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E-LEARNING ADOPTION FACTORS AMONG FSJES STUDENTS IN FEZ, MOROCCO: A SURVEY INSPIRED BY UTAUT

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Abstract

This article discusses the results of a research study conducted in the field, examining the factors influencing the uptake of E-learning platforms among students at the Faculty of Legal, Economic, and Social Sciences (FSJES) in Fez, Morocco. The study utilizes the Unified Theory of Acceptance and Use of Technology (UTAUT) as its theoretical foundation. The methodology employed in this study utilized a quantitative approach to collect measurable and objective data regarding the factors influencing the adoption of E-learning. A sample of 144 students participated, responding to electronic questionnaires

designed to assess key dimensions of the UTAUT model, such as expected performance, perceived effort, social influence, and ease of use. Interpreted through the lens of UTAUT, the results provide significant insights into the factors influencing E-learning adoption among FSJES Fez students. These findings enhance the understanding of determinants specific to this student population and institution, offering avenues for targeted interventions to promote successful E-learning adoption.

Keywords: Educational Technologies, Adoption, E-Learning, Higher Education, UTAUT.

1. Introduction

The swift evolution of educational technologies has ushered in innovative possibilities within higher education. In this rapidly evolving landscape, the adoption of E-learning platforms by students represents a crucial challenge, highlighting the necessity to understand the factors driving this shift. As (Venkatesh et al., 2003) posit, "Technology adoption heavily relies on users' perceptions and their assessment of the benefits these technologies can bring." This study specifically targets the Faculty of Legal, Economic, and Social Sciences (FSJES) in *Fez*, Morocco, to unveil the intricate workings of E-learning adoption. Drawing inspiration from (Davis et al., 1989b), our investigation is grounded in The Unified Theory of Acceptance and Use of Technology (UTAUT) serves as the robust theoretical framework for this study. As articulated by (Venkatesh et al., 2016), "UTAUT provides an integrated framework, encompassing psychological, social, and technological dimensions, to comprehend technology acceptance. Our methodology, guided by Davis' principles and aligned with key UTAUT dimensions, decidedly embraces a quantitative approach. Echoing the sentiments of (Chen et al., 2008), "the use of quantitative methodologies allows for tangible and measurable data, fundamental for a profound understanding of adoption determinants." Through a representative sample of 144 students from FSJES *Fez*, this study endeavors to unveil perceptions and determinants specific to E-learning adoption. We seek to make substantial contributions to the literature on educational technologies by revealing, in the distinctive context of FSJES *Fez*, insights that transcend theoretical boundaries. This investigation, grounded in UTAUT, aims to provide not only a comprehensive understanding of adoption factors but also practical recommendations to facilitate the effective integration of E-learning within FSJES *Fez*. The Faculty of Legal, Economic, and Social Sciences (FSJES) in *Fez*, Morocco, stands at the forefront of an ever-evolving educational landscape. In response to the challenges posed by globalization and digital transformation, higher education at FSJES *Fez* finds itself at a critical crossroads. The imperative to adapt teaching methods to prepare students for an increasingly technology-driven world has become undeniable. Morocco, akin to many other nations, acknowledges the growing

importance of educational technologies to enhance the quality of higher education. E-learning platforms, for instance, provide learning flexibility, enabling students to access educational content at their own pace, collaborate virtually, and develop digital skills crucial for their future careers. In this context, the adoption of educational technologies at FSJES Fez holds particular significance. The efficacy of this adoption will not only influence the quality of students' educational experience but also their readiness for the realities of the modern professional world. This research aims to comprehend the determinants underpinning this adoption at FSJES Fez, thereby offering crucial insights for educators, administrators, and policymakers seeking to align higher education with contemporary demands.

2. Methodology :

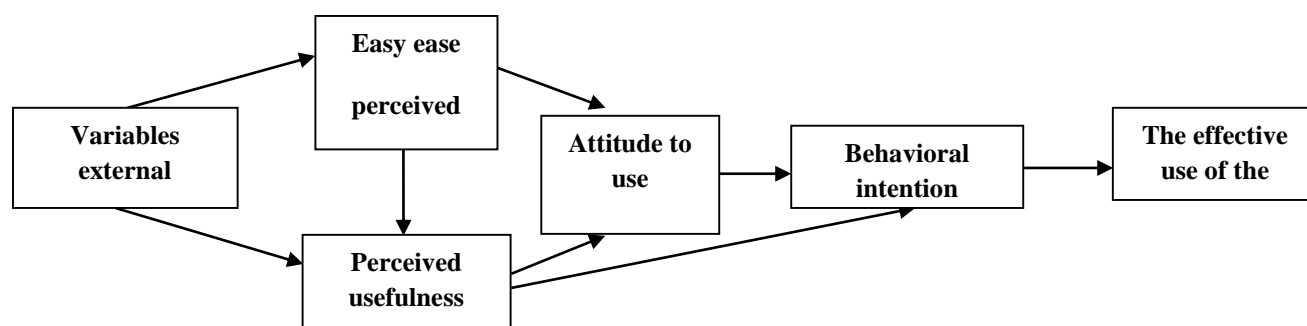
2.1 Theoretical framework:

Education stands as a domain where the integration of new technologies holds paramount importance. Theories and models concerning the acceptance and adoption of technology are commonly utilized to guide research within the educational sphere. This environment encompasses a diverse range of potential users who interact with various forms of technology utilized in learning, teaching, and assessment processes. Among the most influential theoretical approaches are:

2.1.1. The Technology Acceptance Model (TAM):

The Technology Acceptance Model (TAM), developed by (Davis et al., 1989a), stands out as a widely adopted and dependable model used to examine emerging technologies within educational settings. Its application extends to various innovations, including social media platforms (Yu, 2020), teaching assistant robots (bidin A, 2017), simulators (Lemay et al., 2018), and virtual reality (Jang et al., 2021).

Figure 1: Technology Acceptance Model (TAM)

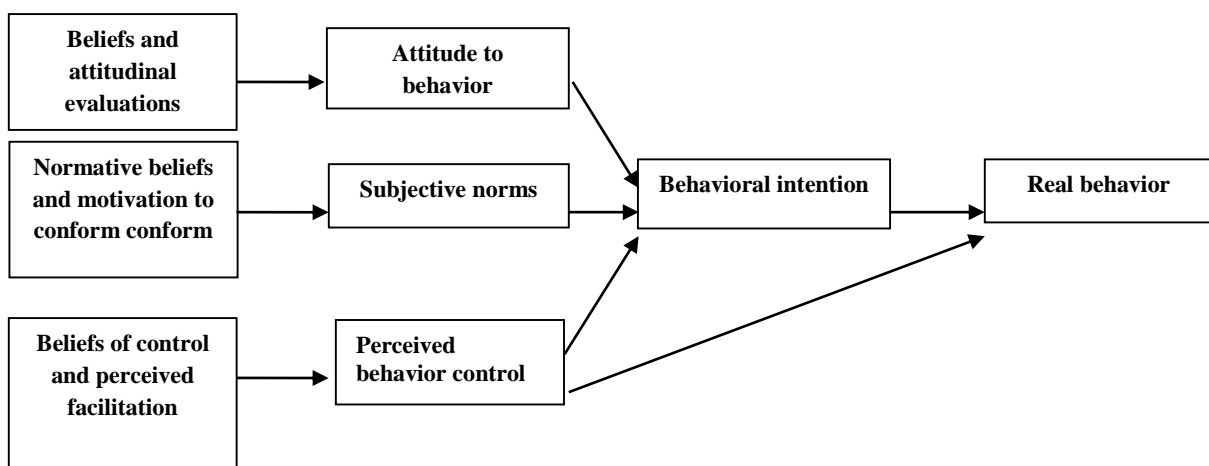


(Source: Davis et al., 1989)

2.1.2. Planned Behavior Theory (PBT)

The Planned Behavior Theory, introduced by (Taylor & Todd, 1995), finds application in understanding various aspects of technology adoption within educational contexts. It is employed to investigate the adoption of WhatsApp for learning among university students (Nyasulu & Dominic Chawinga, 2019), to explore the determinants influencing teachers' intentions to incorporate digital culture (Sadaf & Gezer, 2020), and to examine the factors affecting the acceptance and utilization of online assessment by academics (Alruwais et al., 2017).

Figure 2: Planned Behavior Theory (PBT)



(Source : Ajzen)

2.1.3. Unified Theory of Acceptance and Use of Technology (UTAUT):

The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Venkatesh, and Morris, (Venkatesh et al., 2003), is utilized in various research contexts within the educational domain. It is employed to investigate the key factors shaping university students' attitudes toward the adoption of online courses during the COVID-19 pandemic (Tiwari, 2020). Additionally, UTAUT is used to explore the determinants influencing teachers' acceptance of integrating ICT in the classroom (Birch & Irvine, 2009), as well as the utilization of online learning systems by students in developing actions (Abbad,2021)

3. Research Hypotheses

H1. Expected performance has a direct and positive effect on the use of E-learning platforms.

H2. Perceived effort has a direct and positive effect on the use of E-learning platforms.

H3. Social influence has a direct and positive effect on the use of E-learning platforms.

H4. Facilitating conditions have a direct and positive effect on the use of E-learning platforms.

3.1. Quantitative study description

Our methodology relies on a quantitative approach aimed at acquiring measurable and objective data concerning the factors influencing the adoption of E-learning by students at the Faculty of Legal, Economic, and Social Sciences (FSJÉS) in Fez.

3.2. Population and Sampling

With a sample of 144 students, electronic questionnaires were administered to gather students' perceptions of e-learning, facilitating data collection and analysis

3.3. Principal Component Analysis (PCA) for testing the quality of measurement scales

Validity: Data factorization (KMO; Bartlett's Sphericity; Factor Contribution)

Reliability: Measurement item consistency (Cronbach's Alpha)

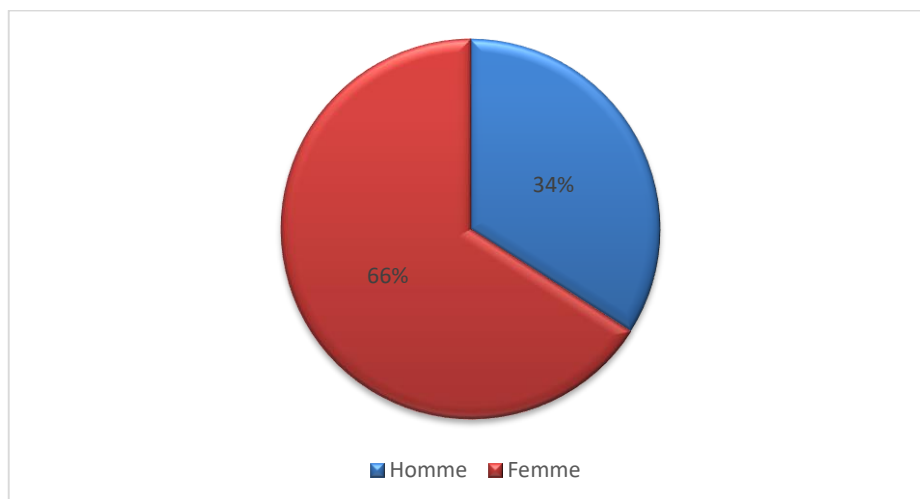
3.4. Hypothesis Testing

Bivariate correlation: Pearson correlation coefficient

Multiple linear regression: Adjusted R-squared coefficient

4. Results

Figure 3 : Interviewé gender



(Source: Author's own Illustration)

The table below presents the gender distribution in a **sample** of a total of 144 participants, with 95 being females (66%) and 49 being males (34%). There are no missing data, indicating that the sum of cumulative percentages reaches 100%. This information is crucial for understanding the composition of our sample.

Table 1: The variable "Expected Performance" or "Anticipated Performance"

Category	Constructs/Concepts Author	Coding	Measurements used
Independent Variable	The degree to which an individual believes that using the system will help them achieve gains in job performance (Venkatesh et al., 2003).	AP1	I perceive e-learning as beneficial for self-education.
		AP2	E-learning enables me to gain knowledge at a faster pace.
		AP3	E-learning facilitates a more efficient acquisition of knowledge for me.
		AP4	By utilizing e-learning, I increase my likelihood of receiving a salary raise.

(Source: Author's own Illustration)

The different scales are presented for each construct. These multi-item scales will be assessed on a Likert scale, using a 5-point agreement scale: Strongly Disagree 2. Disagree 3. Neither Agree nor Disagree 4. Agree 5. Strongly Agree

Table 1 : Representation qualities		
	Initials	Extraction
AP1. Accelerating research and study tasks with digital tools	1,000	.843
AP2. Order of performance in research and studies via digital tools	1,000	.895
AP3. Potential for increased productivity through the integration of digital technologies	1,000	.859
AP4. The belief that digital technologies can improve the quality of my work	1,000	.847

Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

Table 2 : KMO index and Bartlett test	
Kaiser-Meyer-Olkin index for measuring sampling quality.	0,859

Bartlett's sphericity test	Chi-square approx.	541,498
	DDL	6
	Meaning	0,000

(Source : Table Generated by SPSS software)

Table 3 : Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of elements
0,945	0,945	4

(Source : Table Generated by SPSS software)

Table 4 : Total variance explained						
Component	Initial eigenvalues			Sums extracted from load squares		
	Total	% of variance	Cumulative	Total	% of variance	Cumulative
1	3.443	86.074	86.074	3.443	86.074	86.074
2	.243	6.077	92.151			
3	.179	4.463	96.614			
4	.135	3.386	100.000			

Extraction method: Principal component analysis

(Source : Table Generated by SPSS software)

The implementation of Principal Component Analysis (PCA) with Varimax rotation resulted in a one-dimensional factor structure. The Kaiser-Meyer-Olkin (KMO) index of 0.859 suggests that the data is suitable for factor analysis. The commonalities for the four items are very good. This solution explains 86% of the variance. The structural coefficients (0.843, 0.895, 0.859, 0.847) indicate that the items meet the criterion of convergent validity, being strongly correlated with the component. Additionally, the Cronbach's Alpha value is 0.945, exceeding the threshold of 0.7, confirming the internal reliability of the items.

Table 5: The variable "Perceived Effort" or "Expected Effort"

Category	Constructs/Concepts Author	Coding	Measurements used
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Independent Variable	The degree of ease associated with using the system (Venkatesh et al. 2003, p. 450).	EE1	Your e-learning usage report is clear and comprehensible.
		EE2	Becoming proficient in using e-learning will be easy for me.
		EE3	I perceive e-learning as easy to use.
		EE4	Learning how to use e-learning is easy for me.

(Source: Author's own Illustration)

Table 6 : Representation qualities		
	Initials	Extraction
EE1. Easy-to-learn digital technologies for research and study	1,000	.653
EE2. Using digital tools to organize and structure my research projects	1,000	.692
EE3. The contribution of digital educational and research tools to my methodological flexibility.	1,000	.694
EE4. Accessibility and usefulness of the interface and functionalities of digital research tools.	1,000	.537

Méthode d'extraction : Analyse en composantes principales.

(Source : Table Generated by SPSS software)

Table 7: KMO index and Bartlett test		
Kaiser-Meyer-Olkin index for measuring sampling quality.		0,681
Bartlett's sphericity test	Chi-square approx.	236,155
	DDL	6
	Meaning	0,000

(Source : Table Generated by SPSS software)

Table 8: Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of elements
.816	0,816	4

(Source : Table Generated by SPSS software)

Table 9: Total variance explained		
Component	Initial eigenvalues	Sums extracted from load squares

	Total	% of variance	Cumulative	Total	% of variance	Cumulative
1	2.576	64.399	64.399	2.576	64.399	64.399
2	.829	20.720	85.119			
3	.362	9.050	94.169			
4	.233	5.831	100.000			

Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

The implementation of Principal Component Analysis (PCA) with Varimax rotation resulted in a one-dimensional factor structure, supported by the Kaiser-Meyer-Olkin (KMO) index of 0.681. indicates that the data is factorable. All items have a contribution higher than 0.5, and the first axis alone explains 64% of the variance. Similarly, the Cronbach's Alpha value is 0.816, exceeding the threshold of 0.7. Therefore, we conclude that the "Perceived Effort" scale is unidimensional.

Table 10: The variable "Social Influence"

Category	Constructs/Concepts Author	Coding	Measurements used
Independent Variable	The degree to which an individual perceives that important others think he or she should use the new system" (Venkatesh et al., 2003, p. 451)	SI1	The individuals who influence my behavior believe that I should engage in e-learning.
		SI2	The individuals who hold significance to me believe that I should utilize e-learning.
		SI3	The top management of the company has been supportive and helpful in the utilization of e-learning.
		SI4	The company, overall, has promoted and encouraged the use of e-learning.

(Source: Author's own Illustration)

Table 11: Representation qualities		
	Initials	Extraction
SI1.Recommendation for the use of digital technologies by colleagues and mentors	1,000	0,691
SI2.Use of digital platforms by research teachers	1,000	0,712
SI3 Help with learning digital research tools	1,000	0,378
SI4 Influence of other doctoral students' use of digital tools on my practices	1,000	0,718

Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

Table 12: KMO index and Bartlett test		
Kaiser-Meyer-Olkin index for measuring sampling quality.		0,718
Bartlett's sphericity test	Chi-square approx.	197,695
	DDL	6
	Meaning	0,000

(Source : Table Generated by SPSS software)

Table 13: Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of elements
0,792	0,792	4

(Source : Table Generated by SPSS software)

Table 14: Total variance explained						
Component	Initial eigenvalues			Sums extracted from load squares		
	Total	% of variance	Cumulative	Total	% of variance	Cumulative
1	2,499	62,468	62,468	2,499	62,468	62,468
2	0,787	19,677	82,146			
3	0,419	10,478	92,623			
4	0,295	7,377	100,000			

Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

)

For the scale measuring social influence, an initial analysis was conducted, and Item IS3 was eliminated due to its low communality (0.378). The factor analysis was then re-run with three items, all of which have good commonalities (ranging from 0.65 to 0.80)

Table 15: Representation qualities		
	Initials	Extraction
IS1.Recommendation for the use of digital technologies by colleagues and mentors	1,000	.784
IS2.Use of digital platforms by research teachers	1,000	.748

IS4 Influence of other doctoral students' use of digital tools on my practices	1,000	.701
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Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

Table 16: KMO index and Bartlett test		
Kaiser-Meyer-Olkin index for measuring sampling quality.		0,713
Bartlett's sphericity test	Chi-square approx.	159,680
	DDL	3
	Meaning	0,000

(Source : Table Generated by SPSS software)

Table 17: Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of elements
0,827	0,827	3

(Source : Table Generated by SPSS software)

Table 18: Total variance explained						
Component	Initial eigenvalues			Sums extracted from load squares		
	Total	% of variance	Cumulative	Total	% of variance	Cumulative
1	2.234	74.453	74.453	2.234	74.453	74.453
2	.443	14.758	89.211			
3	.324	10.789	100.000			

Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

The recent solution (the elimination of Item IS3) allowed us to achieve a one-dimensional factor structure and explains 74% of the variance, exceeding the recommended 60% by the authors. The Kaiser-Meyer-Olkin (KMO) index (0.713) indicates that the data is factorable. The structural coefficients (0.784, 0.748, 0.701) demonstrate that the items meet the criterion for convergent validity, as they are strongly correlated with the component. Regarding Cronbach's Alpha, the level is very good at 0.827 (between 0.8 and 0.9).

Table 19: The variable 'Facilitating Conditions

Category	Constructs/Concepts Author	Coding	Measurements used
Independent Variable	The degree to which an individual believes that organizational and technical infrastructure exists to support the use of the system" (Venkatesh et al., 2003, p. 453)	FC1	I possess adequate material resources to engage in e-learning.
		FC2	I possess the requisite knowledge to effectively utilize e-learning.
		FC3	E-learning is compatible with the other modes of training I employ.
		FC4	There is a dedicated contact for e-learning available to help me in case I encounter any difficulties.

(Source: Author's own Illustration)

Table 20: Representation qualities		
	Initials	Extraction
FC1. Access to technological and Internet equipment provided by my university for research and studies.	1,000	.391
FC2. Possession of the skills needed to use technologies in research and studies.	1,000	.752
FC3. Autonomy in the use of technology for research and studies.	1,000	.701
FC4. Support for technical questions relating to training or information technology.	1,000	.213

Méthode d'extraction : Analyse en composantes principales.

(Source : Table Generated by SPSS software)

Table 21: KMO index and Bartlett test		
Kaiser-Meyer-Olkin index for measuring sampling quality.		0,593
Bartlett's sphericity test	Chi-square approx.	136,243
	DDL	6
	Meaning	0,000

(Source : Table Generated by SPSS software)

Table 22: Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of elements

0,655	0,655	4
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(Source : Table Generated by SPSS software)

Table 23: Total variance explained						
Component	Initial eigenvalues			Sums extracted from load squares		
	Total	% of variance	Cumulative	Total	% of variance	Cumulative
1	2.058	51.459	51.459	2.058	51.459	51.459
2	.969	24.220	75.678			
3	.707	17.675	93.354			
4	.266	6.646	100.000			

Extraction method: Principal component analysis.

(Source : Table Generated by SPSS software)

We have decided to remove items FC1 and FC4 due to their low communalities (0.391 and 0.213, respectively). Although it is possible to assess a scale with just two items, it would result in extremely limited validity. Considering this extremely limited validity, we have decided not to retain the construct 'Facilitating Conditions' at the PCA stage, abandoning the factor.

Table 24: Analysis of the variable measurement scale

Factors	Coding	Measures Used	Convergent validity	Explained variance	Reliability measured by Cronbach's Alpha
Social influence	IS1	The individuals who influence my behavior believe that I should engage in e-learning.	0,784	74%	0,827
	IS2	The individuals who hold significance to me believe that I should utilize e-learning.	0,748		
	IS4	The company, overall, has promoted and encouraged the use of e-learning	0,701		
Anticipated Performance	AP1	I perceive e-learning as beneficial for self-education.	0,843	86%	0,945
	AP2	E-learning enables me to gain knowledge at a faster pace.	0,895		
	AP3	E-learning facilitates a more efficient acquisition of knowledge for me.	0,859		
	AP4	By utilizing e-learning, I increase my likelihood of receiving a salary raise.	0,847		

Effort expectancy	EE1	I find my e-learning usage report to be clear and understandable.	0,653	64%	0,816
	EE2	I anticipate that becoming proficient in using e-learning will be straightforward for me.	0,692		
	EE3	I perceive e-learning as user-friendly.	0,694		
	EE4	Learning how to use e-learning comes easily to me	0,534		

(Source: Author's own Illustration)

		Use_Technology	Social Influence	Effort_Expectancy	expected_performance
Pearson correlation	Use_Technology	1.000	.967	.966	.987
	Social Influence	.967	1.000	.941	.939
	Effort_Expectancy	.966	.941	1.000	.959
	expected_performance	.987	.939	.959	1.000
Sig. (unilateral)	Use_Technology		.000	.000	.000
	Social Influence	.000		.000	.000
	Effort_Expectancy	.000	.000		.000
	expected_performance	.000	.000	.000	
N	Use_Technology	137	137	137	137
	Social Influence	137	137	137	137
	Effort_Expectancy	137	137	137	137
	expected_performance	137	137	137	137

(Source : Table Generated by SPSS software)

The use of technology and social influence are strongly and positively correlated ($r=0.697$, $\text{Sig}<0.01$). The use of technology and effort expectancy are strongly and positively correlated ($r=0.966$, $\text{Sig}<0.01$). The use of technology and expected performance are strongly and positively correlated ($r=0.987$, $\text{Sig}<0.01$).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951 ^a	.905	.904	.24382

(Source : Table Generated by SPSS software)

Table 27 : ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.415	1	78.415	1319.029	.000 ^b
	Residual	8.263	139	.059		
	Total	89.678	140			
a. Dependent variable: Use_Technology						
b. Predictors: (Constant), Expected performance						

(Source : Table Generated by SPSS software)

Table 28 : Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Bêta		
1	(Constant)	.311	.042		7.426	.000
	Performance attendee	.698	.019	.951	36.318	.000
a. Dependent Variable: Utilisation_Technologie						

(Source : Table Generated by SPSS software)

The obtained model is significant ($p < 0.05$), and the link between expected performance and the use of e-learning is significant ($t = 36.318 > 1.96$) and positive. Hypothesis H3 is supported, as indicated by a significant Beta and an R2 value of 0.905, highlighting a positive direct influence of expected performance on the utilization of e-learning. These results suggest that the stronger the expected performance among respondents, the stronger their intention to use it will be

Table 29 : Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820 ^a	.672	.670	.45491

(Source : Table Generated by SPSS software)

Table 30 : ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.031	1	59.031	285.249	.000 ^b
	Residual	28.765	139	.207		
	Total	87.796	140			

a. Dependent variable: Use_Technology
b. Predictors : (Constant), Expectation_Effort

(Source : Table Generated by SPSS software)

Table 31 : Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Bêta		
1	(Constante)	.330	.086		3.819	.000
	Expectation_Effort	.661	.039	.820	16.889	.000

a. Dependent variable: Use_Technology

(Source : Table Generated by SPSS software)

The obtained model is significant ($p < 0.05$), indicating a statistically significant result. The link between social influence and e-learning usage is also significant ($t = 16.889 > 1.96$) and positive.

Hypothesis H2 is accepted, with a significant Beta and an R2 of 0.672, indicating a positive direct effect of effort expectancy on e-learning usage. These results suggest that the stronger the effort expectancy among respondents, the stronger their intention to use it will be.

Table 32 : Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844 ^a	0,713	0,711	0,42759

a. Predictors : (Constant), Social_Influence

(Source : Table Generated by SPSS software)

Table 33 : ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62,642	1	62,642	342,613	,000 ^b
	Residual	25,231	138	0,183		
	Total	87,873	139			

a. Dependent variable: Use_Technology

b. Predictors: (Constant), Social_Influence

(Source : Table Generated by SPSS software)

Table 34 : Coefficients						
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Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Erreur standard	Bêta			
1	(Constant)	0,425	0,075		5,649	0,000
	Social_Influence	0,638	0,034	0,844	18,510	0,000

a. Dependent variable: Use_Technology

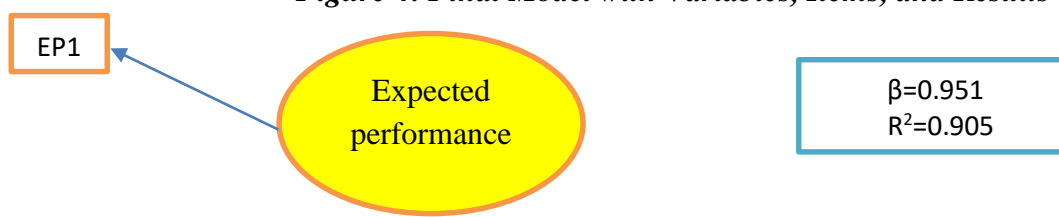
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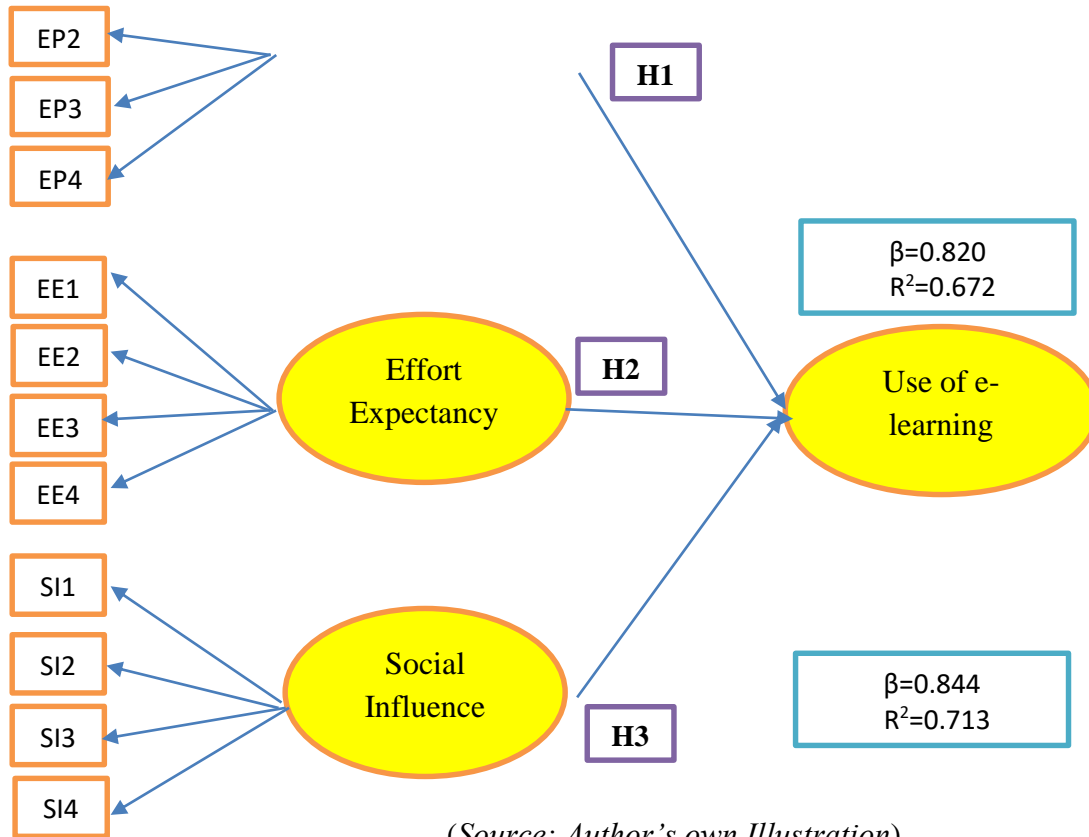
The obtained model is statistically significant ($p < 0.05$), and there is a significant positive link between social influence and the utilization of e-learning ($t = 18.510 > 1.96$). Hypothesis H1 is supported, with a significant Beta coefficient and an R2 value of 0.713, indicating a positive direct impact of social influence on the usage of e-learning. These findings suggest that a stronger social influence among respondents corresponds to a stronger intention to utilize e-learning.

Table 35: Summary of Hypotheses Testing for the Utilization of E-learning Platforms

Hypothesis		Comments	Decision
H1	There exists a positive correlation between expected performance (perceived usefulness) and the utilization of E-learning platforms.	$\beta = 0,951$ $R^2 = 0,905$	Validated
H2	Effort expectancy directly and positively influences the utilization of E-learning platforms.	$\beta = 0,820$ $R^2 = 0,672$	Validated
H3	Social influence directly and positively impacts the utilization of E-learning platforms.	$\beta = 0,844$ $R^2 = 0,713$	Validated
H4	Facilitating conditions directly and positively influence the utilization of E-learning platforms.	Abandonment of the factor at the PCA stage, due to the too-low commonalities of two out of four items. The measurement can only be performed on 2 items	Not validated

Figure 4: Final Model with Variables, Items, and Results





On a theoretical level, our findings partially support the UTAUT model and also validate our adjustments to the model for the e-learning context within the faculty. Following the empirical investigations conducted, out of the four formulated hypotheses, three have been validated. The variables traditionally used in acceptance models, Factors such as Expected Performance and Expected Effort continue to emerge as highly predictive determinants in our model, akin to the original UTAUT model. This reaffirms the fundamental significance of these two factors in elucidating the intention to utilize a system, in this case, e-learning is noteworthy that facilitating conditions are no longer present in our model

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