

Impact of Social Networks on Learning Activities

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Abstract

Chad learning system is one of the least modernized in central Africa. But with the social network tools proliferation, we see that students use these tools. This work aims to see if students really use social networks in their learning activities and how they appreciate them. Also, we wonder if social networks are well used by students and what are their repercussions on students' learning activities. A survey of students from public and private higher education establishments in the city of N'Djamena, capital of the Republic of Chad, was carried out using a questionnaire from 13 March to 18 April 2023. 202 students have taken part. The age of the population studied is between 16 and 30 years old. The results show that almost students (99,5% of those interviewed) is aware of social networks and 86% use them with high frequency among those aged 20 to 25 (89.3%). 93.6% of learners find that social networks help them in their studies but 31.7% find that social networks disrupt them in their learning activities (courses and revisions). Like all users, learners are exposed to social divisions, scams, harassment and other harms of social networks. This study gives a comprehensive understanding of the impact of social network on students learning activities in Chad. It can help decision-makers to reconsider educational policy in order to integrate social media tool to promote not only the success of learners but also to ensure living cohesion which could be undermined through social networks.

Keywords: Impact, Learner, Learning activities, Learning, Social networks.

Introduction

Nowadays, social networks have become essential in our daily activities. They constitute powerful tools for communication and knowledge sharing both on a personal and professional level (1). They bring added value to daily activities. They allow to stay in touch with colleagues, classmates, neighbors, and friends. Researchers (2) estimated that approximately three billion of people are connected by social media. Many people have made new friends through social networks. Social networks have allowed many people to break their loneliness and develop some solidarity. There are several social networks including Facebook, Tweeter, WhatsApp, LinkedIn, Telegram, etc. Researcher (3) has defined seven types of social networks.

At school, students have phones, smartphones, computers and others tools used in social network. In our thought, learners use social networks to share academic resources (course materials, books, etc.) and to cooperate with other students in the same disciplines residing in the same locality or elsewhere (4). By this work, we want to know if

students in our country really use social network in their learning activities and how they appreciate social network contribution in their learning. We do this work in order to recommend to the decision-maker to integrate them in the learning system.

We know that social media also have negative aspects. Indeed, users of social networks are exposed to malicious activities (5) including information theft, scams, identity theft, harassment, intimidation, blackmail, disinformation, defamation, insults, etc. Social network accounts contain sensitive personal information (surnames, first names, date of birth, address, email, telephone number, etc.). This information may be coveted by hackers. We would like to know if our students had been victims of this malicious behavior on social networks. This work tries to give us an answer.

In the sub-region, at our knowledge no kind of this study was done. But we find some works going toward this direction implying students and social media. Researchers (6) worked on the social media

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effect on affective and emotional state of students. Researchers (7) have examined whether social media is an effective tool for education and impact on knowledge sharing between students. Researchers (8) examined some network updates features and academic performance reasons. Researchers (9) studied and established a negative relationship of addiction of social networking and academic performance. (10) introduced the Learner Engagement Technology (LET) based smart campuses and used Game Based Learning (GBL) and found promising results. Researchers (11) explored the positive and negative consequences of tech-enabled classrooms perceptions of students of Saudi EFL University. Researchers (12) studied the effects of social networking sites on learning, social interaction, and sleep duration. He proved that many learners use social networking sites for nonacademic purposes. Researchers (13) studied the main determinants the influence students' attitudes toward using social network for collaborative learning.

In this work, through a sample of students from the city of N'Djamena, capital of the Republic of Chad, we examine the use and the impact of social networks on activities of learners. Do students take profit of social networks? Are they exposed to these evils of social networks? As in (14) where recommendations are addressed to decision-makers to incorporate ITC too in learning system, this works aims also to see if it can advise the social network tool integration into the country learning system.

In the rest of this paper, methodology is presented in point 2, and results in point 3 and a discussion is presented in point 4. Finally, the conclusion will follow.

Methodology

We use a quantitative approach to appreciate the use and the impact of social networks in students' activities in our learning institutions. To collect data for this study, a survey using a questionnaire of twenty questions was carried out among students in five public higher education establishments and three private higher education establishments in the city of N'Djamena, capital of the Republic of Chad. Questionnaires are on paper. To collect our research samples, we move to the chosen institutions, we meet students and propose them to fulfill the forms. The questions mainly

relate to the knowledge and use of social networks and the impacts on student and societal activities.

As guideline, we make three hypotheses:

1. Social networks help in learning activities
2. Social networks negatively impact learning time.
3. Social networks trouble social cohesion between students.

Two hundred and twenty (220) questionnaires were given to students randomly we met randomly within their establishments and who agreed to participate to this study. 202 questionnaires were returned, representing a percentage of 91.81% of answering. In fact, more than 8,8% of our questionnaires did not come back to us. We think that some of those persons who refuse to give us back these questionnaires are facing ethical concerns and are afraid to answer to our questions. Regarding the data preprocessing, there are some questions that are not answered to correct, fortunately, it is just a few (less 5%).

The five (05) public higher education establishments and the three (03) private higher education establishments that took part in this survey were chosen based on their accessibility and the availability of their students to participate in these surveys.

The data collection work took place over a period of five weeks (From 13 March – 18 April 2023). The results were entered and processed using the SPSS statistical tool (15).

Results

Our study focused on 202 learners, 76.7% of whom are men and 23.3% women living in the city of N'Djamena. The age of the population studied is between 16 and 30 years old. Table 1 presents participation statistics by establishment and by gender.

Knowledge and use of social networks

Almost all of the interviewees (99.5%) declared that they were familiar with social networks. That is to say that they knew at least one social network. Only 0.5% say they don't know any. A first observation is that most of the respondents (96.5%) declare that they know at least two social networks. WhatsApp is the most well-known among respondents (97%), followed by Facebook (96.5%) and LinkedIn (82.7%). We note that females are more or less assertive on this point.

Table 1: Distribution of respondents by establishment and by gender

	Status	Men	Women	Total	%
AGORA	Private	7	0	7	3.47
CEFOD	Private	10	15	25	12.38
CFASS	Private	1	3	4	1.98
ENASTIC	Public	8	4	12	5.94
FARCHA	Public	54	5	59	29.21
HARLEM	Public	15	4	19	9.41
MEDECINE	Public	2	0	2	0.99
TOUKRA	Public	58	16	74	36.63
Total		155	47	202	100.00

In fact, 100% of them knew WhatsApp and 95.7% Facebook. On the other hand, for LinkedIn, only 8.5% of them say they know it. 19.3% of respondents say they know other social networks not presented on the questioner. A distribution according to age groups, 65.8% of those interviewed are aged 20 to 25. And 99.2% of this age group are aware of social networks. The age group of 25 to 30 years represents 20.3% of those

interviewed and declare that they are 100% familiar with social networks.

A distribution according to age groups presented in Figure 1 shows that 65.8% of those interviewed are aged 20 to 25. And 99.2% of this age group are aware of social networks. The age group of 25 to 30 years represents 20.3% of those interviewed and declare that they are 100% familiar with social networks. Table 2 presents knowledge of social networks according to age groups.

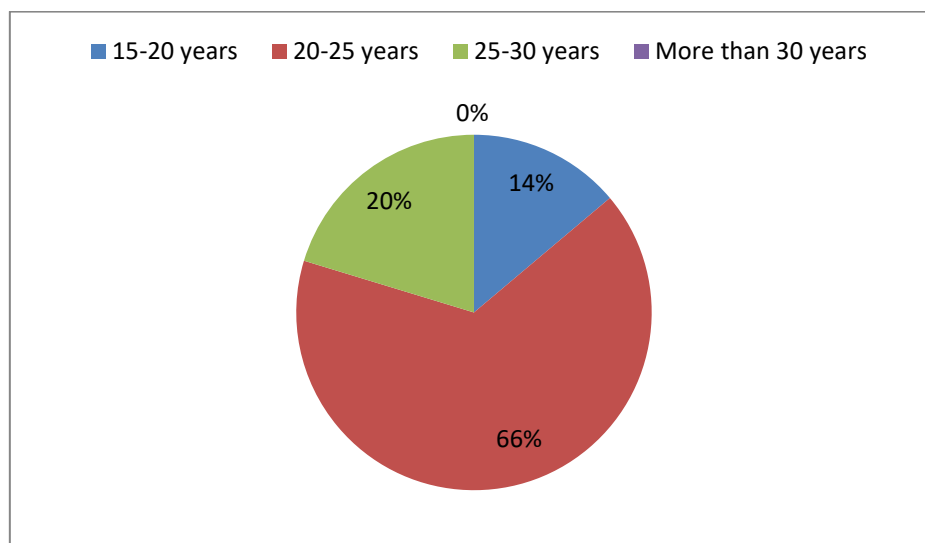


Figure 1: Distribution of respondents according to age groups

Table 2: Knowledge of social networks according to age groups

Age groups		Number	%
Age 15-20	No	0	0.0
	Yes	28	100.0
Age 20-25	No	1	0.8
	Yes	132	99.2
Age 25-30	No	0	0.0
	Yes	41	100.0
Greater than 30 years	No	0	0.0
	Yes	0	0.0

Use of social networks

Regarding the use of social networks, 86.1% of those interviewed say they use social networks. Only 5.4% do not use them and 8.4% have not given an opinion. We see that most of those who use social networks are young. A breakdown of usage according to age groups is presented in Table 3. All age groups use social networks at more than 80%. The age group from 15- to 20-year-old comes first with a percentage of 89.3%, followed

by the 20- to 25-year-old group with 87.2%. We note that females are more assertive on this point. 85.1% of them say they use social networks. 10.6% of them say they do not use any and 4.3% have not given their opinion on the use of social networks. In terms of the use of social networks, Facebook (27.1%) and WhatsApp (26.6%) are the most used followed by YouTube (18%). Figure 2 presents the rates of use of social networks by the respondents.

Table 3: Distribution of use according to age groups

Age group			Number	%
15-20-year-old	Utilization	No	1	3.6
		Yes	25	89.3
		Opinionless	2	7.1
		Total	28	100.0
20-25-year-old	Utilization	No	7	5.3
		Yes	116	87.2
		Opinionless	10	7.5
		Total	133	100.0
25-30-year-old	Utilization	No	3	7.3
		Yes	33	80.5
		Opinionless	5	12.2
		Total	41	100.0

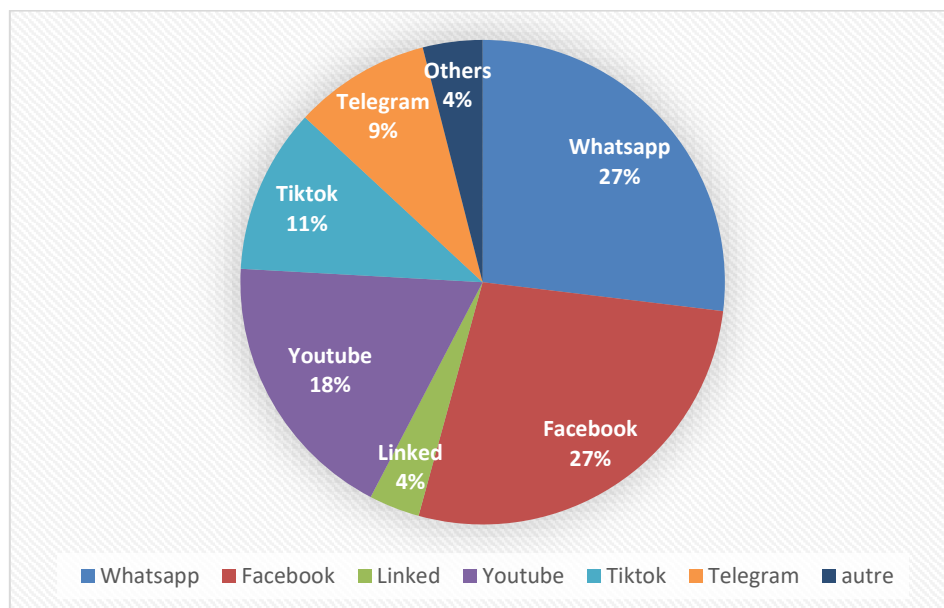


Figure 2: Social networks utilization rate

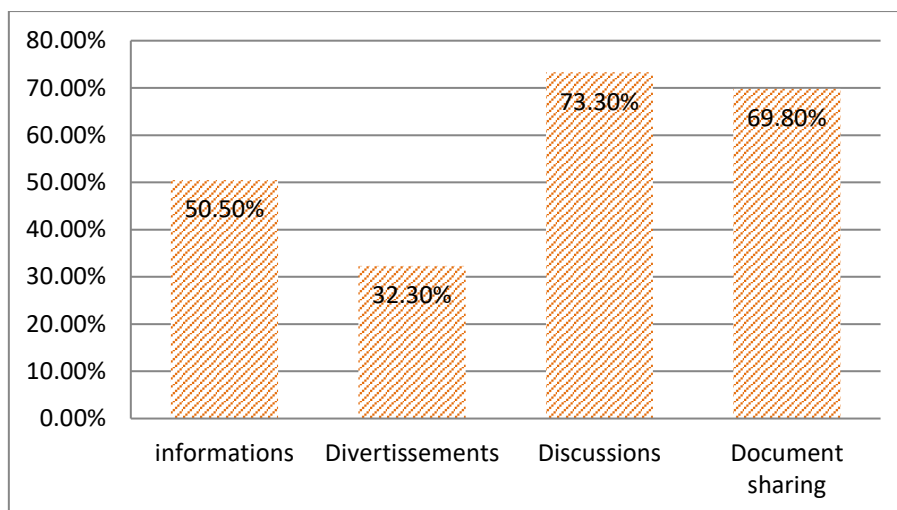


Figure 3: Main using of social networks

We note that almost a quarter of students use social networks for discussions with friends (73.3%). 69.8% of them use them to share course documents and books, 50.5% of them to share information. We notice that 32.3% of those interviewed are interested in social networks for jokes. Figure 3 shows the rates for the main types of use. The high frequency of use is more than twice a day (31.2%). 15.8% of respondents use social networks once a day. Considering the age groups, 63.5% are in the 20-25 age group who use social networks every day with at least 2 hours estimated per day. 55.4% of respondents use social networks wherever they go. And 7.9% of them say they use social networks when they are in class. There are 31.2% who say they use social networks during their course revisions.

Benefits of social networks

There are 93.6% of students who find that social networks help them in their studies. 87.6% of them feel that exchanges on social networks allow them to progress in your studies. However, 4.5% of respondents believe that social networks do not help them in their studies. 31.7% of respondents find that social networks hinder the revision of their courses. Table 4 presents those appreciations. Regarding the question of social cohesion and living together, 65.8% of students find that social networks serve as vectors of social cohesion and living together. As for the usefulness of social networks, 84.7% of respondents admit that social networks are very useful. 58.2% say they are unable to do without it.

Table 4: Appreciation of social networks in learner activities

		Number	%
Study help	No	9	4.5
	Yes	189	93.6
	Opinionless	4	2.0
study complement	No	18	8.9
	Yes	163	80.7
	Opinionless	21	10.4
Study progression tool	No	17	8.5
	Yes	176	87.6
	Opinionless	8	4.0
Social cohesion means	No	34	16.8
	Yes	133	65.8
	Opinionless	35	17.3

Harms of social networks

As far as for the harms of social networks, 31.7% of students find that social networks prevent them from revising courses properly. For violence on social networks, 76.7% of respondents say that they have not made violent comments but 18.3% of them admit to having made violent comments on social networks and 18.9% say they have been victims of violent comments (insults) on social

networks. 21.6% of the latter react to violent remarks with violent remarks and 10.8% with temporizing remarks and 67.6% with silence. 12.1% of those interviewed were confronted with social divisions on social networks. 36.1% of them find that social networks promote racial hatred. 14% felt harassed through social networks and 11.9% said they were victims of theft on and/or through social networks.

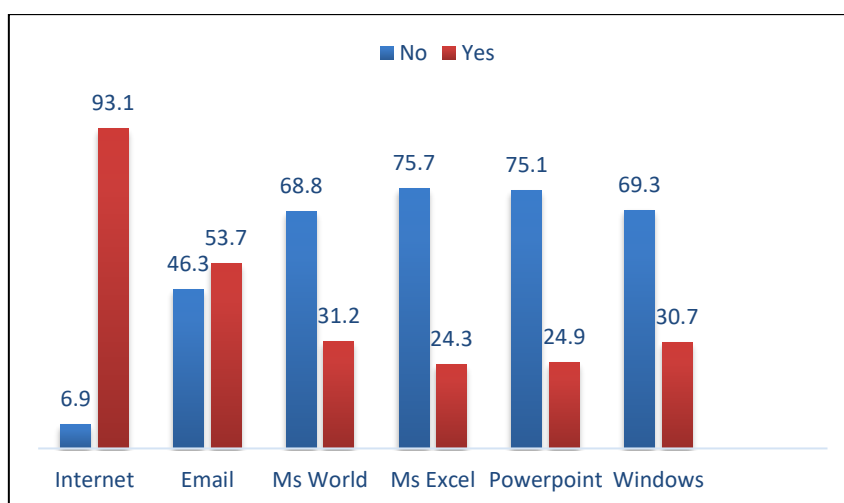


Figure 4: Using common software

Knowledge of common software

A question relating to the use of the main commonly used software provided an idea of the respondents' knowledge of the use of this software. For the Windows operating system (most used on PCs), only 30.7% of those interviewed are familiar with it. MS Office software Word, Excel and PowerPoint, their respective knowledge rates are 31.2%, 24.3% and 24.9%. This clearly shows that students are using mobile phones and tablets more to connect to social media. Regarding the Internet and emails, 93.1% of those interviewed use the Internet and 53.7% use emails. Figure 4 reports the use of this software by the respondents.

Discussion

Social networks are an integral part of various human activities. The learning activity does not break away from this logic as we see through the results of this survey. Knowledge and use of social networks are heterogeneous in the population studied. The youngest of our respondents is 16 years old and the oldest is 30 years old. A classification by age group shows that the youngest know and use social networks more than the oldest. The 15- to 20-year-old group comes

first with a percentage of 89.3% followed by the 20- to 25-year-old group with 87.2%. This is what Table 3 shows.

It should be noted that the younger age group tends to use social networks for jokes and fun. Of the 32.3% who said they use social media for entertainment, 46.4% are in the younger age group. Figure 5 presents the distribution according to the use of social networks for jokes according to age groups. Facebook is the most used social network. This is the same as what (16) found. It is followed by WhatsApp and YouTube.

As for the type of use of social networks, discussions between friends comes first with 73.3% use. This is conformed to what (12) said according to the use social networking sites for nonacademic purposes by students. Sharing documents and books comes second (69.80%), followed by information (50.5%).

As for the first hypothesis, i.e., that social networks help in learning activities. The responses of the respondents confirm this. This hypothesis is validated by the fact that many students find that social networks have enabled the accessibility of documents (course materials, books, videos presenting courses, etc.), collaboration between learners through forums, etc. Indeed, 93.6% find

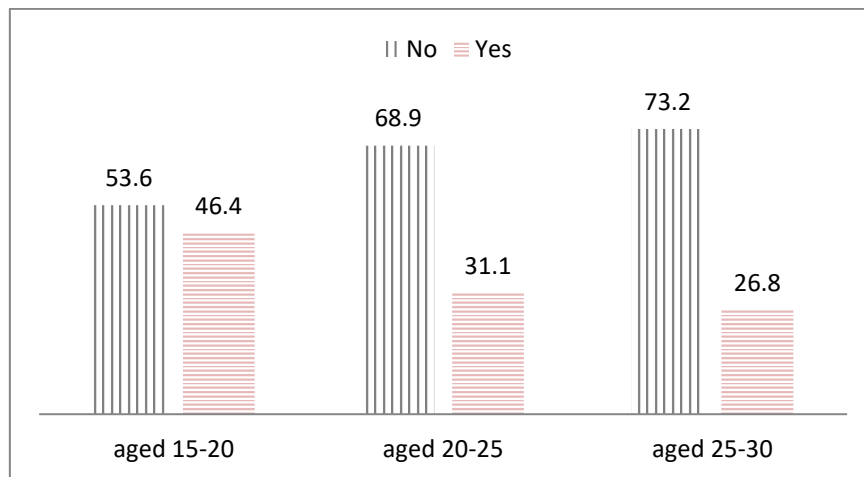


Figure 5: Use of social networks for jokes according to age groups

that social networks help them in their learning, 87.6% find that they help them progress in their learning, certainly through the provision of educational resources. By the way, learners can interact with their classmates remotely. They can collaborate with other students from the same disciplines around the world, which can also help them in their studies. Sharing course materials and electronic books are indeed part of this practice. Figure 6 presents the results on the use of social networks in the studies. As (17) said these tools can also help students and instructors to communicate more effectively. Regarding to these profits, it is suitable to advise the social network tool integration into the learning system. The second hypothesis i.e., social networks negatively impact learning time, 31.3% of respondents declare that they use social networks in class and during their revision time. And 31.7%

of respondents find that networks hinder the revision of their courses. This shows that this hypothesis is not false. This is more noticed among young students as evidenced by the Figure 6. It is therefore likely that these students spend their time chatting or joking during their revision time or even in classroom. They use social network for extra-academic purposes as stated (12). Indeed, they tend to pursue activities that are inappropriate for their studies, particularly fun or entertainment on social networks. This distracts them from their revision activities. This is in line with what some authors call social media addiction (18-19). In fact, social networks produce effects on the brain comparable to those of drugs. For Facebook for example, likes are comparable to doses of dopamine which satisfy the representation of the “ideal self” (19).

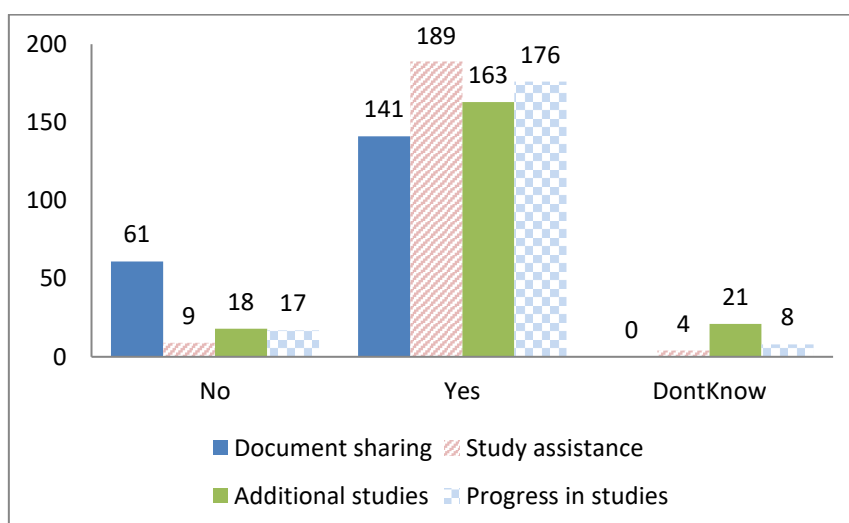


Figure 6: Some advantages of social networks in studies

The third hypothesis relates to the fact that social networks maintain social divisions. Indeed, 65.8% of interviewed find that social networks serve as vectors of social cohesion and living together. However, another social impact of social networks is the development of communitarianism (20-22). Indeed, many community-based exchange groups are created and exchanges can help members but

can also go against the interests of others. 12.1% of those interviewed were confronted with social divisions on social networks. This can create suspicion, distrust and undermine living together. Others experienced harassment or intimidation (11.9%), data theft (11.9%) and identity theft (14%) on social media. Figure 7 shows statistics on the risks faced by social media investigations.

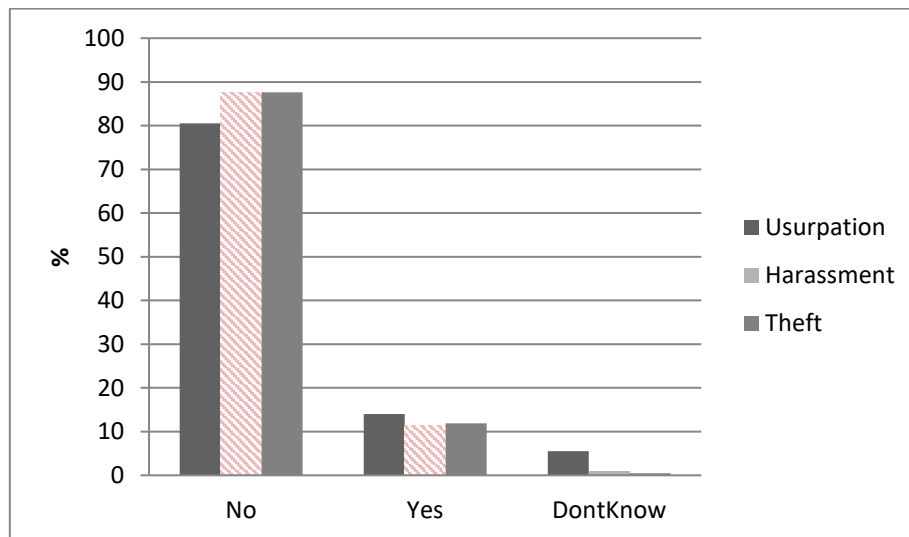


Figure 7: Social network risks incurred by respondents

Advice and Guidance

For a proper use of social networks, some advice is provided here to help social network users, mainly learners. Each learner must impose a certain behavior during his/her class and revision time consisting of not going online. The learner can even keep his/her phone or tablet away and concentrate on his/her lessons. He/She must avoid publishing sensitive information that could harm his/her image. In addition to this, unused accounts must be deleted to prevent them from being used for identity theft. When it comes to applications, it is advisable to install them from trusted sources like official applications sites to reduce the risk of virus infection. Do not hesitate to delete very intrusive applications which are often malicious. After one use, the learner should remember to log out in order to prevent his/her account from being used for other purposes. Finally, he/she must avoid making malicious comments and responding to malicious comments with malicious comments. It would be desirable to use social networks for sharing and collaboration.

Conclusion

Social network impacts everyone’s activities. It can improve the learning system and help learners in

their activities. In Chad, as in most developing countries, although social networks are not officially introduced into teaching programs, many learners are already using them. This work examined the use and impact of social networks in students' learning activities. A survey was carried out with the participation of 202 students, 47 of whom were female. The results show that almost all of the students interviewed (99.5%) are aware of social networks and 86.1% use them. There is a high frequency of use among those aged 20 to 25 (65.35%). Many learners (86.1%) find that social networks help them in their studies. However, 32.3% find that social networks disrupt their learning activities (courses and revisions). As for the harms of social networks, 12.1% of learners feel exposed to social divisions, 11.9% say they are victims of scams and theft, 14% of harassment and other harms of social networks. Social networks are therefore a very important communication and knowledge sharing tool, but they must be used with care. To limit these harms, each user must adopt a behavior aimed at regulating their use of social networks. The learner can even keep his/her phone or tablet away and concentrate on his/her lessons. He/She must avoid publishing sensitive information that could harm his/her image, and

must avoid making malicious comments and responding to malicious comments with malicious comments that would disrupt social cohesion and living together. This study gives a comprehensive understanding of the impact of social network on students learning activities. It advises to decision-makers to consider social networks in educational policy. The study is limited to the city of N'Djamena, as prospects, it should be good to extend it on whole the county to have best results. It also good for us to examine which social network could be efficient for the learning in Chad.

Abbreviation

Nil

Acknowledgement

Nil

Author Contributions

All authors contributed to the study conception and design. Questioner forms preparation was performed by Dionlar Lang and Ali Ouchar, Data collection was performed by all authors. Data analysis was performed by Bery and Batouma. First draft of manuscript was written by Bery and Atteib and all authors had read and commented.

Conflicts of Interest

The authors declare no conflicts of interest.

Ethics Approval

Nil.

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