

# The Influence of Human Resource Information Systems and Organizational Citizenship Behavior on Innovation Through Creativity at Private Universities in Kendari City

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**Abstracts:** This study examines the influence of human resource information systems and organizational citizenship behavior on Innovation through Creativity at private universities in Kendari City. This type of research is explanatory research. The population in the study was 9 Private Universities in Kendari City. The number of samples determined was 206 at 9 Private Universities in Kendari City. The lecturer data from samples/respondents were analyzed using structural equation modeling (SEM) using the AMOS 4.01 program package to obtain the results of causality relationships between variables developed in the Model. The test results of the Influence of Human Resource Information Systems and Organizational Citizenship Behavior on Innovation through Creativity at Private Universities in Kendari City, are as follows; the influence of human resource information systems on creativity with a path coefficient value of 0.74 with a probability level of 0.02 ( $p < \text{value } 0.05$ ), the influence of Organizational Citizenship Behavior towards Creativity with a path coefficient value of 0.71 with a probability level of 0.00 ( $p < \text{value } 0.05$ ), the influence of human resource information systems on Innovation with a path coefficient value of 0.03 with a probability level of 0.68 ( $p > \text{value } 0.05$ ), the influence of Organizational Citizenship Behavior on Innovation with a path coefficient value of 0.21 with a probability level of 0.19 ( $p > \text{value } 0.05$ ), the influence of Creativity on Innovation with a path coefficient value of 0.86 with a probability level of 0.00 ( $p < \text{value } 0.05$ ), the role of creativity in mediating the influence of human resource information systems on Innovation with an indirect influence value of 0.63 more significant than the direct influence value of 0.03, The role of creativity in mediating the influence of Organizational Citizenship Behavior on Innovation with an indirect influence value of 0.61 is greater than the direct influence value of 0.21. The benefits that can be gleaned from this research are the development of science, especially in the paradigm. The influence of human resource information systems and organizational citizenship behavior on Innovation through Creativity at private universities in Kendari City. The development of science and organizational Citizenship Behavior is a variable that can influence and increase the Creativity of Private Universities in Kendari City. Higher Education Creativity is an influential variable in mediating the influence of Organizational Citizenship Behavior on the Innovation of Private Universities in Kendari City.

**Keywords:** Sistem Informasi Sumber Daya Manusia, Organizational Citizenship Behavior, Inovasi, Kreatifitas.

## 1. INTRODUCTION

Higher education is an institution in charge of the birth of intellectual resources expected to improve human resources quality. Activities to produce, construct, and revitalize the paradigm of human resources so that they have a good perspective of cognition, affection, and conation in the eyes of the community as a provision for their lives. Higher education must not only be demanded in terms of its authenticity juridically and existentially so that the government and society recognize its legitimacy as an institution capable of managing and producing quality human resources. However, High Desert must also be able to construct its institution morally and managerially so that it can survive and be able to provide all the intellectualization processes of the products it produces to the community systematically, continuously, and following the demands and needs of the community about the hopes and ideals of getting the benefits of studying at university. The organization of higher education is related to the second dimension of education management, namely organizing [23]. The implementation of higher education needs to be organized because it involves many people, namely lecturers, students, and staff. Higher education is a process that involves a team, namely between lecturers, staff, and students, who work together to achieve common goals [2] 5][12][11].

Southeast Sulawesi, Especially in Kendari City Currently, the number of universities in Kendari City based on the <https://forlap.kemdikbud.go.id/> page is 20 universities where there are 5 universities, 2 institutes, 6 high schools, 1 polytechnic, and 6 academies. Of these universities, only 10 universities have been accredited by institutions. In Southeast Sulawesi, especially in Kendari City, no universities have achieved Accreditation A or Superior Predicate

for Institutions. Higher education creativity and Innovation are needed to increase the accreditation value of Private Universities in Southeast Sulawesi, especially in Kendari City.

Innovation is central to a company's growth and prosperity and can be defined differently [3][19]. There are two theoretical approaches to studying business innovation: the enabling and the results perspectives. An enabling perspective focuses on the factors that help Innovation happen. Heléne Lundberg and Christina Öberg [10], in a study entitled: " *Teachers, researchers, but not innovators? Rethinking university-industry Collaboration,*" states that universities establishing cooperation with industry are generally considered the driving force of Innovation. To foster Innovation requires creative ideas. The idea of creativity indicates Innovation and originality of the ability to look at old problems in new ways and design new ways of thinking, analyzing, and doing new things.

One technological advancement that supports the creation of Creativity and Innovation is the Human resource information system, commonly known as the human resource information system, which is a computerized system that provides the latest and accurate data for control and decision-making [23]. HR Information Systems are essential in helping companies manage their workforce more efficiently, reduce manual labor, and ensure compliance with labor regulations.

Departing from the theoretical and empirical descriptions that have been described, a form of research will be developed aimed at analyzing the relationship model of Human Resource Information Systems (SISDM), Organizational Citizenship Behavior (OCB), Creativity, and Innovation. This research will integrate the variables of Human Resource Information Systems, Organizational Citizenship Behavior influence on Creativity and Innovation, and whether the theories and results of some research that previous researchers have done can be applied in universities in Kendari City. Based on studies conducted by several previous researchers, phenomena, realities, or actual conditions in the work unit, the researchers are interested in continuing to develop a research model on the Influence of Human Resource Information Systems and *Organizational Citizenship Behavior* on Innovation through Higher Education Creativity.

## **2. THEORIES AND HYPOTHESES**

### **2.1. Human Resources Information System (SISDM)**

According to Snell and Bohlander [23], a human resource information system, commonly known as a human resource information system, is a computerized system that provides the latest and most accurate data for control and decision-making purposes. Gulati [8] explained that the Human Resource Information System is software with a database that allows the input, storage, and manipulation of data from employees in the company.

### **2.2. Concept of Organizational Citizenship Behavior (OCB)**

Some researchers described a type of Behavior similar to *organizational citizenship behavior* (OCB) before OCB was first mentioned in scientific articles. This fact is based on Barnard's ideas [4] about the concept of "willingness to cooperate," Roethlisberger and Dickson [21] on "informal cooperation," and Katz and Kahn [14] on "individual behavior patterns." These concepts became the basis for the emergence of OCB before being discussed in the organizational research literature in the early 1980s.

### **2.3. Creativity**

According to Woodman et al.[28], organizational-level creativity is defined as creating products, New services, ideas, procedures, or processes that are valuable and beneficial to the individuals working together. Thus, the level of organizational creativity results from the Behavior of individual members and social interactions among group

members that can inhibit or enhance creative output. Creativity is essential to human development, not least in educational institutions.

## **2.4. Innovation**

Innovation is one of the choices of corporations in facing market competition and sustainable management. Freeman (2004) considers Innovation as the effort of companies through the use of technology and information to develop, produce, and market products that are new to the industry. In other words, Innovation is the modification or discovery of ideas for continuous improvement and development to meet customer needs. Pervaiz K. Ahmed and Charles D. Shepherd [3][19] corporate Innovation can produce *R&D (Research and Development)*, production, and marketing approaches and ultimately lead to commercialization of these innovations.

## **3. METHODOLOGY**

The research was conducted at private universities in Kendari City, namely 3 universities, 5 high schools, and 1 polytechnic, which will be used as a place. The population of this study is as many as 9 private universities in Kendari City, with the number of permanent lecturers totaling 424. Given the large number of lecturers, sampling is carried out using three stages, namely sampling using three stages.

### **3.1. Conceptual Framework**

SEM tests a series of interdependent relationships between variables simultaneously. This technique is beneficial when one dependent variable is independent in the following equation. SEM is an integrated approach between data analysis and concept construction. In SEM, researchers can carry out three activities simultaneously, namely checking the validity and reliability of instruments (equivalent to confirmatory factor analysis) and obtaining relationship models that are useful for estimation (equivalent to structural models or regression analysis) [29]. SEM from the AMOS7 statistical software package can be used in modeling and hypothesis testing. The AMOS7 causal model shows structural measurements and problems and is used to test hypothetical models. Due to the ability to (1) estimate unknown coefficients of structural linear equations, (2) accommodate models covering latent variables, (3) accommodate measurement errors on dependent and independent variables, and (4) accommodate reciprocal, simultaneous, and interdependent warnings.

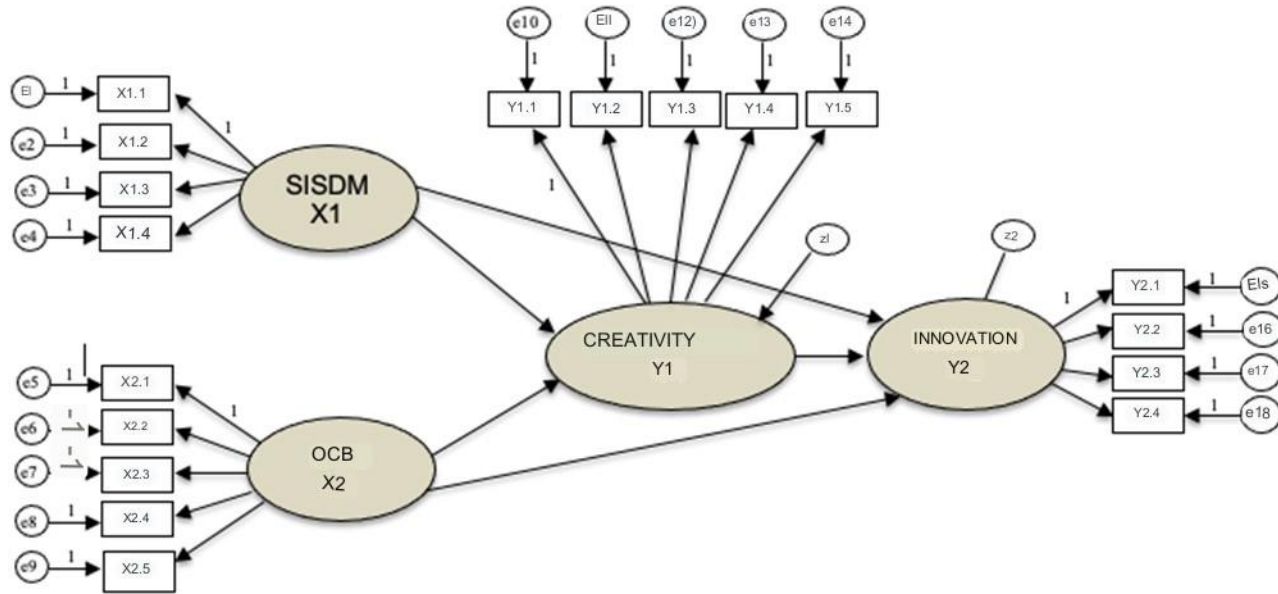


FIGURE 1. CONCEPTUAL FRAMEWORK (ADOPTED FROM REFERENCES [13])

## 4. FINDINGS

### 4.1. Characteristics of respondents

The distribution of sex is more dominated by men, which is 52% or as many as 108 respondents from a total of 206 respondents; the remaining 47% women or as many as 98 respondents of the gender description results are considered to have been able to assess the question items asked objectively. The characteristics of respondents based on working period were found as many as 55 or 26% of respondents had a working period of 2 years, the remaining 151 or 74% had a working period of more than 2 years. The characteristics of respondents based on group/rank were found; as many as 36 or 17% of respondents had group/rank III / a. 55 or 27% of respondents had group/rank III / b. 67 or 33% of respondents had group/rank III / c. 37 or 18% had group/rank III / d. 11 or 5% had group/rank IV/a. The characteristics of respondents based on the functional position were found as many as 91 or 44% of respondents had the functional position of Expert Assistant. 85 or 41% of respondents have the functional position of Lector. 30 or 15% of respondents have the functional position of Associate Professor.

#### 4.1.1. Descriptive statistics

Based on the operational definition that has been put forward in the subchapter of research methods, it is known that there are 4 latent variables contained in this contextual Model or research model, namely: latent variables of human resource information systems ( $X_1$ ), latent variables of Organizational Citizenship Behavior ( $X_2$ ), latent variables of Creativity ( $Y_1$ ), and variables of Innovation ( $Y_2$ ). The four latent variables are operationalized using indicator items, which are then described as questionnaires using Likert scales. The questionnaire was then distributed to 206 lecturers at 9 private universities in Kendari City. This questionnaire uses the Likert scale with five positive and negative answer choices, starting from number 1 to number 5. The lowest number (number 1) has the lowest level of meaning because respondents strongly disagree with the item they are asking.

In contrast, the highest number (number 5) has a positive level of meaning because respondents strongly agree with the item they offer. Furthermore, the average of respondents' answers to question items in the research

questionnaire is included in five levels: Deficient, Low, Enough, High, and Very High. The average category division of respondents' answers is based on the following categories:

1. The average value, between 1.0 and 1.80: Very Low
2. Average score, between 1.81 and 2.60: Low
3. Average score, between 2.61 to 3.40: Sufficient
4. Average score, between 3.41 to 4.20: High
5. Average score, between 4.21 and 5.00: Very High

#### 4.2. Hasil Analisis *Struktural Equation Modelling* (SEM)

##### 4.2.1. Uji Confirmatory Factor Analysis

Hasil uji *confirmatory Factor Analysis* dan deskripsi jawaban responden disajikan dalam bentuk tabel berikut:

**Table 5.9 Confirmatory Factor Analysis (CFA) test results and description of respondents' answers**

No	Variable	Indicators	Loading Factor	Average Description of Respondents' Answers
1	Human Resource Information System (X <sub>1</sub> ) Average: 4.51	1. Technical Feasibility (X <sub>1.1</sub> )	0,85	4,54
		2. Operational Qualification (X <sub>1.2</sub> )	0,91	4,52
		3. Legal and Political Feasibility (X <sub>1.3</sub> )	0,81	4,44
		4. Economic Eligibility (X <sub>1.4</sub> )	0,66	4,55
2	Organizational Citizenship Behaviour (X <sub>2</sub> ) Average: 3,82	1. Putting others first (X <sub>2.1</sub> )	0,67	4,38
		2. Prudence (X <sub>2.2</sub> )	0,70	4,22
		3. Positive Attitude (X <sub>2.3</sub> )	0,66	1,73
		4. Honor (X <sub>2.4</sub> )	0,64	4,34
		5. Member Virtues (X <sub>2.5</sub> )	0,77	4,41
3	Creativity (Y <sub>1</sub> ) Average: 4.42	1. Creative Lecturer (Y <sub>1.1</sub> )	0,66	4,45
		2. Student Krestif (Y <sub>1.2</sub> )	0,77	4,41
		3. Creative Campus (Y <sub>1.3</sub> )	0,74	4,39
		4. Praktek Interdisciplines (Y <sub>1.4</sub> )	0,72	4,40
		5. Creative Database (Y <sub>1.5</sub> )	0,62	4,43
4	Innovation (Y <sub>2</sub> ) Average: 4.38	1. College Social Responsibility (Y <sub>2.1</sub> )	0,61	4,38
		2. High Desert Social Innovation Strategy (Y <sub>2.2</sub> )	0,79	4,36
		3. Innovation in Social Value Creation (Y <sub>2.3</sub> )	0,80	4,37
		4. Sustainable Competitive Advantage (Y <sub>2.4</sub> )	0,83	4,39

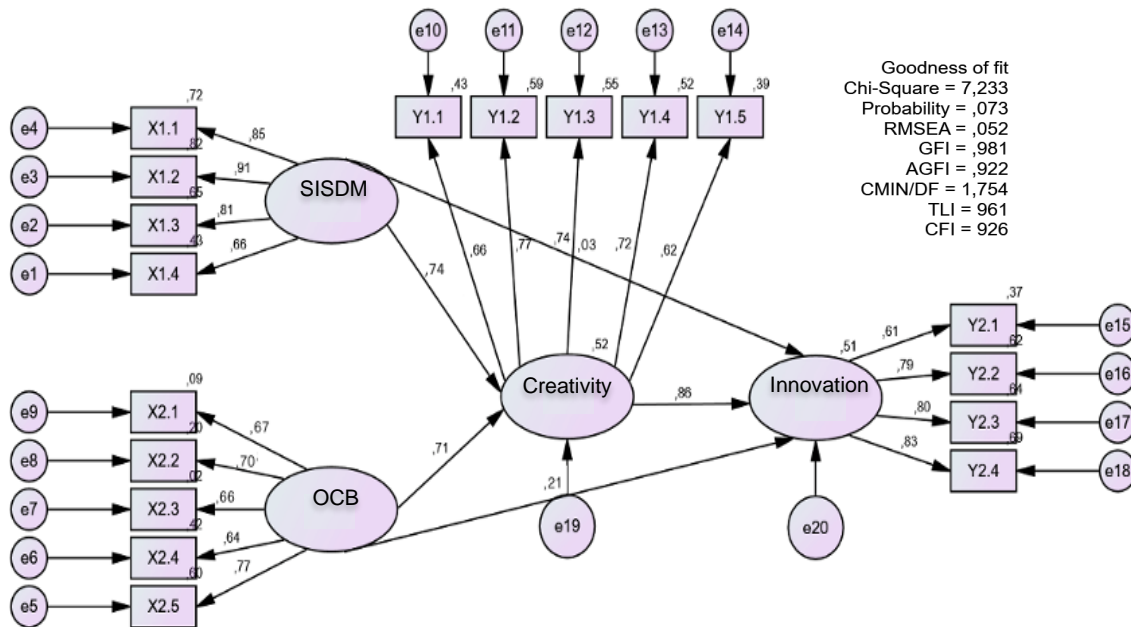
Source: Primary Data processed, 2022

Based on Table 5.9, it can be seen that the comparison of the most vital indicators indicates the variable it measures between the Nilal Loading Factor and the average description of respondents' answers. The strongest indicator indicating the Human Resource Information System variable based on the Confirmatory Factor Analysis (CFA) test is the Operational Feasibility indicator (X<sub>1.2</sub>), while based on the average description of respondents' answers is the Economic Feasibility indicator (X<sub>1.4</sub>), the strongest indicator shows the variable Organizational Citizenship Behavior (X<sub>2</sub>) based on the Confirmatory Factor Analysis (CFA) test and the average description of respondents' answers is an indicator of Member Virtue (X<sub>2.5</sub>). The strongest indicator showing the Creativity variable based on the Confirmatory Factor Analysis (CFA) test is the Student Krestif indicator (Y<sub>1.2</sub>), while based on the average description of respondents' answers is the Creative Lecturer indicator (Y<sub>1.1</sub>). The indicator that most strongly indicates the Innovation variable based on the Confirmatory Factor Analysis (CFA) test is the Sustainable Competitive

Advantage indicator (Y<sub>2.4</sub>), while based on the average description of respondents' answers, is the Sustainable Competitive Advantage indicator (Y<sub>2.4</sub>).

#### 4.2.2. Model Feasibility Test Result

The feasibility test of the Model aims to investigate the amount of data with the Model built in this study. Two tests were conducted: evaluation of SEM assumptions and evaluation of the Goodness fit of the Model.



#### 4.2.3. Hypothesis Testing

Testing the direct influence with the SEM approach resulted in a coefficient of the SISDM influence path on creativity with a value of 0.74 with p-value = 0.02 in Table 5.9 of the hypothesis test results. Because the p-value is smaller than 0.05, the first hypothesis (H1) that states SISDM has an effect on creativity is accepted, so it can be concluded that a better SISDM can increase creativity in private universities naturally.

Testing the direct influence with the SEM approach resulted in a coefficient of OCB influence pathway on creativity with a value of 0.71 with p-value = 0.00 in Table 5.9 of the hypothesis test results. Because the p-value is smaller than 0.05, the second hypothesis (H2) that states OCB affects creativity is accepted, so it can be concluded that the higher the OCB values, the better creativity in higher education will be.

Testing the direct influence with the SEM approach resulted in a coefficient of the SISDM direct influence path on Innovation with a value of 0.03 with p-value = 0.680 in Table 5.9 of the hypothesis test results. Because the p-value is more significant than 0.05, the third hypothesis (H3) that states SISDM affects Innovation is rejected. So, it can be concluded that a better SISDM cannot increase Innovation in private universities.

Testing the direct influence with the SEM approach resulted in the OCB direct influence path coefficient on Innovation with a value of 0.21 with p-value = 0.193 in Table 5.9 of the hypothesis test results. Because the p-value is more significant than 0.05, the fourth hypothesis (H4) that states OCB affects Innovation is rejected. So, it can be concluded that a better OCB cannot increase Innovation in private universities.

Testing direct influence with the SEM approach resulted in a coefficient of direct influence path of Creativity on Innovation with a value of 0.86 with p-value = 0.00 in table 5.9 of the hypothesis test results. Because the p-value is less than 0.05, the fifth hypothesis (H5) that states creativity affects Innovation is accepted. So, it can be concluded that the higher the value of PTS Creativity, the better the Innovation in Higher Education will be.

**4.2.4. Indirect Influence Test (Mediation)**

The mediating role of the Creativity variable is tested by comparing the total direct and indirect influence; the Creativity variable is said to play a mediating role if the total indirect influence through the Creativity variable is greater than the direct influence. The results of the Creativity variable mediation role test are shown in the following table :

**Table 5.8 The Role of Mediation Variables**

No	Line	Influence		Mediation Status
		Immediately	Indirect	
1	Human resource information system Innovation creativity →→	0,03	0,63	Full Mediation
2	Organizational Citizenship Behavior Innovation Creativity→→	0,21	0,61	Full Mediation

Source: Primary Data processed, 2022

1. The role of the Creativity variable ( $Y_1$ ) in mediating the influence of the human resource information system ( $X_1$ ) on Innovation ( $Y_2$ ) is shown by the indirect influence value of the human resource information system → Creativity → Innovation 0.63 more significant than the direct influence value of the resource information system human → Innovation 0.03 so it can be concluded that complete mediation occurs or the Creativity Variable ( $Y_1$ ) plays a mediating role in the influence of the human resource information system ( $X_1$ ) on Innovation ( $Y_2$ )

2. The role of Creativity ( $Y_1$ ) in mediating the influence of Organizational Citizenship Behavior ( $X_2$ ) on Innovation ( $Y_2$ ) is shown in Table 5.8, with the indirect influence value of Organizational Citizenship Behavior → Creativity → Innovation 0.61 greater than the direct influence value of Organizational Citizenship Behavior → Innovation 0. .21 then it can be concluded that there is complete mediation or the Creativity variable ( $Y_1$ ) plays a mediating role in the influence of Organizational Citizenship Behavior ( $X_2$ ) on Innovation ( $Y_2$ )

**5. DISCUSSION**

Based on the results of research on the Influence of Human Resource Information Systems and Organizational Citizenship Behavior on Innovation through Creativity at universities in Kendari City, the following discussion can be made :

**5.2. The Influence of Human Resource Information Systems (SISDM) on Higher Education Creativity at Private Universities in Kendari City**

Several previous studies have outlined that SISDM affects creativity. The SISDM theory in this study refers to the theory proposed by Snell and Bohlander [23], suggesting that the human resource information system, commonly known as the human resource information system, is a computerized system that provides the latest and accurate data for control and decision making. At the same time, the SISDM measurement adopts measurements from Kavanagh et al. [15][17].

Based on the results of the analysis, it is known that indicators that reflect the variables of SISDM are explained: **First**, the Operational Feasibility of the operational side of SISDM has been following the needs of lecturers, able to support the achievement of the performance of each work unit for the better, has progressed since technical changes were made to the information system, has been following campus needs, involvement of the academic community in using HR information systems, Periodic training conducted to optimize the use of the HR information system in question. Research studies in information systems have found that the more compatible a system is with how employees work today, the more likely employees will use the system [1]. In addition, operational feasibility assesses the extent to which SISDM is following the strategic plan of Higher Education Institutions, which focuses on how lecturers use and work with the system, the usefulness of the system, and the training received by lecturers. The system's usability reflects the system's effectiveness and efficiency for the lecturer. It is often characterized by the system's usability for the lecturer and the ease with which he can use it. It reflects how intuitive the interface is to navigate, the effort users must make to learn to use the system, and how effectively it supports the lecturer's work. Do not underestimate the human factor's importance in determining a system's operational feasibility and ultimate success. Several studies have found that systems' usability and ease of use play a significant role in using and adopting systems. In addition, studies have found that users can accurately assess usability estimates early in development. Still, perceptions of ease of use can evolve as employees gain hands-on experience with the software [27].

**Second**, Technical Feasibility in terms of the availability of SISDM, which is reflected through the ownership of hardware and software to implement human resource information systems, ease of obtaining/providing hardware as needed, the ability to build their own IT-based human resource information systems, If there is a new human resource information system, the old system can be integrated into the new system quickly. This technical feasibility focuses on the current technological capabilities of the College and the technological capabilities necessary for the implementation of the proposed system. As part of the technical feasibility assessment, the user, in this case, the lecturer, should work closely with the systems analyst and technical staff to determine whether the current technology can be scaled up to meet the needs of the organization or whether an entirely new technology architecture will be required to implement the proposed system changes.

**Third**, Legal and Political feasibility Legally and politically, the existence of SISDM Does not violate existing copyrights, Does not violate rules/laws/norms, Has established cooperation with other organizations/institutions in terms of the use of HR information systems, Has been following government policy, Has been following international law, there are still some parties on campus who refuse the application of HR information systems, There are parties who are satisfied and dissatisfied with the HR information system that is being used, the HR information system used is at risk of being sabotaged. Political feasibility focuses on the political environment of the university in which the human resource information system is implemented. Issues such as abuse of power involving loss of control of individuals or organizations can have significant political implications that can affect the effectiveness of implementation. What is interesting is that political issues can undermine the implementation of SISDM. The challenge here is that although political feasibility may be reasonably easy to identify, it can be challenging to deal with effectively. Individuals negatively affected by system implementation (or perceive themselves as negatively affected) tend to undermine, resist, or interfere with its implementation, either overtly or covertly. Thus, it is essential to understand and anticipate the political consequences of SISDM implementation before implementation, especially with support from the Higher Education Foundation.

**Fourth**, Economic Feasibility is an indicator that also contributes to the human resource information system, which economically, according to respondents' perceptions that the cost of developing SISDM is proportional to the benefits obtained, the cost of implementation is proportional to the benefits obtained, the cost of operation is proportional to the benefits obtained. An economic feasibility analysis aims to determine whether the cost of developing, implementing, and running a system is proportional to the benefits derived from its use. To do this, an analyst will identify the appropriate costs and benefits of a human resource information system. Then, these costs and benefits should be subject to a thorough cost-benefit analysis.



The first hypothesis (H1) in this study, which states that the Human Resource Information System (SISDM) affects the Creativity of Higher Education at Private Universities in Kendari City, is in line with research conducted by Deepakshi Jaiswal & Rajib Lochan Dhar [7] which found that SISDM has an influence on employee creativity which implies that there is a solid direct effect of SISDM practices on employee creativity. Therefore, this study highlights that with better SISDM practices, employees will show a more positive attitude toward creative Behavior. Caleb Lugar and Rajko Novičević [16] also concluded that knowledge-based human resource management practices will enhance employee creativity through increased knowledge sharing.

### 5.3. The Influence of Organizational Citizenship Behavior (OCB) of Lecturers on Higher Education Creativity at Private Universities in Kendari City

The theoretical study that became the basis for studying and measuring the concept of OCB in this study refers to the theory of Chester [4]. Barnard defines the essence of an organization differently. He argued that the willingness of people to seek to contribute to the system of cooperation is indispensable, the willingness to contribute beyond the performance of functions determined in exchange for contractual compensation. To make the organization work as a cooperating system, each participant must behave in a certain way and show some commitment. The indicators used are *Sportsmanship* (Carrying out proper duties), *Altruism* (likes to help colleagues), *Courtesy* (Always maintaining good relationships), *Civic virtue* (tolerance for discomfort), *Conscientiousness* (compliance with an organization) Podsakoff et al.[18] using 24-item scales. Based on the results of the analysis, it is known that indicators that reflect OCB based on outer loading values are explained: **First**, Compliance with the organization (*Conscientiousness*) that lecturers are always present on campus earlier than the rules should be, Always use teaching time on time, Always obey the rules of the university/faculty/department even though other lecturers do not care, Strive to be a very lecturer Discipline. **Second**, *Altruism is an essential factor that contributes to OCB. It is always willing to help fellow lecturers who have difficulty getting teaching materials, always willing to help fellow lecturers whose task load is heavy, and likes to help explain to new lecturers who still do not understand the rules and work procedures in the faculty/department, Willing to help fellow lecturers who have problems with their duties, Always willing to help/help fellow lecturers who face problems.* **Third**, the factor contributing to OCB is carrying out proper duties (*Sportsmanship*), with 5 negative statement items submitted via the questionnaire showing that Behavior tolerates less-than-ideal conditions in the organization without raising objections.

Someone with high Sportsmanship will increase a positive climate among lecturers. Lecturers will be more polite and work together with others, thus creating a more pleasant work environment. The dimensions of Sportsmanship can be seen from the aspects of individual tolerance and complaints in their work. Individuals with a high sportsmanship attitude will pay great attention to details in their work, can carry out their work reasonably and complain little, and have high adaptability to situations and work environments. In the context of a private university, this attitude will undoubtedly be very beneficial because the lecturers will quickly adapt to changes in their university; for example, if the university issues a new policy, workers with a high Sportsmanship attitude will readily accept the new policy. That and put aside any minor problems that might arise caused by the new policy. **Fourth**, always maintain good relations (*Courtesy*), lecturers always try not to have problems with lecturers and staff at the faculty/department, lecturers always think that their work behavior can influence the success of other lecturers' assignments, and lecturers always try not to abuse their trust/rights. Other people (fellow lecturers): Lecturers always try not to create problems for fellow lecturers; lecturers always try so that their actions can positively influence other fellow lecturers. And **fifth**, tolerance for discomfort (*Civic virtue*). Lecturers always try to improve the image of the university/faculty/department; Lecturers always try to adapt to changes in the policies of their university/faculty/department; lecturers pay attention to and understand every announcement, report, and or university/faculty/department regulations. These five factors significantly contribute to OCB in PTS in the Kendari City area, so PTS should focus on improving these five indicators to increase PTS creativity and thus gain public trust. For this reason, PTS within Kendari City must be able to maintain public confidence so that they become better by maintaining or improving factors perceived as very good by respondents.

The results of this research follow the conditions faced by PTS lecturers in Kendari City, namely that the OCB concept brings a big wave of change in the organizational Behavior field, making it more creative and innovative. In the world of work, work is increasing; an organization requires OCB behavior, including expressing constructive opinions about their workplace, helping others in their team, avoiding unnecessary conflicts, and gracefully understanding work disturbances that sometimes occur without expecting anything in return. Certain. OCB is a positive individual behavior as a member of an organization in the form of a conscious and voluntary willingness to work and contribute to the organization more than what is formally required in the organization. In carrying out his functions and duties, a lecturer will also have a role that goes beyond the main tasks, including committee activities that require a work team, providing services to students outside the teaching and learning process, helping and motivating other doses/colleagues in implementing Tri Dharma of Higher Education. Lecturers carry out actions outside the role assigned to them as Lecturers, such as in a work team, a Lecturer must have interpersonal abilities and skills that can only be displayed by individuals who care about other individuals and try to show the best for their colleagues and the institution where the individual works. Individuals who display Organizational Citizenship Behavior (OCB) behavior are selected behaviors that are not part of a lecturer's formal work obligations but support the effective functioning of the university, and people who display OCB behavior are called good citizens. Through Organizational Citizenship Behavior, lecturers are expected to understand the existence of their organization with all its limitations and voluntarily commit to the effectiveness of organizational functions. When organizations face less conducive situations and the quality of work life decreases, extra-role Behavior (OCB) needs to be supported. In higher education, the application of OCB as an approach to human resource management is very appropriate because the job description of a lecturer differs from the job description of an employee in a commercial institution or company.

Applying OCB will help a lecturer's creativity in the Tri Dharma of Higher Education, such as developing teaching methods, conducting research according to interests and scientific fields, and contributing to community service programs. Institutional policies must emphasize morality to form OCB Lecturers in Kendari City private universities. The Indonesian people have had morality for a long time. Our ancestors inherited the cultivation of moral values at the height of national and state civilization. So, in the past, Indonesia was known as a nation that worked together, liked to help, was friendly, and liked to deliberate. However, over time, moral values were eroded by the rapid rise of materialistic culture. Everything related to service and humanity is measured using material standards. Good lecturer morality will improve the performance of OCB, which will ultimately increase the creativity and quality of service or performance of the lecturer concerned. The results of this research strengthen research conducted by Tran The Nam et al.[24], which found that OCB influences creativity. The findings have implications for theory and practice. In theory, this supports equity theory and social exchange theory. In practice, managers must carefully select candidates who will work for the organization and provide a comfortable work environment to support employees' creativity.

#### **5.4. The Influence of SISDM on Higher Education Innovation in Private Universities in Kendari City**

The third hypothesis proposed in this research is that the Human Resources Information System (SISDM) influences Innovation in universities in Kendari City. Based on the results of hypothesis testing, it shows that the Human Resources Information System (SISDM) does not affect Innovation. Empirically, there are different educational backgrounds. This factor is significant in implementing SISDM due to the lecturers' lack of ability in information technology. The different backgrounds of each lecturer also make a difference in their competencies. Education and age factors significantly influence lecturer competence regarding human resource information system technology. Another empirical factor that also influences the lack of lecturer competence is the unequal age factor. Even though the level of education lecturers possess is the same, other factors influence lecturers' abilities, namely age. Lecturers aged 40 years and over. Of course, this will affect work and make it difficult to impart new knowledge, especially those related to technology. Competence is the ability to carry out a job or task based on skills and knowledge and is supported by the work attitude required by the job. Thus, competency shows skills and knowledge characterized by professionalism in a particular field, which is most important in applying SISDM in private universities to create Innovation.

The facilities and infrastructure needed also have a significant role. This limitation is the main obstacle to meeting needs in implementing SISDM. Therefore, support and understanding from private higher education management, especially at the higher education foundation level as budget managers in every private university in Kendari City, must have a human resource information system despite the costs. Spent on building a human resources information system is not small. However, the PTS Foundation should view these expenditures as an investment because having an information system will make it easier to achieve organizational goals and provide future savings in terms of time and costs.

Another factor that is the cause is socialization, which is an effort to disseminate the content or substance of a policy that has been created to generate knowledge and understanding from various related parties, including the target group, so that they are willing and able to carry out their role in making the goals a success. They were stated in the policy. The aim and objective of carrying out this socialization is to convey information related to the implementation and benefits of competency development efforts that will be carried out to support increased Innovation. The aim of implementing this socialization is so that lecturers can implement and interpret the application of SISDM in supporting lecturer innovation in carrying out their duties. Socialization regarding competency development policies is also a problem that hinders the implementation of SISDM. Due to the lack of socialization in introducing SISDM, SISDM is not yet fully running well. The field of operational feasibility, in particular, periodic training that is always carried out to optimize the use of the HR information system, is the primary driver in implementing SISDM in private universities. For this reason, the key to the successful implementation of SISDM depends on the level of knowledge and abilities of lecturers as users who are supported by activities to socialize understanding of SISDM.

### **5.5. The Influence of Organizational Citizenship Behavior (OCB) of Lecturers on Higher Education Innovation at Private Universities in Kendari City**

The fourth hypothesis proposed in this research is that Organizational Citizenship Behavior (OCB) influences Innovation in universities in Kendari City. Based on the results of hypothesis testing, it shows that OCB has no effect on Innovation in private universities in Kendari City. Innovative work behavior is one of the behaviors that OCB can determine if employees have creativity that can create new ideas or do new things; this attitude can be demonstrated by implementing OCB in the organization. Thus, someone will be able to innovate if they have good creativity, as expressed in the following theory:

*Pervaiz K. Ahmed dan Charles D. Shepherd [3]. 'creativity plays a crucial role in Innovation since it helps define, solve, and sometimes anticipate problems. Creativity must be tapped at all Innovation, problem-solving, and solution-finding stages. It should not be confined simply to trying to generate new ideas. It is required for problem identification, problem selection, and problem preparation. It is, therefore, essential in developing innovative ideas and solutions and implementing the chosen solution. In other words, creativity spans the whole spectrum of innovation activity'.*

*Robert B. et al. [20]. Creativity is the generation of new and valuable ideas, while Innovation is the successful implementation of those ideas. Organizations need creativity and the ability to innovate based on that creativity to succeed.*

Our focus has been on carrying out proper duties, and we have been looking at how support from Higher Education Leadership strongly influences the emergence of OCB. Lecturers who feel that they receive attention from higher education leaders, especially from elements of the higher education foundation, will give reciprocity by engaging in OCB behavior. High-quality superior-subordinate interactions will have impacts such as not spending much time complaining about trivial things, not tending to exaggerate problems, and not finding fault with what the university is doing. Suppose the superior-subordinate interaction is of high quality. In that case, a superior will have a favorable view of his subordinates so that his subordinates will feel that their superiors provide a lot of support and motivation.

It will increase subordinates' trust and respect for their superiors, motivating them to innovate more than their superiors expect.

Years of work correlate with Conscientiousness (caution) in OCB. Lecturers who have worked for over 2 years or more in an organization will have an intense closeness and attachment to higher education. An extended work period will also increase your attitude of obeying university rules and regulations even though no one is watching, becoming a lecturer who is the most careful and more confident in doing his work and creates positive feelings and Behavior towards the university that employs him. The longer a lecturer works at a university, the higher the perception that the lecturer has an investment in it. Organizational climate and organizational culture can be the cause, so the attitude of Civic Virtue (virtue of members) becomes more vital for developing OCB in a higher education institution. A positive organizational climate causes lecturers to be active in attending meetings that are not mandatory but are considered essential. They were actively attending campus activities to help the image of the campus and active lecturers. Following changes in higher education, lecturers will respect each other, trust each other, and be attracted to each other. Superiors treat lecturers with Sportsmanship and feel like they want to do their work more than what is required in the job description. Creating a climate of openness will provide good feedback from one lecturer to another, so it is hoped that this self-oriented Behavior will decrease and will change into Behavior oriented towards tasks and maintenance of higher education, which is a reflection of OCB behavior. This research aligns with the results of VahidReza Mirabi et al. [25], which states that OCB can encourage the creation of Innovation to help managers utilize an innovation paradigm that can quickly catch up with other organizations worldwide. Therefore, managers should pay attention to improving employees' OCB and facilitate the creation of Innovation in their organizations.

#### **5.6. The Influence of PTS Creativity on Higher Education Innovation at Private Universities in Kendari City**

The analysis of the direct influence of Creativity on Innovation shows that creativity affects Innovation. A path coefficient marked positive means that there is a unidirectional relationship between Creativity and Innovation. The stronger the creativity, the more it will increase lecturers' Innovation at Kendari City's private universities. The study theory that is the basis for studying and measuring the concept of organizational creativity in this study refers to the theory of Woodman et al. [28]; organization-level creativity is defined as the creation of new products, services, ideas, procedures, or processes that are valuable and beneficial to individuals who work together. Thus, the level of organizational creativity results from the Behavior of individual members and social interactions between group members that can enhance creative outcomes. Indicators of lecturer creativity were measured in 54 question items justified by Kuo et al.'s measurement of creative teachers. [13].

Based on the results of the analysis with AMOS, it is known that the most prominent indicators in reflecting creativity variables based on outer loading values are described below. **First**, student creativity at private universities so far Has the potential to create or imagine creatively, Always actively participate in training that supports Creativity, Have awareness that students must be creative, Able to solve problems creatively, Have the motivation to learn something independently, Always try to display high-quality learning, Able to use their respective learning styles positively, Able to appreciate the differences in the appearance of others, Able to appreciate individual differences, including different points of view, Like to share ideas and or collaborate with others and have the freedom to express points of view or ideas creatively.

Higher education creativity is an inseparable part of the thinking of the academic community, especially lecturers, in fostering students, where organization-level creativity is defined as the creation of new products, services, ideas, procedures, or processes that are valuable and beneficial to individuals who work together. The level of organizational creativity results from the Behavior of individual members and social interaction between group members that can increase creativity [28]. The process of producing new things can come from the imaginative process of the creator himself, which can also come from previous information and experience about what will be created. Then, the creator merges and updates work and existing ideas to produce new works and ideas that are different from existing ones. Higher education creativity is a process or ability that reflects fluency, flexibility, originality in developing higher

education, and the ability to elaborate (develop, enrich, detail) an idea. This understanding emphasizes more aspects of the change process (Innovation and variation). The process of Higher Education creativity is to create new and valuable ideas and become a place for students to be creative and innovate, such as the Student Creativity Program and Student Entrepreneurship Program activities and the availability of student organizations within the scope of the university itself so that it can help to hone student potential in creative and innovative fields.

**Second**, Campus Creativity that private universities in Kendari City have better sustainability prospects, a Cool campus and several aesthetically pleasing buildings that feel comfortable, safe, and beautiful, an atmosphere of mutual respect, And a place where lecturers and students can share ideas, Able to adopt innovative or creative management, Able to integrate human and material resources efficiently, Have innovative communication channels and compatible administrative management, Academic climate that can integrate local cultural values and traditions, and able to transmit, expand, and respect local cultural values. The campus is expected to be an incubator that can stimulate someone who initially did not know to know, who originally could not become able to. Its primary function as a facility that accommodates the teaching and learning process is expected not only to be a place to transfer knowledge from lecturers to students. But its function should be more than that. Concerning a creative campus, a campus should be able to accommodate a process that is more than just seeking knowledge and skills. It can also stimulate student creativity to create innovations and pursue present and future challenges for their generation. To become a creative campus, the support and consistency of the management of private university foundations and educational facilities can provide unusual programs and supporting facilities. In addition to providing essential functions with classrooms and supporting systems, creative campuses can take a creative approach and create spaces that have added value in increasing the creativity of its users.

**Third**, Interdisciplinary Practice that PTS Kota Kendari collaborates using or integrating more local resources provides welfare for the surrounding community, recruits creative practitioners from various fields of expertise to create a creative climate in the campus environment, recruits / collaborates with creative practitioners from various fields of expertise to teach and improve the quality of student learning, encourages the formation of alliances collaborative between campuses and communities to support a creative campus climate, form creative practice communities with other campuses at regional and national levels, establish connectivity between campuses and parents, and local industries, support and organize dialogue and integration related to the fields of education/teaching and research and organize knowledge sharing of several experts from other campuses to provide their knowledge as needed.

**Fourth**, Lecturer Creativity that Kendari City PTS Lecturers Love to create, imagine, and express themselves. Have attended several trainings that support Creativity, Always strive to be creative lecturers, Have the willingness to participate in creativity efforts, especially those related to efforts to improve their competence, Have research skills, Have high teaching quality, Have used creative teaching methods, Able to adopt and integrate local features in the teaching process, Able to develop teaching methods creatively, Able to integrate creativity into teaching through creative curriculum and teaching material development, Able to use various ways to evaluate student learning and Able to participate Practically in the community of people creatively according to their fields of knowledge. In learning and teaching, creativity in learning is part of a system that is inseparable from students and educators. The role of lecturer creativity is not just to help the teaching and learning process by covering only one aspect in humans. Still, it includes other aspects, namely cognitive, psychomotor, and affective. In general, lecturer creativity has main functions that can be specified into several types, including 1. Lecturer creativity helps increase student interest in courses; lecturer creativity products are expected to provide an actual situation in the learning process. 2. Lecturer creativity helps transfer information because lecturer creativity will complete abstract images previously understood by students and correct incorrect understandings of information obtained from texts. 3. The Creativity of lecturers helps stimulate students to think more scientifically in observing community symptoms or natural symptoms that are the object of study in learning.

**Fifth**, the creative database, namely PTS in Kendari City, has a creative online Database that provides knowledge related to efforts to increase the creativity of lecturers and students that enable student E-Learning, Displaying content, and results of competitions or creative and imaginative activities that help lecturers and other campuses to develop creative teaching plans and materials, Developing an online assessment system to understand creativity capacity student, Online database that promotes creative or imaginative teaching methods that can increase accessibility to creative resources, Online database with easy-to-use and high-speed interface that connects users to relevant educational creativity resources, Online database that can efficiently assemble creative or imaginative teaching methods, materials, and plans. The creative database contained in the Academic Information system is a system designed to manage academic data with the application of computer technology, both hardware and software so that the entire process of academic activities can be managed into helpful information in the management of university management and decision making for decision-makers or top management in the university environment. It aims to support the implementation of education so that universities can provide better and more effective information services to users, both inside and outside the university, through the Internet. Various needs in education and the regulations surrounding it are so high that academic management in an educational institution becomes a job that drains time, energy, and mind. Therefore, academic information systems are built to directly answer the problems and needs of universities for academic management. The results of this study reinforce research conducted by Oguz A. Acar et al. (2018), which found that generating creative ideas and turning them into innovations is the key to competitive advantage. However, efforts towards Creativity and Innovation are limited by constraints such as rules and regulations, deadlines, and scarce resources.

### **5.7. The Influence of SISDM on Innovation through Creativity**

The role of creativity in mediating the influence of human resource information systems on Innovation occurs. Complete mediation or creativity plays a role in mediating the influence of human resource information systems on Innovation. A human resource information system is a form of intersection/meeting between human resource management (HRM) and information technology. This system combines HRM in applying information technology to HR activities, such as planning and compiling a data processing system in a series of standardized steps and summarized in human resource planning applications. Overall, SISDM aims to integrate information obtained from different applications into one universal database system. Creativity is an inseparable part of the thinking of the campus academic community, where creativity is the ability to produce new things that have never existed before. The creativity of higher education as a process or ability that reflects fluency, flexibility (flexibility), and originality in the management of higher education and the ability to elaborate (develop, enrich, detail) an idea that can give birth to Innovation.

### **5.8. OCB's Influence on Innovation Through Creativity**

The Role of Creativity in Mediating the Influence of Organizational Citizenship Behavior on Innovation Complete mediation of variables creativity plays a role in mediating the influence of Organizational Citizenship Behavior on Innovation; this shows that creativity is an essential aspect of human development, including educational institutions. Educational institutions are the right place to nurture creative talents and the ability of a lecturer to think creatively in creating innovations. The challenges in educational institutions related to creativity are the level of knowledge of lecturers about creative ways of learning, learning strategies that can be used to develop student creativity, and the concept of creativity itself. In facing the challenges of modern life today, creativity is needed to adapt to various demands. Creativity is needed within the scope of private universities in Kendari City, including *First*, Lecturer Creativity who can integrate creativity into teaching through creative curriculum and teaching material development; *Second*, Student Creativity Has the potential to create or imagine creatively; *Third*, Campus Creativity, namely the campus can adopt Creative and innovative management; *Fourth*, Interdisciplinary Practice, namely recruiting creative practitioners from various fields of expertise to create a creative climate in the campus environment; *Fifth*, Keratif Database Online database that provides knowledge related to efforts to increase the creativity of lecturers and students. Thus, the role of creativity as a mediating variable in the relationship between OCB and Innovation in private

universities in Kendari City can give birth to innovations in the form of discoveries that can be used to achieve educational goals and the development of learning media that are indispensable considering that lecturers and students can be said to play an essential role in the teaching and learning process in the classroom, must be able to grow their ability to be creative.

## CONCLUSION

Penelitian ini pada dasarnya bertujuan untuk menguji Pengaruh Sistem Informasi Sumber Daya Manusia dan Organizational Citizenship Behavior terhadap Kreatifitas dan Inovasi berdasarkan hasil yang diperoleh dari pengolahan dan analisis data dengan bantuan alat program AMOS Versi 16.0 maka dapat diambil kesimpulan sebagai berikut:

1. The Human Resources Information System influences creativity in private universities in Kendari City. It means that the better the PTS SISDM, the better the university's creativity. Generally, users are satisfied with the HR information system being used. In connection with the policy, PTS management must maintain and improve the reliability of SISDM so that PTS creativity will improve.
2. Organizational Citizenship Behavior influences creativity in private universities in Kendari City. It means that the higher the lecturer's OCB, the higher the university's creativity. In the context of a private university, this attitude will undoubtedly be very beneficial because lecturers will quickly adapt to changes in their university; for example, if a university issues a new policy regarding the Tridharma of Higher Education, lecturers with an OCB attitude will readily accept the policy. New policy and put aside minor problems that might arise caused by the new policy so that it positively impacts PTS creativity.
3. The Human Resources Information System does not affect Innovation at private universities in Kendari City. It means that the higher increase does not follow the SISDM in PTS innovation; regular training for PTS lecturers related to technology to optimize HR information systems is needed.
4. Organizational Citizenship Behavior does not affect Innovation at private universities in Kendari City. Innovative work behavior is one of the behaviors that OCB can determine if employees have creativity that can create new ideas or do new things; this attitude can be demonstrated by implementing OCB in the organization. Thus, someone will be able to innovate if they have good creativity.
5. Creativity influences Innovation in private universities in Kendari City, which means that the higher the creativity of the private universities, the higher the education innovation. These results indicate that the higher the students' creativity in creating or imagining creatively actively participating in training that supports creativity, the campus has an atmosphere of mutual respect and respect, a place where lecturers and students can share ideas and adopt innovative or creative management, can integrate human and material resources efficiently so that PTS innovation will be higher.
6. Creativity reflected through lecturer creativity, student creativity, campus creativity, interdisciplinary practices, and creative databases play a role in mediating the influence of SISDM on PTS innovation. It indicates that the interaction of SISDM and PTS creativity strengthens PTS innovation. Based on creativity indicators, it was found that creative databases had a strengthening effect on the influence of SISDM on PTS innovation.
7. Organizational Citizenship Behavior reflected through carrying out proper duties, liking to help fellow workers, always maintaining good relationships, tolerance for discomfort, and compliance with the organization plays a role in mediating the influence of OCB on PTS innovation. It indicates that the interaction of OCB and PTS creativity strengthens PTS innovation. Based on OCB indicators, it was found that compliance with the organization had a strengthening effect on the influence of OCB on PTS innovation.

## Research Findings

Based on the results of data analysis and discussion, theoretical and empirical studies of this study found that:

1. OCB is a variable that can influence and increase the Creativity of Private Universities in Kendari City.
2. Creativity is an influential variable in mediating the influence of OCB on Innovation.

### Limitations and recommendations of researchers

The respondents of this study were limited to private university lecturers in Kendari City. Thus, it can limit the ability to generalize the findings of this study, especially to private universities in other regions. The analysis of this research data is based on survey data that is limited to presenting relationship analysis at one point in time (cross-sectional) because the dynamics of SISDM, OCB, and Creativity can change over time, so to identify these changes, further research studies are needed and reexamine whether the relationship between the variables analyzed in this study changes. The research object is limited to lecturers at private universities in Kendari City, so the research results cannot be generalized to other regions. Research can then add Organizational Culture, Leadership, Loyalty, and Competence variables to measure the influence of Creativity on Innovation.

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