



Cyberloafing/Cyberslacking in educational institutions: Examining the positive and negative consequences on students academic activities

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Abstract

It won't be an overstatement to state that the technological advancements of the present century have effectively contributed to innumerable human activities in uncountable ways. These information and communication technologies have led to easy accessibility of all forms of information within and beyond national boundaries. These technological discoveries have also led to effective job performance at various levels of human activities. However, these same technological advances that made life more lively and enduring, such as better-quality job performance and virtual teamwork/collaboration have turned a double-edged sword/knife that acts in two ways and spears nobody. The use of the Internet, one of the technological tools, tablets, and smartphones brought both positive and negative consequences, especially in the academic sector. Cyberloafing/cyberslacking, which was formerly limited to the working environment has recently found its way into the education arena, as students make use of the Internet and also come to the classroom with other technological devices, such as smartphones, laptops, and others alike. These digital devices that are supposed to assist students perform their various academic activities, such as class assignments and answering online quizzes, have resorted to multitasking activities that distract their academic work. Consequently, the paper conceptualized cyberloafing/ cyberslacking, looked at forms of cyberslacking behaviours among students. The paper reflected on why students cyberloaf/cyberslack in the classroom environment, and examined the positive and negative effects of cyberloafing in academics; The paper also made suggestions on how students could effectively maximize internet & smartphones, tablets, and other technological devices in the learning process to limit the effects of cyberloafing/ cyberslacking in students' learning activities. However, the paper did not ignore proffering solutions on how to combat academic cyberloafing/cyberslacking behaviours in the school environments.

Keywords: Cyberloafing, students, academic environments, digital technologies and digital, distractions

Introduction

The 21st Century has been demarcated as a different world from all others because many things are perceived and done differently. Gone are the days when the major means of communication is through face-to-face. The dawn of the Internet has given birth to several digital terms, such as Cyberloafing, Cyberslacking, Cybersecurity, Cybercrime, Cyberbullying, Virtual learning, Virtual workmanship, and the rest of the cybers' and virtuals'. Similarly, all types of digital devices have been produced to conform with the digital age. Additionally, every aspects of human activities have become digitalized, which makes us glue our eyes to all forms of digital devices, such as computers, mobile phones, and digital screens to cope with the digital world.

Li, Xia, Zhang, Wang and Wang (2022) ^[23] assert that with the gradual penetration of network media into various fields of peoples' lives, the relationship between network behaviour and the sense of meaning of life is bound to be closer and closer. Researchers have developed widespread interest on cyberloafing because it is said to have cost businesses worldwide billions of naira annually. Researchers believe that cyberloafing is a problematic behavior of network use (Kim and Byrn, 2011) ^[19], and it has become a prevailing topic in the field of psychological research. Khansa *et al* (2018) ^[18] opined that academic literature has demonstrated both the prevalence and severity of cyberloafing at workplaces.

Hence, Udemy (2018) revealed the adverse effects of employees' cyberloafing in work-related places by reporting that 62% of employees wasted about 60 minutes of worktime, per day, through personal phone use alone. Conner (2015) also asserts that employees' cyberloafing has hit an alarming critical stage. Therefore, the interest of this paper is to explain to readers the meaning of cyberloafing, its effects in workplaces, the causes, and suggestions that will reduce the incidents. The authors believe that this paper will add to the existing literature on this topic and will as well be of immense benefit to most organizations that intends to achieve maximally.

Conceptualizing cyberloafing in academic environments

We are in the digitalized world; this generation has come to embrace the technology, and the majority of have the liberty to often access the Internet and other technological devices to perform one activity or the other. Call it cyberslacking or cyberloafing, they are technological terms coined in recent times by scholars in the field of Information and Communication Technologies. Just like most persons are unaware of their involvement in cloud computing, in the same way, majority of us are unknowingly practicing cyberloafing on regular basis.

When students conducting non-academic internet access during classroom periods, it is referred to as cyberloafing/cyberslacking. This phenomenon started when

employees use the Internet for non-productive behaviours at workplace; that is, using the company's internet access during productive hours for matters unrelated to their job (Mcnicol, 2017) ^[28]. According to (Akçayır, Dundar, Akçayır, 2016 ^[2], Arabacı, 2017 ^[7], Varol & Yildirim, 2018) ^[45], the concept of cyberslacking was later used in an educational setting to refer to the behavior of accessing non-productive internet sites; that is, the non-academic internet access pursued by students during classroom sessions. As further opined by Akçayır, Dundar, Akçayır, 2016 ^[2] and Varol & Yildirim (2018) ^[45], cyberslacking in the academic context of higher education, refers to the use of the internet by students, during classroom sessions, for non-academic access, which is irrelevant to the classes in progress.

Cyberloafing/cyberslacking is originally defined as the use of Internet access and IT equipment for non-business or non-educational objectives during work or study hours (Aybas & Gungor, 2020) ^[8]. Gerow, Galluch, & Thatcher (2010) conceptualized cyberloafing as any electronically-mediated activity students engaged in during classes that instructors do not consider it class-related, such as sending personal e-mail messages, playing online games, visiting deal-of-the-day Web sites, posting status updates on social networks and watching videos online. Cyberslacking/Cyberloafing refers to students' non-academic internet access during lectures. In the same manner, Akbulut, Dursun, Donmez & Sahin, 2016 ^[5]; Arabacı, 2017 ^[7]; Varol & Yildirim, 2018 ^[45] have defined cyberslacking or cyberloafing in the academic context as internet access during lectures for non-academic purposes.

Simanjuntak, Nawangsari & Ardi (2022) ^[36, 39] also described Internet access for non-academic purposes during lectures as academic cyberslacking. University students, as members of the digital generation, often access the internet for non-academic purposes while attending lectures in the classroom (Simanjuntak, Nawangsari & Ardi, 2019) ^[38]. Pindek *et al* (2018) ^[33] defined cyberloafing as when employees engage in technologically-mediated malingering behaviours instead of work-related behaviors. Academic cyberloafing is nothing but students the of internet connection(s) to perform activities that are not related to what they were originally assigned to do in class/school.

Furthermore, cyberloafing was originally used to describe the phenomenon by which employees use network tools provided by the organization to browse non-work-related websites, sending and receiving personal e-mails, which has an impact on job performance during working hours (Li, Xia, Zhang, Wang & Wang, 2022) ^[39].

However, recent researches on cyberloafing have also been associated with those in the academic environment, as some studies have revealed that cyberloafing among college students, which has deviated them from learning is even more serious than that among employees (Cutino & Nees, 2016) ^[10]. For instance, students using the internet connection in the classroom to play games, watch YouTube videos, checking, sending, and replying to private emails, scrolling on social media sites, ordering, buying, and selling items online, instead of sourcing information for academic activities. Therefore, when students use the internet connection to engage on non-academic activities to socialize online, instead of doing their academic assignments/home-works, they are practicing academic cyberloafing.

Similarly, in the academic circle, the use of electronic media by college students not for the purpose of learning, in or out of classroom when completing learning tasks is referred to as cyberloafing in learning (Cutino and Nees, 2016 ^[10] and Flanigan, 2018) ^[11].

Forms of Cyberslacking/Cyberloafing Behaviours Among Students

There are several forms of cyberloafing/cyberslacking behaviours perpetuated online by students in which they visit inappropriate sites during lectures or lessons. The forms of these behaviours engaged in by students during lessons include the following: -

Personal emailing (sending and receiving text messages) to friends, accessing Facebooks, social media, blogging, visiting game sites, playing digital games, and online shopping (Simanjuntak, NAF & Ardi, 2019) ^[38]. Other students are involved in tweeting and retweeting, chatting, and writing comments on social network sites, web browsing (Kawamoto, 2022), interacting or chatting with friends, uploading, accessing the uploaded materials, and commenting on posts or uploads made by friends. Others access and download online contents from friends and relatives, such as downloading videos and music illegally. Students' are also involved in online purchases sites, banking, auctions, checking online products, and surfing news or sports sites. Also included are reading latest online news on matters concerning a person, or his surroundings via Opera news, or any other social media platforms (Simanjuntak, Nawangsari & Ardi, 2022) ^[36, 39]. Students as well cyberloaf/cyberslack via platforms, such as TikTok, Instagram, YouTube, Spotify and Netflix and WhatsApp (Loh, Sun & Lim, 2022) ^[26]. Other students/learners visit or access Instagram, Telegram, Facebook, Twitter (now X), and others notable sites at the detriment of their academic activities in the class. Additionally, students are involved in online gambling, betting, surfing adult websites, participating in chat rooms, and watching online videos. Others students as well focused on web-based activities, such as blogging, and using social network sites in their studies (Akbulut *et al.*, 2016, 2017 ^[5, 6]; Baturay & Toker, 2015; Karaođlan-Yılmaz *et al.*, 2015).

Why Students Cyberloaf/Cyberslack in the Classroom

In a research conducted by IPSOS (2016) across 23 countries of the world revealed that more than two-thirds of the world's population could not imagine life without the Internet. The use of the Internet today has been popularized and its extensive impact on human life cannot be overemphasized; this is especially true of students as they use it for various academic activities in school. But this Internet that makes accessibility of educational resources easy and most times free can easily become a temptation to students, stated (Zhou, Li, Tang and Cao, 2021) ^[49]. According to these scholars, students often have to make choice between sticking to learning tasks and pursuing more desirable leisure activities. As a result of the Internet, Kim (2023) found out that cyberloafing/cyberslacking has become the new norm.

Currently, teachers/educators cannot claim to be unaware that students' glance through their mobile phones and similar devices, which they normally place on their desks/tables in the classroom while lectures are going on. This makes them easily distracted in many during lessons.

Students constantly cyberloaf in the classroom setting, which is attributed to factors.

Varol & Yıldırım (2017) ^[44] affirmed that lecturers with insufficient capability to deliver materials attractively may trigger cyberslacking behavior by students. According to the scholars, students have highlighted that unattractive lecture delivery may cause boredom, which they try to reduce by performing cyberslacking. According to (Simanjuntak, Nawangsari & Ardi, 2022) ^[36, 39], the role of lecturers in occasioning cyberslacking is in line with the ARCS thinking on extrinsic learning motivation, formulated by Keller (2010) ^[17], which states that a teacher must meet the requirements related to the elements of Attention, Relevance, Confidence, and Satisfaction (ARCS) during teaching sessions (Li & Keller, 2018) ^[22]. Students have the perception that lecturers fulfill the requirements related to the elements of Attention, Relevance, Confidence, and Satisfaction (ARCS) in his or her teaching session, would reduce their ability to perform cyberslacking in class.

Most students are at their youthful age, particularly at the point of entering universities. As teenagers or youths, they have the urge to socialize with their peers within and across their current universities. Hence, the best method to day is to use the cheapest and the most affordable media available to interact with their fellow university students, friends and relatives. The role of social media cannot be overlooked in this respect. Social media has become the main instrument or a point of contact among students, which has become a triggering factor for academic cyberslacking/cyberloafing, as students want to be consistently in touch with their peers, despite being involved in university work (Alt, 2017) ^[3]. This is in line with several research results on cyberslacking, which states that one cyberslacking behavior performed by students in class is accessing social media (Özcan, Gökçeşlan & Yüksel, 2017). Researches have it that students exchange inappropriate information through social media during lessons (Dursun, Donmez & Akbulut, 2018).

Taneja, Fiore & Fischer (2016) and Sheikh, Atashgah & Adibzadegan (2015) affirmed that several studies on cyberslacking have used the theory of planned behavior in explaining cyberslacking. These studies as referenced by the scholars highlighted factors which may cause cyberslacking, such as attitude, subjective norms, and perceived behavioral control. One of the studies on cyberslacking, related to the theory of planned behavior (TPB) was conducted by Taneja, Fiore and Fischer (2015) ^[42] mentioned the attitudes of students being supportive of cyberslacking, which may encourage students to perform cyberslacking in class.

Another study conducted by Askew, Buckner, Taing, Ilie, Bauer and Coovert (2014) on cyberslacking also states that perceived behavioral control was an important factor in cyberslacking. That is, once someone has a perception that it is easy to perform cyberslacking without the authority noticing, then, that particular individual would be liable to perform cyberslacking in the process of completing a task (Askew, Buckner, Taing, Ilie, Bauer & Coovert, 2014). Based on the theory of planned behavior, the factors triggering cyberslacking are limited to three: attitude, subjective norms, and perceived behavioral control, which forms the behavioral intention to perform cyberslacking behavior (Askew, *et al*, 2014).

Cyberloafing/cyberslacking is perpetuated when students are unable to understand the materials delivered by the

lecturers; they will choose to engage in academic cyberslacking (chatting via social media) (Alt, 2017) ^[3]. A study by Alt (2017) ^[3] also showed that when students experience difficulty, or are unable to keep up with the lecturers, they will choose to engage in academic cyberslacking. In this context, students may have low ARCS motivation, since the lecturers lack the capability to deliver the materials attractively (attention) and relevantly (relevance), which would encourage students to engage in academic cyberslacking by accessing social media (Alt, 2017) ^[3].

Students of this digital generation have the potential to engage in academic cyberslacking, owing to the limitations of surveillance by the lecturer. When students observe that they cannot be caught why doing an act whether good or bad, there is every tendency that they will continue to that act (Kawamoto, 2022). Again, students might use it for a much-needed break for their mental health or well-being. For example, loneliness can make some students to turn to social media to offset the lack of interaction with lecturers and the content. Some students may find the much needed emotional support they need to power through the rest of the day via social media.

Studies have revealed that student cyberloafing could also be dependent on academic stressors. Academic stressors are said to be closely related to most common factors affecting students' behavior. This include assignments, such as writing term papers, taking tests, constant pressure on studying, and other school activities which are unavoidable (Zhou *et al*, 2021) ^[49]. According to the general strain theory, it has been said that a person is more likely to experience negative emotions and afterward engage in unexpected or addictive behaviours when faced with a high level of strains. Hence, when students are faced with more academic stressors (especially students with low trait self-control (Zhou *et al*, 2021) ^[49] and having to deal with various learning tasks in school, they would perceive more emotional distress and resort to cyberloafing/cyberslacking as ways to get rid of them. Lim and Chen (2012) had already stated that cyberloafing is an effective way to escape from negativity, in part because of its "recovery" impact.

Finally, Kawamoto (2022) has identified major causes of cyberslacking/cyberloafing thus: loneliness and workplace ostracism, stress, burnout, workplace aggression, emotional or physical pain, boredom, and desire to find resources that make work and life better.

Positive Effects of Cyberloafing/cyberslacking in Academics

Presently, the internet has a crucial impact on every person's life. As a result, computer and internet technologies have become the bases for the so called "e" phenomenon, such as e-education, e-trade or commerce, e-communication, e-business, e-health, and so on. These electronic devices have negatively or positively impacted on the students' academic programmes in school. Now, let us examine how cyberloafing/cyberslacking has positively impacted students in their academic pursuits.

Consequently, contemporary students are allowed to bring their mobile or digital devices, such as smartphones, laptops and other digital devices into the classroom, which students are expected to be used to access or search information for their assignments or answering the online quiz for academic purposes. The provision of the Internet in schools is to aid

student-centered learning. Therefore, the availability of the internet access in schools or classroom is meant to assist students in their learning process. It enables students to easily access online reference materials, such as books, magazines, journals, encyclopedias, gazettes, and other learning information, to improve the quality of learning outcomes for students (Lim, 2023) ^[25]. Lim, 2023) ^[25] in his study, observed that smartphones are generally allowed in classes in Singapore's institutions of higher learning as it allows students to engage with class materials in a dynamic way because smartphones and other IT devices provide immersive learning experiences as students engage in interactive learning activities, such as class polls, pop quizzes, and educational games.

The use of the Internet, smartphones, tablets and other technological devices in the classroom has the possibility of enhancing the learning process, as students can use their smartphones to record lectures, take notes, and also contribute in class discussions (Lim, 2023) ^[25]. Cyberloafing/cyberslacking also addresses individuals' well-being, such as better coping with personal problems, job stress, increased creativity, performance, productivity and job satisfaction (Akar & Coskun, 2020 ^[4]; Özkalp & Yıldız, 2018). Karataş (2018) ^[15] emphasize the positive impact of using digital devices in class, such as increased participation, interaction with the instructor, and active learning.

Negativities of Cyberloafing in Academics

The rapid developments in ICTs have resulted in the Internet and other technological devices playing important role in the lives of every human being. However, when these technological devices are misused, they can lead to harmful effects in life. In the same manner, Masadeh (2021) ^[29] stated that Internet connection and smartphones are advantageous for all people nowadays, but warned that they should consider their demerits like any other modern technologies. The scholar furthermore maintained that smartphones, once connected to the Internet can provide access to different materials and generate the sense of comfort, but they may also result in anxiety and unhealthy and negative psychological dependency.

Study on cyberloafing/cyberslacking has progressively attracted the attention of scholars in information and communication technology due to the widespread use of digital devices in educational environments. Researches reveal that students' have the tendency to cyberloaf during teaching and learning processes due to their perpetual use of mobile technologies and wireless networks in in-class activities). This seriously hinder their performances as a result of distractions during their academic activities in their classroom setting (Yılmaz, Yılmaz, Öztürk, Sezerc, Karademir, 2015) ^[47]. As revealed by Loh & Sun & Lim (2022) ^[26], some students avowed that smartphones do distract in view of the numerous notifications that interrupt their reading experience.

As Spector *et al* (2006) states, cyberloafing is considered a counterproductive work behavior that harms organizations and/or organization stakeholders; this involves abuse (verbally mistreating someone at work), production deviance (purposefully working slowly or incorrectly), sabotage (purposefully wasting materials or damaging equipment), theft (reporting more hours than actually worked, or taking supplies home without permission), and

withdrawal (taking longer breaks or coming in late). Cyberloafing is conceptually closest to both production deviance, which is doing work incorrectly or poorly (Lim, 2002), and withdrawal, which is working less time than required (Askew *et al*, 2012).

However, in the academic sector, cyberloafing has been found to be counterproductive to students' academic achievements in schools. Lepp, Barkley & Karpinski (2014) ^[21] revealed that previous studies showed that the impact of non-academic internet access while in class could lead to a decrease in academic scores and difficulties in paying attention to lectures. Therefore, the impact of cyberslacking behavior is the absorption of learning material during lectures that is not optimal and causes students' low academic achievement).

One of these challenges is the involvement of students in accessing materials which are non-academic, and irrelevant to the course being undertaken in the classroom (Gökçearslan, Mumcu, Haşlamam & Çevik, 2016 and Arabacı, 2017) ^[7]. This non-academic access is often performed by students on internet sites, such as those of social media, sites irrelevant to the courses in progress, sites devoted to online shopping, or offering digital games (Akbulut, Dursun, Dönmez & Şahin, 2016) ^[5]. Other research conducted also revealed that students in class tutorials often access social media sites, such as Facebook, which are quite irrelevant to the courses at hand (Talbert, Hofkens & Wang, 2019). Furthermore, students are also found chatting, sending emails, and accessing irrelevant sites during classroom learning sessions, which also contributes to their academic underachievement.

Based on the results of previous studies as identified by (Lepp, Barkley & Karpinski, 2014) ^[21] revealed that non-academic internet access while in class could lead to a decrease in academic scores and difficulties in paying attention to lectures. Also, absorption of learning material during lectures that is not ideal and causes students' low academic achievement (Simanjuntak, 2019) ^[38]. As Lim (2023) ^[25] noted, it is no secret that students can easily get distracted in numerous ways if they are involved in cyberslacking/cyberloafing during lectures. The scholar as also affirmed that students who don't see cyberloafing as wrong, are more likely to engage in it.

Lim (2023) ^[25] in his study also found that students who engage in cyberloafing are less likely to pay attention and understand what is being taught and feel disconnected from the class. The author further stressed that while most people believe that cyberloafing in class does not hurt others, it can actually create a disruptive learning environment, and an unfair disadvantage for those who do not engage in it. In support of Lim (2023) ^[25], Soh, Koay and Lim (2018) ^[40] in an earlier research revealed that using these devices for non-class-related purposes during lessons can be distracting and detrimental to students' academic performance, as well as frustrating for instructors.

Saritepeci (2019) ^[35] has also argued that apart from the fact that cyberloafing is one of the phenomena that adversely affects the efficiency and productivity, it also has a negative impact on the learning environment as it causes distraction and affects students' attention and ability to focus (Soh, Yeik, & Lim, 2018). Gozum, Erkul & Aksoy (2020) ^[13] affirmed that some studies found out that students who engage in multitasking activities, such as playing online games and texting during lecture time are usually distracted

from learning, and suggested that teachers should make the lesson more interesting and engaging to prevent learners from cyberloafing/cyberslacking. In the same manner, in a research conducted by Zhou, Li, Tang and Cao (2021) [49], the findings revealed that cyberloafing can fluctuate over periods, especially for individuals who lack self-control. Mendoza *et al* (2018) in their contributions to the negativity of students' cyberslacking/ cyberloafing opined that it impacts on students' concentration, attention, comprehension, and recall of the course material.

Maximizing Internet & Smartphones Use by Students in Learning Process

We are in a digitalized world; this generation has come to embrace technology, and the majority of us have the liberty to often access the Internet and other technological devices to perform one activity or the other. Call it cyberslacking or cyberloafing, they are technological terms coined in recent times by scholars in the field of Information and Communication Technologies. Just like most persons are unaware of their involvement in cloud computing, in the same way, the majority of us are unknowingly practicing cyberloafing regularly.

When students conduct non-academic internet access during classroom periods, it is referred to as cyberloafing/cyberslacking. This phenomenon started when employees use the Internet for non-productive behaviours at the workplace; that is, using the company's Internet access during productive hours for matters unrelated to their jobs (Mcnicol, 2017) [28]. According to (Akçayır, Dundar, Akçayır, 2016 [2], Arabacı, 2017 [7], Varol & Yildirim, 2018) [45], the concept of cyberslacking was later used in an educational setting to refer to the behavior of accessing non-productive internet sites; that is, the non-academic internet access pursued by students during classroom sessions. As further opined by Akçayır, Dundar, Akçayır, 2016 [2] and Varol & Yildirim (2018) [45], cyberslacking in the academic context of higher education, refers to the use of the internet by students, during classroom sessions, for non-academic access, which is irrelevant to the classes in progress.

Cyberloafing/cyberslacking is originally defined as the use of Internet access and IT equipment for non-business or non-educational objectives during work or study hours (Aybas & Gungor, 2020) [8]. Gerow, Galluch, & Thatcher (2010) conceptualized cyberloafing as any electronically-mediated activity students engage in during classes that instructors do not consider class-related, such as sending personal e-mail messages, playing online games, visiting deal-of-the-day Web sites, posting status updates on social networks and watching videos online. Cyberslacking/ Cyberloafing refers to students' non-academic internet access during lectures. In the same manner, Akbulut, Dursun, Donmez & Sahin, 2016 [5]; Arabacı, 2017 [7]; Varol & Yildirim, 2018 [45] have defined cyberslacking or cyberloafing in the academic context as internet access during lectures for non-academic purposes. Akbulut, Dursun, Donmez & Sahin, 2016 [5]; Arabacı, 2017 [7]; Varol & Yildirim, 2018) [45].

Combating Academic Cyberloafing in School Environments

In the 21st Century school environment, there is every need for availability of Internet services in every school to assist in the student-centered learning process. Providing the

Internet service or technology on campuses is to facilitate or provide quick access to academic learning resources, namely, e-books, e-dictionaries, e-encyclopedias, academic e-journals, e-magazines, and other e-literary learning materials that are aimed to improve the quality of learning outcomes for students (Turel & Sanal, 2018) [43]. Talbert, Hofkens & Wang (2019) [38] and Whillans and Chen (2016) [46] emphasized that this approach to the learning process, that emphasizes on student autonomy in accessing learning sources, is in line with student-centered learning, which focuses on students being active participants in the learning process.

It has become so unfortunate that the ease of access to these instructional media on the Internet during the learning process in the school has now become a big challenge in the learning process for the students' academic programmes. This easy and quick access to learning materials have resulted to students accessing materials from social media sites that are devoted to online shopping, or offering digital games that are non-academic or irrelevant to their courses in the classroom; other students are also found chatting, sending electronic mails, and accessing inappropriate sites during classroom learning sessions (Arabacı, 2017) [7].

Cyberloafing or cyberslacking is said to be counterproductive, and deviates from organizational norms; many serious consequences of cyberloafing have been identified in the academic circle. Students use of Internet for none-academic-related activities have been identified by the teachers, parents, and the students alike, as they spend more time to inappropriate activities on social media and other related websites at the expense of their academic assignments, which is tantamount to waste of time and procrastinations.

Students have the perception that if lecturers fulfill the requirements related to the elements of Attention, Relevance, Confidence, and Satisfaction (ARCS) in his or her teaching session, as formulated by (Keller, 2018) [22] would reduce their ability to perform cyberslacking in class (Li & Keller, 2018) [22]. Training students in online behavior management in relation to cyberslacking may help students to be more constructive in managing their online behaviors (Simanjunta *et al*, 2022) [36, 39].

Hence, Loh & Sun & Lim (2022) [26] recommended that putting time aside in school for reading, helping students to find relevant online reading sites, installing reading apps and making time for recommendations are ways to introduce teenagers to more online reading material. Lim (2023) [25] suggested that to mitigate this, educational workshops and discussions can be held to raise awareness of the downsides of cyberloafing, while practicing mindfulness during class can promote better focus.

Lim (2023) [25] further suggested that Professors should lead by example and avoid cyberloafing in class, and that educational leaders must communicate their stance on cyberloafing and enforce policies related to it. Students should be made to know the harmful effects of cyberloafing, as previous research shows its links to lower test scores, decreased academic success, and smartphone addiction. By engaging students in such discussion as Lim (2023) [25] emphasized, it is possible to obtain their cooperation and ensure that cyberloafing among Gen Z does not become a significant problem in the learning process.

Lim (2023) [25] has also observed that recurring engagement in cyberloafing/cyberslacking behaviours can strengthen the

practices of procrastination and distractibility, which may disrupt someone from achieving his goals and negatively impact other areas of life, such as personal relationships. Thus, the scholar further stressed that cyberloafing habits developed during school may potentially persist into adulthood, and affect work performance. Metin-Orta and Demirtepe-Saygılı (2021) ^[30] suggested that educators should develop appropriate policies and interventions to manage misuse of the Internet and other technological devices in the classroom.

Summary

The 21st century has been acclaimed to be the century of information and communication technologies, where individuals have the openings to enhance their know-hows through the emergence of various applications, tools and devices (Ozdemir, Cakir, & Hussain, 2018) ^[31]. There is no doubt that the Internet and the other digital tools have various good opportunities that make life better. But the same technological tools that make life more meaningful have their own downsides, especially in the educational settings due to the problem of cyberloafing they create. Cyberloafing/cyberslacking is originally defined as the use of Internet access and IT equipment for non-business or non-educational objectives during work or study hours (Aybas & Gungor, 2020) ^[8]. Recently, these digital devices that transformed many aspects of human life is not only used to seek for information and entertainment, but also integrated into the education sector for the purposes of improving academic performance of students in schools.

This paper carefully explained cyberloafing/cyberslacking and forms of behaviours among students. The paper reflected on why students engage in this act in the classroom environment, and surveyed its positive and negative effects on students' academic programmes. Also, suggestions were made on how students could effectively maximize internet, smartphones, tablets and other digital technologies/devices in the learning process to limit the effects of cyberloafing/cyberslacking in learning activities. Finally, the paper proffer solutions on how to combat academic cyberloafing/cyberslacking behaviours in the /classroom/school environments.

Conclusion

The internet has come to stay, especially with our teenagers who are digital natives. Most students in schools have one form of digital tools or another, and these tools must be used wisely, particularly for academic purposes. Currently, students are seriously cyberloafing/cyberslacking in the classroom. Presently, many students or teenagers in the classroom are more concerned on online entertainments on several social media platforms than knowing about the learning possibilities afforded by their smartphones. Consequently, the teachers/lecturers, parents and adults in the society should, as a matter of urgency direct students to use their digital tools to resources that will promote academic activities during their lectures. Loh & Sun & Lim (2022) ^[26] have advised that given the pervasiveness of smartphone usage in today's world, especially in the in the classroom, guiding our teenagers to use their smartphones effectively is one way we can prepare them for life-long learning. The scholars further suggest that schools should

continue to play a key role in students' development of digital literacies and their use of technologies for learning, exclusively for those with lesser home support for learning such literacies. Lastly, there is a need for parents, teachers and adults to educated students or learners on the negative effects of cyberslacking/cyberloafing; at the same time guide and direct them on the effective and suitable utilization of these new digital technologies in the classroom/school in order not to waste their productive time (Ayebi-Arthur, Arhin & Aidoo, 2022) ^[9].

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