

**INFLUENCE OF TELEGRAM IN ENHANCING EDUCATIONAL TECHNOLOGY
STUDENTS' PERFORMANCE IN FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA, NIGER STATE**

BY

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2016/1/59126BT

**DEPARTMENT OF EDUCATIONAL TECHNOLOGY
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE**

APRIL, 2023

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**A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL
TECHNOLOGY FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER
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BACHELOR OF TECHNOLOGY (B. TECH) IN EDUCATIONAL TECHNOLOGY**

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ABSTRACT

The study investigated the “influence of telegram in enhancing educational technology students’ performance in Federal University of Technology Minna, Niger State.” Three research questions were raised and one hypothesis stated and tested at 0.5 level of significance. A sample of 50 pre-service teachers was randomly selected from 200 and 300 level students in Education Technology Department. The design of study was descriptive design, using questionnaire as the research instrument, the content validity and reliability coefficient of 0.85 was obtained. The major findings of the study include: The finding of the study revealed that students are aware of integrating telegram as a tool of teaching and learning. there is positive impact on students that make use of Telegram application for educational activities daily.

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CHAPTER ONE

1.0

INTRODUCTION

1.1 Background to the Study

In the age of technology, students' use of technology has become inevitable. It becomes an attractive factor that outperformed the traditional method of education. Electronic tools have moved from a means of entertainment and play for children to an indispensable educational tool (Hashim, Yunus, & Embi, 2018). The integration of technology in education has contributed to the development of the interest of the students in academic achievement. Thus, educational institutions in most countries have resorted to e-learning to work alongside traditional education (Polly & Binns, 2018).

In this era of globalization, the change in the teaching learning process occurs quickly with the help of modern mobile technologies. The use of mobile technology for designing new pedagogy is creating a more communicative situation in the classroom through an interesting and effective way of teaching, for example using mobile phone to look for materials or to access some webs that can make learning process communicated and effective. Furthermore, mobile phones are developing into important tools for education in general (Binns, 2018).

In this modern time, many students know much about social-media, they use it in their daily lives, whether male or female. They use social media because they consider social media to facilitate all forms of communication such as communication in education, business, etc. Social media itself can be relevant in every activity because of the development of technology. The social media that are widely used by the younger generation are WhatsApp, Instagram, Telegram, etc (Hashim,

2017). These applications are used to communicate with each other, but not only to communicate but also, they are used in other needs like religion and entertainment. They have different features that offer their own advantages and disadvantages. One example is the superiority of Telegram revealed by (Mei Yusmita 2019), he said that Telegram has advantages over other social media, namely in terms of sending images, audio, and files, even Telegram have certain signs that show delivery, which has been read, etc.

Consequently, academics use social media in learning and teaching language skills. These number of social media platforms have become extremely popular in the communication world. In the aftermath of the Covid19 virus, teachers have used Telegram and WhatsApp, free communication messenger apps, extensively for teaching and learning purposes. They use them to post homework, notes, instructions, and activities for students. Special features such as videos, audio media messages, text messages, images or pictures can be uploaded and downloaded by users (Walker,2020).

Academic achievements have to do with complex outcome variable, known to depend on various factors. Traditionally, intelligence and personality have been considered as the most influential dispositional predictors of academic achievement (Embi, 2018).

The Telegram program can transfer data and different means of social media to a Messenger network to more than 5000 members. It can manage all types of documents that can be accessed by a computer or smart mobile device. Telegram, like a mobile phone can read and write an email list (Blattner & Lomicka 2015). Furthermore, Telegram is free messaging apps that can be downloaded at no cost. It has a lot of clout in the world of education right now. Thus, according to Sarvari (2019), telegram bridged the gap between the teacher and the students when they are absent from class. To track student progress, the teachers used the Telegram social media platform.

They also used the information to make future instructional decisions. It was used to motivate and encourage new writers. The social network's formative potential assists participants to improve their academic performance. Today's integration of ICT in education makes teaching and learning accessible to everyone.

1.2 Statement of the Research Problem

The challenges of social media (Telegram) is that attention has been shifted from visible to invisible friends. Important academic activities like studying and writing might be affected in the process. Social media contributes positively and negatively to students' academic performance. Academic performance of students is facing a lot of neglect and challenges. There is deviation, distraction and divided attention between social networking activities and their academic work. Instead of students reading their books, because of the influence of social media they spend their time chatting. They also make friends through the social media. This might have influenced on their academic performance. The manufacturing and distribution of sophisticated cellular phones is equally posing a challenge that constitutes a contributing factor to the use of social media (Telegram). Students no longer need to visit a cybercafé before they send and receive messages. Many students who have access to the social media (Telegram) waste time on it by chatting and surfing the internet for non-educative information. They are glued to their phones all day thereby losing sense of time.

It is therefore of great importance to explore some of the trending challenges facing students' academic performance as a result of social media (Telegram). This is due to the availability of opportunities created by social media (Telegram) for study purposes. Whether these opportunities promote studies is a question that needs to be answered. The solutions to the problems of social media (Telegram) on students' academic performance is that students should try to use the social media sites in a normal proper way while doing their school related works. Since it is more important in using Telegram for academic excellent. Therefore, it is pertinent to examine the influence of telegram in enhancing educational technology student's performance in Federal University of Technology Minna, Niger State.

1.3 Aim and Objectives of the Study

The aim and objectives of the study is to determine the influence of telegram in enhancing educational technology students' performance in Federal University of Technology Minna, Niger State. The following are the objectives;

1. Determine the checklist of educational technology students using telegram in Federal University of Technology Minna.

2. Determine the challenges of educational technology students in using telegram on their performance in Federal University of Technology Minna.
3. Determine the influence of telegram on the performance of educational technology students in Federal University of Technology Minna.

1.4 Research Questions

The following research questions were raised to guide the study.

1. What is the percentage of educational technology students using telegram?
2. Is there any negative influence of telegram on the academic performance of educational technology students in Federal University of Technology Minna.
3. Is there any challenges of telegram on the academic performance of educational technology students in Federal University of Technology Minna.

1.5 Research Hypotheses

The following research hypotheses are formulated and will be tested at 0.05 level of significant.

Ho₁: There is no significant difference in the challenges of educational technology students in using telegram base on gender in Federal University of Technology Minna.

Ho₂: There is no significant difference between Male and Female students on performance using telegram in Federal University of Technology Minna.

1.6 Significance of the Study

The findings of the study or outcome will be of benefit to Lecturers, Students, government, and researcher;

1. For the lecturers, the result of this research will give reference to media for the lecturers in the academic achievement of educational technology student, then the lecturer can get more knowledge to teach in the school and it can help the lecturer to transfer the material through

telegram. Telegram application will be very helpful and powerful tools for online teachers. Lecturers can communicate with students using this app and give them access to course material. Telegram app will enable lecturers to hold live sessions with students using telegram video and voice calling features.

2. For the students, the result of the findings will make students to know the important and applicability of Telegram for learning and studying in achieving academic goals like usage of it for classwork, assignment and little project purposes because Telegram enhances interactive teaching and learning. Telegram app will enable student send assignment and task, easy communication with parent, post content on the group, make groups on telegram messenger apps, attempt fun quizzes. Telegram enable students to express themselves, many students will be scared with the thought of what will happen if they express themselves, thus it help students to share their thought without any fear. It is a broad platform that students can connect with anyone in the world. We all know that academic gap is one of the major issues students are facing nowadays, it enables student grab opportunities after their degree program.
3. For the government, the result of the research will be useful to the government and it agencies, because the government wants the students to have easy access to social media, which may lead to the need for government subsidies and installation of internet connections in the school premises. It will enable the government adopt virtual learning(telegram) in to education system, there has been more than enough crises happening across the globe in the past few years. The COVID-19 pandemic, Brexit, the January 6th instruction and the occupation of the general public's control or decisions from lawmakers will not affect the or hindered teaching and learning.
4. For the researcher, the result of this research will help the researcher to know the important of Telegram as tools for teaching-learning on academic achievement and also gives an insight about social media (telegram) in achieving academic goal. Telegram enable researchers to get

immediate feedback, this eliminates the waiting game and can even draw the positive attention and interest in their work. It could also help reach a larger audience. Researchers scroll through the telegram to see peoples opinion and feedback. Telegram help researchers to meet collaborators and stakeholders by using network to reach out and interact with those who want to work with and other reach out to them as well.

1.7 Scope of the Study

The study was focused on the influence of telegram in enhancing educational technology student's performance in Federal University of Technology Minna. This study is specifically to determine the influence of telegram in enhancing educational technology student's performance in Federal University of Technology Minna. The study is restricted to both male and female students in the Department of Educational Technology in the Federal University of Technology Minna. The time allowed for the study is one weeks.

1.8 Operational Definitions Terms

Academic: is used to describe things that relate to the work done in schools, colleges, and universities, especially work which involves studying and reasoning rather than practical or technical skills. It also used to describe work, or a school, college, or university, that places emphasis on studying and reasoning rather than on practical or technical skills.

Academic achievement or academic performance: is the extent to which a student, teacher or institution has attained their short or long-term educational goals. Completion of educational benchmarks such as secondary school diplomas and bachelor's degrees represent academic achievement.

Education: is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, habits, and personal development. Educational methods include teaching, training, storytelling, discussion and directed research.

Educational technology: is the combined use of computer hardware, software, and educational theory and practice to facilitate learning. When referred to with its abbreviation, EdTech, it is often referring to the industry of companies that create educational technology.

Social Media: is a group of Internet-based applications built on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of user-generated content. Social media is forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as video) Social media platforms are used as an online component to facilitate students in learning approach especially blended learning approach which employed both online

instruction and traditional face-to-face. In the educational field, social media as platforms for social communication in which they are based on social constructivism theory.

Student: A student is primarily a person enrolled in a school or other educational institution and who is under learning with goals of acquiring knowledge, developing professions and achieving employment in a desired field.

Telegram: Telegram is a freeware, cross-platform, cloud-based instant messaging service. The service also provides end-to-end encrypted video calling, VoIP, file sharing and several other features. It was launched for iOS on 14 August 2013 and Android in October 2013.

CHAPTER TWO

2.0

LITERATURE REVIEW

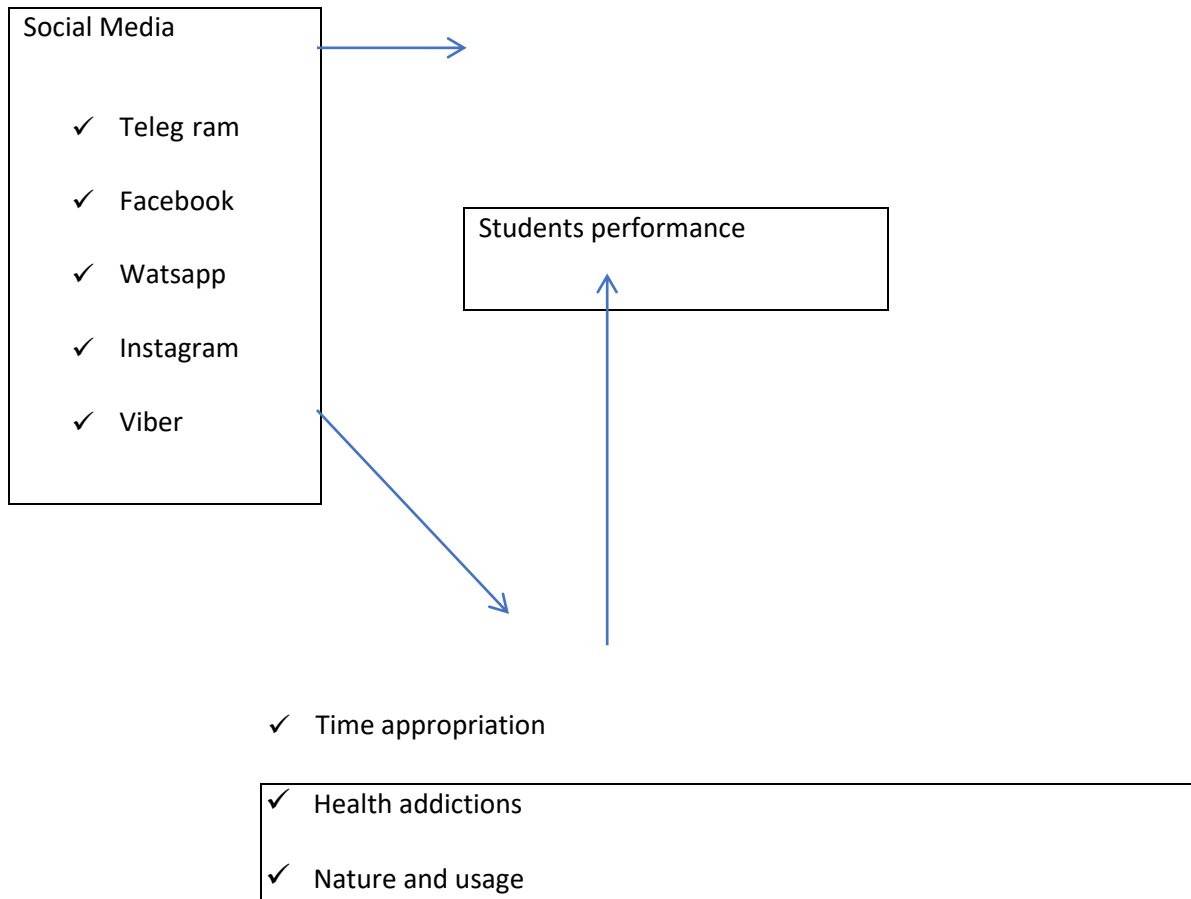
2.1 Conceptual Framework

According to Oye (2012), students' academic performance is affected by the more they use Telegram, Social media platforms for social activities rather than academic purpose. Oye (2012) said that majority of students feel that social platforms have positive impact on academic growth. In a different research conducted by Shana (2012) it was ascertain that students use platforms mainly for chatting and making friends. "The consequences of internet and social platforms on students' academic growth" a study than by Young (2016) it was seen that internet has spread its wings to reach teenager's school life. It was also observed by Young that students are more dependent on internet to access info that pertain their academic life as well as entertainment.

Additionally, Young said that internet, though take a lot of time, and have less impact on studies. It was observed by Wang (2011) that impact of social platforms rest on the degree of usage. Jeong (2015) observed that internet addiction is significantly and negatively related to students' academic growth, as well as emotional attributes. Seo (2014) confirms Jeong statement when he opined that the negative influence of internet is only on excessive users and not on all users. Rather (2013) avers that: the social platforms which are being used today with great desire and enthusiasm have altered the way of using internets in this modern age by defining online tools and utilities which allow users for communication, participation and collaboration of information online. Today's young generation, especially teens and youth are using technology through innovative ways due to which they are referred to as millennial and have changed the way they think~work and communicate even though they are in formative years of their life. Today's youth because of social platforms have become technology addicts and are quite withdrawn.

Figure 1:

Conceptual Framework



Source: Pariser, Eli. 2011. The Filter Bubble: What the Internet is Hiding from You. Penguin UK.

Pew Center. 2016a. Social media and academic performance.

2.1.1 Social Media

Social media, which by definition involve individuals relating to each other, represent new and fertile ground for exploring what drives online social behavior. Not surprisingly, considerable research had addressed the question of why people used social media in varied contexts. Literally hundreds of motivations underlying why people used social media in a wide variety of contexts including blogs, Twitter, virtual worlds, YouTube and many others had been identified, as stated by (Novak 2016) . In a review of more than 30 articles that examined over 100 objectives, goals or motivations for using social media, Novak uncovered no fewer than 22 distinct motivational categories of social media use. These included, for example, achievement Kuznetsov, information, peer pressure as stated by (Jung, Youn & McClung 2017), positive experience (Hoffman & Novak, 2017) self-understanding (Zhao, Grasmuck & Martin 2018) and social interaction (Lenhardt & Fox 2016), among others. While it was clear that people

use social media for many different reasons, the lack of a unifying framework hinders deeper understanding of the fundamental motivations driving social media use.

Greenhow summarizes that using social media tools in learning promotes a more student-centered course. These tools allow students to interact and collaborate with each other and instructors and “promotes personal choice, customization and student familiarity”. Students are better able to create their own understanding of content when creating with these tools.

2.1.2 Telegram

Telegram as a social network is becoming one of the major tools for education, and entertainment. The rapid development and enormous advancement in computer technologies have been affecting all aspects of life for more than three decades. Moreover, many researchers found a positive association between use of internet and social networking sites (SNS) and academic performance of the students. Students using internet frequently, scored higher grades in reading skills test and higher grades in other subjects as well, based on (Flad, 2017). One of the problems that students encounter in learning language is the lack of opportunities for authentic communication due to non-personalized course content, and complains about being forced to follow a strict curriculum stated by (Barlett, Bragg & Donmus 2017). Integrating Telegram channels into existing learning practices can provide informal learning contexts and create new opportunities for learners.

The Telegram application is compatible with different operating systems and different devices. The appropriate operating system should be selected from the website. Additionally, it can be used in a web-based domain where installation is not necessary. Signing up to the system is very easy as it only requires the mobile number and the verification code which is later sent to the user via a text message. After logging into the system, the application can be customized in terms of the appearance and security settings. Moreover, the application has the capacity of importing the contacts from the users’ phone book (Martin 2019).

Telegram emphasizes speed and security as it is very easy to use, fast in uploading and downloading files, and easy to connect with your fellow members. Furthermore, its cloud based system ensures permanent access to the files which are exchanged across different channels and groups. Moreover, it is capable of synchronizing encrypted data across multitude of independent data centers. It shows the flexibility of Telegram in starting conversations with different people and among different channels.

These are the description features of Telegram:

1. Safety and Security

First, this application ensures the cyber security of users since Telegram messages are encrypted and the app has the capability of self-destruction., the secret chats can be self-destructed without any interference. This allows learners to be more extrovert and cooperative in doing the tasks because users should no longer be worried about the mistakes they might make since the exchanged messages can be easily rectified. This allows learners to express themselves freely because the messages can be corrected at any time.

2. Access to Channels and group

Once a Telegram user is signed up, they have access to a wide variety of channels and groups particularly the language learning ones. The channels and groups can either be searched parametrically or accessed by having an invitation link. Unlike some other virtual societies and websites, access to channels, discussion groups, and online classes can be made much easier with a little search about the topic of interest. Moreover, joining channels and groups is free of any premium charges. Every teacher and/or learner can construct their own channels and groups and invite their students to start interacting in an online environment.

3. The seamless Network

It is possible to use Telegram on different devices simultaneously, for example, on both a smartphone and a laptop. This helps the continuation flow of getting the information from different resources without any interruption. In other words, a learner can start getting the information on their laptop and continue doing so on their mobile phone if they want to get out of the house.

4. Supporting files with various extensions and size

Telegram has the capability of supporting all file formats including, but not limited to, doc, zip, ppt, mp3, mpeg, etc. This is very important for distance language learning since teachers and learners need a robust and dynamic environment to send and receive files with different extensions. Moreover, there is no restriction over the size of files which are exchanged. Files up to 1.5 GB can be exchanged in any discussion forum. Selecting a file from the gallery or saving a file to the hardware requires a single touch or click. For example, the teacher can send a multimedia file with any extension and upload it to a group. All group members can download it for free and share their opinions about it. Learners can also express their own opinions by sharing files. All this maximizes interaction among learners and encourages them to do the tasks collaboratively.

Telegram is a versatile multifunctional online application, with its channels and groups catering for most purposes of their users. Every individual user can create unlimited groups for up to 100,000 members and channels with an unlimited number of members. A group is a combination of email service, text messaging app, multimedia messaging app, online forum discussion, and systematic educational robots. Therefore, it can take care of personal, educational, and business needs all at the same time. Once the members are added to a group, they can be guided by the admin users of the group (usually the online instructors or the researchers and their assistants) to accept the rules of the group. Depending on the purpose of the group, members are briefed on how to make use of the presented materials within an already determined framework.

2.2 Online communication in learning

Educational interaction is a vital component in the successful learning process, especially in online environments because of the absence of physical communication between the student themselves and between them and their instructors (L. Vygotsky 2018). Previous studies have discussed the four types of interactions presented by Moore and Hillman et al. explaining the benefits of these interaction types on

students' learning and providing some suggestions to increase these interactions. Learner–instructor interaction is the interaction type most discussed in literature. There are various ways instructors can continuously interact with their students to bridge the physical gap in online environments. Interaction can be enhanced by providing students with immediate feedback and using their first names when sending instant messages (Habibi, A. & Mukminin, Y. 2016). Offering emotional support is a great way to increase student interaction and decrease their feeling of isolation (R. Becer 2019). Moreover, the instructor's involvement in the discussion thread with their students encourages students to be more active in online learning activities (Vlachopoulos, 2016). (Vlachopoulos & Makri, 2017), also emphasized the positive effect of synchronous classes in maximizing the interaction of students. A good interaction between instructors and students leads to improvements in the latter's academic performance, motivation, satisfaction, and persistence to complete a course (R. Becker 2018). Learner–instructor interaction can produce a sense of academic community that may stop the feeling of isolation that usually appears in online learning environments due to the physical separation between students and their instructor A. (Habibi, A. & Mukminin, Y. 2016).

The second type of educational interaction is learner–learner interaction, which occurs when students communicate and participate in educational activities. Instructors can enhance this interaction by encouraging students to participate in threaded discussion forums and coordinate or lead the teamwork. Besides these activities, students can interact with their peers in their synchronous or asynchronous online classes with or without their instructor in attendance. (W. Creswell 2018). Yu et al. (2017) stated that students involved in frequent peer interaction in online courses acquire a considerable amount of information and improve their academic performance. Instructors can promote learner–content interaction by providing students with instructional videos to watch, research tasks to do, and interactive course content to interact with. (Habibi, A. & Mukminin, Y. 2019), When learners interact with content, they retrieve the old information, process the new one, and combine both to create the knowledge (Mukminin, Y. 2015).

Learner–interface interaction is vital for online learning. As students interact with technology to learn and structure their knowledge, the technology should provide its users ease and satisfaction.

However, technical problems in an online system could have a negative impact on students' learning and interaction with technology if these problems are not resolved immediately. (W.

Creswell 2016).

2.3 Telegram in Higher Education

With its many features, Telegram can be effectively used for academic purposes. Previous literature has discussed students' attitudes toward the use of Telegram in their courses, its advantages and disadvantages, and its effects on students' academic performance. These studies indicated that students enjoy using Telegram, as it makes their courses more interesting (F.

Alkhezzi & W. Al-Dousar 2016). The students' positive attitudes were mostly due to the advantages granted to them from using Telegram in their learning. One of these advantages is

Telegram's seamless network, which lets students access their accounts on any device, meaning they can start learning on their mobile phones and continue learning on their laptops, therefore maintaining the information flow from different resources without stopping (E. Vaziripour, & Farahbakhsh, 2019).

Students and instructors appreciate Telegram's media sharing support as well. Telegram supports sharing all file formats up to 1.5 GB. Instructors can employ this feature in their teaching activities and provide their students multimedia information, such as video clips and images, that improve the students' learning (Mukminin, Y. 2018). Al-Abdli (2018) indicated that students enjoy using

Telegram in a course because of the video clips and images their instructors shared. Xodabande (2016), similarly emphasized that sharing video broadcasts on Telegram with his students improved their English pronunciation skills. He also explained that teaching pronunciation is a difficult job for teachers; however, on Telegram, learners can play educational video clips listening to native speakers and learn proper pronunciation on their own time and as many times as they want, which is impossible in traditional offline classroom methods. Telegram groups are a great tool for building communities, as they can accept up to 200,000 members each. These groups can present publicly to anyone who utilizes Telegram's search box or privately to select users with specific invite links. Many studies have demonstrated that Telegram groups assist students in improving their academic performance and gaining higher course scores for several reasons (E. Vaziripour, & R. Farahbakhsh, M, 2018), First, Telegram groups increase student collaboration and discussions with instructors and peers, which provides students new information (M. Almasi 2017).

Group discussions also enhance students' understanding of the course content due to their frequent discussions with peers (P. Bishop 2015). Moreover, some instructors assign peer assessment tasks over Telegram, which are highly beneficial because students learn from each other and thus expand their knowledge and information (J. Lester 2018). Further, peer assessments in Telegram groups promote students' critical thinking skills with the extra attention that students give to their comments, as these comments are presented in the class's Telegram group and subsequently judged and evaluated by teachers and other students (L. Vygotsky, 2016). Quick feedback from instructors in Telegram groups is another contributor to students improved academic performance (Bakar, & Fauzi, 2017).

Despite the benefits of Telegram, previous studies have also investigated its drawbacks. Telegram's main downfall is technical issues, such as network failure or lack of internet coverage (T. Paulus 2016).

Students expressed their annoyance with the internet problems, such as internet disconnections or the lack of internet coverage, which disturb their online learning (Fauzi, N. 2017). Further problem is the high cost of internet subscription (I. Alizadeh, 2015). Another drawback is Telegram potentially distracting students from the essential aim of using it in their course, which is learning through other, non-traditional means (Aghajani 2017). Aghajani & Adloo (2016), indicated that some students forgot to do their writing task on Telegram because they were distracted by the fun offered on the Internet. This

fun could occur when a student opens Telegram to send their assignment but is distracted by other Telegram groups they have joined (Adloo 2019). Distraction may also happen when peers send irrelevant posts in the Telegram class group that disturb the learning use on the platform. Telegram's ease of use may also increase the workload for both students and teachers, especially if the students expect their teacher to be available for them 24/7 (S. Bakar, & Fauzi, N. 2016), leading to their disappointment if the instructor does not reply to their queries immediately. Cheating, addiction to Telegram, and sharing misleading materials are the other disadvantages of this platform. Alizadeh (2015), reported that spending a great deal of time on Telegram to do assignments causes students to be addicted. He also explained that some of his students admitted they did not write their assignments themselves, instead they simply used copy and paste from other websites.

2.4 The Educational Interactions on Telegram

Previous studies have indicated that Telegram's features support various types of online interaction. For example, it supports all file formats and discussions, and it allows groups to maximize learner-instructor and learner-learner interactions, which consequently enhances students' academic outcomes in their online learning courses (E. Vaziripour, & R. Farahbakhsh, M. 2017). Similarly, Aghajani & Adloo (2019), who employed Telegram as a medium for language learning, found that it increases students' interactions with peers in a cooperative environment due to online peer assessments assigned through this SNS, as these assessments have a great role in boosting learner-learner interaction. Habibi et al. (2016), indicated that learner instructor interaction is the most common interaction in online learning that is employed Telegram for several reasons. First, Telegram excellently answers students' need for quick feedback. Furthermore, Telegram as an SNS offers students additional opportunities to interact with their instructors beyond the limited time and place of traditional classrooms (I. Alizadeh, 2016). These findings are in line with those of M.G. Moore, who further claimed that learner-instructor interactions are the most desirable interaction type for instructors, as well as learners.

2.5 Theoretical Framework

Theoretical perspectives are defined as theoretical frameworks concerning a few aspects of a social or educational phenomenon that can be used as a conceptual model for explaining the research area.

Figure 2; shows in diagrammatic form of the two underpinning theories that may use in a proposed future study. Furthermore, the following sub-sections will explain the two theories that could be applied in the future research.

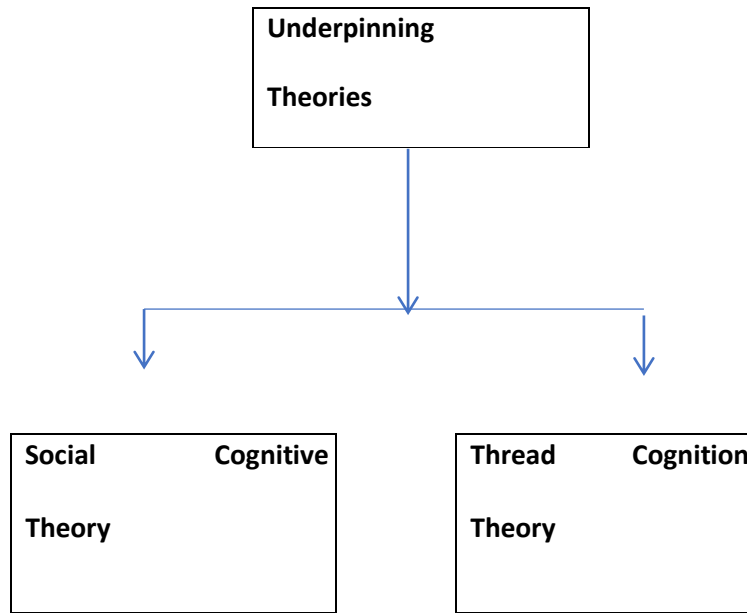


Figure 2: Underpinning Theories

2.5.1 Social Cognitive Theory

The social cognitive theory provides a system in which the psycho-social components, through which emblematic communication affects the idea, the influence, and human activity, are analyzed and determined. The frameworks of communication work in two respects: the instant way and the social way. They encourage change immediately by teaching, empowering, persuading and managing members (Bandura (2016). In the socially interfered route, the media have an impact on connecting employees with social systems and network settings which provide distinctive driving forces and continue the required change in a person. Because wide communications have a compelling position in the public interest, it is of important significance to understand the psychosocial elements by which representative communication influences idea, impact and human activity. A theoretical structural agent for inspecting determinants and structures of such effects is the social cognitive theory. Human behavior, in which conduct is created and regulated by environmental effects or inner dispositions, was frequently categorized according to the unidirectional causality. Social cognitive theory clarifies psychosocial activity regarding the supplementary triadic causality (Bandura 2016). In this view, Fonagy (2018) based on the value of oneself and society, individual variables like mental, social and natural occasions, norms of private behavior and environmental events are determining variables mutually influencing one another. With regard to the above, social behavioral theory tends to differentiate the respective causality between individual components (e.g. cognitive, affective or biological), private and natural behavioral norms Bandura (2019) in the determinants of human considerations, feelings, and behavior. Through communication and effect processes among the three determining variables, people tend to keep, alter or reinforce their thoughts, impacts and activities, which are the intrinsic concept of people, also known as "plasticity" (Bandura 2014, 2016); Hutto (2017). In that manner, people display a distinctive boundary created by four human skills: symbolization, self-direction, self-reflection, and vicarious capacity when separated from other living beings. In view of symbolizing, it refers to the ability of a person to symbolize, through the cognitive processes identified with the external condition, images related to their experiences.

2.5.2 Thread Cognition Theory

The sub-process cognition by Salvucci and Taatgen (2018) is a theory of multiple resources that means to clarify the psychological procedures and the results of multitasking practices. It depends on ACT-R (Adaptive Control of Thought-Rational), a computational model of mind design that attempts to recognize and talk about crucial structures and procedures (Martin & Sujatha (2016). Underlined cognition holds that there are sets of distinctive assets for various intellectual procedures, which include a set of focal points for procedural memory (i.e., how assignments are made) and marginal backgrounds for observation, motor capabilities and memory revealing While multiple tasks are performed, each task is composed around the particular objectives of the individual as a subjective self-sufficient "thread" (or numerous threads for complex tasks). At the moment in which an objective is established, it triggers a progression of principles from the set of focal procedure assets, which guide the psychological sub-processes and the use of assets from different groups to achieve the objective (Nijboer, Taatgen, Brands, Borst, & van Rijn (2014).

Think of a direct circumstance: a man is walking through a hallway and chatting with a partner. There are two particular goals (walking and talking) with establishing psychological principles for each one.

The principles are activated in the memory of procedures; and the fundamental forms of perception, motor or decisive memory that participate in the execution of each task are fused in intellectual threads (for example, observing the earth, moving the legs, creating expressions).

The most important thing is that a single thread can effectively attract a set of assets at a time.

This is not at all like the restricted general limit or the different estimation of assets represented previously, in which the restrictive element is the measure of the assets accessible in a group (Nijboer, Borst, van Rijn, & Taatgen (2016). Conversely, if a group of assets is drawn with a one thread procedure, at that point a procedure is deferred from another thread. In the case of walking and talking, there may not be an extraordinary level of asset coverage between the different subprocesses. This considers that the two objectives will be executed simultaneously. In more complicated assignments, there could be more notable coverage among assets, delivering bottlenecks or impedance between companies.

2.6 Empirical Studies

Junco, et al (2017), conducted a study on the relationship of social media and engagement of students with social media and grades of students, with population of 132 students. The study was carried out in Germany. The studies were divided into two groups, one group use twitter and the other group did not use twitter account. The objective of the study is to make discussions about study material, organize the study groups in a manner, also post the announcements of class, and remain in touch with class fellows. A rating scale was administered to respondents to answer the research questions. Data analysis was carried out using mean and standard deviation. The result obtained revealed that most students do not have access to twitter due to variation in network. The researchers surprised the students by using Twitter group to achieve greater GPAs and higher scores than the other group.

Adegboji and Toyo (2006) in their study on the impact of social media on research, reported that social media contributed significantly to the ease of research through materials online. It is commonly believed that researchers and students in Nigerian Higher education institution are battling the problem of inadequate and out- of-date materials. The only way to pursue knowledge is through research and the Internet as well as social media which sprang from the internet is having a profound impact on the research process and dissemination of Information. (Kamba 2008).

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Asemah, & Edegoh, (2016), conducted a study on Facebook which is the most used social media by undergraduate students of Kogi State University. The study was carried out in Kogi state with population of 210 students. The objectives of the studies reveal that majority of students Kogi of State University spend at least 4-5 hours or so daily surfing the internet. This shows that most of them go online. Data analysis was carried out using mean and standard deviation. The study also criticized seriously the obsessive attitude of Nigeria youths towards social media. It pointed out that the rate at which youths devote their quality time in chatting, calls for urgent attention. The study further examines the various actions taken by students on social media and found out that most students prefer to chat than do any other thing on social media.

Shambare, R et al. (2014), conducted a study on Social networking habits among students their study indicates that such Medias most commonly used by Younger"s and Facebook is most widely using by a large number of communities and have multiple effects on student's life, which were carried out in Chinchuan university in China with population of 234 students. The objectives of the study revealed that the high speed and quickly approach to internet and the development of smart phone technology are most important drivers behind the adoption and connectivity with social networking websites and conclude that SNS enhance their knowledge level. Questionnaire was the main instrument used for the data collection. Pearson correlation coefficient (r) was the statistical analysis technique adopted to test the hypotheses under study of 0.05 level of significance.

Heeter, (2016), conducted a study on technology use in higher education, at University of Michigan State. The objectives of the studies give information about technology use in higher education, particularly in relation to faculty. This survey interprets teaching and learning habits for staff members' online, students that are graduate and undergraduate are also included. About 65 % of faculty and students both read blogs but here faculty for personal information was more likely read them. Students post for both educational and personal proposes. Faculty used online photo sharing programs more than students such as Flickr, but about 50 % of both groups used it. Students used Facebook 70 percent while faculty used less than 10 percent of either Facebook or MySpace. Students send text message more likely.

Ahmad, A (2015), conducted a study on the network of social media is growing globally. The study was carried in University of Ebonyi with the population of 167 students been administered. The objectives of the studies revealed that social networking sites have number of advantages for their users, it enable the community to keep in touch with their peers and relink with old ones and help to find new friends according to your interest from all around the and a large number of persons are linking with these networks. Hence the network of social media is growing globally. The study related in that it employed the same survey research method and data collected were analyzed using mean and standard deviation to answer the research questions and t-test statistics for testing the hypotheses. All the five null hypotheses developed for the study were rejected at 0.05 level of significance. The finding revealed that, significant difference was found between the responses of male and female students and administrators for improve communication in Ebonyi state. There was no significant difference between the responses of students and administers on improve network using social media for communication.

Adegboji and Toyo (2006) in their study on the impact of social media on research, reported that social media contributed significantly to the ease of research through materials online. It is commonly believed that researchers and students in Nigerians Higher education institution are battling the problem of Inadequate and out- of-date materials. The only way to pursue knowledge is through research and the Internet as well as social media which sprang from the internet is having a profound impact on the research process and dissemination of Information. (Kamba 2008).

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2.7 Summary of Literature reviewed

This chapter reviews relevant literatures on the effect of telegram on the academic achievement of educational technology student in Federal University of Technology Minna, Niger State. From the research of various researchers included in this work, it can be deduced that impact of social media (telegram) on undergraduate students of educational technology lack proper usage for learning and studying. It is the perspective of this paper that educational technology students are liable to perform inadequately in their studies due to extraordinary number of times spent on social media without educational benefit. But most the researcher emphasized that there is lack of proper channeling of Telegram for teaching and learning many teachers doesn't encourage the use of telegram for learning. In the literatures reviewed, 5 research works were reviewed which included Junco, Heibergert, & Lokenet al (2017) stated the relationship of social media and engagement of students with social media and grades of students. But Shambare, R et al. (2014) show that Social networking habits among students have indicated the Medias is most commonly used by Younger"s and Facebook is most widely used by a large number of communities and have multiple effects on students.

This research study adopted the Social cognitive theory which provides a system in which the psycho-social components, through which emblematic communication affects the idea, the influence, and human activity, are analyzed and determined. It also a theory in which conduct is created and regulated by environmental effects or inner dispositions, was frequently categorized according to the unidirectional causality. And also, thread cognition theory which is a theory of multiple resources that means to clarify the psychological procedures and the results of multitasking practices. It depends on ACT-R (Adaptive Control of Thought-Rational), a computational model of mind design that attempts to recognize and talk about crucial structures and procedures.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Design of the Study

The research design adopted for this study is the descriptive survey research method. Descriptive research design is adopted to collect information that can be generalized to all population and that it can provide relatively simple and straight forward approach to the study of values attitude, beliefs and motives (robson, 2002). Since this study seek to investigate the influence of telegram on academic performance of educational technology student in federal university of technology minna Niger state, descriptive research survey method was chosen as appropriate in carrying out the study.

3.2 Population of the Study

The total population of 200 level and 300 level undergraduate students of educational technology for this study was one hundred and forty-six (146). The number is made up of both male and female students of educational technology in Federal University of Technology Minna.

3.3 Sample and Sampling Technique

Simple random sampling technique was used to select 50 students of the population. The sample size conforms to the sample size formula for finite population.

3.4 Instrument of Data Collection

The instrument used to collect data for this study was a researcher designed questionnaire tagged Influence of Telegram in Enhancing Educational Technology Students Performance (ITEETSP). It consists of items and Bio-data of respondents divided into sections A, B, C and D. Section 'A' deal with the respondent Bio-data. Section 'B' entails the response percentage of educational technology students using telegram. Section 'C' contains 10 items that deals with the challenges facing educational technology student in using telegram on their performance in Federal University of Technology Minna. Section 'D' contains 10 items that deals with the influence of telegram on the educational technology student performance in Federal University of Technology Minna.

3.5 Validation of the Instrument

Validity is the extent to which a measuring instrument measures what is supposed to measure accurately (akinboye 2002).in order to determine the validity of the instrument, The draft of the questionnaire was given to the researchers' supervisor and two other lecturers in the department of educational technology for content validity. The experts therefore made necessary corrections and suggestions which was taken into consideration while preparing the final draft of the instrument

3.6 Reliability of the Instrument

The reliability of an instrument is the degree or extent to which it yield the consistent result when it is administered over a number of times. The test re test method of ascertaining reliability was employed in this study. The instruments was administered twice within an interval of four weeks to the same group of respondents who would not be part of the study. The two sets of score were correlated using Pearson's Product Moment Correlation PPMC and a coefficient of 0.69 was obtained which made the instrument to be considered reliable for the study.

3.7 Method of Data Collection

The instrument was been collected from the respondents by the researcher. The researcher administered the questionnaire to the respondents and collection will be made. This will be possible with the help of the attached letter of introduction from the department of Technology

Education in the faculty of School of Science and Technology in the Federal University of Technology Minna. This method enabled the researcher to obtain at least 100% return of the filled questionnaires; it also helped the researcher to offer assistance to the respondents when needed.

3.8 Method of Data Analysis

The data for the study was been collected from respondents and the collected answer analyzed using the mean and the standard deviation. 2.5 will be used as a mean score. Which implies that from 2.5 above represented available and 2.5 below represented not available in the analysis.

The likert scale was used in rating the responses collected from the correspondents. The Likert scale are: Strongly Agree (SA), Agree (A), Strongly Disagree (SD), and Disagree (D). And their values are as follows: (SA) 4, (A) 3, (SD) 2, (D) 1 and from which a mid-point mean value was calculated. Formula

Σ = Sum of

X = Nominal Value

N = Total Number of Respondents

Formula for Standard Deviation

Σ = FXx

Σ = Sum of

F = frequency

X = Nominal value

N = Total number of Respondents

The numeric values assigned to a different scaling items used as follows:

SA/Strongly Agree = 4

A/Agree = 3

D/Disagree = 2

SD/Strongly Disagree = 1

The mean value therefore $= \frac{4+3+2+1}{4} = \frac{10}{4} = 2.5$

CHAPTER FOUR

4.0

RESULT AND DISCUSSION OF DATA

4.1 Data Analysis and response to Research Questions

4.1.1 Research Question 1: What is the percentage of educational technology students using telegram?

Table 4.1: Percentage Distribution of the sex of the respondents from the checklist

Response	Frequency		Percentage %	
	Male	Female	Male	Female
200 level	13	10	56.52	43.48
300 level	14	13	51.85	48.15
Total	27	23	54	46

Table 4.1 shows the percentage and frequency distribution of the sex of respondents. Male respondents are 27 and have 54% while the female respondents are 23 with 46%.

4.1.2 Research Question 2

Is there any negative influence of telegram on the academic performance of educational technology students in Federal University of Technology Minna.

Table 4.2: Mean response on the negative influence of telegram on the academic performance of educational technology students in Federal University of Technology Minna.

S/N	ITEMS	N	Mean	Standard Deviation	Decision
1.	Immoderate use of telegram can affect students' academic performance.	50	2.72	1.232	Agreed
2.	Time managements plays a important role in determining the success and failure of a student's when using telegram for academic activities	50	2.61	1.001	Agreed
3.	Telegram get Students distracted and time consuming if not well properly used.	50	2.54	1.320	Agreed
4.	Students devote more attention and time to telegram than they do for their normal studies.	50	2.40	1.210	Not Agreed
5.	Frequent usage of telegram has a effect physical health.	50	2.52	1.222	Agreed
6.	There is a problem of internet connection	50	2.73	0.921	Agreed
7.	Telegram addiction can cause another type of addiction like repulsive buying, gambling and pornography.	50	2.65	0.872	Agreed
8.	College are unsure as to how to effectively integrate telegram in the learning-teaching process.	50	2.60	1.234	Agreed
9.	The curriculum does not allow enough time to integrate the usage of telegram for learning-teaching process	50	2.59	0.923	Agreed
10.	Students tends to spend more time socializing through telegram and spent less time on their studies.	50	2.66	1.256	Agreed
Grand Mean		50	2.60		Agreed

Decision Mean: 2.50

Table 4.2 shows the Mean and Standard Deviation of responses on the negative influence of telegram on the academic performance of educational technology students in Federal University of Technology Minna. The table reveals the computed mean score of 2.72 with standard deviation of 1.232 for item one, 2.61 with standard deviation of 1.001 for item two, 2.54 with standard deviation of 1.320 for item three, 2.40 with standard deviation of 1.210 for item four, 2.52 with standard deviation of 1.222 for item five, 2.73 with standard deviation of 0.921 for item six, 2.65 with standard deviation of 0.872 for item seven, 2.60 with standard deviation of 1.234 for item eight, 2.59 with standard deviation of 0.923 for item nine, 2.66 with standard deviation of 1.256 for item ten. The table revealed further that, the grand

mean score of responses to the 10 items was 2.60 which was greater than the decision mean scores of 2.50. This implies that educational technology students face challenges in using telegram on their performance in Federal University of Technology Minna.

4.1.3 Research Question 3

Is there any challenges of telegram on the academic performance of educational technology students in Federal University of Technology Minna.

Table 4.3: Mean response of the influence of telegram on the performance of educational technology students in Federal University of Technology Minna.

S/N	ITEMS	N	Mean	Standard Deviation	Decision
1.	Telegram make learning easier at everywhere, every time and at any place for educational students.	50	2.63	1.233	Agreed
2.	Telegram will help students manage their time properly during their studies period.	50	2.71	1.020	Agreed
3.	Educational students will be able to reach their lecturer one on one for clarity of lessons which they have missed out on with ease through telegram.	50	2.80	1.121	Agreed
4.	Frequent usage of telegram can trigger mental health problem.	50	2.65	1.234	Agreed
5.	The usage of telegram creates a safe space for students to escape from social environmental/problems.	50	2.69	0.921	Agreed
6.	Telegram promotes multitasking while using it for academic purposes.	50	2.81	0.871	Agreed
7.	Educational students learned a lot when using telegram that would otherwise be difficult to learn.	50	2.73	0.721	Agreed
8.	Telegram help motivating educational students to participate in class during the learning process.	50	2.91	0.826	Agreed
9.	Telegram help other students and the lecturers become equal participants in the knowledge sharing process.	50	2.78	1.244	Agreed
10.	The information and data collection in telegram are helpful for academic performances.	50	2.57	0.970	Agreed
	Grand Mean	50	2.73		Agreed

Decision Mean: 2.50

Table 4.3 shows the Mean and Standard Deviation of responses on the influence of telegram on the performance of educational technology students in Federal University of Technology Minna. The table reveals the computed mean score of 2.63 with standard deviation of 1.233 for item one, 2.71 with

standard deviation of 1.020 for item two, 2.80 with standard deviation of 1.121 for item three, 2.65 with standard deviation of 1.234 for item four, 2.69 with standard deviation of 0.921 for item five, 2.81 with standard deviation of 0.871 for item six, 2.73 with standard deviation of 0.721 for item seven, 2.91 with standard deviation of 0.826 for item eight, 2.78 with standard deviation of 1.244 for item nine, 2.57 with standard deviation of 0.970 for item ten. The table revealed further that, the grand mean score of responses to the 10 items was 2.73 which was greater than the decision mean scores of 2.50. This implies that using of telegram influence the performance of educational technology students in Federal University of Technology Minna.

4.4 Hypothesis Testing

Ho₁: There is no significant difference in the challenges face by educational technology students in using telegram base on gender in Federal University of Technology Minna.

Table 4.4: T-test for the difference in the challenges face by educational technology students in using telegram base on gender in Federal University of Technology Minna.

Group	N	Df	x	SD	t-value	p-value	Decision
Male	27	2.33	0.46				
		48				-0.89	0.35
NS							
Female	23	2.43	0.26				
No Significant at 0.35>0.05 level							

Table 4.4 revealed that there was no significant difference in the challenges face by educational technology students in using telegram base on gender in Federal University of Technology Minna. The p-value of 0.35>0.05 which was greater than 0.05, confirmed that there is no significant difference in the challenges face by educational technology students in using telegram base on gender in Federal University of Technology Minna. Hence, the null hypothesis was accepted and implies that there is no in the challenges face by educational technology students in using telegram base on gender in Federal University of Technology Minna.

4.5 Discussion of Findings

Finding from the analysis revealed that students are familiar with Telegram, as the responses show a grand mean score of 2.60 shows that the challenge face by educational technology students in using telegram base on gender in Federal University of Technology Minna was above the established mean of 2.50. This finding is in line with Hashim, Yunus, & Embi, (2018) studies indicate the integration of technology in education has contributed to the development of the interest of the students in academic achievement.

The data analyzed also revealed the influence of Telegram on students' performance in Federal University of Technology Minna, with the grand mean score of 2.73 which was above the already established decision mean of 2.50, indicating that positive influence of Telegram on students' performance at Federal University of Technology Minna, which is in line with findings of Polly& Binns, (2018) study on the influence of students' Utilization of Telegram application for gaining knowledge and enhance students' achievement.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study revealed that there is positive influence on students' performance that make use of

Telegram application for educational activities daily. A lot of benefits abound in the use of Telegram such as, sharing information and ideas, improving reading skills, resourceful communication, increase student's participation through the group chat, etc. The findings of this study clearly shown that Telegram has positive influence on education technology students' learning performance, the study also discovered that most education technology students use Telegram in their academic work. They include using Telegram apps to do their assignment and project work, share academic information with their friends, keeping track of new innovations relating to education in the country, use Telegram group chat and to take part in discussion relating to educational activities.

5.2 Recommendations

Based on the findings of this study, the following recommendations are made:

1. The adoption and integration of telegram app in an attempt to resolve the late delivery of learning modules as well as learning convenience for distance education technology students.
2. Internet access should be made available for both lecturers/instructors and students at tertiary institution.
3. Seminar, conferences and workshops should be held to enlighten instructors/lecturers and students on the benefits of Telegram in teaching and learning.
4. Government and Stakeholders should provide computers, stable power supply, mobile devices and ICT centers in Universities.

5.3 Suggestion for further study

This study was limited to Federal University of Technology Minna, Niger State. The study can as well be extended to other universities in Nigeria, using a larger sample size. Studies could be conducted on the:

1. The use and role of Telegram in education.
2. Its impact on academic achievement of tertiary institution students in Nigeria.

3. Effect of Telegram participation on student academic performance across gender.
4. The impact of Telegram on undergraduate students.

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APPENDIX

INFLUENCE OF TELEGRAM IN ENHANCING EDUCATIONAL STUDENTS PERFORMANCE IN FEDERAL UNIVERSITY OF TECHNOLOGY MINNA SECTION A: BIODATA

PERSONAL DATA OF RESPONDENTS

Name of Department.....

LEVEL: 200 () 300()

Gender: Male Female

SECTION B

Instruction: Tick (✓) against the correct answer that reflects your degree of agreement or disagreement with the statement. There is no right or wrong answer. Note that SA = strongly agree A = Agree SD = Strongly Disagree D = Disagree

Research Question 1: What is the percentage of educational technology students using telegram?

Table 1: Checklist of student using Telegram for learning

	Variable
Used	Not Used _____
Telegram _____	

Research Question 2: What are the challenges facing educational technology students in using telegram on their performance in Federal University of Technology Minna?

Table 2

SN	ITEMS	SA	A	SD	D
1.	Immoderate use of telegram can affect students' academic performance.				
2.	Time managements plays an important role in determining the success and failure of a student's when using telegram for academic activities.				
3.	Telegram get Students distracted and time consuming if not well properly used.				
4.	Students devote more attention and time to telegram than they do for their normal studies.				
5.	Frequent usage of telegram has an effect physical health.				
6.	There is a problem of internet connection.				
7.	Telegram addiction can cause another type of addiction like repulsive buying, gambling and pornography.				
8.	College are unsure as to how to effectively integrate telegram in the learning-teaching process.				
9.	The curriculum does not allow enough time to integrate the usage of telegram for learning-teaching process.				
10.	Students tends to spend more time socializing through telegram and spent less time on their studies.				

Research Question 3: What is the influence of telegram on the performance of educational technology students in Federal University of Technology Minna?

Table 3

SN	ITEMS	SA	A	SD	D
1.	Telegram make learning easier at everywhere, every time and at any place for educational students.				
2.	Telegram will help students manage their time properly during their studies period.				
3.	Educational students will be able to reach their lecturer one on one for clarity of lessons which they have missed out on with ease through telegram.				
4.	Frequent usage of telegram can trigger mental health problem.				
5.	The usage of telegram creates a safe space for students to escape from social environmental/problems.				
6.	Telegram promotes in multitasking while using it for academic purposes.				
7.	Educational students learned a lot when using telegram that would otherwise be difficult to learn.				
8.	Telegram help motivating educational students to participate in class during the learning process.				
9.	Telegram help other students and the lecturers become equal participants in the knowledge sharing process.				
10.	The information and data collection in telegram are helpful for academic performances.				