

University Governance and its Role in Developing Knowledge Management in Universities: Larbi Tebessi University–Tebessa as a Case Study

حوكمة الجامعات ودورها في تنمية إدارة المعرفة في المؤسسات الجامعية

دراسة حالة: جامعة العربي التبسي-تبسة-

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Abstract

Most public sectors have adopted governance as part of the reform. Through the following study, we try to focus on the higher education sector, by introducing the idea of university governance represented by partial variables (participation, independence, accountability, evaluation) and its role in the development of knowledge management.

The professors of Larbi Tebessi University (Tebessa) are selected as a study sample. One of the most important results reached after analyzing the questionnaire based on SPSS 26 program is that university governance significantly affects the development of knowledge management in universities.

Keywords: university governance, knowledge management, higher education sector

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ملخص

توجهت معظم القطاعات العامة إلى تبني موضوع الحوكمة باعتبارها جزء من الإصلاح، وسوف نحاول من خلال هذا البحث التركيز على قطاع التعليم العالي، من خلال طرح فكرة الحوكمة الجامعية ممثلة بالمتغيرات الجزئية (المشاركة، الاستقلالية، المساءلة، التقييم) ودورها في تنمية إدارة المعرفة.

وتم اختيار أساتذة جامعة العربي التبسي-تبسة- كعينة دراسة، ومن أهم النتائج المتحصل عليها بعد تحليل الاستبيان بالإعتماد على برنامج SPSS 26 هي أن الحوكمة الجامعية تؤثر بشكل كبير على تنمية إدارة المعرفة في المؤسسات الجامعية.

الكلمات المفتاحية: حوكمة الجامعات، إدارة المعرفة، قطاع التعليم العالي.

1. INTRODUCTION

There is no doubt that university institutions play a leading role in shaping and developing comprehensive development plans for societies, as they are the institutions responsible for educating and training human resources and preparing the societal elites. It also always and effectively contributes to the development of knowledge management in order to produce qualified outputs capable of dealing with the requirements of society.

Given the important role of universities, a flexible system of governance must be adopted by those in charge of it that takes into account all the prevailing interactions. At the same time, it works to devote effective oversight mechanisms to ensure control over the management processes, examination, control, and follow-up of all its administrative and pedagogical work, in order to achieve the objectives set by the institution's project.

Because knowledge management is concerned with organizing knowledge exchange processes and ensuring good management of the existing relations between its parties, and working to enhance the process of knowledge sharing within university circles, this has allowed it to become one of the most important topics on the university governance agenda. This study came to examine the possibility of developing knowledge management through the contribution of the governance system. Therefore, the following study raises the following problematic:

Does university governance contribute to the development of knowledge management in university institutions?

In order to be able to address the main problem, it has been divided into sub-questions as follows:

- Is there a correlation between university governance and knowledge management at the significance level of $\alpha = 0.05$?
- Is there a correlation between participation and knowledge management at the significance level of $\alpha = 0.05$?
- Is there a correlation between independence and knowledge management at the significance level of $\alpha = 0.05$?
- Is there a correlation between accountability and knowledge management at the significance level of $\alpha = 0.05$?
- Is there a correlation between evaluation and knowledge management at the significance level of $\alpha = 0.05$?

- Is there an effect of university governance on knowledge management at the significance level of $\alpha = 0.05$?

Study hypotheses

To answer the research problematic, the main hypothesis and the following sub-hypotheses can be formulated as follows:

The main hypothesis

University governance contributes to enhancing knowledge management in university institutions.

Sub Hypotheses

Through the main hypothesis, the following sub-hypotheses can be formulated:

- There is a correlation between university governance and knowledge management at the significance level of $\alpha = 0.05$.
- There is a correlation between participation and knowledge management at the significance level of $\alpha = 0.05$.
- There is a correlation between independence and knowledge management at the significance level of $\alpha = 0.05$.
- There is a correlation between accountability and knowledge management at the significance level of $\alpha = 0.05$.
- There is a correlation between evaluation and knowledge management at the significance level of $\alpha = 0.05$.
- There is an effect of university governance on knowledge management at the significance level of $\alpha = 0.05$.

Study Significance

This study derives its significance from the importance of its two variables (university governance, knowledge management) as being two contemporary variables. The conclusions and recommendations emanating from their study contribute to evaluating the extent to which university governance contributes to the development of knowledge management in the university. This, thus, achieves rational management of all activities related to the subject of knowledge, as well as improving the quality of outputs in higher education institutions in general and at the University of Larbi Tebessi, Tebessa, in particular.

Study objectives

This study aims to achieve a number of objectives, the most important of which are:

- Highlighting the importance of university governance and the extent of its contribution to the development of knowledge management in university institutions.
- Clarifying the relationship between university governance and knowledge management.
- Identifying the role of university governance in knowledge management at Larbi Tebessi University, Tebessa.

Research Methodology

In order to cover the various aspects of research, answer the problematic and test the validity of the hypotheses, the descriptive and analytical approach is adopted in the theoretical study, in which the general concepts of the variables are described. Moreover, the method of the field study is used by distributing a questionnaire form to survey the opinions of a group of professors from the University of Larbi Tebessi, Tebessa, about university governance and its role in the development of knowledge management.

2. Theoretical framework:

2.1 What is university governance?

2.1.1 Definition of university governance

The definitions that dealt with the concept of governance in universities (university governance) differ due to the difference in the intellectual trends of these definitions' authors.

Governance in universities is defined as: "The system through which the work of the institution is directed and monitored at the highest level to achieve its objectives and meet standards of accountability and transparency. This is in addition to drawing a clear structure for the institution's work within the framework of using an ethical system that enables it to achieve quality and excellence." (Dahawy and El-Meligy, 2011, p. 46)

The Organization for Economic Cooperation and Development (**OECD**) (OECD and IBRD/ The World Bank, 2010, p. 86) considers that the existence of an effective governance system in the university environment is a guarantee of rationality and efficiency in the exploitation of public resources allocated to higher education, increasing the ability to be proactive

and to solve the problems of education, training, research and creativity in universities. This is because university governance ensures access to quality at reasonable costs, and benefits not only from student formation but also from economic growth and community development. According to this organization, governance processes in higher education address multiple dimensions. They are represented in: the way it holds its parts together, how it exercises its authority, how it communicates with internal members (students and professors), how it makes its decisions, how it delegates responsibility for internal decisions and actions, and to what extent does it do so? The governance structure includes the role of corporate boards of directors and heads of institutions, their participation structures, their procedural and disciplinary rules, their resource allocation policies and arrangements for performance management, and follow-up on reporting.

It is also defined as the way with which universities and higher education systems define and implement their goals and manage their institutions in the physical, financial, human resources and academic programs for students, monitor their achievements and achieve their goals. (Jaramillo, 2012, p. 3)

Through the previous definitions, university governance can be defined as the way in which the activities of the university are directed, manage its scientific departments and faculties, follow up the implementation of its strategic plan and general directions, how to allocate its financial resources, manage its human resources, and set standards and mechanisms for the performance of all parties. This is by applying transparency, disclosure policy, a method for measuring performance, holding officials accountable, and public participation in the management and evaluation process.

2.1.2 The importance of university governance

There are various points of view regarding the importance of applying governance in universities, each according to its perspective on the aspect of benefiting from it, and this can be stated as follows:

-It represents a comprehensive system if it invests in universities according to an organized scientific approach that helps to adapt to the variables of the internal and external environments. It also increases interaction and coexistence with the local community and students, which contributes to achieving the competitive advantage in the quality of its material and moral

outputs, and in its local, regional and international academic and scientific reputation and the extent of obtaining international accreditation.

- Minimizing errors to the minimum possible by using control systems that prevent the occurrence of such errors, and avoiding administrative and financial corruption of universities (Eid, 2017, p. 16)

- Avoiding any risks or conflicts within the university that may impede the quality of performance.

- Improving university institutions and achieving justice, integrity and transparency in all university transactions

- Assisting the university administration to formulate and build a strategy and ensure effective decision-making that positively affects the efficiency of performance.

- Improving and developing the performance of the university (Cheikh, Mansouri, and Ben Ayyad, 2019, p. 340)

2.1.3 Principles of University Governance Authority: Means the authority granted to the University rector by the governmental bodies in the country and which s/he exercises through his/her deputies: the Vice President of the University, the Dean, the Head of the Department and the administration officials and in coordination with the University units of faculties, professors and students.

Consultation: The president of the university and the rest of the staff consult with the rest of the parties concerned to discuss the issues and concerns of the university.

Discussions with interested parties should be characterized by prior announcement in accordance with legal procedures and reasonable deadlines. The academic program should also take into account the use of appropriate information, feedback and timely communication with the relevant institutions.

Representation: Effective university governance requires professional and student representative bodies at the college and university council levels, as well as at the university's external level. Its representative is appointed according to an election at the college level. These bodies represent its members at the university level, administrative and pedagogical decisions, the financial level, and executive procedures. Students must be represented at the university level, the pedagogical committees and also the committees

of the external units because their voice is very important in all university affairs, as well as for the professors.

Participation: The constituent parties of university governance must participate through their representatives in all matters that are affected by it, whether at the administrative, academic or financial level.

Evaluation: The performance at the department, college and university level should be evaluated periodically. (Mekideche, 2009-2010, p. 71)

2.1.4 Stages of applying governance in universities

Higher education institutions go through specific stages of implementing corporate governance, which are as follows:

- **Introducing governance and spreading its culture:** It is the first and most important stage of governance and the most dangerous at all. A distinction is made between governance as a culture, as an administrative method that is adhered to, and as a basis for fair transactions, where the features and aspects of governance are clarified, and its dimensions and concepts, approach, importance, tools and messages are defined.
- **Building Governance Basic Structure:** Corporate governance needs a strong and solid basic structure to be founded on, which is capable of interacting with the developments and changes surrounding it and achieving understanding and effective communication between the various parties. This basic structure is divided into two types, namely:
 - **Superstructure:** It includes the organizational institutional entity of the governance councils, and the bodies supervising their implementation at the university level.
 - **Infrastructure:** It includes the moral and ethical framework (Ezzat, 2009, p. 185)
- **Setting a standard program for governance and determining its standard timing:** Governance needs a timetable in which the work, tasks and duties are defined, and through the systems of obedience, follow-up and obligation, all the expected and desired goals are achieved.
- **Governance implementation:** It is the stage in which real tests begin and the extent of willingness and willingness of all parties to implement governance is measured. Just as a set of freedoms are exercised in governance, it also includes restrictions and controls such as accountability and responsibility. Therefore, these preparations must be

studied and analyzed to identify weaknesses in implementation. (Eid, 2017, p. 19)

– **Follow-up and development of governance:** ensuring the proper implementation of all previous stages through monitoring that performs two main functions:

- Treating any errors that occur by checking the mechanism of implementation of procedures and processes.
- Preventing errors and devising means to increase the effectiveness of governance

2.1.5 Obstacles to applying governance in universities

Obstacles mean everything that hinders thought, management, or performance from internal concerns or external positions that prevent the achievement of governance in higher education institutions. These obstacles can be categorized under the following factors:

- **The prevailing culture in society and the university:** Represented in the absence of dialogue and consultation, and the absence of transparency and accountability, as a result of what individuals have gained from their community and university environment. This is what generated a culture of reluctance and mistrust in the possibility of change in an authoritarian culture that prevents the student from objecting to views at various levels, such as public discussions or curricula and teaching methods and everything that is subject to the professor's relationship with the rest of the higher administrative levels. Thus, this makes the university a bureaucratic institution where those below the administrative hierarchy have no right to discuss the decisions of the supreme president.
- **General political climate:** The political climate of the state affects the extent to which the university family cares about their own affairs within the university walls. As an example, the absence of democracy in various fields, including the democracy of student unions, sows frustration and failure in the ability to bring about change.
- **University management method:** The issue of university management lies particularly in the method of selecting faculty members and university leaders in general, starting from the university president to deans of faculties and heads of departments... They are appointed by the

executive or administrative authorities instead of the process of electing them to take up their positions (Hafdhah, 2016, p. 31)

– **Promotion criteria:** They are not often based on the university professor's ability to teach, communicate knowledge, develop curricula, and participate in local research aimed at addressing local problems. Rather, it is based on external considerations, such as publishing research in specialized international journals and periodicals in developed countries, which often deal with topics related mainly to theoretical and applied issues in the economies of these countries (Ammari and Guettaf, 2001, p. 106).

– **Marginalization of higher education reforms:** This is reflected in the marginalization of members of the university family in the decision-making process, as well as reforms that concern and affect their affairs in the first place. This affects the possibility of running the university in accordance with the requirements of its governance applications. (BOUKCHOUR, 2007, p. 261)

2.2 Theoretical framework for knowledge management

2.2.1 Definition of knowledge management

Knowledge management is defined as “the process through which the organization uses its collective intelligence to achieve its strategic goals” (Qassem and Shukr, 2010, p. 179).

According to Cross, knowledge management is a thriving business generation system and learning environment that encourages the generation, collection, use and reuse of both personal and organizational knowledge in pursuit of new business value. (Hijazi, 2014, p. 51)

It is also defined as: “The processes that help organizations to generate, obtain, select, organize, use, disseminate and transform knowledge, including data, information and experiences into products, and use their outputs in decision-making and problem-solving. (Altaher, 2010, p. 93)

It is also "that management that works to identify knowledge hidden in individuals' minds, whether employees, consultants, or beneficiaries." It also can be the collection and finding of the knowledge found in the records and documents, and organizing it in a way that facilitates its use and participation in it among the employees of the institution. The aim is to raise

the level of performance and the success of work with the best methods and at the lowest possible costs. (Alaklubi, 2008, p. 26)

Based on the previous definitions, it can be said that knowledge management is a modern and complex phenomenon represented in the process of planning, organizing, directing and controlling the various knowledge and skills to generate, transfer and disseminate among the various employees in the institution. It is also an organized and systematic process related to the processes of generating and acquiring knowledge, preserving and storing it to facilitate its retrieval, distribution, sharing, use and utilization for the purpose of solving problems and making decisions, innovation, and strategic planning (Ghodbane, 2018, p. 93).

2.2.2 Dimensions of knowledge management: They are represented in three basic dimensions of knowledge: (Imran, 2013, p. 32)

- **Technological dimension:** Examples of this dimension are search engines, software collective entity products, intellectual capital management databases, and distinct technologies, all of which work to address knowledge management problems technologically. Therefore, the organization seeks excellence by possessing the technological dimension of knowledge.
- **Organizational and Logistic Dimension of Knowledge:** This dimension expresses how knowledge is obtained, controlled, managed, stored, enhanced, multiplied and reused. It is related to defining the methods, procedures, facilities, aids and processes needed to manage knowledge effectively in order to gain viable economic value.
- **Social Dimension:** This dimension focuses on sharing knowledge between individuals, building groups of knowledge makers, establishing society on the basis of knowledge makers' innovations, sharing personal experiences, building effective networks of relationships between individuals, and establishing a supportive organizational culture.

2.2.3 Factors affecting knowledge management: There is a group of factors affecting knowledge management. Wiig refers to two factors: (Malkawi, 2006, pages 107-108)

- External factors:** They refer to the environmental elements under which the institution operates and which affect its work. The institution has no

alternative but to adapt to these variables and factors and respond to their requirements. The most important of these factors are:

- Globalization:** it appeared due to the advancement of communication means that made the world a small village, which led to the intertwining of global interests, where only the most effective institution could survive. Here emerged the importance of knowledge management, which is able to provide the necessary knowledge for organizations wishing to survive, compete and gain a competitive advantage.
- Increasing sophistication and complexity in consumer needs and desires:** This is due to the developments that the world is witnessing, which are reflected in the consumer's desires, which have increased in terms of diversity and plurality, which means their complexity. This reinforces the importance of knowledge management to face these situations
- Increasing the intensity of competition (competition):** Institutions are witnessing intense competition in the introduction of new products and services and their continuous development and the use of modern technologies. This needs to build continuous and rapid learning processes to build a competitive experience capable of confrontation.
- Increasing the level of sophistication and complexity in the supply processes:** Suppliers seek to keep pace with the development processes of the consumer's needs and desires, and global competition. Therefore, institutions always seek to constantly develop and update their operations and capabilities, and contribute to creativity and innovation processes to provide the best products and services, and to involve suppliers in that. This increases the importance of knowledge management and the need to participate in it.
- Internal factors:** These factors are available within the organization as they contribute to the development of knowledge management, most notably the following:
 - **Bottlenecks in the effectiveness of the institution:** Among the factors that contribute to the effectiveness of the organization are the work flow, the volume of information, the organization's ability to overcome bottlenecks by using modern technologies, and a highly skilled and developed staff who is able to organize work better. This can only be

done with the presence of knowledge management to predict and plan in general.

- **Increasing technical capabilities:** Technical capabilities such as computers and software have contributed to the multiplicity of approaches to knowledge management, and information technology (information technology), where information management systems had a significant impact on this.
- **Understanding the cognitive functions:** this is undertaken by practically and scientifically qualified individuals, which has increased the effectiveness of knowledge management.

2.2.4 Knowledge management fields: It is used in the organizational areas of the organization, the most prominent of which are the following:

- Making decisions in all areas:** knowledge management helps decision makers to obtain all the information required to make a specific decision, which enables an understanding of all aspects of the subject, its dimensions and all its implications.
- Strategic planning:** a person with knowledge and experience is more capable of planning than others. Therefore, knowledge is greatly beneficial in setting and developing the strategic plan.
- Process planning and re-engineering:** i.e. re-engineering processes and workflow.
- Communication:** The communication process facilitates the transmission of more accurate information about the value of the product.

2.2.5 Knowledge management requirements: in order to build a knowledge management system, the basic components and requirements for that must be met, which we summarize as follows:

- **Organizational culture:** It is the organization's identification card to the community, and it is the component of the organization's personality. It must be unique and distinct in the eyes of employees and customers. It provides an integrated picture that reflects the values and beliefs about where the organization has been, what its position is now, and how it will be in the future. The success of the knowledge management system depends on the existence of an organizational culture that supports the efforts and activities of employees in the organization to build and develop knowledge that can be used to

improve work performance. This requires the organization to create a culture that promotes and supports knowledge building, sharing and collaboration among individuals, encourages spending time in learning, and rewards positive behaviour. (Issawi, 2011, p. 17)

- **Organizational bodies:** It is one of the basic requirements for the success of any business. Through its members, it may direct energies towards work and release the latent creativity of employees. Therefore, there must be an organizational body characterized by flexibility, so that individuals of knowledge can unleash their creativity and work freely to discover and generate energy. These bodies control how knowledge is acquired, controlled, managed, stored, enhanced, multiplied and reused, or it is also related to defining and renewing the procedures, facilities, aids and processes needed to manage knowledge effectively and efficiently in order to gain meaningful economic value.
- **Availability of the necessary infrastructure:** the technology required for this, which is based on the computer and special software, such as electronic search engines, and all related matters. These refer in one way or another to information technology and information systems.
- **The role of leadership in knowledge management:** There is no doubt that leadership is an important element in the adoption and application of knowledge management, as the leader is considered a role model for others in continuous learning. Knowledge management requires an unusual style of leadership that enables others to be led, to achieve the highest levels of productivity in the organization (Malkawi, 2006, pp. 85-86).

Human Resources: Knowledge management requires having creative human resources capable of generating and exchanging knowledge with others, especially with the widespread use of work teams to accomplish organizational tasks. The world of knowledge requires employees of the organization to have the ability to use information outside the framework of standard methods. This necessitates having the ability to first determine the required information, then to use that information accurately, and to understand the results of use. The change in the content of work requires that human resources be capable to cope and develop in line with environmental developments. The process of creating new knowledge

depends on the type of relationships between individuals working in the organization, and between them and the organization's leadership. That is, it requires a social environment that encourages creativity and innovation (Al-Khatib and Zegan, 2009, pp. 13-14).

3. The relationship between the application of university governance and knowledge management

When talking about the relationship between knowledge management and university education, one of the most important tasks of university education is to find knowledge, and one of its most important goals is to spread this knowledge and put it in the service of society, education, and scientific research. Knowledge here means that knowledge that takes place through human interaction, exchange and sharing within a relationship in which it is supposed to go beyond the formal educational framework or educational situation specified in a lecture or educational meeting (Bogjan, Wadeh, and Haseeb, 2021, p. 209). The process of knowledge sharing within the educational system needs an effective model to frame it, which is represented in the knowledge governance model within the university institution. This is because sharing knowledge, creating and retaining it, learning, building capabilities and experiences will all be useless without a strategic direction that supports the knowledge management process in universities.

In this context, the preliminary draft of the directive law for the year 2020 proposed improving governance in higher education institutions, by dedicating the institution's project as a legal mechanism for better management of higher education institutions. This bill works on defining the institution's orientation policy, its work plan, and the implemented development strategy, on which the director of the institution relies on the better governance, leadership and management of his/her institution (Introductory Project, 2020, Article 2 v6). That is why the bill sought to define a clear path, which is:

- Raising the quality level of training and running higher education institutions.
- Maintaining the quality of research, giving it a priority to convert it to job positions whenever possible.

The preliminary project also suggested working on the enrollment of higher education institutions in the era of digital technology by defining the framework that allows higher education institutions to join the era of digital technology. This is done by developing its use in most of its administrative and pedagogical functions, such as placing digital resources within the reach of trainings guaranteed by the public facility for higher education and its management. Thus, pedagogical and scientific digital services and resources are made available to its users (Ministerial Instruction No. 416/A.kh.f. 2020 dated in, 2020).

Some researchers believe that the purpose of establishing governance bodies is to ensure the success of any organizational activity. The governance of knowledge management can meet the objectives set by developing an understanding of knowledge, its implementation, its alignment. It can also suggest value to the organization's strategy, regularly review and validate it, and evaluate and monitor investments in infrastructure that are effective in human knowledge exchanges. In general, governance in the context of knowledge management is concerned with the mechanisms that distinguish and integrate knowledge-related efforts within the organization. This is in addition to focusing on differentiation and integration efforts defined by knowledge management such as the structure, processes and related mechanisms established to direct, coordinate and control the explicit and adopted knowledge management in the organization. The governance of knowledge management also constitutes the achievement of central and decentralized procedures in the function of knowledge management and methods for integrating the various parties in decision-making and the development of organizational strategies .The preliminary draft of the Higher Education Directive Law adopted all the previously mentioned objectives by linking the governance of the university institution to determining the following: (Introductory Project, 2020, Article 32)

- the modalities of implementing programs prepared in the form of objectives and activity programs, taking into account budget forecasts;
- the modalities of putting the established programs into practice;
- Development of the institution in terms of human resources, infrastructure and digital equipment;

- The Institution's project ensures the coherence of the various activities of higher training, scientific research, continuous training of staff, and the social and professional integration of students;
- Teaching educational disciplines according to the demand of the environment, the use of digital tools and resources, the pedagogical organization of the institution, cooperation and exchange with foreign higher education institutions;
- Establishment of resource centers to manage digitization and prepare a scheme for a digital manager at the level of higher education and training institutions (Introductory Project, 2020, Article 43)

4. Field Study:

Study population

Larbi Tebessi University - Tebessa - is chosen as the study population, and a random sample of 45 professors is selected. We made sure that the sample included university professors of all ranks in order to reach the most accurate results, thus, to know the extent of the impact of university governance on knowledge management. The following table shows the circulation of the form as follows:

Table 01: Number of questionnaires

| Number of questionnaires | Number | Percentage |
|-------------------------------------|---------------|-------------------|
| distributed (answered) | 45 | 100% |
| Missing and unsuitable for analysis | 10 | 22.22% |
| Valid for analysis | 35 | 77.78% |

Source: prepared by the researcher.

Through table (01), we note that 45 forms have been distributed to the professors of Larbi Tebessi University of Tebessa, and 10 forms have been lost, which is equivalent to 22.22% of the total distributed forms. This is due to the difference in the timing of the teachers' work as a result of the changes made to cope with the epidemic's circumstances. 35 valid forms were sufficient for analysis, which is equivalent to 77.78% of the total forms, which is a good and reliable percentage.

The validity of the study tool

The study relied on the questionnaire, which contained a set of questions estimated at 25 questions that included personal data as well as the axes of university governance and knowledge management.

After preparing the form, it was necessary to measure its reliability and validity, as it was distributed to an optional sample of 03 professors to ensure the clarity of the statements of this form so that everyone could answer.

The reliability of the study tool

In order to measure the reliability of the questionnaire, the reliability coefficient Cronbach's alpha was relied upon, which is the most important indicator for measuring the reliability of the test in the questionnaires. Its value was high in this study, and the questionnaire can be used and the results obtained are reliable, which are represented in the following table:

Table No. 02: Cronbach's alpha reliability coefficient for the axes of the study tool

| Number of items | Validity coefficient | Cronbach's alpha reliability coefficient |
|------------------------|-----------------------------|---|
| 25 | 0.952 | 0.907 |

Source: Prepared by the researcher based on SPSS 26

It is noted from the above table that the reliability coefficient of Alpha Cronbach for the study as a whole is 0.907, which is an excellent reliability ratio. The questionnaire can be relied upon as a tool for collecting data and information related to the study. This means that the same results will be obtained if the questionnaire is distributed again and under the same conditions.

Hypothesis Validity Test

In order to answer the main hypothesis, the sub-hypotheses are first studied and analyzed based on the correlation coefficient, model quality test, coefficient of determination and impact test, at the level of significance (0.05). The sub-hypotheses are as follows:

Sub-hypothesis (1) test for validity

The Pearson correlation coefficient was calculated between the university governance variable and the knowledge management variable, and Table (3) shows this:

Table No. (3): The correlation between the university governance variable and the knowledge management variable

| University governance | Knowledge management | |
|--------------------------|---------------------------------|--------|
| | Pearson correlation coefficient | 0.652* |
| Significance level (sig) | 0.000 | |
| N | 35 | |

**Significant at level 0,01

Source: Prepared by the researcher based on the results of SPSS 26

It is clear from the above table that there is a positive and very strong significant correlation at 0.05 between the university governance variable (university governance) and the knowledge management variable, which is estimated at to 0.652, i.e. approximately 65%. Hence, we accept the validity of the first sub-hypothesis.

This was also proven by calculating the correlation coefficient between the partial variables (participation, independence, accountability, evaluation) as shown in the following table:

Table (4)

| University governance | Knowledge management | |
|-----------------------|---------------------------------|--------------------|
| | Pearson correlation coefficient | Significance level |
| Participation | 0.340* | 0.046 |
| Independence | 0.363* | 0.032 |
| Accountability | 0.684 | 0.000 |
| Evaluation | 0.635 | 0.000 |

Source: Prepared by the researcher based on the results of SPSS 26

It is clear from the above table that there is a positive and strong significant correlation at $\alpha = 50.0$ between the dimensions of university governance

(participation, independence, accountability, evaluation) and the knowledge management variable. The correlation coefficients ranged, respectively, (0.340, 0.363, 0.684, 0.635) as shown in the above table. We note that the highest correlation rate was recorded between accountability and knowledge management. This confirms the validity of the sub-hypotheses explained earlier in the introduction.

Sub-hypothesis (2) test for validity

Shapiro-Wilk normal distribution test

We will present the (Shapiro-Wilk) test since the sample is less than 50 to see if the data follow a normal distribution or not. The following table shows the test results:

Table (5): Normal distribution test results

| Axis | Shapiro-Wilk | Sig |
|------------------------------|---------------------|------------|
| University governance | 0.964 | 0.308 |
| Knowledge management | 0.953 | 0.136 |

Source: Prepared by the researcher based on the results of SPSS 26

Through the above table, it was found that the degree of significance of Shapiro-Wilk for both study variables is greater than $\alpha=0.05$. Thus, the data follows a normal distribution. Based on this, we can study the relationship between the study variables.

Multicollinearity test

Before testing the hypotheses, it is necessary to ensure the appropriateness of the data for regression analysis, and this is done by testing for multicollinearity between the independent sub-variables. The variance inflation factor (VIF) must be less than 3, and the allowable contrast value must be greater than 0.05. The table(6) shows that:

Table (6): Multicollinearity test

| | Tolerance | VIF |
|-----------------------|------------------|------------|
| Participation | 0.513 | 1.951 |
| Independence | 0.855 | 1.170 |
| Accountability | 0.481 | 2.078 |
| Evaluation | 0.464 | 2.154 |

Dependent variable: knowledge management

Source: Prepared by the researcher based on the results of SPSS 26

It is evident from Table (06) that the value of the coefficient of variance inflation for all independent variables is less than 3 and its value ranges between (1.170)-2.154. The Tolerance value was greater than 0.05 and ranged between (0.464-0.855). Accordingly, we conclude that there is no high correlation between the independent variables and that the data are suitable for regression testing.

Hypothesis (2) test for validity

To test the validity of Hypothesis No. 2, the simple regression model was relied on to ensure that the independent variable university governance had an effect on the dependent variable knowledge management, and the following table illustrates this:

Table (07): Results of the simple regression model

| Model | Sum of squares | Freedom degree | Mean squares | F calculated value | Sig level |
|------------|----------------|----------------|--------------|--------------------|-----------|
| Regression | 5.853 | 1 | 5.853 | 24.459 | 0.000 |
| Error | 7.896 | 33 | 0.239 | | |
| Total | 13.749 | 34 | | | |

| Variable | B | standard error | coefficient β | T calculated value | Sig level |
|----------------------|-------|----------------|---------------------|--------------------|-----------|
| Constant | 1.754 | 0.327 | | 5.371 | 0.000 |
| Universitygovernance | 0.561 | 0.114 | 0.652 | 4.946 | 0.000 |

| | | |
|---------------------------------------|--|---|
| Correlation coefficient: 0.652 | Coefficient of determination: 0,426 | Dependent variable: knowledge management |
|---------------------------------------|--|---|

Source: Prepared by the researcher based on the results of SPSS 26

It is clear from the above table that the model is valid for testing the hypothesis based on the calculated F estimated at 24.459 with a probability value of 0.000 which is less than the significance level $\alpha = 50.0$. Moreover, it is clear from the same table that the correlation coefficient between the two variables (university governance, knowledge management) is 0.652. This indicates, as mentioned previously, that there is a very strong and positive

correlation. It is also noted that the coefficient of determination is equal to 0.426, which means that 42.6% of the variance in knowledge management at the University of Larbi Tebessi is due to changes in university governance, and the rest is due to other factors. The calculated t value was 4.946 with a probability value of 0.000 which is less than the significance level $\alpha = 0.05$, and the value of the β coefficient is 0.652.

The regression equation can be as follows:

$$y = 1.754 + 0.561x$$

Based on these results, we accept the second hypothesis, which states that there is an effect of university governance on knowledge management at the significance level of $\alpha = 0.05$.

4. Conclusion

Through the foregoing, it is clear that the application of the rules of governance in the university environment, or what is known as university governance, has a direct impact on contributing to the development of knowledge management at the university. This is demonstrated by the applied study conducted at the University of LarbiTebessi, Tebessa. Among the most prominent results obtained are the following:

- There is a positive and very strong significant correlation at $\alpha = 0.05$ between university governance (university governance) and knowledge management.
- There is a positive and strong significant correlation at $\alpha = 0.05$ between the dimensions of university governance (participation, independence, accountability, evaluation) and knowledge management.

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