201		
Total	64.992	131			

Source: processed data, 2026

Table 3. How lecturer expertise sparks student interest: regression analysis results

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.899	0.239	-	3.769	0.001
Academic degree (X)	0.766	0.055	0.773	13.913	0.001

Source: processed data, 2026

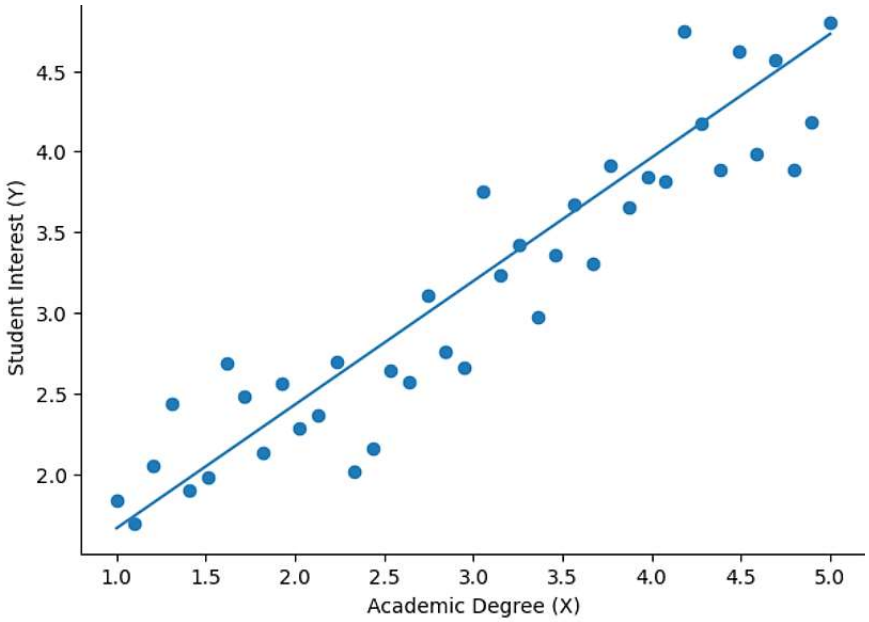

Figure 2. Scatterplot and regression line

Table 4. Model summary

R	R Square	Adjusted R Square	Std. Error of the estimate
0.773	0.598	0.595	0.448

Source: processed data, 2026

The results of this study show that the coefficient of determination indicates that a lecturer's credentials can explain about 59.8% of the variation in student interest ($R^2 = 0.598$). At the same time, the rest comes down to other factors not included in our research. The results of the regression analysis show that the coefficient of determination (R^2) is 0.598, which means that the lecturer's academic degree variable explains only 59.8% of the variation in student interest in learning. Thus, there is still 40.2% variation that cannot be explained by the quantitative model used. To understand the unexplained portion of the variance, this research uses qualitative interview findings to complement the analysis. The results of the interviews revealed that students did not evaluate lecturers solely by their academic degrees but rather by their direct learning experiences. Several qualitative factors that emerge consistently include the lecturer's teaching style, communication skills, class interactivity, and the learning approach used. Students tend to show greater interest in learning when lecturers explain the material clearly, involve students in discussions, and relate it to real-world contexts, including sustainability issues.

After collecting the quantitative results, the researchers conducted interviews with three student participants to corroborate them. The following are the results of the interviews with the three students.

Table 4. Interview results

Question	Response
1. Do you think a lecturer's expertise based on their academic degree could influence your interest in participating in green	Participant 1: I think it is influential. I feel more confident and engaged when the lecturer holds an academic degree and teaches within their area of expertise, as their explanations are more in-depth and easier to understand.

	university-based learning? Why?	Participant 2: In my opinion, it is quite influential because lecturers with academic degrees can provide motivation and offer insight into issues related to green universities. Participant 3: In my opinion, it is highly influential because lecturers with academic degrees, given their expertise, usually have publications and research experience in the field, so the learning process feels more relevant and up to date. Participant 4: I believe that a lecturer's expertise, as reflected in their academic degree, can influence students' interest in learning because they can explain green university-based learning materials more effectively, drawing on their academic experience. This can make me more interested in participating in the learning process. Participant 5: I think this is important because lecturers with relevant academic backgrounds can connect theory with their practical experience in sustainability and environmental issues. Therefore, the learning becomes more engaging and easier for me to understand. Participant 6: I think the impact is significant, as competent lecturers are more professional and able to create a more interactive learning environment. This allows me to participate more actively in the green university-based learning process.
2.	How can lecturers who have academic expertise based on their expertise influence your understanding and motivation towards the concept of a green university?	Participant 1: In my opinion, expert lecturers are considered capable of connecting theory with practice, such as implementing sustainability reporting on campus. This situation makes me even more attracted to them. Participant 2: In my opinion, expert lecturers who can explain systematically and draw on data make it easier for me to understand the urgency of a green university. Participant 3: In my opinion, lecturers with academic expertise from their research make class discussions more critical, which makes me more interested in reading additional journals on green-related issues. Participant 4: I believe that lecturers with academic expertise in their fields can provide concrete examples of how green university concepts are implemented in everyday campus life. This makes it easier for me to understand the benefits and importance of maintaining environmental sustainability. Participant 5: I believe that lecturers who are experts in their fields can

	explain the material in greater depth and in ways relevant to current environmental issues. This explanation can motivate me to participate in campus activities that support the green university concept. Participant 6: I believe that lecturers with academic competence in their fields can provide broader insights into environmental impacts and sustainability solutions. This situation has made me more aware of the important role of students in supporting green university programs.
3. Do you feel more interested in green-based courses when they are taught by lecturers who have academic expertise in the field?	Participant 1: I think so. This is because I feel like I've gained new insights, not just into basic theory, but also into issues related to green.
	Participant 2: I think yes, especially if the lecturer has researched the green economy or green investment.
	Participant 3: I think so. I would consider taking a thesis on green sustainability because of the lecturer's motivation. Participant 4: I feel more engaged because lecturers with expertise in the green environment can explain the material more effectively with concrete examples, making it easier to understand. This makes learning more engaging for me. Participant 5: I think so. Lecturers with a deep understanding of their fields can explain the relationship between sustainability theory and practice, which makes me more interested and motivated to delve deeper into the course material. Participant 6: I believe that lecturers with academic experience in green environments can provide broader, more up-to-date insights and experiences. This makes me more enthusiastic about participating in the learning and understanding the importance of sustainability concepts in higher education.

Source: processed data, 2026

Based on the coding '! categorization '! theme process, 4 main themes were obtained:

1. Academic Credibility as an Early Signal Students view academic degrees as indicators of lecturers' competence, depth of knowledge, and academic credibility.
2. Real Teaching Quality Students place more emphasis on clarity of explanation, systematic, data-based approaches, and the ability to link theory and practice.
3. Relevance and Contextualization of Green Issues Students are engaged when the material is linked to real sustainability, lecturers have environmental publications, and the learning feels "up-to-date."
4. Impact on Learning Interest and Motivation The final output is increased interest in learning, motivation to read journals, and interest in thesis topics.

Based on interviews with three student participants, it was found that lecturers' expertise,

as reflected in their academic degrees, increased the perceived credibility, depth of material, and quality of discussions in green university-themed learning. This demonstrated that lecturers with strong academic backgrounds were able to explain concepts related to the green economy more systematically, research-based, and linked to real-world practice. Consequently, students developed trust, interest, and motivation to delve deeper into green economy-related issues. This study employed a mixed-methods approach, with qualitative data serving as a complement to quantitative findings rather than as the primary source of generalizations. Therefore, the limited qualitative sample size (N=3) was not intended to achieve representativeness, but

rather to provide a deeper understanding of the quantitative analysis results. The selection of three participants was purposive, considering a variety of characteristics relevant to the study. Specifically, respondents were selected based on their level of learning interest (high, medium, and low) and their experience interacting with lecturers with different academic degrees. This approach allowed the researcher to capture diverse perspectives (maximum variation sampling), so that, despite the limited number of participants, the data obtained remained information-rich.

These interview findings are consistent with the quantitative findings, which showed that lecturer expertise, as measured by academic degrees, had a positive and significant effect on students' interest in green university-based learning. This means that the higher students' perceptions of lecturer expertise based on academic degrees, the higher their interest in green university-based learning. Therefore, these interview results reinforce (triangulate) the quantitative findings of this study, which demonstrate that lecturer expertise is not merely a symbolic factor tied to academic degrees but is also reflected in pedagogical skills and substantive depth, both of which can enhance student interest.

Based on this description, it can be seen that the Thematic Map is as follows:

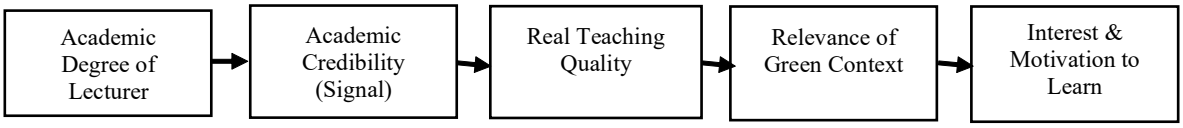

Figure 3. Thematic map

Table 5. Operational variables of lecturer expertise research based on academic degrees

Variable	Operational Definition	Indicator	Item Code	Scale
Lecturer Expertise Based on Academic Degree (X)	Student perceptions of the level of expertise and academic competence of lecturers as reflected in the academic degrees they hold and their implementation in the green university-based learning process.	1. Mastery of material according to scientific field	X1	Likert 1–5
		2. Depth of conceptual understanding	X2	Likert 1–5
		3. Ability to explain material systematically	X3	Likert 1–5
		4. Ability to relate material to scientific research results	X4	Likert 1–5
		5. Integration of sustainability values (green university) in learning	X5	Likert 1–5

Source: processed data, 2026

Based on Table 5, the variable of lecturer expertise based on academic degree (X) is operationalized as students' perceptions of the lecturer's academic competence, as reflected in their educational qualifications and their implementation in green university-based learning. This variable is measured using five indicators: mastery of material according to the scientific field (X1), depth of conceptual understanding (X2), ability to explain material systematically (X3), ability to relate material to scientific research results (X4), and integration of sustainability values in learning (X5). All indicators are measured on a 1–5 Likert scale to assess the level of respondent agreement with the statements in the questionnaire.

Table 6. Operational research variables of student interest in the learning process

Variable	Operational Defenition	Indicator	Item Code	Scale
Student Interest in the Learning Process (Y)	The level of students' interest, cognitive involvement, and affective involvement during the green university-based learning process.	1. Interest in learning about subjects	Y1	Likert 1–5
		2. Attention during the learning process	Y2	Likert 1–5
		3. Active participation in class discussions	Y3	Likert 1–5
		4. Enthusiasm for attending lectures	Y4	Likert 1–5
		5. Interest in sustainability-based learning	Y5	Likert 1–5

Source: processed data, 2026

Table 6 presents the variable of student interest in the learning process (Y), operationalized as the level of cognitive and affective interest and involvement in participating in green university-based learning. This variable is measured through five indicators: interest in learning the course (Y1), attention during the learning process (Y2), active participation in class discussions (Y3), enthusiasm for attending lectures (Y4), and interest in sustainability-based learning (Y5). All indicators are measured on a 1–5 Likert scale to assess respondents' level of agreement with the statements in the questionnaire.

Table 7. Results of the validity test of the lecturer expertise variable instrument based on academic degree

Item Code	r-count	r-table (α = 0,05)	Conclusion
X1	0.721	0.361	Valid
X2	0.748	0.361	Valid
X3	0.793	0.361	Valid
X4	0.769	0.361	Valid
X5	0.812	0.361	Valid

Source: processed data, 2026

Table 8. Results of the validity test of the student interest variable instrument

Item Code	r-count	r-table (α = 0,05)	Conclusion
Y1	0.734	0.361	Valid
Y2	0.768	0.361	Valid

Y3	0.781	0.361	Valid
Y4	0.805	0.361	Valid
Y5	0.759	0.361	Valid

Source: processed data, 2026

Table 8 Validity test results show that all statement items in the student interest variable are declared valid, because the calculated r-value for each item (Y1–Y5) is in the range of 0.734–0.805 and is greater than the r-table of 0.361 at a significance level of 0.05. Thus, all questionnaire items are suitable use in measuring student interest in the green university-based learning process.

Table 9. Results of the reliability test of research instruments

Variable	Number of Items	Cronbach's Alpha	Conclusion
Lecturer Expertise Based on Academic Degree	5	0.842	Reliable
Student Interest in the Learning Process	5	0.856	Reliable

Source: processed data, 2026

Table 9. The results of the reliability test indicate that the research instruments for both variables have a good level of internal consistency, as indicated by Cronbach's alpha values of 0.842 for the lecturer's expertise variable based on academic degree and 0.856 for the student's interest in the learning process variable. Since all Cronbach's Alpha values are greater than the minimum limit of 0.70, all statement items are declared reliable and suitable for use in research data collection.

The results of the in-depth interviews identified three main themes. The qualitative insights provide a deeper look into this dynamic through three distinct lenses. For starters, students saw lecturers with advanced degrees as more credible, feeling they had a much deeper and more organized grasp of the subject. It also made a huge difference when lecturers connected their lessons to real-world sustainability issues through case studies, relevant discussions, and recent research. This didn't just make the material feel more important; it also left students more motivated and engaged in their classes.

This student feedback really backs up the hard numbers, showing that a lecturer's expertise affects not just how students think but also how they feel and how motivated they are. When you put it all together, it's clear that a professor's expertise impacts student engagement on multiple levels. Learning through real-world examples gets students invested both emotionally and intellectually, while an advanced degree signals to students that their professor really knows their stuff, building trust from the start.

Ultimately, our findings suggest that this concept of "signaling" quality could be useful in many other areas of higher education. They also highlight just how crucial lecturers are in sustainability education; they are on the front lines, helping instill these values in their students.

■ CONCLUSION

In short, our findings suggest that a lecturer's expertise, as evidenced by their academic degree, has a real and positive impact on students' interest in learning about green university initiatives. When students see their instructor as a highly qualified expert, they become more engaged, pay closer attention, participate more, and show more enthusiasm in class. This confirms that a lecturer's degree is

more than just a formal qualification; it is a signal of quality that directly shapes a student's experience. Of course, a lecturer's expertise is not the whole story. It accounts for about 59.8% of the factors driving student interest, which means other factors are clearly at play. Factors such as a professor's teaching style, a student's background, the classroom atmosphere, and the available learning resources all make a difference. Even so, it is clear that instructor expertise is a key piece of the puzzle for improving the quality of learning, especially for universities seeking to strengthen their sustainability-focused programs.

Although the analysis results indicate that the model explains 59,8% of the variation in students' learning interest, 40,2% of the variance remains unexplained. This indicates that learning interest is a complex construct influenced by factors beyond the variables examined in this study. For example, the academic climate and campus culture. Several alternative factors that could potentially influence this variance include pedagogical aspects, such as learning methods and the quality of interactions between lecturers and students.

On a practical level, our findings suggest that universities should invest in their faculty's growth. Supporting lecturers as they pursue further studies, attend training, and build their research skills is a clear strategy for improving the quality of learning. Beyond that, universities need to equip their faculty to weave green values into their courses, making the material more relevant, contextual, and engaging for students. From a theoretical standpoint, this research contributes to the conversation in higher education by demonstrating how a lecturer's expertise can spark student interest, particularly in subjects like sustainability. These results can serve as a foundation for future studies to build a more complete model, one that also includes factors such as teaching competence, innovative classroom methods, and student psychology. By taking a more holistic view, we can shape learning policies and practices that are truly aimed at enhancing the quality of sustainable education.

Of course, we should be clear about a couple of limitations in this study. First, we measured lecturer expertise based on students' perceptions of their professors' academic degrees. This approach could be biased and does not really give a full picture of their teaching ability or research experience. Second, our model accounted for only about 59,8% of the factors driving student interest in the green university concept. This tells us that other key factors are likely at play, such as how well instructors teach, how engaged students are in class, or even their own motivation to learn.

This research has limitations related to the use of a green university context, which has not been fully operationalized in the empirical model. However, this research emphasizes the importance of sustainability-based learning. However, the variables representing the characteristics of a green university are neither measured directly nor controlled in the analysis. The implication is that the findings of this research cannot yet confirm that the identified relationships are genuinely influenced by the context of a sustainability-oriented campus environment.

This study has limitations in measuring the construct of "lecturer expertise." Although this variable conceptually refers to lecturers' substantive competencies, the instrument used in this study only measures students' perceptions of lecturers, specifically based on tangible attributes such as academic degrees and perceived learning experiences.

To get a fuller picture, future research should examine other factors that may be at play, such as teaching quality, student engagement, and what motivates them to learn. This would help us better understand the connections we are seeing. We could also use more advanced analytical tools, such as Structural Equation Modeling (SEM), to

test how these different pieces fit together. On a practical level, this means universities should support their lecturers in improving their academic qualifications. However, that training needs to be combined with real-world teaching skills and a focus on sustainability. By doing this, green university initiatives will be more effective and can have a real impact on getting students genuinely interested and involved.

DECLARATION OF GENERATIVE AI USAGE IN THE WRITING PROCESS

During the drafting of this manuscript, the authors used ChatGPT to assist with grammar correction, academic organization, and sentence development. Following the use of this tool, the author(s) reviewed and revised the content as necessary and accept full responsibility for the final content of the article.

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