

## RESEARCH THE RELATIONSHIP BETWEEN QUALITY CULTURE AND SUSTAINABLE DEVELOPMENT OF UNIVERSITIES

QUANG VAN NGO <sup>1</sup> and VAN KHANH HA <sup>2\*</sup>

<sup>1</sup> Faculty of Business Management, Hanoi University of Industry, Vietnam. Add: 298 Cau Dien - BAC Tu Liem - Hanoi – Vietnam. Email: quangnv@hau.edu.vn

<sup>2</sup> Faculty of Business Administration, East Asia University of Technology, Vietnam. Add: Trinh Van Bo Street - Nam Tu Liem - Hanoi – Vietnam. Email: vanhk@eaut.edu.vn

### Abstract

Research on quality cultural relationships and sustainable development between universities. Specifically, the author conducted an examination of university management relationships that have a direct impact on faculty performance and sustainable university development. Or the role of mediating variables in the relationship between university management and sustainable development. Finally, clarify the moderating role of quality culture on the relationship between university management and faculty performance or university management and sustainable development. Through designing a survey questionnaire and randomly sending it to individuals working in the fields of higher education, specifically lecturers, university staff or the university students themselves. The study obtained 350 valid responses that were coded and cleaned using SPSS and AMOS software. After the cleaning and coding step, reliability testing, exploratory factor analysis, and confirmatory factor analysis were conducted. CFA determination and SEM hypothesis testing. Finally, draw conclusions and provide management implications and solutions to contribute to the research. The research has made a significant contribution after cleaning the research data showing that: Real lecturer performance plays an intermediary role to promote sustainable development in university management. Besides, the more quality culture is enhanced, the weaker the relationship between university management and sustainable development. Finally, university management positively and directly impacts faculty performance and sustainable development. From the above academic contributions, the author considers to make practical contributions.

**Keywords:** Quality Culture, Sustainable Development, University Management, Performance.

### INTRODUCTION

In the context of higher education, quality culture refers to a set of shared values, beliefs and practices that prioritize and ensure standards in teaching and research. Besides, to meet the needs of the present and future generations, sustainable development is an indispensable factor. It can be seen that the relationship between quality culture and sustainable development of universities is an important aspect of global concern.

In the global context, the role of universities is determined in shaping the knowledge economy, promoting innovation and contributing to social progress. The quality of education and research conducted by universities directly affects their impact on sustainable development goals. A culture of quality ensures universities produce students with the knowledge to solve challenging problems in society as well as help organizations adapt to change and progress. Of technology, contributing to long-term sustainability. The importance of practical teaching and effective learning is emphasized, universities with high quality cultures prioritize interdisciplinary collaboration, integrity in scientific practice and transfer of research results into practical solutions to social challenges. Besides, universities are setting high standards for

educational quality and management methods. Quality culture not only helps enhance the school's reputation but also contributes to the comprehensive and sustainable development of the community through training that promotes inclusiveness and diversity.

In Vietnam, the relationship between quality culture and sustainable development in universities is consistent with the country's goals of modernization and globalization. Universities in Vietnam are increasingly focusing on improving the quality of education, research and administration to enhance global competitiveness and contribute to the country's development. Some initiatives aimed at promoting a culture of quality include evaluating curriculum and faculty performance to ensure schools meet international standards. Practical application of research results for social benefit when universities are encouraged to research and innovate as drivers of sustainable development. In addition, to improve the quality of education, schools are actively seeking cooperation with international partners to contribute to the exchange of knowledge and best practices, promote sustainable higher education and more connected. Quality culture increasingly emphasizes community engagement and social responsibility. Both globally and in Vietnam, fostering a strong culture of quality in higher education institutions is essential to prepare students, conduct effective research and contribute to long-term prosperity of society.

Quality culture is a system of values, standards and quality work habits that have shaped every member of a university to perform work effectively. Quality culture of a university Universities are partly affected by the management, policies and strategies of the university. Every educational institution has its own culture, which can affect the job performance of employees within the organization. A good quality culture will be very beneficial in improving lecturers' performance, it will help achieve goals and improve the quality of education and training. Faculty performance is important to the well-being of higher education institutions (Gappa et al., 2007). Factors affecting the quality of professional work are important and effective research drivers (Feldman & Paulsen, 1999). Many studies have examined the relationship between university management and job satisfaction (Ali et al., 2013); (Bushra et al., 2011); (Shahzadi et al., 2014) (Saleem, 2015). Other authors have discussed quality culture and faculty performance (Hamayun et al., 2011); (Shahzad, 2014) According to (Vaughter et al., 2013) points out that the literature on sustainable development in universities still mainly focuses on case studies in organizational activities with little consider policies or the impact of quality culture on sustainable development. For example, the impact of quality culture on management policies, social cohesion, teaching performance, and personal behavior of staff and students is currently unexplored and needs attention. More. But especially few researchers have considered the influence of university management on faculty performance (Paracha et al., 2012) (Shah et al., 2017; Torlak & Kuzey, 2019), and Lecturer performance on sustainable development has not been explored. In this study, the author shows the mediating role of lecturer performance in the relationship between university management and quality culture.

According to (Wals, 2014), higher education institutions are making more systemic changes by reorienting their education, research, operations, and community outreach activities toward more sustainable. Research has clarified that leadership plays an important role in promoting

employee creativity ((Mumford & Hunter, 2005); (Woodman et al., 1993). Previous studies on the relationship between leadership and employee creativity has identified a number of mechanisms, including providing infrastructure, resources and psychological conditions to stimulate employee participation in the process. Creative process and express their creative abilities (Carmeli et al., 2010); (Reiter-Palmon & Illies, 2004)). In particular, research also shows that leaders can guide, create infrastructure, and provide guidance to their teams, thus facilitating effective problem solving. More creative and effective (Redmond et al., 1993).

Leest and colleagues found that in practice excellence programs, leadership plays an important role in creating a sense of ownership for quality care among teachers. This is achieved through recognizing teachers as experts and making teaching and learning a shared responsibility (Leest et al., 2015). The most effective leaders in improving quality culture are individuals who are able to tell compelling stories about the purpose and impact of planned changes, creating unity among competitors. Potential or establish a professional language about the teaching and learning process. Furthermore, "leading leadership" also has the power to increase a leader's credibility and acceptance of change. The above studies only clarify the relationship between leadership and employee creativity, but there is no research to clarify the relationship between university management and lecturers' performance under the regulation of quality culture. Quantity. These are also considered limitations and gaps that previous research has not been able to do that the author wants to exploit.

Some other studies on the interrelationship between improving quality culture and sustainable development. According to Ali and Musah, they have clearly shown in their research that "quality culture" has a positive influence on the quality of education and work efficiency. They concluded that "A quality culture-oriented work environment creates a good working environment, where faculty are encouraged and valued for their contributions and opinions. Faculty have can freely express their ideas and creativity, without being restricted by overly burdensome rules and unnecessary pressure. They are encouraged to improve their knowledge and professional skills, and participate in research activities. Research and development, and share the latest knowledge with students". Thereby, a civilized and quality working environment helps lecturers create good relationships with students. Positive and open interaction between lecturers and students is an important factor in students' learning and personal development. (Mohd Ali & Borhandden Musah, 2012) The above research has shown that quality culture has an impact on work performance but has not considered the impact of other variables that can be added to the model. Besides, in these studies, quality culture is considered an independent variable that has a positive impact on the quality of education, however, there are no studies that have determined the role of quality culture as a variable. Moderating the relationship between university management and faculty performance.

Universities are important cultural change agents promoting sustainable development that can be demonstrated through interactions and engagement with businesses and society. According to (Vargas et al., 2019) developing relationships between educational organizations and relevant external parties is important for promoting sustainable development. Universities, acting together with business and society at large, are a necessary prerequisite for building and

maintaining sustainable development. According to (Stephens et al., 2008) improving cultural quality, setting policies in cooperation with external organizations helps facilitate change towards a better society by applying the goals Sustainable development goals as a means of connecting universities, especially graduates, with businesses. This study has added not only enhancing the quality culture within the organization but also enhancing external engagement. This has important practical implications for universities, businesses and social organizations in working together to build a sustainable society. Here, these studies have shown that university management is a factor promoting sustainable growth. In addition, improving quality culture also helps universities develop more sustainably. A new research gap has emerged. In this study, the author combined all three factors including university management and sustainable development to highlight the regulatory role of quality culture.

Although there are studies that have contributed to improving the understanding of the role of cultural quality in influencing sustainable development in educational environments, there are still many gaps that have not been clarified. . In this research, the author will clarify the moderating role of quality culture on the relationship of university management to faculty performance or university management to sustainable development. Besides, according to ((Paracha et al., 2012); (Shah et al., 2017); (Torlak & Kuzey, 2019) very few studies clarify the relationship between university management and lecturer performance, especially lecturer performance plays a mediating role in the relationship between university management. and sustainable development, there have been no studies to clarify

Therefore, the purpose of this study is to provide information and improve understanding of the influence of quality culture to support the sustainable development of a university in a period of international integration such as: Currently. From there, universities consider making policies and strategies on higher education management, improving lecturer performance, and organizing cultural quality. This study will attempt to answer the questions:

First, does quality culture promote the relationship between university management and sustainable development?

Second, what impact does quality culture have on promoting the relationship between university management and faculty performance?

Third, does university management have an indirect positive impact on sustainable development through faculty performance?

Finally, what advantages does improving quality culture create to help universities compete in today's fierce education market?

## **Background Theories and Research Model**

### **Background Theories**

Motivation theory is a behavioral theory that states that people are motivated by internal and external motivation. According to Logan (Logan, 1968), the author believes that motivation is motivated through a reaction mechanism, so classical conditioning will describe the effect of motivational change. This is decisive for work performance, increases efficiency levels and can

directly and objectively measure the problem. The incentive value of financial and non-financial incentives of rewards is the motivation from administrators that is responded to by lecturers' work results and output quality.

The theory proposes that motivation comes from the human desire to relieve the pressure of not satisfying certain needs, and explains behaviors that originate from basic human needs such as biological needs, safety needs, etc. However, each human's behavior is not always driven by unmet needs. Understanding this theory, leaders always constantly change training and remuneration policies, creating the best environment for lecturers to innovate, complete their work, improve teaching quality and performance. Of pupils and students. Leaders must always observe and analyze behavior, grasp the psychology of individuals and families, and promptly pay attention to difficult issues to support and help lecturers.

According to the needs theory of (Maslow, 1943), he said that human behavior originates from needs and needs are arranged in order from low to high. Low needs such as physiological, safety, civilization and after meeting these needs, people increasingly have a strong desire to be recognized and often like to be respected and expressed. Based on Maslow's hierarchy of needs, administrators will consider applying flexibility to lecturers to motivate them to complete their work effectively and be ready to dedicate and contribute to social organizations.

According to Frederick Herzberg's two-factor theory (Herzberg, 2015), the factors that motivate employees to work are maintenance and motivating factors. Company policies, status, working conditions or relationships with colleagues are maintenance factors. Besides, opportunities for advancement and achievement are motivating factors. Leaders have the right and obligation to create satisfaction, motivate employees to work dynamically and support everyone to complete everything with a positive, voluntary attitude and vice versa, if they do not do well. There will be appropriate punishment regulations.

### **Quality Culture**

Currently, in the context of globalization and integration, in order to face fierce competition from universities, university management must always find new solutions, suitable to the context and capacity. Present. One of the factors that build and develop the internal education system is the quality culture of universities. So what is quality culture that is of interest to domestic and foreign researchers? Depending on the perspective, living environment or thinking of each individual researcher in each period, quality culture has different concepts.

Quality culture is not only the responsibility of those responsible for quality control but is also a shared responsibility of the entire community within the organization (Crosby et al., 1986). This is not only a value system, but also an organizational environment built to establish and continuously improve quality. Every member, from learners to managers, from departments to mass organizations, must understand their work in the context of quality and comply with that quality requirement (Le, 2008).

The concept of quality culture, as described by Yorke, specifically emphasizes a focus on the needs of all stakeholders in the organization and comprehensive support for achieving a commitment to quality and improvement. Progress continuously. Quality culture is not just a set of rules or processes, but a mindset and outlook that characterizes the entire organization.

According to (Lewis & Weigert, 2012) it not only exists at the organizational level but is also an indispensable part of the daily life of the university. It is not only an individual responsibility but also a shared responsibility of the entire academic community, from officers, professional and administrative staff to students. Everyday life and quality assurance activities are not just the task of a small number of people but a commitment in which everyone in the community participates to ensure and improve quality in every aspect of operations. University movement.

A study carried out under the auspices of the European University Association (EUA), whose view of quality culture can be understood as a set of values, beliefs, expectations and commitments that Educational organizations (in universities) share and maintain with the main purpose of always making efforts and constantly trying to improve quality. This is an important aspect of organizational culture, where all members are aligned towards the common goal of improving the quality of education. Besides, the two main components that make up quality culture have been clearly and specifically distinguished, avoiding confusion. First, the cultural and psychological aspects include: common values are a set of principles and desires that the educational community unanimously respects and pursues, beliefs the belief that maintaining a supportive environment Support and investment in quality improvement measures are key to achieving educational goals and expectations, commitment to innovation with continuous improvement of quality through activities such as research and training. Second, the aspect of infrastructure and management characteristics always refers to the process of supporting quality improvement through methods and tools applied by the organization to ensure and improve quality. It also involves coordinating work by organizing, managing, guiding, and agreeing on activities related to quality improvement.

Thus, quality culture can be understood as the awareness, awareness and responsibility of everyone in the organization for quality, and must be consistent with the common strategy and goals when performing all work. . More specifically, university quality culture is an important aspect of educational organizations, where all members work towards the common goal of improving quality. It is not only a value system, but also an organizational environment and a shared responsibility of the entire community within the organization to ensure and enhance quality in all aspects of university operations.

### **Sustainable Development of the University**

Sustainable development is one of the burning issues that many researchers have given their concepts and opinions on. At the same time, it is also a controversial issue from different perspectives, whether it is a concept, a goal or a development strategy of a real researcher.

Sustainable development, as defined by the United Nations World Commission on Environment and Development, is a development process that does not significantly affect the ability of future generations to meet their needs. . This definition focuses on weighing up the

"needs" of the present, especially the needs of the world's poor, and the "limitations" of the environment in meeting these needs not only today but also in the future. According to SSF, at the societal level, sustainable development includes three main aspects: human welfare, environment and economy. Human welfare refers to meeting the basic needs of communities and ensuring a decent standard of living for everyone, while not unduly harming future generations. The environmental aspect is concerned with protecting and maintaining the health of the ecosystem, ensuring that development does not have severe consequences for the environment. The economic aspect refers to building a strong and flexible economic base that not only benefits the present but also creates the basis for sustainable development in the future. With this knowledge, sustainable development becomes a complex system, requiring consensus and multilateral cooperation between governments, businesses and communities to ensure that all decisions and actions are directed towards the goal is to be sustainable and not compromise the ability of future generations to survive.

A good, unique concept of sustainable development in the Brundtland report (WCED, 1987) is development that meets the needs of the present without compromising the ability of future generations to meet their needs. .

Sustainability is related to the process or direction of a future strategy for sustainable development (Reis & Moore, 2005). This perspective is considered at two specific levels (micro) such as a university being considered an industrial enterprise. Social processes have political significance, but also at the overall (macro) level as the higher education system is considered a political construct with significant social impacts. This implies that sustainable development not only affects specific aspects of a university but also requires attention to the overall level of the higher education system. Therefore, sustainable development is not only the responsibility of individual universities but also a comprehensive challenge that requires cooperation and stability between members of the higher education system and the society it serves. Service.

The concept of sustainable development opens the door to effectively confronting complexity without denying it or trying to reduce it in unacceptable ways. At the same time, elements such as justice, participation and interculturalism play an important role in shaping the university's inclusive approach, combined with forward-looking thinking to create a form of development desired for the whole society. At the same time, the idea of sustainability also seems applicable from an organizational perspective: "at the organizational level, sustainability can be seen as an enabler of structural and organizational change." system organization" (Wals & Corcoran, 2006). Even if universities can be described as institutions with paradoxical and contradictory characteristics, they should not be ignored in the process of trying to promote change towards sustainable development; instead, they should be used actively as a form of structural stress (Kehm & Pasternack, 2001).

Thus, the sustainable development of universities is not only a theoretical issue but also a practical challenge for the research community. This concept raises the question of how universities can grow efficiently, without harming the environment, and at the same time fully meet the needs of existing communities without compromising their ability to meet the needs

of their communities. Meet the needs of future generations. Besides, the concept of sustainable development in universities also focuses on creating a positive and innovative academic environment, encouraging research and applying technology to solve social problems. Society and the environment. At the same time, it also includes building strong links with communities and businesses to ensure that knowledge and research can be converted into practical solutions.

Ultimately, the sustainable development of universities is a complex process, requiring consensus and cooperation among many stakeholders to ensure that higher education is not only a place to impart knowledge but also is the driving force for progress and prosperity of society.

### **Research Hypotheses**

According to research by Amazt and Idris (Amazt & Idris, 2011), the author points out that the teaching staff is the key to the success of universities in education. Each lecturer is one of the core elements, an internal and external motivator. Administrators use motivation to satisfy certain needs from low to high levels to help lecturers have spirit of contribution and dynamism at work. This shows that the motivation of managers and lecturers is extremely important in affecting the work performance of employees. In research on lecturers' work motivation (Nguyen, 2022), (Duc & Linh) and (Hanh et al., 2021), the authors and their colleagues showed that welfare, compensation, and promotion , rewards based on achievement or working environment are important factors that determine the dedication and contributions of lecturers in the long term.

Both authors Duc and Linh (Duc & Linh) in the study "Work motivation of lecturers at public universities in Hanoi" pointed out that university administrators at public universities have quite a few policies. Policies to improve lecturers' working motivation such as high salaries, good incentives, etc. On the contrary, private schools according to authors Hanh, Trieu and colleagues (Hanh et al., 2021) give that lecturers tend to attract lecturers in forms such as a good creative environment (An, 2015), high income, better remuneration and welfare than some state-run schools, so many lecturers tend to prefer working outside the state.

*H1: University management has a positive impact on faculty performance*

According to research on evaluating teacher performance in schools by authors Bichi (Bichi, 2017) and Asio (Asio, 2020), the authors all believe that evaluating teacher performance needs to be effective. Implemented regularly and mandatory during work and work. Reality shows that the learning outcomes of students as well as students and teachers are related to each other in assessing teachers' learning outcomes. The article also sets out some criteria in the integrated assessment of learning outcomes and teaching quality. Pupils and students will be able to evaluate teachers teaching their subjects and can suggest modifications in teaching methods, which helps bring about effectiveness in teaching. In addition, school environment also affects student achievement and teacher performance towards sustainable development (Adeogun & Olisaemeka, 2011).



According to author Asia (Asio, 2020), evaluating lecturer performance helps teachers be aware of the effectiveness of assessment activities. Research also shows that organizations and businesses will operate well thanks to work that has High performance standards. When lecturers actively absorb innovation, it increases work performance and promotes long-term development of organizations and businesses. At the same time, evaluating work performance also creates many opportunities and challenges for lecturers, requiring continuous updating with the age of sustainable digital technology development.

*H2: Lecturer performance has a positive impact on sustainable development*

The university is also considered a business, a social enterprise is leadership that catalyzes change and solves social problems. According to authors Muralidharan and Pathak (Muralidharan & Pathak, 2018), individuals in organizations combine with the motivation to pursue goals that benefit themselves, while creating economic and social value. Association helps businesses develop sustainably. The main behavior of a leader is to bring awareness, inspiration, and a working environment that makes subordinates satisfied and proud of the value of the contribution they bring to the organization and business. At the same time, lecturers need to cooperate, maintain development and improvement in their professional fields, and give ideas to innovate policies and regulations to rationalize the content of the set goals.

Author Asbari (Asbari et al., 2020) points out that the innovation of lecturers to simultaneously develop both hard and soft skills in the era of 4.0 technology development is essential, the industrial revolution requires resources. Quality human resources with good qualifications and skills can adapt well to a rapidly changing context. Managers will provide criteria for evaluating different aspects of lecturers. To ensure competition between universities, lecturers need to be fully trained, supplemented with knowledge and skills, and always updated with innovative teaching and working methods (Oanh, 2017; Vu, 2015). For organizations or businesses, administrators always accompany, encourage, motivate, and orient the development of lecturers, increase lecture performance for the long-term, sustainable goals of the organization, meeting meet the knowledge needs of society (Chaong, 2023), (Pham, 2018).

*H3: University management has a positive impact on sustainable development*

According to research on the implementation of education in university curricula by authors Barth and Rieckmann (Barth & Rieckmann, 2012), the authors argue that the learning process can create transformational changes. Change mainly depends on the qualifications of instructors, ability and willingness to support that process. Research also shows that creating conditions for lecturers to develop personal capacity and change teaching methods affects the overall sustainable development of universities in general.

According to Sarker and Ranna (Sarker et al., 2021), (Asio, 2020) both believe that developing teaching staff is a condition for professionalism, quality of sustainable and qualified education. Lecturers need to be evaluated through programs of discovery, professional engagement, updating practical knowledge, gaining experience to do well in teaching, and improving performance to be able to advance their careers and grow. Further on the path of knowledge. At the same time, paying lecturers based on performance or degree level is also a way to

motivate lecturers to innovate and study. Also sharing the same opinion as the above authors (Liu et al., 2020), Lui and Peng also mentioned higher education policy and talent training, lecturers are knowledge bridges that pave the way for students, Student performance can also raise the visibility of the university. The author believes that good lecturer performance promotes education, brings benefits to the organization, and the measured capacity of lecturers affects the sustainable development of businesses and organizations.

*H4: University management has a positive impact on sustainable development through faculty performance*

According to research (Bendermacher et al., 2017) by authors Bendermacher and Oude Egbrink, leaders and managers are organizational contextual factors that function to link management structures and create trust and loyalty. General understanding. Leaders influence resource allocation, clarify roles and responsibilities, create partnerships, provide vision, and analyze and coordinate work. Quality culture is related to interactive relationships between people, actions, commitment to output quality and continuous improvement according to current development trends. Many leadership styles have an impact on the performance of subordinates, leaders have the ability to promote trust, improve confidence and maintain cooperation (Mohammed et al., 2015), (El Kharraz & Boussenna, 2021).

Managers provide incentives to employees, participate in corporate decision making, increase employee value and enhance professional competence and increase faculty performance (Jamali et al. al., 2022). Leaders play a role in determining behavior that focuses on the emotions and well-being of members in the organization. In addition, they also care about maintaining personal relationships, feel passionate about their work every day, and are willing to contribute. This promotes the teaching quality of schools to increase the scale and quality of occupations. Increased faculty performance thanks to the promotion of university management is an important result of quality culture.

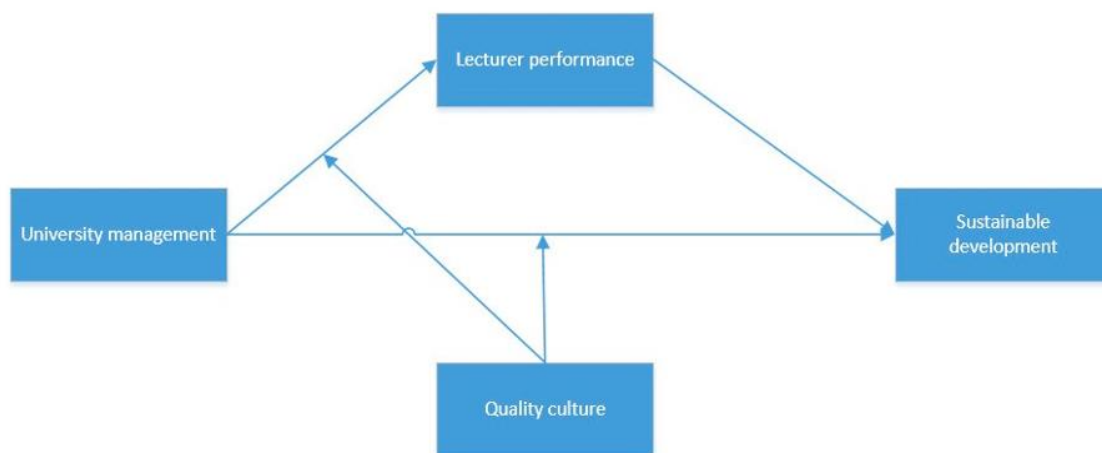
*H5: Quality culture moderates the relationship between faculty performance and university management*

In the research (Zkri Ali & Yousif Hanna, 2022), (Iranmanesh et al., 2019) the authors point out the role of factors in adapting to sustainable development in higher education and accounting training institutions. Identify mentors that increase instructor performance through collaboration among organizational members. Sharing the same opinion as the above author, authors Erdogan and Liden and their colleagues (Erdogan et al., 2006) also believe that the perception of fairness and leadership exchange between members are interconnected. . Sustainable development requires trade-offs for social goals, teaching forms combined with the university environment in the digital age to help teach effectively and improve the quality of student output (Giang & Nam, 2019).

According to authors Ahmed and Ahmed (Ahmed et al., 2023), research on green human resource management starts from employees' green initiatives that promote green creativity in production employees. The environment of production employees is associated with the work of ecological innovation initiatives, collaborative innovation and quality development of the enterprise. Improved faculty performance through innovation helps improve the quality of higher education, creating a favorable environment to maintain and sustainably develop the education system. At the same time, lecturers who invest in research and innovate teaching methods are encouraged and supported to develop knowledge and techniques, promoting the development of education.

*H6: Quality culture moderates the relationship between faculty performance and sustainable development*

### Proposed Research Model



**Figure 1: Proposed Research Model**

*(Source: Suggested by author)*

## RESEARCH METHODOLOGY

### Questionnaire Design

The research method used by this topic to address the research objectives is a mixed method. This is a combination of using qualitative research methods and quantitative research methods. In particular, qualitative research methods help explain specific cases and problems. Qualitative research is only suitable for addressing the goals of identifying research problems, identifying research gaps and a number of related goals. In contrast, quantitative research methods have the advantage of finding general laws through data analysis. While the evaluation criteria of the qualitative approach can be subjective and depend on personal opinion, the conclusions obtained from the quantitative approach often have clear criteria, which makes the results difficult to understand.

The results supported by the quantitative method have definite and clear reliability. Mixed methods combine the use of both approaches in research design to take advantage of the advantages and limit the shortcomings of each method. In other words, according to Klassen et al., (2012), "this is the use of one method to extend, supplement and explain the results of another method".

### **The research was conducted based on 2 phases:**

Stage 1: From identifying the research problem and research objectives, and based on Based on theory, the author proposes a research process, from which the author proposes a preliminary scale, including four factors: University management, Lecturer performance, Sustainable development and Quality culture. The University management factor includes 5 observations taken from the research of ((Todorovic et al., 2011). Next comes the factor Lecturer performance has 6 observations taken from the study (Noor, 2022) The Sustainable development factor has 5 observations taken from research (Rocca, 2004) and finally the Quality culture factor has 5 observations taken from the research of ((Doval & Bondrea, 2011), ( Kanji et al., 1999), (Sahney et al., 2010).

Phase 2: The author conducted interviews with 5 experts in the field of education to survey whether they agreed or had any additional contributions to the opinions. The goal of the group and in-depth interviews was to discover and adjust the observed variables University management, Lecturer performance, Sustainable development and Quality culture as a basis for building an official questionnaire. The official questionnaire used was collected online via google form and sent to survey subjects. Survey subjects were officials, lecturers, and students in the university environment in Hanoi via email, zalo, online link. Based on the participants' answers, the rating scale is designed based on a 5-level Likert scale (1 - completely disagree, 5 - completely agree) built on the following scales: from the research of (Citrin, 2001), (Bambauer-Sachse & Mangold, 2011; Davis et al., 2009; Delgado-Ballester & Munuera-Alemán, 2001; Spencer & Spencer, 2008; Wu & Shaffer, 1987) The results of this research will be the basis for the author Propose management implications to improve quality culture to contribute to the sustainable development of the university's educational foundation. These results can help universities better understand the importance of quality culture in promoting the relationship between University management and Sustainable development, University management and Lecturer performance.

### **Data Collection**

The main purpose of this study is to study the relationship between quality culture and sustainable development of universities. Therefore, the research subjects are ministries, lecturers, and university students, especially in Hanoi. The author applied a simple random sampling method. The questionnaire includes 21 main questions, so according to Hair, Black, Babin, Anderson, & Tatham the minimum sample size will be 105 questionnaires (Hair et al., 1998).

The results achieved were 21 observed variables representing 4 research factors. With 400 survey subjects including officials, lecturers and students, questionnaires were distributed. The result was 400 pounds, of which 50 pounds did not meet the response quality requirements. From collecting raw data, the author proceeds to use spss and Amos software to clean research data. After testing the reliability of each scale, scales that are sufficiently reliable will be included in EFA exploratory factor analysis, then satisfactory observations will be included in CFA and SEM analysis to check. Determine the research model and hypothesis that the author proposed in advance.

## RESEARCH RESULTS

After reviewing domestic and foreign research documents, applying theoretical research models and explaining the theoretical basis related to the research topic, the author proposed a research model in the future. Above. The model tries to determine the role of Lecturer performance in the relationship between university management and sustainable development with the moderation of Quality culture on the relationships between university management- Lecturer performance and university management- sustainable development. After building the research model, the author proceeded to build a questionnaire using 5-level Likert scales in the research through in-depth interviews and group interviews with experts from qualitative research. Preliminary calculations and quantification based on previous research and adjustments appropriate to the context and research objectives of the topic. In addition, the author also uses quantitative research methods conducted through direct interviews and surveys using ggform links of the subjects to be surveyed. From collecting raw data, the author proceeds to use spss and amos software to clean research data. From testing the reliability of each scale, scales that are sufficiently reliable will be included in EFA exploratory factor analysis, then satisfactory observations will be included in CFA and SEM analysis to test. Determine the research model and hypothesis that the author proposed in advance.

### Descriptive Statistics

Factors	Ingredient	Quantity	Percent
Sex	Male	162	46.3
	Female	188	53.7
Age	Under 18 years old	83	23.7
	From 18 to 15 years old	110	31.4
	From 25 to 35 years old	93	26.6
	Over 35 years old	64	18.3
Income	Under 5 million	34	9.7
	From 5 to 10 million	129	36.9
	From 10 to 15 million	131	37.4
	Over 15 million	56	16
Job	University staff	69	19.7
	Lecturers	81	23.1
	Student	121	34.6
	Other	79	22.6

### Test the Reliability of the Scale

The author conducted all scales including University management (5 observations), Lecturer performance (6 observations), Sustainable development (5 observations) and Quality culture (5 observations) to test the reliability of the scale. Scale, see if the scales meet the criteria for inclusion in EFA exploratory factor analysis. The criteria for testing the reliability of the scale are as follows: Cronbach's Alpha coefficient (Ca) with general Ca is greater than 0.6, besides the total variable correlation coefficient must be greater than 0.3. In addition, we also pay attention to the criterion that the total variable correlation coefficient must be less than the total variable correlation coefficient if the variable is eliminated. Observations in the scale that do not meet the above criteria are considered trash variables and removed from the scale to analyze the next steps in the study. Thus, the results of testing the reliability of the measurement scales are shown in the following table:

**Table 1: Results of Testing the Reliability of the Scale**

Element	Cronbach's Alpha (Ca)
University management	0.883
Lecturer performance	0.914
Sustainable development	0.924
Quality culture	0.874

*(Source: Statistics author)*

Through the above results table, we see that Cronbach's Alpha coefficient (Ca) with general Ca ranging from 0.874 to 0.924 is greater than 0.6 (specifically shown in the table above). Besides, the total variable correlation coefficients of the above four scales are all greater than 0.3, specifically the smallest total variable correlation coefficient of the University management, Lecturer performance, Sustainable development, and Quality culture scales is 0.683 respectively; 0.664; 0.731; 0.607. Finally, the total variable correlation coefficients if the variable types are all smaller than the general Ca coefficient of each scale. Thus, after testing the reliability of the 4 measurement scales, we see that no observed variable was eliminated because it did not meet the standards. Therefore, all observed variables of the 4 scales were subjected to EFA exploratory factor analysis.

### Exploratory Factor Analysis Results

The scales that have just been tested for sufficient reliability are included in the EFA exploratory factor analysis. With 4 scales including 21 observed variables, however, the author only included EFA exploratory factor analysis with independent variables, dependent variables and intermediate variables, without the participation of moderator variables. So we proceed for the variable University management (5 observations); Lecturer performance (6 observations) and Sustainable development (5 observations) were entered into EFA exploratory factor analysis using promax rotation. The results of EFA exploratory factor analysis are shown in the table below

**Bảng 2: KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.875
Bartlett's Test of Sphericity	Approx. Chi-Square	3834.952
	df	120
	Say.	0

(Source: Statistics author)

Firstly, the coefficient KMO= 0.875 reaches a value of 0.5 or higher ( $0.5 \leq \text{KMO} \leq 1$ ) which is an index used to consider the appropriateness of factor analysis. Second, the Bartlett test (sig Bartlett's Test=  $0.00 < 0.05$ ), proves that the observed variables are correlated with each other in the factor. Third, in terms of Eigenvalue, there are only factors with Eigenvalue= 2,634 > 1, so the factors are retained in the analytical model. Fourth, total variance extracted = 71,906%  $\geq 50\%$  shows that the research model is consistent with actual data. Finally, the loading coefficients of all factors are greater than 0.5, the smallest being the loading coefficient of observation UM4= 0.779, which satisfies the condition greater than 0.5 according to Hair et al. (2010). Besides, the higher the factor loading coefficient, means the greater the correlation between that observed variable and the factor and vice versa. Specifically, the load factors are shown in the rotation matrix table below:

**Table 3: Pattern Matrix Rotation Matrix**

<b>Pattern Matrix<sup>a</sup></b>			
	Component		
	1	2	3
LP6	0.893		
LP4	0.856		
LP3	0.851		
LP5	0.849		
LP2	0.816		
LP1	0.747		
SD5		0.906	
SD2		0.903	
SD4		0.887	
SD3		0.856	
SD1		0.822	
UM2			0.866
UM3			0.858
UM5			0.827
UM1			0.783
M4			0.779
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

(Source: Statistics author)

Thus, after analyzing the exploratory factors for 3 observed variables: University management, Lecturer performance, Sustainable development extracted from 16 observations, it can be seen that the observations of these 3 variables all meet the criteria in the analysis. EFA exploratory factor, observations remain intact and are not reduced or added when entering CFA confirmatory factor analysis.

### **Confirmatory Factor Analysis Results**

The CFA confirmatory factor analysis method has attracted great attention from the scholarly community due to the outstanding advantages it brings compared to exploratory and correlational factor analysis methods. CFA provides a more rigorous approach to model testing, helping authors more rigorously confirm the linear model structure and the relationships between variables in the study.

The rigor of confirmatory factor analysis CFA not only helps the author control the linear model but also helps determine the accuracy of the applied model structure. This helps avoid statistical errors that may appear during the research process. CFA is not only a powerful tool for testing theory, but also provides accurate and reliable results, laying the foundation for a better understanding of the relationships between variables in the model.

To analyze the CFA confirmatory factor, it is necessary to satisfy a number of Model fit criteria as follows: CMIN/df= 2.413 (CMIN/df  $\leq$ 3); GFI= 0.922 (GFI $>$ 0.9); CFI=0.964 (CFI $\geq$ 0.9); TLI=0.955 (TLI $\geq$ 0.9); RMSEA=0.064 (RMSEA $\leq$ 0.08); PCLOSE= 0.016(PCLOSE $\geq$ 0.01). Thus, the CFA model has satisfied the set criteria, it can be concluded that the model the author is using is suitable for market data and the scales used in this study ensure validity. Unidirectional (see description in image below)



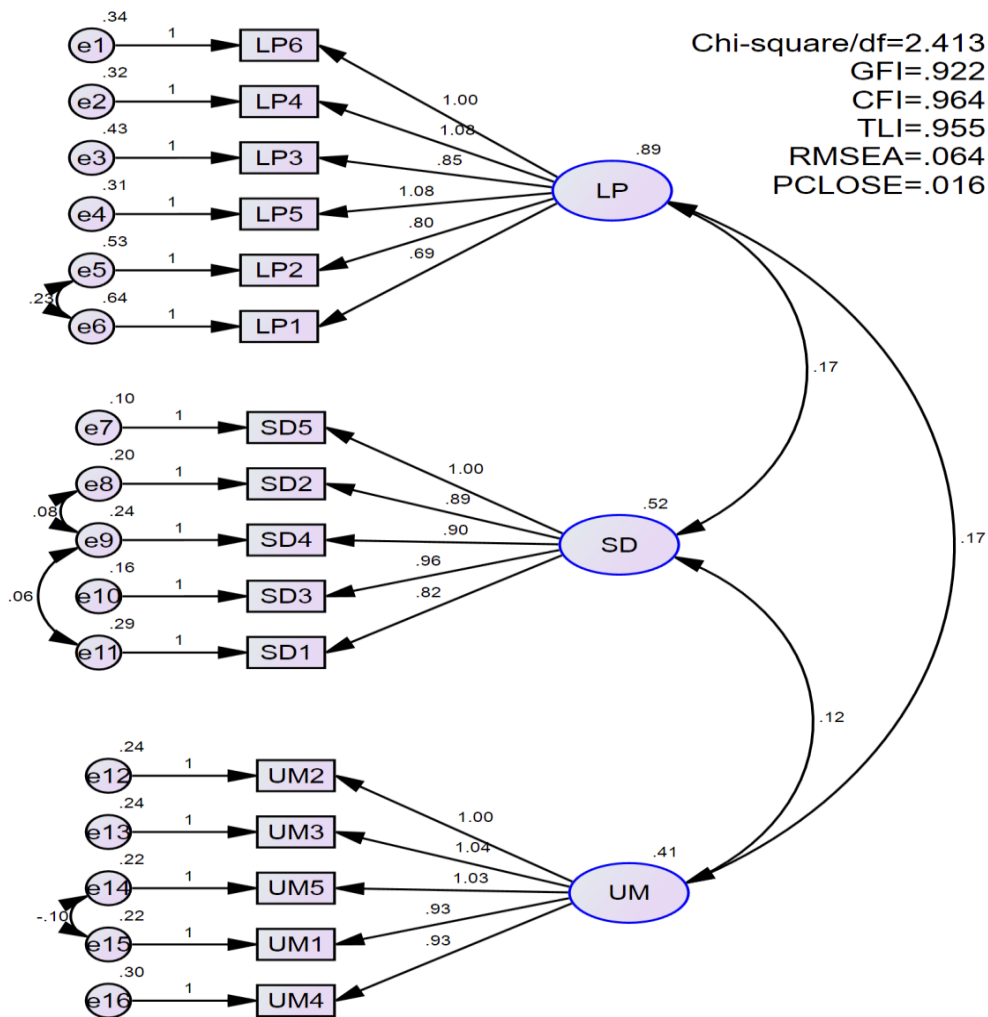


Figure 2: CFA Model

(Source: Statistics author)

After testing the model's suitability with market data, we continue to test the reliability, convergence and scale value.

Standardized Regression Weights: (Group number 1 - Default model)

**Table 4: Standardized Factor Loadings**

			Estimate
LP6	<---	LP	.849
LP4	<---	LP	.873
LP3	<---	LP	.773
LP5	<---	LP	.876
LP2	<---	LP	.720
LP1	<---	LP	.633
SD5	<---	SD	.918
SD2	<---	SD	.825
SD4	<---	SD	.798
SD3	<---	SD	.867
SD1	<---	SD	.740
UM2	<---	ONE	.795
UM3	<---	ONE	.804
UM5	<---	ONE	.814
UM1	<---	ONE	.782
M4	<---	ONE	.734

(Source: Statistics author)

First, looking at the table of standardized loading factors, we can see that the standardized loading factors are all  $\geq 0.5$ , specifically the smallest standardized loading factor is  $UM4 = 0.734$  of the variable UM. In addition, the CR composite reliability is greater than 0.7 ( $CR \geq 0.7$ ), the smallest is still the UM variable with  $CR = 0.850$ . Thus, the study's measurement scales have achieved sufficient reliability.

Second, to test the convergence of the study, we evaluate based on whether the CR index is greater than 0.7. If it is greater, convergence is guaranteed. In addition, the AVE index is also a criterion for evaluation. If AVE is greater than 0.5, convergence is guaranteed. Especially if both indexes ensure the evaluation threshold, the condition of convergence is very strong. From here we can see that the CR indices of variables SD, LP and UM are 0.918 respectively; 0.885;  $0.890 > 0.5$ . Its AVE is also: 0.692; 0.609;  $0.618 > 0.5$  should satisfy the set criteria. Thus, it can be confirmed that the research achieved convergence

Finally, to achieve discrimination, the MSV indexes must be smaller than the corresponding AVE index; at the same time, the SQRTAVE index must be greater than the Inter-Construct Correlations index

**Table 5: Evaluation Results of CR, AVE, MSV and SQRTAVE**

	CR	AVE	MSV	MaxR(H)	SD	LP	ONE
<b>SD</b>	0.918	0.692	0.072	0.931	<b>0.832</b>		
<b>LP</b>	0.885	0.609	0.076	0.907			
<b>ONE</b>	0.890	0.618	0.076	0.892	0.268	0.276	

(Source: Statistics author)

### Test the Model and Research Hypotheses

First, we test the SEM linear structure without any detailed variables. The variables of the CFA results are included in testing the hypothesis through the model fit coefficients.

From the image above, we can see that the research model is consistent with real data because the measurement indicators are consistent with the evaluation criteria and appropriate to the situation that the author researches. Specifically as follows: PCLOSE index=0.016 satisfies the criteria  $> 0.01$ , CMIN/df = 2.413 satisfies the evaluation criteria  $CMIN/df < 3$ , CFI index = 0.964 satisfies the criteria  $CFI > 0.9$ , RMSEA = 0.064 Satisfying the condition that this indicator must be less than 0.08, GFI index = 0.922 is suitable for the context and sample size used in the study, therefore, this indicator also completely satisfies the set evaluation criteria. .

Thus, the research model is consistent with market data, we continue to test the proposed research hypothesis through SEM analysis, based on the unstandardized regression coefficient table to see consider impact relationships.

Regression Weights: (Group number 1 - Default model)

**Table 6: Unstandardized Regression Coefficients**

Hypothesis	Correlate		Estimate	S.E.	C.R.	P
H1	LP	<--- ONE	.405	.085	4.742	***
H2	SD	<--- LP	.151	.045	3.387	***
H3	SD	<--- ONE	.240	.066	3.624	***

(Source: Statistics author)

Through the SEM linear structural model analysis table, it is seen that the P - value is not standardized between the relationships: LP<--- UM; SD<---LP; SD<---UM has a P value of: 0000. It can be seen that in the three tested relationships, all P values are  $< 0.05$ , so these three relationships are statistically significant with 95% confidence. ( $p < 0.05$ ) and have a positive impact on each other because the estimated coefficient is positive. Thus, from here it can be concluded that the above hypotheses: H1; H2; H3 is accepted because the P values of the hypotheses are consistent with statistical significance

**Table 7: Intermediate Relationship Table**

Hypothesis	Relationship	Direct		Indirect		Intermediate type
		S.ES	Sig.	S.ES	Sig.	
H4	SD<---LP<---UM	0.213	0	0.054	0.001	Partly intermediate

(Source: Statistics author)

After testing the direct impact relationships, the author continues to test the indirect relationship through the intermediate variable. The test results in the table above show that, in the relationship SD<---LP<---UM, the LP variable is the intermediate variable, after testing the indirect Sig coefficient of this relationship =  $0.0001 < 0.05$  satisfies the criterion of coefficient sig.  $< 0.05$ . Therefore, we can conclude that there is an indirect relationship between them through the variable LP. Besides, they also show the direct relationship SD<---UM as tested

above through unstandardized regression coefficients. It can be seen that this is considered a partially intermediate relationship. Thereby, the author tested the proposed research hypotheses. Specifically, hypothesis H4 is accepted.

**Table 8: Testing the Role of QC Moderating Variables**

Hypothesis	Relationship	Coeff	SE	t	P	LICI	ULCI
H5	UM*LP(QC)	<b>-0.0733</b>	0.1013	-0.7238	0.4697	-0.2725	0.1259
H6	UM*SD(DC)	<b>-0.2905</b>	0.0767	-3.7871	<b>0.0002</b>	-0.4414	0.1396

(Source: Statistics author)

By using PROCESS v4.0 macro, obtaining results as shown in the table above, we see that the QC variable does not moderate the relationship between UM and LP (because  $p = 0.4697 > 0.05$ ) but does moderate the relationship. Relationship between UM and SD (because  $p = 0.0002 < 0.05$ ). Thus, through the table above, we reject hypothesis H5 (because  $P > 0.05$ ) and accept hypothesis H6 (because  $P < 0.05$ ). Besides, we can also see that the regression coefficient in the relationship  $UM * SD (DC) = -0.2905 < 0$  shows the meaning that as the QC moderator variable increases, the relationship UM and SD decreases (decreases). The impact of UM variable on SD variable).

## RESEARCH DISCUSSION

With the purpose of clarifying the role of quality culture and sustainable development based on the research model proposed by the author, the author collected and analyzed data through SPSS 25 software and SPSS 25 software. Soft Amos. The results show that university management has a positive impact on faculty performance and sustainable development with positive standardized beta coefficients of 0.405 and 0.240, respectively. Besides, lecturer performance also positively impacts the sustainable development of the university with beta coefficient = 0.151. From here it can be seen that, between lecturer performance and university management, university management has a stronger impact than lecturer performance on the dependent variable of sustainable development among universities. In addition to acting as a dependent variable in the relationship between management and university management, lecturer performance also plays a mediating role in the relationship between university management and sustainable development, specifically is partially mediated, meaning it is both indirect and direct with a positive standardized regression coefficient = 0.054, meaning that lecturer performance contributes to promoting university management relationships and sustainable development. Finally, about the role of quality culture as a moderator for two relationships: university management and faculty performance; university management and sustainable development. After quantitative testing, it can be seen that quality culture only has a moderating role in the relationship between university management and sustainable development ( $P = 0.0002$ ) with the standardized regression coefficient (Coeff). =  $-0.2905 < 0$ , meaning there is a negative regulation of that relationship.

From the above research results, the author proposes some management implications to create sustainable development of universities. Universities should prioritize building a culture of quality to promote a positive relationship between university management and the pursuit of sustainable development goals. Invest in leadership training and initiatives that successfully promote a culture of quality within universities. Besides, understanding the importance of university management in directly promoting sustainable development, adjusting management strategies in accordance with sustainable development goals becomes a factor that promotes sustainable development. Long-term movement. With the interdependencies elucidated in research, continuous monitoring and adjustment of management strategies serves to reinforce a culture of quality. Only by proactively approaching and reinforcing the maintenance of a culture of quality will we promote an environment conducive to the sustainable development of universities.

Next, the study found that quality culture has a moderating effect that strengthens the relationship between university management and sustainable development. While other studies show that leadership style plays an important role in sustainable development (Tran, 2023). In this study, the author discovered that quality culture plays an important role in promoting the relationship between university management and sustainable development. The author points out the role of quality culture in the above relationship associated with sustainable development goals, promoting a comprehensive approach to sustainability in all aspects. When a quality culture is built and developed, every member of the organization, including university management, is clearly aware of the school's goals and sustainable development orientation. This will create unity in awareness and action, contributing to promoting the relationship between the two sides. In addition, the school will have specific regulations, processes, and standards, creating a professional and effective working environment, helping university management carry out activities that promote sustainable development. Not only developing within the university, improving quality culture also promotes social responsibility through community service activities. This contributes to improving and promoting the close relationship between the university and the social community, promoting the sustainable development of society. Universities need to integrate sustainability principles into a culture of quality that promotes commitment to sustainability among faculty and students. University leaders should support a culture of quality, they play a key role in developing these values within the university. Establishing metrics to measure the impact of a culture of quality on sustainable development helps universities track progress, identify areas for improvement, and communicate their sustainability efforts effectively. By taking advantage of the positive impact of a quality culture in strengthening the relationship between university management and sustainable development, schools can promote a more sustainable academic environment, fostering a more sustainable academic environment. Culture in which sustainability is not only a goal but an integral part of the school's identity and operations.

Third, the study found that university management indirectly impacts sustainable development through faculty performance. Although (Mumford & Hunter, 2005) indicated that leadership plays an important role in promoting employee creativity, based on previous research, the author researched and found that university management impacting faculty performance

contributes to promoting the sustainable development of universities. In this study, the author was more subtle in changing employee creativity into faculty performance to study sustainable development. This new discovery provides universities with a roadmap to enhance sustainability practices by focusing on improving faculty performance. It shows that, in addition to research and teaching roles, faculty performance also contributes to the sustainable development of the university. Universities should implement policies, allocate resources to support and encourage faculty participation in sustainable activities. Providing professional development programs on the importance of sustainability, integrating sustainability into teaching, research, and administrative activities, can empower faculty to contribute meaningfully to the school's sustainable development goals.

Finally, universities need to focus on improving their internal quality culture and focusing on implementing very important sustainable development goals. Therefore, universities need to play important roles in promoting and implementing sustainable development through activities: research, teaching, creating interactive relationships with businesses and society to improve the quality, capacity and qualities of current and future generations. However, creating good relationships and connections with businesses and society is often underestimated compared to the remaining activities (Sedlacek, 2013). This suggests that schools need to modify the role of stakeholders, especially students, in today's 4.0 revolution. Connecting with businesses and meeting managers and leaders will help students shape their work and future. By improving cultural quality, creating a creative environment, motivating lecturers to maximize performance, helping students have full knowledge and development skills. Furthermore, these great contributions not only help lecturers and students but also help businesses and society have comprehensive human resources, which will help businesses achieve their goals. These will help the university continue to improve its reputation and quality, creating a competitive advantage in the education market.

Besides contributions to theory and practice, the research also has some limitations. Firstly, the study has a limited sample size, the sample size the author collected is valid and usable with  $n = 350$  small sample size and it is not representative of all universities. Future research could consider expanding the sample size by collecting more information in different geographical areas. The next limitation is that the research was conducted in a short period of time, so it is difficult to avoid errors and omissions in the research of the topic. Errors can occur during the research process, so other studies can study and supplement and correct the shortcomings of this study. Third, this research was conducted based on a specific context in certain areas in Hanoi, so it may limit the generalizability of the research results compared to the broader academic context.

Fourth, although the study shows a positive correlation between quality culture and the relationship between university management and sustainable development, there may be other factors not taken into account in the study that may affect the relationship between university management and sustainable development. Affect this relationship. There may be other important variables not included that influence the observed relationship outcomes. Finally, future studies can consider adding other factors to the research model of the relationship

between quality culture and sustainable development of universities to provide an overview of the topic. This. The quality culture variable is being considered as a moderating variable in the model. Future research can consider the quality culture variable as an independent variable or an intermediate variable that has a direct impact on sustainable development. Solid. Future documents can add variables such as technological advancement, student participation, and financial resource allocation to the research model to the research model and make the topic more comprehensive.

## References

- 1) Adeogun, A., & Olisaemeka, B. U. (2011). Influence of school climate on students' achievement and teachers' productivity for sustainable development. *Online Submission*, 8(4), 552-557.
- 2) Ahmed, Z., Khosa, M., Rehman, S. U., & Omar Faqera, A. F. (2023). Towards sustainable development in the manufacturing industry: does green human resource management facilitate green creative behaviour? A serial mediation model. *Journal of Manufacturing Technology Management*, 34(8), 1425-1447.
- 3) Ali, F., Omar, R., & Amin, M. (2013). An examination of the relationships between physical environment, perceived value, image and behavioural Intentions: A SEM approach towards Malaysian resort hotels. *Journal of Hotel and Tourism Management*, 27(2), 9-26.
- 4) Amazt, I. H., & Idris, A. R. (2011). Lecturers' satisfaction towards university management & decision-making styles in some Malaysian public universities. *Procedia-Social and Behavioral Sciences*, 15, 3957-3970.
- 5) An, D. T. T. (2015). Solution to promote working motivation of Civil Servants, Officials and workers at Dak Lak Provincial Cultural Center until 2020.
- 6) Asbari, M., Purwanto, A., Ong, F., Mustikasiwi, A., Maesaroh, S., Mustofa, M., Hutagalung, D., & Andriyani, Y. (2020). Impact of hard skills, soft skills and organizational culture: Lecturer innovation competencies as mediating. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 101-121.
- 7) Asio, J. M. R. (2020). Effect of performance review and faculty development to organizational climate. *International Journal of Management, Technology, and Social Sciences*, 5(2), 1-10.
- 8) Bambauer-Sachse, S., & Mangold, S. (2011). Brand equity dilution through negative online word-of-mouth communication. *Journal of retailing and consumer services*, 18(1), 38-45.
- 9) Barth, M., & Rieckmann, M. (2012). Academic staff development as a catalyst for curriculum change towards education for sustainable development: an output perspective. *Journal of Cleaner production*, 26, 28-36.
- 10) Bendermacher, G., oude Egbrink, M. G., Wolfhagen, I., & Dolmans, D. H. (2017). Unravelling quality culture in higher education: a realist review. *Higher education*, 73, 39-60.
- 11) Bichi, A. A. (2017). Evaluation of teacher performance in schools: Implication for sustainable development goals. *Northwest Journal of Educational Studies*, 2(1), 103-113.
- 12) Bushra, F., Usman, A., & Naveed, A. (2011). Effect of transformational leadership on employees' job satisfaction and organizational commitment in banking sector of Lahore (Pakistan). *International journal of Business and Social science*, 2(18), 261-267.
- 13) Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260.

- 14) Chuong, N. V. (2023). Factors affecting the innovation behavior of university lecturers in Vietnam. *Asian Journal of Economics and Business Research*.
- 15) Citrin, A. V. (2001). *Information quality perceptions: the role of communication media characteristics*. Washington State University.
- 16) Crosby, N., Kelly, J. M., & Schaefer, P. (1986). Citizens panels: A new approach to citizen participation. *Public administration review*, 170-178.
- 17) Davis, D. F., Golicic, S. L., & Marquardt, A. (2009). Measuring brand equity for logistics services. *The International Journal of Logistics Management*, 20(2), 201-212.
- 18) Delgado-Ballester, E., & Munuera-Alemán, J. L. (2001). Brand trust in the context of consumer loyalty. *European Journal of marketing*, 35(11/12), 1238-1258.
- 19) Doval, E., & Bondrea, E. (2011). Building quality culture within European and national framework: Filling the gaps. *Economics, Management and Financial Markets*, 6(2), 868.
- 20) Duc, D. A., & Linh, H. D. Work Motivation Of Lecturers Of Public Universities In Hanoi.
- 21) El Kharraz, O., & Boussenna, Y. (2021). Moderating effect of culture on the relationship between knowledge management and organizational performance in the university context. *International Journal of Business and Technology Studies and Research*.
- 22) Erdogan, B., Liden, R. C., & Kraimer, M. L. (2006). Justice and leader-member exchange: The moderating role of organizational culture. *Academy of Management journal*, 49(2), 395-406.
- 23) Feldman, K. A., & Paulsen, M. B. (1999). Faculty motivation: The role of a supportive teaching culture. *New directions for teaching and learning*, 78, 71-78.
- 24) Gappa, J. M., Austin, A. E., & Trice, A. G. (2007). *Rethinking faculty work: Higher education's strategic imperative*. Jossey-Bass.
- 25) Giang, V. T., & Nam, N. H. (2019). Combined teaching: a form suitable for university teaching in Vietnam in the digital age. *Science Magazine of Hanoi University of Education*, 1, 2019.
- 26) Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). Multivariate data analysis. Uppersaddle River. *Multivariate Data Analysis (5th ed) Upper Saddle River*, 5(3), 207-219.
- 27) Hamayun, M., Khan, S. A., Khan, A. L., Shinwari, Z. K., Ahmad, N., Kim, Y.-H., & Lee, I.-J. (2011). Effect of foliar and soil application of nitrogen, phosphorus and potassium on yield components of lentil. *Pak. J. Bot*, 43(1), 391-396.
- 28) Hanh, N. N., Trieu, N. D., Thoa, N. T., An, H. T., & Minh, T. T. H. (2021). Factors affecting the work motivation of officials and employees at the University of Finance and Marketing. *Journal of Financial-Marketing Research*, 81-92.
- 29) Herzberg, F. (2015). Motivation-hygiene theory. In *Organizational Behavior 1* (pp. 61-74). Routledge.
- 30) Iranmanesh, M., Zailani, S., Hyun, S. S., Ali, M. H., & Kim, K. (2019). Impact of lean manufacturing practices on firms' sustainable performance: Lean culture as a moderator. *Sustainability*, 11(4), 1112.
- 31) Jamali, A., Bhutto, A., Khaskhely, M., & Sethar, W. (2022). Impact of leadership styles on faculty performance: Moderating role of organizational culture in higher education. *Management Science Letters*, 12(1), 1-20.
- 32) Kanji, G. K., Tambi, A. M. B. A., & Wallace, W. (1999). A comparative study of quality practices in higher education institutions in the US and Malaysia. *Total quality management*, 10(3), 357-371.
- 33) Kehm, B. M., & Pasternack, P. (2001). *University development as a problem of complexity: case studies of change*. black
- 34) Leest, B. d., Mommers, A., Sijstermans, E., & Verrijt, T. (2015). Quality assurance and quality culture in higher education Part 1: Literature study.



- 35) Lewis, J. D., & Weigert, A. J. (2012). The social dynamics of trust: Theoretical and empirical research, 1985-2012. *Social forces*, 91(1), 25-31.
- 36) Le, D. N. (2008). Building a quality culture: creating internal resources for training institutions to meet the requirements of the quality era.
- 37) Liu, X., Peng, M. Y.-P., Anser, M. K., Chong, W.-L., & Lin, B. (2020). Key teacher attitudes for sustainable development of student employability by social cognitive career theory: the mediating roles of self-efficacy and problem-based learning. *Frontiers in psychology*, 11, 1945.
- 38) Logan, F. A. (1968). Incentive theory and changes in reward. In *Psychology of Learning and Motivation* (Vol. 2, pp. 1-30). Elsevier.
- 39) Maslow, A. H. (1943). Preface to motivation theory. *Psychosomatic medicine*, 5(1), 85-92.
- 40) Mohammed, A. H., Taib, C. A., & SR Nadarajan, S. (2015). Mapping the relationship among quality management practices, organizational learning, organizational culture, and organizational performance in higher education: A proposed framework. *American Journal of Industrial and Business Management*, 6(4), 401.
- 41) Mohd Ali, H., & Borhandden Musah, M. (2012). Investigation of Malaysian higher education quality culture and workforce performance. *Quality Assurance in education*, 20(3), 289-309.
- 42) Mumford, M. D., & Hunter, S. T. (2005). Innovation in organizations: A multi-level perspective on creativity. In *Multi-level issues in strategy and methods* (Vol. 4, pp. 9-73). Emerald Group Publishing Limited.
- 43) Muralidharan, E., & Pathak, S. (2018). Sustainability, transformational leadership, and social entrepreneurship. *Sustainability*, 10(2), 567.
- 44) Nguyen, T. T. (2022). Factors affecting the work motivation of lecturers at universities in the current period: some theoretical issues. *Education Magazine*, 22(9), 20-23.
- 45) Noor, A. (2022). Pandemic Covid 19: Academic Culture, Lecturer Ability, And Lecturer Performance. *Archives of Business Research*, 10(3), 136-145.
- 46) Oanh, T. T. T. (2017). Developing teaching capacity for pedagogical university lecturers to meet the requirements of educational innovation in Vietnam today. *Journal of Educational Sciences*, 137, 22-29.
- 47) Paraphai, M. U., Qamar, A., Mirza, A., Hassan, I.-u., & Waqas, H. (2012). Impact of leadership style (transformational & transactional leadership) on employee performance & mediating role of job satisfaction. Study of private school (educator) in Pakistan. *Global Journal of Management and Business Research*, 12(4), 55-64.
- 48) Pham, H. T. H. (2018). Current status and solutions to improve the capacity of lecturers to meet the requirements of reforming higher education.
- 49) Redmond, M. R., Mumford, M. D., & Teach, R. (1993). Putting creativity to work: Effects of leader behavior on subordinate creativity. *Organizational behavior and human decision processes*, 55(1), 120-151.
- 50) Reis, E., & Moore, M. (2005). *Elite perceptions of poverty and inequality*. Zed Books.
- 51) Reiter-Palmon, R., & Illies, J. J. (2004). Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *The leadership quarterly*, 15(1), 55-77.
- 52) Rocca, G. P. (2004). *Speaking the incomprehensible God: Thomas Aquinas on the interplay of positive and negative theology*. CUA Press.
- 53) Sahney, S., Benton, M. J., & Ferry, P. A. (2010). Links between global taxonomic diversity, ecological diversity and the expansion of vertebrates on land. *Biology letters*, 6(4), 544-547.
- 54) Saleem, H. (2015). The impact of leadership styles on job satisfaction and mediating role of perceived organizational politics. *Procedia-Social and Behavioral Sciences*, 172, 563-569.

- 55) Sarker, M. A. M., Rana, M. S., Shatabdi, S., Roki, A. A., & Islam, N. (2021). Impact of Faculty Development and Evaluation Programs for Enlightening Education and Sustainability of the Universities in Bangladesh: A Methodological Study. *Journal of Research in Business and Management*, 9(5), 22-30.
- 56) Sedlacek, S. (2013). The role of universities in fostering sustainable development at the regional level. *Journal of Cleaner Production*, 48, 74-84.
- 57) Shah, S. S., Shah, A. A., & Pathan, S. K. (2017). The relationship of perceived leadership styles of department heads to job satisfaction and job performance of faculty members. *Journal of Business Strategies*, 11(2), 35-56.
- 58) Shahzad, F. (2014). Impact of organizational culture on employees' job performance: An empirical study of software houses in Pakistan. *International Journal of Commerce and Management*, 24(3), 219-227.
- 59) Shahzadi, I., Javed, A., Pirzada, S. S., Nasreen, S., & Khanam, F. (2014). Impact of employee motivation on employee performance. *European Journal of Business and Management*, 6(23), 159-166.
- 60) Spencer, L. M., & Spencer, P. S. M. (2008). *Competence at Work models for superior performance*. John Wiley & Sons.
- 61) Stephens, J. C., Hernandez, M. E., Román, M., Graham, A. C., & Scholz, R. W. (2008). Higher education as a change agent for sustainability in different cultures and contexts. *International Journal of Sustainability in Higher Education*, 9(3), 317-338.
- 62) Todorovic, Z. W., McNaughton, R. B., & Guild, P. (2011). ENTRE-U: An entrepreneurial orientation scale for universities. *Technovation*, 31(2-3), 128-137.
- 63) Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. *International Journal of Productivity and Performance Management*, 68(2), 276-295.
- 64) Tran, A. C. (2023). Education Quality Management through the Indirect Assessment of Expected Learning Outcomes in the Undergraduate Training Program of Business Administration. *VNU Journal of Science: Policy and Management Studies*, 39(2).
- 65) Vargas, V. R., Lawthom, R., Prowse, A., Randles, S., & Tzoulas, K. (2019). Sustainable development stakeholder networks for organisational change in higher education institutions: A case study from the UK. *Journal of Cleaner Production*, 208, 470-478.
- 66) Vaughter, P., Wright, T., McKenzie, M., & Lidstone, L. (2013). Greening the ivory tower: A review of educational research on sustainability in post-secondary education. *Sustainability*, 5(5), 2252-2271.
- 67) Vu, N.D. (2015). Determine The Quality And Competence Requirements Of Pedagogical University Lecturers To Meet Education And Training Innovation. *Hue University Journal of Science (HU JOS)*, 105(6).
- 68) Wals, A., & Corcoran, P. B. (2006). 14. Sustainability as an Outcome of Transformative Learning.
- 69) Wals, A. E. (2014). Sustainability in higher education in the context of the UN DESD: a review of learning and institutionalization processes. *Journal of Cleaner Production*, 62, 8-15.
- 70) WCED, S. W. S. (1987). World commission on environment and development. *Our common future*, 17(1), 1-91.
- 71) Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of management review*, 18(2), 293-321.
- 72) Wu, C., & Shaffer, D. R. (1987). Susceptibility to persuasive appeals as a function of source credibility and prior experience with the attitude object. *Journal of personality and social psychology*, 52(4), 677.
- 73) Zkri Ali, U., & Yousif Hanna, N. (2022). The Role of Organizational Factor in Adapting Sustainable Development in Higher Education Institutes and Its Effect on Accounting Education Moderated by Instructors' Characteristics. *Eurasian Journal of Management Social Sciences*, 19-34.