

# Distance Learning From The University Professor's Point Of View

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## **Abstract:**

This research aims to explore the perspectives of some professors at the Mouloud Mammeri University of Tizi Ouzou regarding the distance learning variable, as a parallel pattern to face-to-face education. The researcher used the descriptive approach as it is the most suitable for studying such phenomena. The research sample consisted of 23 professors who were randomly selected. A questionnaire was applied to collect information about the topic. Several statistical methods were used to analyze the data, such as Cronbach's alpha, Shapiro-Wilk test, and one-way ANOVA test, in addition to some descriptive statistical methods to describe the study variables. One of the most important results reached is that there are no statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to speciality, and teaching experience.

**Keywords:** Distance learning; university professor; face to face learning; technology; internet.

## **- INTRODUCTION**

Distance learning, also known as remote learning, refers to the education of students who may not always be physically present in a traditional school setting. It involves separating the learner and the teacher in both time and space. In the past, this method typically involved correspondence courses where students communicated with the school via mail. However, in recent times, this approach has evolved due to unforeseen circumstances such as the COVID-19 pandemic, which

forced the educational sector to adopt distance learning as a primary mode of instruction. This method utilizes technology and advancements in communication and information technologies, such as video conferencing, television, and the Internet.

The choice of this topic stems from its significant importance, especially in the current era characterized by the widespread use of media and communication technologies. Mastering all aspects of this field is crucial to reaching a broad segment of society, particularly in the

face of global health crises like the COVID-19 pandemic. The adoption of distance learning in Algeria represents a challenge undertaken by the Algerian government to facilitate the dissemination of knowledge and education, reduce travel time and effort, and keep pace with developed countries in terms of scientific research standards.

### **I. Definition of Distance Learning**

Distance Learning is a contemporary phenomenon that enhances and complements formal, traditional education. It utilizes communication media to deliver instruction to learners who may be geographically distant from the instructor. In the past, it was primarily referred to as "correspondence education," where learners communicated and received materials via mail (Sami Mohamed, 2015, p. 13).

Rontery: defines distance learning as education that occurs when there is a physical separation between the learner and the instructor. It typically involves pre-prepared instructional materials, and the learners and instructors may be separated in time, space, or both.

Tarek Abdel Raouf: defines distance learning as a type of education that utilizes various technological media to establish two-way communication between the instructor and the learner. It operates

within an organizational framework (institute, center, or university) and ensures the provision and delivery of educational materials to the learner. It also provides opportunities for face-to-face interaction, similar to traditional education, but without a fixed schedule (Tarek Abdel Raouf, 2018, p. 5).

Michael Grahame & William G.: define distance learning as a rational approach that involves the division of labor to provide knowledge. This is achieved by applying industrial organizational principles and utilizing technology extensively. This facilitates the replication of instructional activities to a certain extent, allowing many learners to participate in university-level education simultaneously, regardless of their location or occupation (Michael Grahame & William G., 2003, p. 12).

UNESCO: defines distance learning as an educational process and system where all or part of the instruction is delivered by a person or entity, eliminating time and distance barriers for the learner, distance learning requires:

- ✓ Organized planning
- ✓ Well-designed lessons
- ✓ Specialized pedagogical techniques

Electronic communication methods and other technologies (Mary, 2011, p. 9).

## **2. Research Problem**

Based on the aforementioned information about distance learning and the field study conducted at the Faculty of Human and Social Sciences at Mouloud Mammeri University of Tizi Ouzou, Algeria, on a random sample of professors from different specializations, the following research question can be posed: Are there statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to specialization, teaching experience, and department?

### **3. Research Hypotheses**

3.1. There are statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to specialization.

3.2. There are statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to teaching experience.

3.3. There are statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to the department.

### **4. Research Objectives**

This research aims to determine whether there are differences in the perspectives of professors on the distance learning variable attributed to

the following variables: specialization, teaching experience, and department.

### **5. Research Sample**

The research sample included 23 professors from different specializations working in the Department of Psychology at the Faculty of Human and Social Sciences at Mouloud Mammeri University of Tizi Ouzou, Algeria. They were randomly selected without any consideration.

### **6. Data Collection Tools**

The researcher mainly relied on the questionnaire tool, which was prepared by the Ministry of Higher Education and Scientific Research in Algeria to evaluate the effectiveness of distance learning during the COVID-19 pandemic. The questionnaire was downloaded from the following website: <https://services.mesrs.dz/sondages/index.php/797483>

The questionnaire consists of 14 items that measure distance learning. The weights of the items (according to the three-point Likert scale) were as follows:

**Table 1.** Weights of items

Agree	Neutral	Disagree
3	2	1

**Source:** Prepared by the researcher

The average weight for each option was calculated by subtracting the smallest value from the largest and dividing by the number of weights ( $3 - 1 = 2$ , then  $2 \div 3 = 0.66$ ). Consequently, the average weight for "Disagree" is 1.66 ( $1 + 0.66 = 1.66$ ), meaning any item with an arithmetic mean between 1 and 1.66 falls under "Disagree." Similarly, the average weight for "Neutral" is 2.32 ( $1.66 + 0.66 = 2.32$ ), encompassing items with arithmetic means between 1.66 and 2.32. Lastly, the average weight for "Agree" is 2.98 ( $2.32 + 0.66 = 2.98$ ), classifying items with arithmetic means between 2.32 and 2.98 under "Agree."

## 7. Reliability of the Research Tool

The reliability of the research tool (questionnaire) was verified by calculating Cronbach's alpha coefficient, and the results are shown in the following table:

**Table 2.** Reliability of the questionnaire

Number of items	Alpha de Cronbach
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14	,730
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**Source:** Results of the spss

As shown in Table 2, the reliability coefficient value was 0.73, indicating that the questionnaire is reliable. The closer the Cronbach's alpha coefficient value is to 1, the more reliable the questionnaire.

## 8. Statistical Methods Used for Data Analysis

8.1. Shapiro-Wilk Test: To test the normality of the data distribution.

8.2. Cronbach's Alpha Test: To calculate the reliability of the questionnaire.

8.3. One-Way ANOVA Test: To compare the mean scores of the professors on the distance learning variable based on their specialization, teaching experience, and department.

8.4. Arithmetic Mean: To calculate the average score of each variable.

8.5. Standard Deviation: To measure the variability of the scores around the mean.

8.6. Frequency: To count the number of times each value occurs.

8.7. Percentage: To express the frequency as a proportion of the total sample

## 9. Descriptive Statistics of the Research Variables

**Table 3.** The arithmetic mean and standard deviation of the characteristics of the research sample members: specialty, teaching experience, and department

	department	teaching experience	Specialty
the sample	23	23	23
The arithmetic mean	2,5217	2,0435	3,4348
standard deviation	,99405	1,10693	2,31254

**Source:** Results of the spss

Table 3 shows the descriptive statistics of the three variables (specialization, teaching experience, and department) for the 23 professors in the research sample. The mean score for specialization was 3.43, with a standard deviation of 2.31. The mean score for teaching experience was 2.04, with a standard deviation of 1.10. The mean score for the department was 2.52, with a standard deviation of 0.99.

Based on these results, specialization ranked first with a mean score of 3.43, followed by department with a mean score of 2.52, and teaching experience ranked third with a mean score of 2.04.

10. Descriptive Statistics

10.1. Frequencies and Percentages of Specialty

**Table 4.** Frequencies and Percentages of Specialty

Specialty	Frequency	percentage
Work and organizational psychology	6	26,1
Clinical Psychology	3	13,0
Educational Psychology	4	17,4
Scholar Psychology	5	21,7

Informatic	1	4,3
Sociology	1	4,3
Law	1	4,3
Anthropology	1	4,3
Human sciences	1	4,3
Total	23	100,0

**Source:** Results of the spss

Table 4 shows the frequencies and percentages of the different specializations of the professors included in the study. The specialization of "Work and Organizational Psychology" ranked first with a percentage of 26.1%, followed by "School Psychology" with a percentage of 21.7%, and "Educational Sciences" with a percentage of 17.4%. "Clinical Psychology" ranked fourth with a percentage of 13.0%, and the specializations of "Computer Science," "Sociology," "Law,"

"Anthropology," and "Human Sciences" were all tied with a percentage of 4.3%.

Table 4 also shows that there are two specializations, "Computer Science" and "Law," that do not belong to the Faculty of Human and Social Sciences. These professors may be working as contract professors to cover the shortage in some teaching units.

## 10.2. Frequencies and Percentages of Experience

**Table 5.** Frequencies and Percentages of Experience

Experience	Frequency	percentage
- de 5 ans	7	30,4
de 5 - 10 ans	12	52,2
de 11 - 15 ans	2	8,7

+ de 20	2	8,7
Total	23	100,0

**Source:** Results of the spss

Table 5 shows the frequencies and percentages of teaching experience. The category of professors with teaching experience between 5 and 10 years ranked first with a percentage of 52.2%, followed by the category of professors with teaching experience less than 5 years with a percentage of 30.4%. The categories of professors with teaching experience between 11 and 15 years and those with more than 20 years were tied with a percentage of 8.7%, ranking third.

In my opinion, this can be explained by the fact that most of the university professors included in the study are contract professors with teaching experience between 4 and 10 years. As for professors with teaching experience between 11 and more than 20 years, they are few, which indicates that they are permanent professors who have been employed for a long time.

**10.3. Frequencies and Percentages of Department**

**Table 6.** Frequencies and Percentages of Department

Department	Frequency	percentage
dentist	1	4,3
psychology	14	60,9
Social sciences	5	21,7
educational Sciences	1	4,3
Human sciences	2	8,7
Total	23	100,0

**Source:** Results of the spss

Table 6 shows the frequencies and percentages of the department. The category of professors belonging to the Department of Psychology ranked first with a percentage of 60.9%, followed by the category of professors belonging to the Department of Social Sciences with a percentage of 21.7%, and the category of professors belonging to the Department of Human Sciences with a percentage of 8.7%. The categories of professors belonging to the Department of Dentistry and the Department of Educational Sciences were tied with a percentage of 4.3%.

In my opinion, this can be explained by the fact that most of the university professors included in the study are teaching professors in the Department of Psychology. This may be due to the college's need for additional professors to cover teaching units in the Department of Psychology, perhaps at the master's level, in addition to the Department of Social Sciences for undergraduate education, to teach students, especially second-year students, different approaches to the specializations. The presence of a

professor from the Department of Dentistry may be due to the college's need to teach some units, such as physiology, speech therapy, and clinical psychology.

**11. Inferential Statistics**

**11.1. Hypothesis Testing**

**11.1.1. Shapiro-Wilk Test for Normality of Data Distribution**

Before testing the research hypotheses using appropriate statistical methods, it is methodologically and statistically necessary to verify the normality of the data distribution. Therefore, the Shapiro-Wilk test was used, which requires a small sample size (less than 50 individuals).

Null Hypothesis: The data does not follow a normal distribution (If the p-value or sig is less than 0.05, we reject the null hypothesis).

Alternative Hypothesis: The data follows a normal distribution (If the p-value or sig is greater than 0.05, we accept the alternative hypothesis).

The following table shows the results:

**Table 7.** Shapiro-Wilk Test distribution

Distance learning from the university	Normal distribution test
	Shapiro-Wilk

professor's point of view	statistics	Degree of freedom	sig
	,956	23	,388

**Source:** Results of the spss

Table 7 shows the Shapiro-Wilk test to verify whether the data follows a normal distribution. The p-value (sig) is 0.38, which is greater than 0.05. This allows us to reject the null hypothesis that the data does not follow a normal distribution and accept the alternative hypothesis that the data follows a normal distribution. This allows us to use certain parametric tests to analyze the data, such as the one-way ANOVA test, which is a parametric test used in hypothesis testing.

**11.1.2. Testing the First Hypothesis**

There are statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to specialization.

This hypothesis was tested using the one-way ANOVA test because it is the most appropriate test for comparing means between more than two groups.

**Table 8.** Results of the one-way analysis of variance test regarding the first hypothesis

	ANOVA				
	Distance Learning				
	Sum of squares	degree of freedom	mean of squares	F	Sig.
Between groups	180,452	8	22,557	,791	,619
Within groups	399,200	14	28,514		
total	579,652	22			

**Source:** Results of the spss

Table 8 shows that there are no statistically significant differences in the mean responses of the study sample regarding distance learning attributed to the specialization

variable. The p-value (sig) is 0.619, which is greater than the significance level (0.05). This value is not statistically significant at the level ( $\alpha \geq 0.05$ ). The calculated f-value is

0.791 with degrees of freedom (8, 14), which is greater than its tabulated value (2.70). Therefore, it can be said that the hypothesis was not confirmed, and we accept the null hypothesis that there are no statistically significant differences in the mean responses of professors regarding distance learning attributed to the specialization variable.

### 11.1.3. Testing the Second Hypothesis

There are statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to teaching experience.

This hypothesis was tested using the one-way ANOVA test because it is the most appropriate test for comparing means between more than two groups

**Table 9.** Results of the one-way analysis of variance test regarding the second hypothesis

ANOVA					
Distance Learning					
	Sum of squares	degree of freedom	mean of squares	F	Sig.
<b>Between groups</b>	28,807	3	9,602	,331	,803
<b>Within groups</b>	550,845	19	28,992		
<b>total</b>	579,652	22			

**Source:** Results of the spss

Table 9 shows that there are no statistically significant differences in the mean responses of the study sample regarding distance learning attributed to the teaching experience variable. The p-value (sig) is 0.803, which is greater than the significance level (0.05). This value is not statistically significant at the level ( $\alpha \geq 0.05$ ). The calculated f-value is 0.331 with degrees of freedom (3, 19), which is greater than its tabulated value (3.13). Therefore, it can be said that the hypothesis was not confirmed, and we accept the null hypothesis that there are no statistically significant

differences in the mean responses of professors regarding distance learning attributed to the teaching experience variable

### 11.1.4. Testing the Third Hypothesis

There are statistically significant differences in the mean responses of professors regarding the distance learning variable attributed to the department.

This hypothesis was tested using the one-way ANOVA test because it is the most appropriate test

for comparing means between more than two groups

**Table 10.** Results of the one-way analysis of variance test regarding the second hypothesis

	ANOVA				
	Distance Learning				
	Sum of squares	degree of freedom	mean of squares	F	Sig.
Between groups	57,724	4	14,431	,498	,738
Within groups	521,929	18	28,996		
total	579,652	22			

**Source:** Results of the spss

Table 10 shows that there are no statistically significant differences in the mean responses of the study sample regarding distance learning attributed to the department variable. The p-value (sig) is 0.738, which is greater than the significance level (0.05). This value is not statistically significant at the level ( $\alpha \geq 0.05$ ). The calculated f-value is 0.498 with degrees of freedom (4, 18), which is greater than its tabulated value (2.93). Therefore, it can be said that the hypothesis was not confirmed, and we accept the null hypothesis that there are no statistically significant differences in the mean responses of professors regarding distance learning attributed to the department variable.

**12. Discussion of Results**

Through the study and analysis of the topic "Distance Learning from the University Professor's Perspective", a

field study at the Faculty of Human and Social Sciences, Mouloud Mammeri University of Tizi Ouzou, Algeria, the results that were reached can be summarized as follows:

- ✓ The results of the study indicated that there are no statistically significant differences in the mean responses of the professors included in the study regarding distance learning attributed to the variables: specialization, teaching experience, and department.

These results are contrary to the results of the study conducted by Al-Baytar, and Hamdi Mohamed (2016) entitled "The Effectiveness of Using Distance Learning in Developing Academic Achievement and Attitude Towards Distance Learning in the Educational Technology Course for General Diploma Students in the One-Year System, Industrial Education Branch."

The study aimed to:

- Reveal the effectiveness of using distance learning in developing academic achievement among students in the educational technology subject.
- The study sample consisted of 32 students from Assiut University.
- The researcher used the descriptive method to analyze the results of the study.
- He also relied on the quasi-experimental method in the field study.

The study reached several results, including:

- There are differences between the mean scores of the students in the experimental group in the pre-application and post-application related to the achievement test.
- There are differences between the mean scores of the students in the experimental group in the pre-application and post-application of the distance learning scale.

The students who studied according to the distance learning method excelled in academic achievement after they took the post-test, which is due to the use of many technological activities in the distance learning method (Aroua, 2021)

## **- CONCLUSION**

In conclusion, we have discussed distance learning, including its definition, advantages, and disadvantages. Distance learning has become more important, especially during the COVID-19 pandemic and

with the significant development of artificial intelligence.

The most important results of the study are as follows:

- ❖ Regarding the descriptive statistics of the personal variables (specialization, teaching experience, and department), the specialization variable ranked first with a mean of 3.43, followed by the department variable with a mean of 2.52, and the teaching experience variable ranked third and last with a mean of 2.04.

The results of the study also indicated that there are no statistically significant differences in the mean responses of the professors included in the study regarding distance learning attributed to the variables of specialization, teaching experience, and department.

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