



Data Article

Dataset of Moroccan nursing students' intention to use and accept information and communication technologies and social media platforms for learning



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ABSTRACT

The outbreak of COVID-19 has redefined how we carry out our daily activities with emphasis on safety measures like social distancing, the use of face masks and proper hygiene. With nursing personnel at the forefront of combating the menace created by this pandemic, the use of ICT has remained a vital technology that must be embraced by all in order to carry out a safe nursing practice. Therefore, becoming ICT compliant is no more an option to stay relevant and alive during this COVID era. This data article presents the outcome of a survey carried out among Moroccan nursing students. This was done with a view to assess their readiness and willingness to accept and use ICT as well as social media for learning and discharging their duties during and after this COVID era. Unified Theory of Acceptance and Use of Technology (UTAUT) model was adopted to structure the questionnaire items used in this survey. This was then administered to Moroccan nursing students via online Google forms. Seven hundred and two (702) respondents completed the

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questionnaire. After data screening and cleaning, normality assessment of the data was carried out in terms of skewness and kurtosis. Afterwards, Partial Least Square Structural Equation Modeling (PLS-SEM) was employed to establish the statistical significance of the data in terms of the reflective indicator loadings, internal consistency reliability and convergence. This dataset includes the questionnaire used (in English and French), the responses obtained in spreadsheet format, the charts generated from the responses received, the SPSS file and the statistical analysis file. This dataset will help policy makers understand how nursing students use ICT and social media platforms and how these could be adopted as a more secure means of learning and discharging their during the COVID-19 era and beyond.

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Specifications Table

Subject	Education
Specific subject area	Education Technology
Type of data	Text files, SPSS file and Charts
How data were acquired	The data reported in this article was elicited from 702 Moroccan nursing students via an online google form.
Data format	Raw data and SPSS data
Parameters for data collection?	The survey instrument (questionnaire) was administered among Moroccan nursing students only and all the questionnaire items were made compulsory for the respondents so as to avoid missing items.
Description of data collection	The data presented in this article was obtained from 702 nursing students from various ISPITS in Morocco using an online google form. The data collected was used to examine Moroccan nursing students' intention to use ICT and social media platforms for learning in this COVID-19 era. The questionnaire items are based on the variables of UTAUT model which are: Performance Expectancy, Effort Expectancy, Social Influence and Facilitating conditions
Data source location	Institution: Institute of Nursing and Health Technology (ISPITS) Country: Morocco
Data accessibility	Data is publicly available at http://dx.doi.org/10.17632/f9dbktdr3f.2

Value of the Data

- The data presented in this article reveals the ICT and social media platforms that Moroccan nursing students are familiar with.
- The data presented in this data article will help readers to understand factors militating against Moroccan nursing students' intention to use and accept ICT and social media platforms for learning.
- The dataset will further help academic stakeholders to know the best ICT and social media platforms that could be adopted to enhance learning among Moroccan nursing students.
- The responses received from respondents can serve as a reference point when Governments and policy makers are making policies aimed at combating the effects of COVID-19 in the education sector and especially among nursing students.
- The dataset can be used as a benchmark for comparing similar studies involving the use of ICT and social media among students of other disciplines.

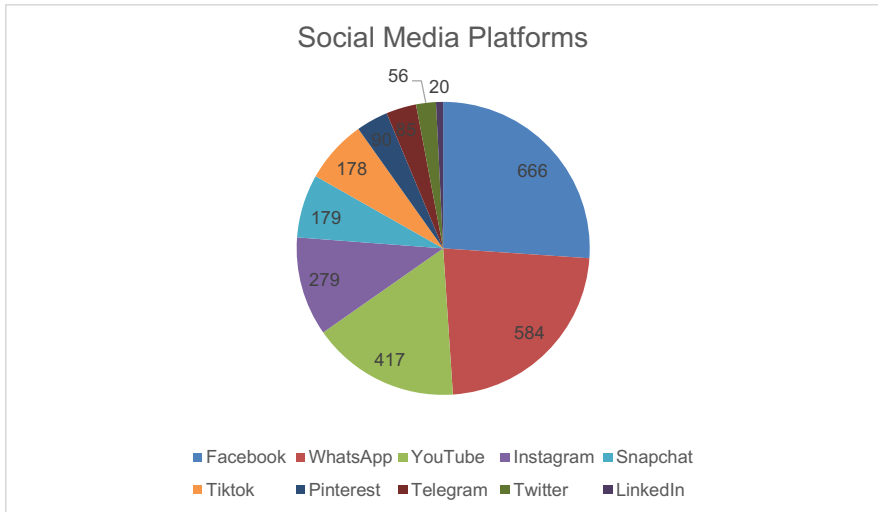


Fig. 1. Top 10 Social Media Platforms.

1. Data Description

The data presented in this article was obtained from 702 nursing students from the 23 ISPITS centers in Morocco. The survey instrument used was an online questionnaire administered via google form. It was used to elicit information about respondents' intention and willingness to use various ICT and social media platforms for learning especially during this COVID-19 era and beyond. The questionnaire was adopted from [1]. It was structured using Unified Theory of Acceptance and Use of Technology (UTAUT) model. From the responses received, 66% (463) of the respondents are females while 34% (239) are males. They are between the ages of 17 and 24 years. It was observed that 97.3% of the respondents use smartphones to access the internet while 53.7% use laptops. This conforms with existing surveys [2,3] and this was attributed to the fact that smartphones guarantee ubiquitous connectivity to the internet. The top 10 social media platforms used by the respondents are illustrated in Fig. 1. This revealed that the most widely used social media platform among the respondents are: Facebook, WhatsApp, YouTube and Instagram in that order. Furthermore, with no restriction to the number of social media platforms respondents can subscribe to, the best combinations of social media platforms used by respondents is illustrated in Fig. 2. This showed that Facebook and WhatsApp (98%); Facebook, WhatsApp and YouTube (75%); and Facebook, Instagram and WhatsApp (50%) are the most widely used combination of social media platforms employed by the respondents. Furthermore, the various ICT platforms that the respondents are familiar with is presented in Fig. 3. Responses received showed that Google Classroom, Zoom, Facebook Live and mobile learning via mobile applications are the most widely used ICT platforms the respondents have used for learning. The supporting documents that have been made publicly available via <http://dx.doi.org/10.17632/f9dbktdr3f.2> contains the questionnaire instrument used (In English and French versions), the raw responses received from the 702 respondents in excel formats, the charts extracted from the responses and the SPSS files of the statistical analysis carried out.

2. Experimental Design, Materials and Methods

The survey instrument used to elicit information from the respondents is a questionnaire administered via google form. The questionnaire has three (3) sections. Respondents' demographic

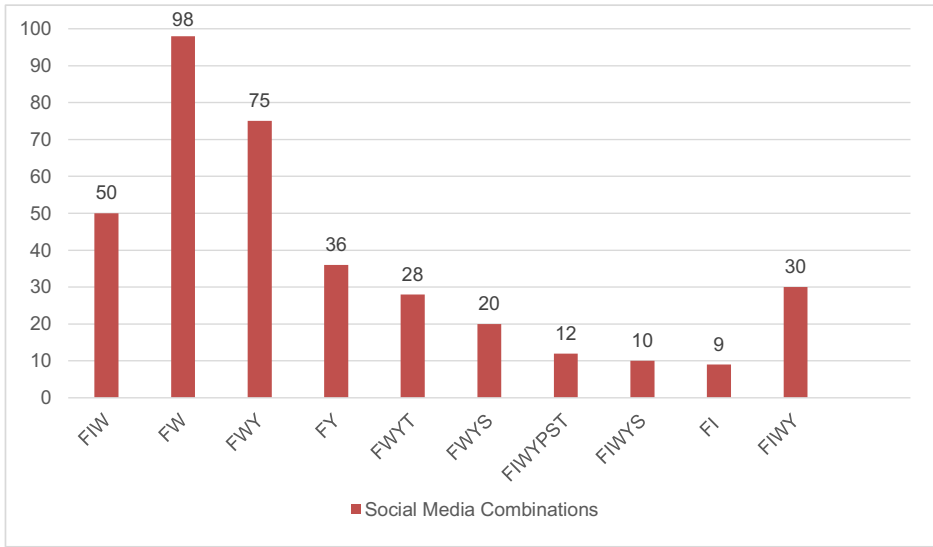


Fig. 2. Social Media Platforms Combination

Where FIW = Facebook + Instagram + WhatsApp, FW = Facebook + WhatsApp, FWY = Facebook + WhatsApp + YouTube, FY = Facebook + YouTube, FWYT = Facebook + WhatsApp + YouTube + Tiktok, FWYS = Facebook + WhatsApp + YouTube + Snapchat, FIWYPST = Facebook + Instagram + WhatsApp + YouTube + Pinterest + Snapchat + Tiktok, FIWYS = Facebook + Instagram + WhatsApp + YouTube + Snapchat, FI = Facebook + Instagram, FIWY = Facebook + Instagram + WhatsApp + YouTube.

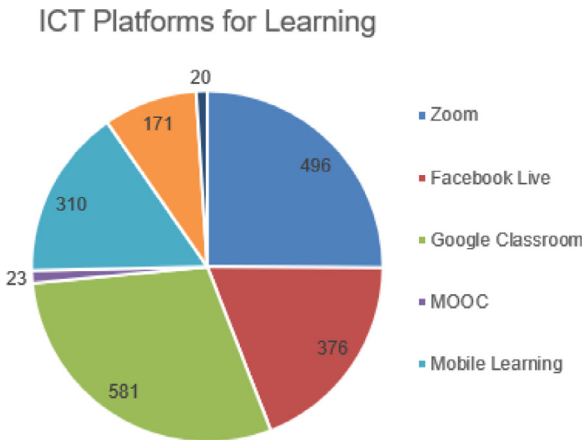


Fig. 3. ICT Platforms.

information was retrieved with questions in section A while respondents' awareness of social media and ICT platforms was assessed using questions in section B. Section C contains fifteen (15) questions that were structured using UTAUT model. It uses metrics such as Social Influence (SI), Performance Expectancy (PE), Effort Expectancy (EE), Facilitating Conditions (FC) and Voluntariness of Use (VU) to measure respondents' willingness to use technology under consideration. Furthermore, the questions under this section employed a 5-Point Likert scale that ranges from '1' for Strongly Disagree to '5' for Strongly Agree. Afterwards, Statistical Package of the Social Sciences (SPSS) was used to compute the statistical significance of the data. This involved

Table 1

Normality assessment of the data.

UTAUT Variables	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
1	4.218	.7320	-1.568	.092	2.518	.184
2	4.061	.6802	-1.740	.092	2.136	.184
3	4.091	.7555	-1.705	.092	2.723	.184
4	3.997	.8048	-1.675	.092	1.954	.184
5	4.104	.7971	-1.629	.092	2.100	.184
6	4.184	.7970	-1.613	.092	1.981	.184
7	4.047	.8113	-1.581	.092	1.773	.184
8	3.972	.8788	-1.361	.092	2.278	.184
9	2.560	1.2209	.351	.092	-0.911	.184
10	4.101	.8427	-1.656	.092	1.865	.184
11	4.124	.8067	-1.635	.092	2.087	.184
12	3.530	1.1474	-0.846	.092	-0.264	.184
13	4.001	.8769	-1.441	.092	2.426	.184
14	4.075	.7932	-1.615	.092	2.054	.184
15	4.141	.8522	-1.605	.092	1.507	.184

Table 2

Item, Loading, Cronbach's Alpha, CR, and AVE.

UTAUT VARIABLES		CA	CAID	FL	CR	AVE
PE	1		0.783	0.869	0.902	0.754
	2	0.840	0.726	0.901		
	3		0.825	0.834		
EE	4		0.799	0.863	0.906	0.762
	5	0.843	0.724	0.905		
	6		0.818	0.850		
SI	7	0.812	-	0.918	0.915	0.843
	8		-	0.918		
	9	0.751	0.691	0.657		
FC	10		0.556	0.865		
	11		0.504	0.840		
	12		0.548	0.647		
VU	13		0.527	0.557	0.923	0.858
	14	0.834	-	0.926		
	15		-	0.926		

where CA= Cronbach's Alpha, CAID= Cronbach's Alpha if item is deleted, FL= Factor Loading, CR= Composite Reliability, AVE = Average Variance Extracted.

carrying out the normality assessment of the data in terms of skewness and kurtosis. As reported in [3] skewness and kurtosis values need to be between -2 to $+2$ for them to be acceptable. As presented in Table 1, the least value for skewness obtained is -1.361 while the greatest value for kurtosis is 2.723 . These values are acceptable for skewness and kurtosis.

The reflective measurement model of the data was also computed using Partial Least Square Structural Equation Modeling (PLS-SEM). This generated the reflective indicator loadings, internal consistency reliability and convergence of the data. As reported in [4], a good indicator loading is expected to be ≥ 0.708 while the Composite Reliability (CR) is expected to be between 0.700 to 0.900 . As presented in Table 2, the CR values recorded are between 0.842 and 0.915 which are acceptable values. Furthermore, the internal consistency of the data was measured using Cronbach's alpha. A Cronbach's alpha value less than 0.5 is unacceptable, while a value greater than 0.5 is poor, a value greater than 0.6 is questionable while a value greater than 0.7 is acceptable. A value greater than 0.8 is known to be good while a value greater than 0.9 is termed excellent. As presented in Table 2, the Cronbach's alpha values recorded are between 0.751 and

0.843. these falls within the acceptable range. Finally, the convergence of the data was measured using Average Variance Extracted (AVE); a value ≥ 0.500 is known to be good. As presented in Table 2, the values recorded are between 0.523 and 0.858 which are also within the acceptable range. These computations establish the statistical significance of the responses received from the survey. The questionnaire used in this survey, the raw responses received in spreadsheet format, the charts extracted from the responses, the SPSS files of the computations are publicly available on Mendeley via <http://dx.doi.org/10.17632/f9dbktdr3f.2>

Ethics Statement

The data collection was planned in accordance with the Helsinki Declaration of ethics. The online questionnaire was anonymous and the data was coded. On the main page, the responders were supplied with a summary of the data collection's purpose as well as an online consent letter. Only responders who agreed to participate in the survey were given access to the questionnaire. Therefore, no respondent was coerced to participate in the survey.

CRedit Author Statement

Hind Bahri: Conceptualization, Data Curation and Validation, Writing - Original Draft; **Oluwatobi Noah Akande:** Writing - Original Draft, Statistical Analysis; **Nisrin El Mlili:** Validation, Supervision, Reviewing and Editing; **Abdel-ilah Kerkeb:** Validation, Reviewing and Editing; **Mourad Madrane:** Validation, Supervision, Reviewing and Editing.

Declaration of Competing Interest

Authors declare that there is no competing interest.

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Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi:[10.1016/j.dib.2021.107230](https://doi.org/10.1016/j.dib.2021.107230).

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