The Relationship between TikTok Use Experiences, Socio-demographics, and Academic Performance among Jimma University Students

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Abstract

TikTok as an educational, entertainment, socialisation, and information gratification platform has attracted great attention. However, its effect on students' academic performance is debated. Studies found that students spend long hours on the app, and such exposure results in poor time management. However, little is known about how TikTok experiences influence university students' academic performance. The study investigates the association between TikTok engagement experiences and university students' CGPA. The study employed a cross-sectional correlational research design. Out of 395 populations, the study selected 198 respondents using a stratified random sampling technique. A structured questionnaire and students' grade lists were used to gather quantitative data. To analyse the data, the study employed descriptive statistics and parametric tests, with the help of SPSS version 27 software (CI=95%). The analysis indicated a statistically insignificant relationship between demographic characteristics, current use of TikTok, and CGPA. It also revealed that using the app for education, entertainment, informativeness, and spirituality positively influences CGPA. Conversely, having 1k and above followers on TikTok, ever posting videos on TikTok, and making live streams on TikTok were negatively associated with students' CGPA. Specifically, the number of months since TikTok was joined, time spent on TikTok daily (in hours), and frequency of TikTok browsing per day negatively determined students' CGPA. The finding implies a need for revising the teaching-learning approach and proper guidance on TikTok usage to mitigate the negative effect the app exerts on students' academic performance.

Keywords: CGPA, Engagement experience, Influence, Jimma University, Purpose, TikTok

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1. Introduction

1.1 Background to the Study

TikTok is a social network focused on video consumption whose need is growing fast among the new generations. TikTok was initially launched in 2016 for the Chinese audience but, during the COVID-19 pandemic, the use of TikTok exploded all over the world as users searched for a way to connect (Chafe, 2023; GilPress, 2023; Nawi *et al*.2023). Currently, TikTok is one of the most widely used social media apps worldwide with more than 1.7 billion users as of 2023 (GilPress, 2023), and students are among these users. "TikTok, a popular social media platform throughout the world, has gained immense popularity among students worldwide" (Atinafu & Demelash, 2023, p.1).

According to Camilia *et al*. (2019), university students are the most dominant social networking site users. Further, as to the study of Aida *et al*. (2021), who is cited in Nor *et al*. (2023), TikTok is not only well accepted among university students as a tool for educational development, but also is well used "as a social media platform, a window for online learning, and a way to improve communication skills and technology skills" (p. 456).

In Ethiopia, higher education students with diversified demographic characteristics use TikTok (Eyerusalem, 2021). The hashtag marked #jimmauniversity specified different videos showing Jimma University students' lives, and funny videos in a dorm and other places. During informal observations and discussions with students, the researchers of the current study also witnessed that Jimma University students watch funny videos and video games inside and outside classrooms.

The wide use of social media among students in general and university students in particular alarms the importance of moving from the traditional educational approach to a blended approach to improve learning performance. Considering recommendations given by many researchers (e.g. Febrianti *et al*., 2022; Nadwa *et al*., 2022; Salomé *et al*., 2022) and understanding the advantages of the app, "Even educators have attempted to incorporate this app as an instructional medium in their classes to facilitate tertiary-level learning" (Escamilla-Fajardo *et al*. (2021), as cited in Ilianis & Nur, 2022, p.30). Likewise, to the researchers' experience, some instructors, at Jimma University, use social media (Telegram) to deliver assignments and instructional materials to students. Consequently, university students preferred this new method over the traditional mind map due to its usefulness (Ilianis and Nur, 2022; Nor *et al.* 2023). Likewise, to fit into the demands of the 21st century, currently, social media is incorporated as an independent course in the syllabus (curriculum) for the Media and Communication Studies program, at Jimma University. However, using social media is not without problems; how it is used makes a difference in academic performance. This research investigates the association between TikTok engagement experience and the CGPA of undergraduates of the College of Social Science and Humanities (CSSH) at Jimma University.

1.2 Statement of the Problem

Social media plays numerous roles in education. Studies found TikTok as a powerful platform for students to access, make, share, and watch videos for learning English (Annisa & Kiki, 2022), express themselves freely, improve their communication skills in general and English communication abilities in particular, and gain new experiences (Syifa, 2022; Zaitun *et al*., 2021).

However, using the app is not without problems. Different studies show that students in higher institutions are vulnerable to excessive use of social media including TikTok (Carlsson *et al*., 2023; Chamba-Rueda *et al.,* 2023; Hayen, 2023; McLaughlin & Sillence, 2023), and such vulnerability results in poor time management. TikTok not only takes the precious time that should be used for academic purposes but also distracts students' attention from accomplishing their academic tasks. Studies revealed that as the time undergraduate students spend on TikTok each day increases, their chance of becoming addicted to the use of the

app and distracted from pursuing the lesson and accomplishing school tasks increases (Annisa & Kiki, 2022; Herath, 2020; Mekler, 2021; Peter and Ebere, 2018). The reason for the destruction is that, according to these authors, the possibilities of access to different digital contents such as travel, food, sports, beauty, gaming, and others can divert their attention from focusing on the main academic activities like doing assignments. Hence, mismanagement of time because of indulging in the TikTok app could lead to poor academic performance.

The researchers of the current study, during their informal discussion with students, witnessed that many students with different demographic characteristics, from the College of Social Sciences and Humanities, at Jimma University, unwisely use their time. These students were seen being busy with smartphones, for entertainment purposes, in the vicinity of the college where Wi-Fi is freely accessible instead of spending time in the library for academic purposes or using the app as an internet library. Thus, the extent to which student's CGPA associates to engagement experience in the TikTok app, reasons for using the app, and demographic characteristics of the TikTok users calls for research.

Studies revealed conflicting findings about the effect social media such as TikTok exert on higher institute students' academic accomplishments. For example, quasi-experimental studies (Jacobs *et al.,* 2022; Roberd and Roslan, 2022) found that students' post-test scores improved after they used TikTok. Conversely, the study of Grace and Anne (2023), which measured the perceived relationship between TikTok use and students' academic performance, concluded that the app negatively impacts mass communication students' academic achievements. Other studies also found that posting and performing well on TikTok videos has a deteriorating effect on academic performance (e.g. Herath, 2020; Qureshi, 2022). However, these studies did not investigate the magnitude to which students' academic performance would be affected by purpose differences.

Additionally, studies show that the demographic characteristics of media users can influence academic performance. According to the findings of VandenBoogart (2006, as cited in Alam & Aktar, 2021), compared to their male counterparts, females spent much more time on Facebook. Conversely, another study found that males spent more time on sites related to social networking than females (Khan, 2012, as cited in Alam and Aktar, 2021). The same source indicated that respondents between the age group 15 and 25 prefer social networking websites for entertainment. According to GilPress (2023), the age group 18 to 34 is the largest TikTok user. Mekler's finding (2021) confirmed an absence of a significant association between socio-demographic characteristics and giving attention in a classroom due to being distracted by TikTok and the extent of time exerted on the app daily. Syed's (2013) study could not find a significant relationship between gender and scholastic performance of adolescents with heavy and low television viewing habits. Locally, the study conducted by Hussen *et al*., (2023), which examined the effect of television series viewing engagement and duration on the academic achievement of Jimma secondary school students, revealed the absence of a relationship between the educational performance and grade levels. However, the impact of the reasons and the time engagement magnitude in TikTok use by university students can be different from the reasons and the time engagement magnitude in television series viewing by secondary school students. In the case of TikTok, while the students are active, in the TV case, they are passive. Although several studies describe the demographic characteristics of TikTok users (e.g. Alam & Aktar, 2021; Mekler, 2021), studies that investigate the relationship between these characteristics and academic performance are limited. Our study anticipates that the demographic characteristics of TikTok users influence academic performance.

Locally, a few studies investigated how social media in general and TikTok in particular are used. According to Mebratu's (2014) findings, many undergraduates of Addis Ababa University spend, on average, from one to two hours per day, and they use Facebook mainly for personal and socialization purposes and slightly for academic purposes. The finding of Nebiat and Girum (2014) detected the absence of a significant relationship between time and frequency of login Facebook with postgraduate Jimma University students' GPA. In addition, it was found that using a mobile device to access Facebook had an inverse relationship with students' academic performance (Nebiat & Girum, 2014). But these studies excluded

TikTok. Eyerusalem's study (2021), conducted within high schools found in the Bole sub-city, assessed students' perception of addiction, cognitive dissonance, and dissonance behavioral change to exposure to the TikTok social media platform. The study concluded that TikTok addiction is significantly related to deteriorating academic performance. However, she assessed the issue from a psychological perspective. Likewise, a review made by Atinafu and Demelash (2023) reads: "…three-minute videos on TikTok can distract its users from completing other necessary tasks, such as finishing homework or completing chores" (p.3). These studies concluded that social media including TikTok harms study habits and academic achievement when excessive time is spent on it.

Coming to the research gaps, though the accessible reviewed published and unpublished studies have indicated media, social media including the TikTok app impact on academic performance, their findings are still in conflict, as shown above. Some reported positive relationships (Jacobs *et al.,* 2022; Roberd and Roslan, 2022), some others found negative relationships (e.g. Grace and Anne, 2023; Herath, 2020; Qureshi, 2022), and some others (e.g. Hussen *et al*., 2023) indicated an absence of significant relationships. Secondly, discipline-wise, social media studies including the TikTok apps geared to psychology. These studies (e.g., Eyerusalem, 2021; Febrianti *et al*., 2022; Mekler, 2021; Qureshi, 2022) showed that more time spent on TikTok was correlated with more attention distraction in class and deteriorated moral and ethical values. Put another way, studies related to TikTok's impact on academic performance in social sciences and humanities settings are lacking.

Further, regarding the experience of using TikTok, studies investigating the relationship between engagement experience in TikTok (engagement type) and academic performance are rare. Previous studies (Herath, 2020; Saleem et al., (2021)) assessed experiences of watching and posting videos on TikTok apps that could influence students' GPA and reported a significant negative relationship. However, they did not report the relationship CGPA has with the experience of making live streams on TikTok and the number of TikTok followers. Furthermore, past studies investigated the purposes of using TikTok, and they reported that the app is used for various purposes but mainly for entertainment, socialisation, informativeness (to keep themselves updated), making money, and education. Jacobs et al. (2022) and Roberd and Roslan (2022) explored the relationship between using TikTok for educational purposes and academic performance, for example. Nevertheless, studies that measure whether the difference in the purpose of using the app influences academic performance lack. On top of that, many former studies described the relationship between academic performances and demographic characteristics of social media (especially Facebook) users; nevertheless, there is a dearth of studies concerning TikTok.

Last and least, methodologically, studies that involve parametric tests are rare. Most of the studies about TikTok are more descriptive in the research design (e.g. Jessica & Caroline, 2023; Roudlotun, 2023; Yunqing (2023) while a few are correlational (e.g., Herath et al., 2020; Syifa, 2022; Zaitun *et al.*, 2021) and regression (e.g. Mugambo & Kiwango, 2022; Nor *et al*., 2023). Disturbing more is the wrong statistical interpretations of a few studies. For example, a case study from UvaWellassa University of Sri Lanka (Herath *et al.,* 2020), which measured the impact of TikTok on university students' academic achievements, has suffered from statistical interpretation. In the absence of statistically significant correlations between independent and dependent variables ($r=.359, p=.726$), the study concluded that less time excreted on TikTok positively influences GPA, whereas posting TikTok videos ($r=0.180, p=.626$) and watching TikTok videos ($r=0.191, p=.623$) negatively influences GPA. A similar problem is observed in the study of Swathi and Devakumar (2020). After reporting a positive relationship between time spent in TikTok and GPA ($r=0.358, p=.726$), they retained the hypothesis: "The less time spent on TikTok will have a positive impact on [the] academic performance of the students" (pp.140-141). Yunqing (2023), who assessed the influence TikTok has on education, applied only frequency and percentage. These studies call for regression analysis and careful interpretation, which this study intends to consider.

Overall, given TikTok is one of the most widely used social media platforms for different purposes, the association between TikTok engagement experience and students' CGPA is under-researched in Ethiopian universities in general and in Jimma University in particular, as far as the researchers' review of the extent is concerned. Therefore, this paper examines the extent to which the experiences of engagement in TikTok use, the purpose of using it, and the demographic characteristics of its users associate with their CGPA. The findings contribute to theory and practice by uncovering variables influencing students' CGPA in the study setting. The study answers the following research questions:

1. Which socio-demographic variables are associated with the CGPA of TikTok users?
2. Do respondents differ in their CGPA because of purpose differences (e.g. entertainment, informativeness, education) in TikTok use?
3. Do respondents differ in their academic performance because of experience differences (e.g. engagement duration, engagement type) in TikTok use?
4. What variables are strongly related to the CGPA of the study participants?

2. Review of Related Literature

This part briefly presents the theoretical framework of the Uses and Gratification Theory (UGT and empirical findings, followed by a conceptual framework that shows the potential predictors of CGPA.

2.1 Theoretical Framework

The Uses and Gratification Theory (UGT) of Katz *et al.* (1973) is applied to frame the current study. UGT seems to be used dominantly in psychology research. UGT is called the New Media Uses and Gratification Theory in media and communication studies. It assumes that people use media to gratify their needs and wants (Vinney, 2019). According to Vinney, the introduction of UGT dates back to the 1940s. It was then used to study why people preferred to utilize different media. In the 1970s researchers focused on "the outcomes of media use and the social and psychological needs that media gratified". Today, UGT is being used more to understand "people's motivations for choosing media and the gratifications they get out of it". Hence, we the researchers from communication and media studies, found UGT appropriate to frame this study.

Studies show that new media (internet-dependent media) is preferable to the older forms of media among its users. It allows users to control what they interact with when to interact with it, and to choose more content preferences. According to Song *et al.* (2004), new media users (including TikTok) can get diversified gratifications from internet-dependent media. They categorize these into two: Content and Process. Users can get gratification from the content uploaded on social media and from engaging/participating in uploading content and commenting on content uploaded on the new media, which is a process. Song *et al.* (2004) classify the concept of gratification into seven: information seeking, aesthetic experience, monetary compensation, diversion, personal status, relationship maintenance, and virtual community. According to them, a virtual community could be considered a new and unique gratification concept compared to other forms of media. According to Shao (2009), consumers of new media get gratification in three ways: consuming (e.g., passively viewing social media content), participating (e.g. commenting on, liking or sharing content), and producing (creating and publishing content).

Citing Ahlse *et al.* (2020), Mackey (2021) summarized the purposes related to TikTok use. Entertainment is the first gratification form of TikTok. This entails using the app to have fun, relax, and take a break from the reality around them. Information-seeking comes in the second place. This involves staying up-to-date on trends and knowing what is happening on social media. Socialization is the other reason for using TikTok. Because of its diversified interactive features—commenting, liking, sharing, duetting, stitching, and

live videos— it makes socializing easy and apparent. The other reason is convenience, which is "a huge motivating factor for this platform" (p.8). TikTok is simple to open and begin scrolling, for the viewer. If users want to post a video, they press record and upload. According to Shao (2009), users get diversified gratification when they use new media for different reasons: information and entertainment, community development and social interaction, and fame-seeking, identity-creation, and self-actualization purposes. Shao's categorization of social media has become a widely established framework for studying its use (Vinney, 2019). According to Yang (2020) in Syifa (2022, p. 102), "social media has four main purposes: entertainment, socialization, informativeness, and academics".

The forgone discussion can be summarized with the two principles of media choices the UGT relies on. First, the new media users are active in their choice of media, and second, they know why they choose it. When making media choices, they evaluate whether they meet their specific wants and needs (Vinney, 2019).

According to Vinney, the theory has five assumptions, which are directly quoted:
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1. Media use is goal-directed. People are motivated to consume media.
2. Media is selected based on the expectation that it will satisfy specific needs and desires.
3. Media influence on behaviour is filtered through social and psychological factors. Thus, personality and social context impact the media choices one makes and one's interpretation of media messages.
4. Media are in competition with other forms of communication for an individual's attention. For example, an individual may choose to have an in-person conversation about an issue instead of watching a documentary about the issue.
5. People are usually in control of media and therefore are not particularly influenced by it" [they are not always passive; they can create content, edit, and disseminate (e.g. share), comment, like].

2.1.1   UGT and E-learning

From the perspective of academics, UGT can be applied to e-learning. If applied properly, it can gratify students' learning needs, learning styles, values, motivations, interests, intentions, and epistemological curiosity (Mondi *et al.,* 2007). These researchers hypothesized that students may be motivated to use e-learning resources to gratify their cognitive, affective, personal integrative, social integrative, and entertainment needs. The UGE concept suggests that students, as media users who have expectations are value-oriented, and play an active role in choosing and using e-learning resources to fulfil their learning needs (Mondi *et al*., 2007, p.436). Accordingly, to satisfy their e-learning gratification, they prioritize applications like TikTok. Because TikTok "reaches the most gratifications out of all social media platforms", it is one of the most popular social media applications today to access e-learning resources (Ahlse *et al*., in Mackey, 2021, p.8).

Regardless of its popularity in media and communication research, UGT is criticized for its limitations. For one thing, it is criticised for overlooking how media influence people, especially unconsciously. Secondly, it assumes that audiences are always active, while they may not be. Finally, because of its broadness, it is considered an approach to media research rather than a theory (Vinney, 2019). Irrespective of its limitations, the authors believe it can be used to explain and interpret the findings of this study. They also used it to construct a structured questionnaire concerning reasons (purposes) for using TikTok.

2.2 Empirical Findings

Studies show that social media plays a significant role in teaching and research. According to Salomé et al. (2022), the use of social media platforms for educational purposes seems to help increase the internalization of the "contents being taught and the likeliness to remember what has been learned, and it leads to the improvement of research skills and students' capacities" (p.95).

2.2.1 TikTok as a Teaching Aid

Concerning communication, "as a social media, *TikTok* inspired online interaction among users because they can use the application to send messages, share information, videos, and make comments" (Annisa & Kiki, 2022, p.2). Roberd and Roslan (2022) read: "Social media play an important role in communication and have attracted wide attention to be seen as teaching and learning aids (p.367). This gives the students an alternative way of learning compared to the traditional approach. For example, the participants in the study of Roberd and Roslan preferred to be taught through TikTok rather than through traditional teaching and learning and textbooks. "Using social media, particularly TikTok, for educational purposes can benefit student learning in science education" (p. 373).

According to Ilianis and Nur (2022), TikTok is beneficial for entertainment, improving English skills, and providing learning resources. Regarding the former, learning with the help of TikTok is "interesting", "entertaining" and "fun". Concerning the second benefit, using TikTok improves students' English skills such as pronunciation and vocabulary. Regarding the learning resources, TikTok provides students not only with diversified learning resources that are limited to education but also offers hacks for everyday life. For example, they can easily access numerous English learning channels through "hashtags, including #englishlearning, #englishlearningtips, #englishspeakingpractice, and many more. Of course, the content varies from narratives to short lectures and covers several English skills, including grammar, vocabulary, and pronunciation" (Annisa & Kiki, 2022, p.1). Nor *et al*. (2023) concluded that using TikTok as a language learning tool in English language courses reinforces educational platforms and improves instruction by giving students more ways to learn languages.

Aida *et al*. (2021, as cited in Nor *et al*., 2023) read: "University students accepted TikTok as a tool for education development when it was used as a social media platform, a window for online learning, and a way to improve communication skills and technology skills" (p.456). Sarah (2022), who carried out a TikTok-based case study on students from the Journalism and Mass Communication Department, at the American University in Cairo, Egypt, found that 78.6 % of the participants highlighted that learning through the TikTok app (like doing assignments, creating educational content around topics they are interested in) increased their creative communication and expression. Further, the students prefer integrating TikTok into their educational experience. Sarah (2022) suggested the TikTok platform as a pedagogical tool for learning in the classroom.

> Results show that Gen-Z University students indeed prefer integrating social media to their educational experience, and even prefer expressing through short video content over other assessment alternatives. Beyond that, short video content creation allowed them to express more creatively, and also reflecting on the class curriculum through using short video content production, was a more effective method of material reflection than other reflective methods (p.69).

Citing Junco *et al*. (2011) and Akgunduz and Akinoglu (2016), Roberd and Roslan (2022) wrote that integrating social media into the teaching and learning process positively influences student learning. It helps them to interact with teachers outside of the classroom (Huang, 2023). "Educational institutions and universities can consider employing TikTok as a medium for instruction and assignments" (Elaine & Fuady, 2023, p.8).

Overall, findings indicated that when social media apps are used to browse, search, communicate, and share academic materials such as books and notes, students' academic performance improves (Mugambo & Kiwango, 2022). However, unwarranted TikTok use could lead to disruptions, reduced study time, and a potential decline in academic performance (Annisa & Kiki, 2022). Students' purposes of using TikTok, their experience of engagement, and the extent to which the types of purposes and duration of engagement influence

academic performance are not assessed in the context of the current study. Thus, this research investigates the association between TikTok engagement experience, purpose for using TikTok, demographic characteristics of TikTok users, and the CGPA of Jimma University undergraduates. The conceptual framework (see Fig.1) shows the one-way-directional relationship between CGPA and its anticipated predictors. The findings will be used to show the theoretical and practical implications of the study.
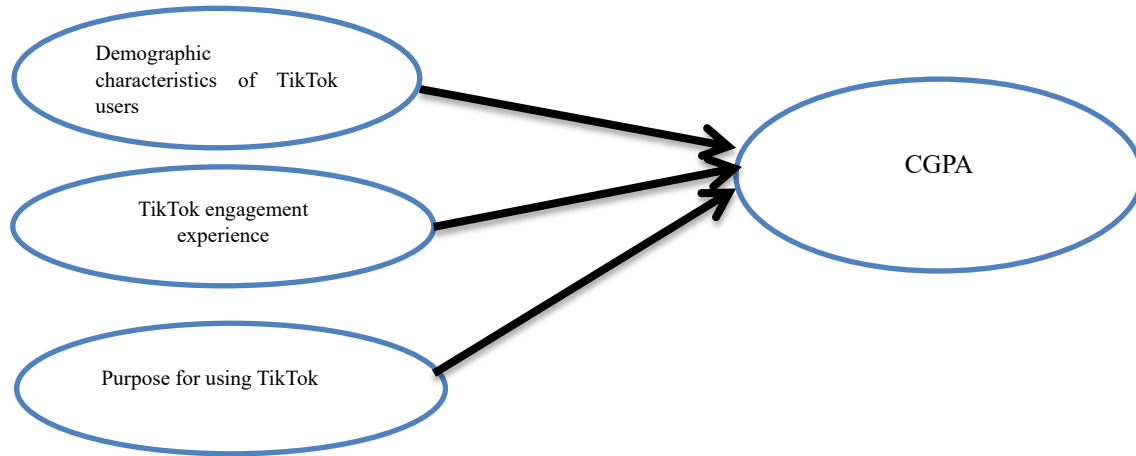

Fig 1: Potential Determinants of CGPA

 Source: Authors' Field Survey (2023)

3. Methodology

3.1 Study Setting

The study was conducted at Jimma University, a public research university located in Jimma City, Ethiopia. Jimma City, located in Oromiyaa National Regional State, is found at a distance of about 347 km (on public roads) southwest of Addis Ababa, the capital city of Ethiopia. The data was collected between March 20, 2023, and April 28, 2023.

3.2 Study Design

To address the research questions and objective, in light of the time and expense involved in conducting this study, the study employed a cross-sectional correlational research design because the information from the students was gathered during a single period.

3.3 Study Population

For easy access to data, 198 participants were selected from 395 fourth-year students, from 13 departments found in the College of Social Sciences and Humanities, where the authors belong to. The reason to select 4th year or GC students was that they spent longer time in the College and the authors believed these students have been experienced with social media interaction like TikTok. Additionally, compared to second and third-year students, the fourth-year students' CGPA had more data points. At the time of data collection, students from first to third years had the results of 1, 2, and 5 semester GPAs respectively, and the fourth- year

had a cumulative of 7 semesters GPA. Hence, because of having a higher grade point average, fourth-year students were selected.

3.4 **Sample Size and Sampling Techniques**

The study applied a stratified random sampling technique to determine the sample size and to select the departments. The departments in the College of Social Science and Humanities are used as strata (sub-groups). The study applied Yamane's (1967) sample size determination formula to determine the sample size (C.I. 95%).

$$n = \frac{N}{1 + N * e^2}$$

Where N is total number of population; n- Sample size; e is margin of error

$$n = \frac{N}{1 + N * e^2} = \frac{395}{1 + 395 * 0.05^2} = 198$$

After computing the population sample size, using Cochran's sample size formula: $n_h = \frac{Nh*n}{N}$, the sample size of each stratum was computed.

Where: n_h is the sample size from each stratum, (N_h) is the population of each department, and N is the total population of undergraduate fourth-year or GC students' of CSSH. Finally, the participants were selected using simple random sampling from the sampling frame (students' list). The random was drawn using SPSS version 27.

3.5 **Inclusion and Exclusion Criteria of Respondents**

Fourth-year or GC regular undergraduate, male and female students from Jimma University, College of Social Sciences and Humanities, were included in the study. On the other hand, evening, weekend, CEP (Continuous Education Program), and all postgraduate students from the CSSH and other colleges of Jimma University were excluded from the study.

3.6 **Instrument of Data Collection**

The methods of data collection involved in this study are questionnaire and document analysis. To gather primary data, the study used a closed-ended and open-ended questionnaire that contained three parts. Part one deals with demographic characteristics of the study participants such as gender, age, residence (urban vs. countryside), housing place of respondents (in dorm vs. out of dorm), and department. Part two focused on interaction with TikTok. Eleven multiple-choice TikTok usage and CGPA questions concerning the participants' experience of using TikTok were included. The students' GPAs were also collected from the Registrar's Office of the College of Social Sciences and Humanities (as a document review). Part three dealt with students' views of the influence of TikTok on academic performance. The open-ended questions asked respondents to give any additional information regarding TikTok use and academic performance. However, since the respondents skipped the open-ended questions, the open-ended data were not analysed. The questionnaire was adapted from Herath (2020), who studied the impact of TikTok on GPA. Some questions were also prepared based on the review of the related literature. Finally, the piloted questionnaire was administered to 198 participants selected from the 13 departments. Three people (two data collectors and the principal researcher) collected the data.

3.7 Measures

Average grade point (a dependent variable). To know the students' CGPA, we asked the students one question: Your Cumulative Grade Point Average (CGPA)? It was measured with continuous numbers. The students whose names were randomly picked up from the sampling frame were asked to write their seven semesters' CGPA which was also counter-checked from the sampling frame collected from the registrar's office of CSSH. Higher scores indicate a higher CGPA. The independent variables include:

Amount of time spent on TikTok. To know the amount of time spent on TikTok each day by the study participants, we asked them: How long (in hours) did you use TikTok per day? "Higher scores indicate that students find themselves losing track of time on TikTok more often".

TikTok joining time. To know when the study participants joined TikTok, we asked them (1 item): How long (in months or years) has it been since you joined TikTok? "Higher scores indicate that students find themselves losing track of time on TikTok more often".

Interaction with the app TikTok. To know how the study participants interact with the app TikTok, we asked them: (1) How often do you browse TikTok per day? (For example, two times, three times, etc.). Higher scores indicate more frequent use of TikTok. (2) Do you ever post videos on TikTok? The "Yes," response indicates that participants often produce posts on TikTok. "No" response indicates that respondents often navigate through the posts of other people on TikTok. (3) Do you ever make a live stream on TikTok? The "Yes" response indicates that students ever made live-stream on TikTok. (4) Do you have 1k and above followers on TikTok? The responses were coded with 1 for Yes and 0 for No. (5) How do you connect to the internet to use TikTok? The responses were coded as 1 for Data, 2 for Wi-Fi, and 3 for Data & Wi-Fi.

Demographic characteristics such as (a) Sex is measured as Male (coded 1) and Female (coded 2), (b) Age in years, (c) Residence in urban (coded 1) and countryside (coded 2), and (d) current lodging place in a dorm (coded 1) and out of a dorm (coded 0).

Perception questions about the use of TikTok. These questions were measured using a Likert Scale rating system ranging from strongly disagree (coded 1) to strongly agree (coded 5). Three of them read: (1) TikTok is useful to better communicate with friends, (2) Viewing TikTok has a positive effect on students' academic performance, and (3) I watch TikTok to entertain myself. Higher scores indicate strong agreement.

3.8 Reliability and Validity

To examine the instrument's reliability, we piloted it on 17 (11 male and 6 female) fourth-year undergraduate students randomly selected from the College of Natural and Computational Science. After the revised instrument was circulated to the 198 participants selected for the study, 195 were returned. However, only 187 were found acceptable; eight questionnaires were discarded because of incompleteness. Accordingly, a Cronbach's alpha of (α. 853) for reasons for using TikTok (4 items) and (α=0.700) for duration engagement in TikTok use (3 items), were computed using SPSS software version 27. The values indicate acceptable internal reliability**.**

The face validity and content validity of the instrument were confirmed by subject area and research-experts including the advisors of the principal researcher. The constructs' validity was factor analysed applying principal component analysis (Varimax Rotation Method) and a cross-loading score of $\geq$ .70 was considered; hence construct validity was confirmed.

3.9 Method of Data Analysis

Before analysing the data, we cleaned the data to fix problems related to missing values and outliers. The study employed descriptive statistics (e.g. mean and standard deviation) to analyse data related to demographic variables of the respondents. An independent-sample T-test was run to determine if there was a mean difference in the academic performance (CGPA) of students with different demographic characteristics as

well as experience of using TikTok. A One-way ANOVA was performed to determine if respondents' CGPA differed because of the reasons for using TikTok (where there are sample size differences we applied "Equal variances not assumed", like Games-Howell). A stepwise regression was applied to identify the dominant contributing variables to CGPA. The Statistical Packages for Social Science (SPSS) version 27software was used to run the statistics, setting the significance level at 0.05. Before the analysis, basic assumptions of parametric tests (normality, linearity, multicollinearity, hetroscadecity, and autocorrelation) were checked. In the light of this, all these assumptions are satisfied.

3.10 Ethical Considerations

The researchers issued a formal letter of consent from the Media and Communication Studies Department and the dean's office of CSSH. Next, the principal researcher explained the purpose of the research to the study participants and assured them (a) that participating in the study would not harm them and (b) that their responses would be kept confidential.

4.   Result

This part presents the influence demographic characteristics and TikTok engagement experiences have on CGPA of the study participants.

4.1 Participants' Background Characteristics

Out of the 187 participants, 152 (81.3%) are male and 35 (18.7%) female; 175 (93.6%) live in a dorm and 12 (6.4%) out of a dorm; while 92 (49.2%) come from urban, 95 (50.8%) come from rural. The age of the respondents (97.9%) falls within the range of 19-28 with a mean age of 22.51. About departments, the majority of the respondents come from the departments of Geography and Environmental Studies (n=28, 15%), History and Heritage Management (n=22, 11.85%), and Sociology (n=20, 10.7%), respectively. The rest come in different proportions in descending orders: from the departments of Afan Oromo and Literature 19 (10.2%), English Language and Literature 18 (9.6%), Social Work 17 (9.1%), Oromo Folklore and Literature 14 (7.5 %), Amharic Language and Literature 14 (7.5%), Social Anthropology 12 (6.4%), and Media and Communication Studies 11 (5.9%). Further, while the students from the Theatre Art Department represent 4.3% (n=8) of the participants, the students from the departments of Music Art and Visual Art each represent 1.1% (n=2) of the total respondents.

But the question is which demographic characteristics do influence the academic performance (CGPA) of TikTok users?   The study ran an independent-sample t-test and correlation to answer this research question. However, the study revealed an insignificant relationship between CGPA and demographic variables: gender, origin (urban vs. rural), living place (dorm vs. out of dorm), and age. Hence, we omitted displaying the analysis to save space.

4.2 **Purpose of Using TikTok vs. Academic Performance**

Before measuring whether respondents differ on their CGPA because of reasons for interacting with TikTok, it is important to describe why they use the app.

 As the descriptive analysis reveals, of the total respondents, 94.7 % of them were current users of TikTok, when the data was collected. Reportedly they were watching the app for different purposes: 93 (49.7%), 37 (19.8%), and 31 (16.6%) respondents watch/follow TikTok for entertainment, information, and education purposes, in that order. Whereas 19 (10.2%) and 7 (3.7%) follow the same for spiritual programs and to make money respectively [1]. Hence, one can conclude that the majority of the study participants follow TikTok for entertainment purposes, implying a stronger relationship between TikTok use and entertainment

compared to the other purposes. Now, to determine if differences in purpose for using TikTok influence CGPA, we ran a One-Way ANOVA.

Table 1

Summary of One-Way ANOVA for Relation between Purposes for Using TikTok and CGPA

Variable						
Purpose	Group	X̄	Mean Difference	*SE*	*F*(4,182)	p
To make money	Entertainment	3.05	-.60836 *	.11552	*4.215*	.004
	Information	2.98	-.54421*	.13125		.007
(X̄ =2.44)	Education	3.19	-.75479*	.12895		.000
	Spiritual Program	3.14	-.70338 *	.14690		.001

* P < 0.05

Source: Field Survey (2023)

A One-way ANOVA was performed to determine if respondents' CGPA differed because of the reasons for using TikTok (Table 1). The ANOVA Post Hoc Multiple Comparisons test revealed that there was a statistically significant difference in the CGPA score between the four groups (F (4, 182) = 4.215, p = 0.003, η^2= 0.085). Games-Howell was applied for multiple comparisons. It found that the mean value of exam score was significantly different between entertainment and make money (p = 0.004, 95% C.I. = [.2194, .9973]), between information and make money (p=.007, 95% C.I. = [.1359, .9525]), between education and make money (p<.001, 95%, C.I. = [.3497, 1.1599]), and between spiritual program and make money (p=.001, 95% C.I. = [.2587, 1.1481]). From the findings, we can conclude that students who used TikTok for education, entertainment, and information-seeking outperformed better in CGPA compared to their counterparts who used the app for money making. However, the study participants did not differ in CGPA because of differences in entertainment, education, and information seeking.

Table 2

Independent Sample T test of Frequency of Using TikTok for Academic Purpose vs. CGPA

Group		n	X̄	SD	T(168.556)	P	Cohen's d (Effect size)
Do you use TikTok most frequently for academic activities?[4]	No	106	3.40	0.25	-21.254	.000	.256
	Yes	81	2.59	0.26			

*** P < 0.001

Source: Field Survey (2023)

To determine whether there is a difference in the academic performance (GPA) between those who use TikTok most frequently for academic purpose and their counterparts who do not, an independent-sample t-test was conducted (Table 2). The results indicate a statistically significant difference between the respondents who reported No ($\bar{X}$= 3.40, *SD*= 0.25) and their counterparts who reported Yes ($\bar{X}$=2.59, *SD*=0.26), [t (168.556) =21.254 p < .001, CI [.73375, .88401]. The effect size is medium (Cohen's d=.256)[1]. From the data, it is possible to conclude that respondents who did not use TikTok most frequently performed better than their counterparts who reported using the app TikTok most frequently for academic purposes. A separate analysis also showed that out of the 187 respondents, 130 (69.5%) agreed that TikTok negatively affects academic performance.

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[4]TikTok users are said to be more frequent users of the TikTok platform when they browse more than three times per day.

4.3 Interaction Experience with TikTok vs. Academic Performance

The study also intended to determine if respondents differ in their academic performance because of differences in TikTok engagement experiences. The result is summarized in Table 3.

Table 3

Independent Sample T test for TikTok Interaction Experience with CGPA

Group		n	M	SD	P	Cohen's *d*
Current use of TikTok	Yes	177	3.05	.48	.286	
	No	10	2.90	.41		
Do you ever post video on TikTok	Yes	101	2.85	0.46	.000	.428
	No	86	3.27	0.39		
Do you ever make live stream on TikTok?[5]	Yes	93	2.65	.31	.000	.275
	No	94	3.43	.23		
Do you have 1k and above followers on TikTok?	Yes	85	2.69	.39	.000	.354
	No	102	3.33	.31		

Source: Field Survey (2023)

An independent-sample t-test was conducted to determine whether there is a difference in academic performance (GPA) between current users and non-users of TikTok (Table 3). The results indicate an absence of statistically significant difference between Current users ($\bar{X}$=3.05, SD=0.48) and Non-current users ($\bar{X}$=2.90, SD=0.41), t (10.425 = 1.125 p = .286, CI= [-.14759, 45180]. Therefore, we can conclude that there is no difference between the sample means.

A similar test was carried out to detect whether TikTok users differ in academic performance because of differences in experience of posting videos on TikTok (Table 3). The test reveals that the mean values of respondents who had never posted a video on TikTok ($\bar{X}$= 3.27, SD= 0.39) are significantly higher than their counterparts who had ever posted a video on TikTok ($\bar{X}$=2.85, SD= .046), (t (184.969) = -6.834, p<0.001, CI= [-.54541, -.30106]. The effect size is medium (Cohen's d=.428). These findings suggest that respondents who had never posted a video on TikTok are more likely to outperform their counterparts who had ever posted a video on TikTok.

Additionally, as shown in the same table, an independent-sample t-test was conducted to determine whether there is a difference in academic performance (GPA) between those who ever made a live stream and those who did not make a live stream on TikTok. As the Test reveals, the mean values of respondents who had never made a live stream on TikTok ($\bar{X}$= 3.43, SD= 0.31) is significantly higher than their counterparts who had ever made a live stream on TikTok ($\bar{X}$=2.65, SD= .31), (t (185) = -19.265, p<0.001, CI= [-.85571, -.69672]. The effect size is medium (Cohen's d=.275). These findings suggest that respondents who had never made a live stream on TikTok are more likely to outperform their counterparts who had ever made a live stream on TikTok.

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[5]TikTok live streamer: Live broadcaster using TikTok for various purposes.

Further, to determine whether there is a difference in the academic performance (GPA) between those who had 1k and above followers on TikTok and those who had below this amount, an independent-sample t-test was conducted (Table 3). The results indicate a statistically significant difference between the respondents who reported having 1k and above followers on TikTok ($\bar{X}$= 2.69, *SD*= 0.40) and their counterparts who reported having below 1K followers on TikTok ($\bar{X}$=3.33, *SD*=0.31), (*t* (157.080) =-12.017, *p* < .001, CI= [-.74476, -.53449]. The effect size is medium (Cohen's d=.354). From the findings, one can conclude that respondents who reported having below 1K followers on TikTok are more likely to outperform their counterparts who reported having above 1K followers on the app.

4.4 Duration Spent on Using TikTok vs. Academic Performance (CGPA)

Before running the regression analysis, we ran a descriptive analysis to know the amount of time the study participants spent on TikTok, their perception of the time taken by TikTok, and TikTok's effect on academic performance. As a separate analysis revealed [1], overall, while the majority of the study participants (n=80, 42.8%) used more than three hours per day for TikTok, 58 (31%) used less than one hour per day for the same. The variation in time engagement could be attributed to the way they connect to the internet: with Wi-Fi, data, or both. If they get free access to Wi-Fi, they may be tempted to stay longer on TikTok compared to data; they may use both when the internet connection is poor; as they are students (have a shortage of money), we do not think most of them use data. A separate analysis revealed that 118 (63.1%) use both Wi-Fi and data, 66(35.3%) use Wi-Fi, and the minority use data 3(1.6%). As far as the app's effect on study time consumption is concerned, while 56 (57.8%) of the study participants agree with the idea that "TikTok takes students' study time", the majority 118 (57.8%) did not agree with this idea. However, the majority of the study participants (n=130, 69.5%) admitted that "TikTok has a negative effect on academic performance". While 33(17.7%) deny this negative effect, 24 (12.8%) remain undecided. Therefore, to measure the effect duration engagement in TikTok use has on CGPA, and to reach an informed conclusion, it is important to run a stepwise regression analysis.

Table 4 presents TikTok engagement duration variation assumed to influence students' academic performance (GPA). To identify variables that uniquely influence students' academic performance (GPA), multiple regression analysis (MLR), Stepwise, was run. Accordingly, the three variables, which fulfilled assumptions of MLR, hierarchically entered into the regression model, uniquely influenced the dependent variable: number of months since TikTok was joined, frequency of TikTok browsing per day, and time spent on TikTok per day (in hours).

Table 4

Summary of Regression Results by Regressing Students' GPA on TikTok Using Duration

	Unstandardized coefficients		Standardized coefficients		95%CV for B	
	Beta	SE	B	T	LB	UB
Step 1						
Constant	3.601	.032		111.153	3.537	3.665
Number of month since TikTok is joined	-.034	.002	-.841***	-21.166	-.038	-.031
Step 2						
Constant	3.652	.024		149.060	3.577	3.673
Number of month since TikTok is joined	-.012	.002	-.298***	-5.533	-.017	-.008
Time spent on TikTok per day (in hours)	-.058	.005	-.652***	-12.104	-.067	-.048
Step 3						
Constant	3.652	.017		211.865	3.618	3.686
Number of month since TikTok is joined	-.004	.002	-.103*	-2.534	-.007	-.001
Frequency of TikTok browse per day	-.027	.004	-.306***	-6.716	-.035	-.019
Time spent on TikTok per day (in hours)	-.193	.014	-.594***	-13.712	-.220	-.165

Source: Field Survey (2023); $R^2(1)$=70.8; $R^2(2)$=83.7; $R^2(3)$=92.0; Durbin-Watson=1.784

Dependent variable: Students' Academic Performance (GPA)

Note. * $P < 0.05$, *** $P < 0.001$

To examine the contribution each variable makes to the model at the point at which it is entered, in this research, the predictor variables were entered into the regression model in ascending order, in terms of their relationship strength (correlations partial) with the dependent variable (Table 4). First, 'Number of months since TikTok was joined' ($r = -.184$, $P < .0001$), next, Time spent on TikTok per day (in hours) ($r = -.445$, $P < .0001$), and then 'Frequency of TikTok browse per day' ($r= -.712$, $P < .0001$) have been entered into the regression model.

The results of the first regression model show that about 70.8% of the variation in the dependent variable can be significantly explained by the number of months since TikTok was joined, $F(1, 185) = 447.989$, $p < .0001$. When 'Time spent on TikTok per day (in hours)' was added into the second regression model, R2 increased 12.9 % (from .708 to .837), $F(2, 184) =473.416$, $p < .0001$. Finally, when 'Frequency of TikTok browse per day' was added into the third regression model, R3 increased 8.3 % (from .837 to.920), and the full regression model remained statistically significant, $F(3, 183) =699.081$, $p< .0001$. The three variables collectively explained 92.0 (Adjusted 91.8%) of the variation in CGPA.

In addition, as Table 4 shows, for every one-month increment of experience in using TikTok, the CGPA of the student was reduced by 0.004 (*β* = 0.004, *t (185)* =-2.534, *p* =0.012). Put another way, the CGPA of students who used TikTok for one month was 0.004 higher than the CGPA of students who used the app for two months. Similarly, as TikTok browse frequency per day increases, the CGPA goes down significantly. For a one-time increment of browsing TikTok, the CGPA of students decreases by 0.027 (β = -0.027, *t (185)* =-6.716, *p* < .0001). On top of that, as the time spent on TikTok per day increases by one hour, the CGPA of a student decreases by 0.193 (β = -0.193, *t* (185) = -13.712, *p* <0.001).

When we apply the standardized coefficient, students' CGPA decreases by 10.3% (standard deviation) for every one unit (standard deviation) increase of one month in TikTok use, 30.6% (standard deviation) for every one unit (standard deviation) increase in the frequency of TikTok browse per day, and 59.4% (standard deviation) for every one unit (standard deviation) increase of one hour spent in TikTok per day. As can be seen from the model, there is a strong negative relationship between CGPA and the three predictor variables. However, time spent on TikTok per day (in hours) is the strongest unique variable influencing students' CGPA negatively when the remaining two variables are kept constant.

5. Discussion

The survey research tried to appraise how demographic characteristics and TikTok use of the study participants influence academic performance (GPA). The study shows that 94.7% of respondents with diversified demographic characteristics use TikTok "currently". This finding is in line with Ilianis and Nur (2022), who found that most Malaysian university students, who participated in the study (83.8%), used TikTok. Our finding also gets support from Herath (2020) and Mekler (2021), who noted that the use of TikTok among higher education students was growing.

Our study revealed an absence of a significant correlation between the demographic characteristics of TikTok users and academic performance (GPA). The finding is congruent with Syed (2013), who found that heavy and low television viewer adolescents do not differ significantly in academic achievement based on gender. The finding implies the study participants use TikTok similarly regardless of their differences in demographic characteristics. However, our finding is not in line with VandenBoogart (2006, as cited in Alam & Aktar, 2021), who reported that females spent much more time than males on Facebook. The difference could be attributed to the type of social media choice implying the issue of conflicting findings is continuing.

The findings from this study revealed that students use TikTok for entertainment, information, socialization, education, making money, and spirituality. This finding supports Alam and Aktar (2021) and Syifa (2022), who concluded that social media including TikTok is used for four main purposes: entertainment, socialization, informativeness, and academics. However, the majority of the study participants in our study follow TikTok for entertainment purposes instead of for academics. The finding agrees with studies conducted locally and somewhere else. The local study of Eyerusalem (2021) concluded that TikTok is mainly used for entertainment, within high schools in the Bole sub-city of Ethiopia. Mebratu (2014) found that many undergraduate students at Addis Ababa University use social media (Facebook) less for academic purposes compared to for personal and socialization purposes.

An overseas study conducted at Islamic University in Bangladesh discovered that most of the study participants used social media including TikTok for entertainment (Alam & Aktar, 2021). The study conducted at Arkansas State University also found that students use social media more for socialization and entertainment than for academic (Alomari, 2019). Another support to our study comes from Enache *et al*. (2021) who concluded that TikTok may only be utilised as a teaching tool in limited circumstances. A study from Thailand also found that students watch short-form videos to relieve stress, have leisure when feeling bored, and keep up

with trends (Puaponpong *et al.*, 2023). The reason for using TikTok more for entertainment could be attributed to its design. It was designed for entertainment instead of academics (Iqbal, 2020). Its users seem to get gratification by creating, posting, and watching videos, and this is in line with the Theory of Uses and Gratification (Katz *et al*., 1973) which claims that people use media to get gratification from entertainment, socialization, information, and education.

Our study also assumed that students' CGPA could be affected because of differences in the purposes of using the app. Overall, as was revealed by the One Way ANOVA, compared to using the app 'to make money', using TikTok for entertainment, information, education, and spiritual programs significantly and positively influences students' CGPA. Specific to education, our finding is in harmony with previous studies (Zaitun *et al.*, 2021; Febrianti *et al*., 2022; Rendón *et al*., 2022; Roberd and Roslan, 2022) which indicated that using TikTok had a positive effect on students' learning achievements.

However, it is important to note that using the app for education does not always positively influence academic performance. It was found that the CGPA of students who used TikTok more frequently for academics was significantly lower than those who used it less frequently, implying the higher the frequency the lesser the CGPA. One explanation for this reversed relationship could be that when the students frequently use the TikTok app to search and download academic materials, they do not use the downloaded materials beyond accumulating. Supporting explanation comes from Mugambo and Kiwango (2022), who say that storing academic materials had a small effect on the academic achievements of secondary school students.

The other explanation could be that though the students frequently use the app for academic purposes, during the actual use they allow the app to distract their focus. The reason is that using TikTok frequently for a longer time and seeing frequently posts from other people can distract students' attention from what they are supposed to do, i.e., scholarly works. Van den Eijnden *et al*. (2016) noted that the frequent use of social media influences students to engage in non-related study or task content while doing assignments, which may lead to an addiction to using the app more than they should. A similar view comes from the review of Atinafu and Demelash (2023), who says: "Constant distractions, such as receiving notifications, scrolling through endless feeds, and watching short videos, can break their concentration and hinder their ability to engage in deep and meaningful learning (p.3). Syifa (2022), who writes the cone side of TikTok, is concerned: "Since TikTok is one of the applications intended to entertain users, it is feared that this app will make the students lose time and forget to do other activities" (p.109). The overall implication of the finding is the importance of proper management of the TikTok application. Studies show that, when properly applied for academic purposes (e.g., to practice their English skills), TikTok enhances EFL learners' speaking ability (Zaitun *et al*., 2021; Syifa, 2022) and communication skills (Annisa & Kiki, 2022).

Nevertheless, significant differences in CGPA were not observed between students who used TikTok for education, entertainment, information seeking, and spiritual needs implying that the materials they access through the app serve multiple purposes. Put another way, materials created for educational purposes, for example, storytelling, can serve informativeness and entertainment purposes. Likewise, materials prepared for entertainment may gratify informativeness and academic needs. The finding supports Liu (2022) who concludes: "TikTok is not only an entertaining social media but also a place with an educational function" (p.279). The finding is also in harmony with Mondi et al. (2007), who hypothesised that students may be motivated to use e-learning resources to gratify their cognitive, affective, personal integrative, social integrative, and entertainment needs. The finding indicates the importance of integrating social media into the student's educational experience.

Regarding the experience of engagement in TikTok use, according to our findings, the majority of participants used more than three hours per day for TikTok, and our finding is in line with a local study conducted by Mebratu (2014). His study found that many undergraduate students at Addis Ababa University spend an average of 1-2 hours on Facebook. Our finding also complies with Herath *et al*. (2020), who found that 87.5% of students at UvaWellassa University of Sri Lanka spend more than two hours per day on social media.

The result of multiple linear regressions indicated that, as the experience of time spent on TikTok per day, per month increased, and the frequency of browsing TikTok increased daily, their CGPA decreased significantly. Support for this finding is indicated by Wuttaphan (2022), who found that the length of TikTok time per hour has a significant negative impact on academic performance. Another finding that complies with our findings comes from Mugambo and Kiwango (2022) and Alam (2021), who reported that students who spend more time on social media demonstrate poor academic achievement. Our study also favours a local study by Hussen *et al*. (2023) and Syed (2013), who reported that heavy TV viewer adolescents exhibited a lower scholastic achievement than their counterparts, low TV viewer adolescents.

Furthermore, our findings indicated that participants who had never posted a video on TikTok outperformed their counterparts who had ever posted a video on TikTok. Our finding is in harmony with Saleem *et al.,* (2021), who concluded that watching and posting TikTok Videos are time-consuming and negatively impact students' academic achievements. However, our finding does not support the findings of Febrianti *et al*. (2022), whose experimental group outperformed the conventional group which did not pass through the experience of creating and uploading videos. The difference could be attributed to the design of the study. In their case, they used a quasi-experimental study which involved the experimental group creating 1-minute videos, and uploading them to Google Classroom to be assessed by the lecturers i.e., they used TikTok as a learning media in pharmacy classes/ activities. However, in the case of our cross-sectional correlational study, the TikTok app was not directly/purposefully used for educational purposes in a classroom. The study participants were not asked to create and post videos for academic purposes.

Our study also indicated that TikTok live stream use and having a large number of TikTok followers (1k and above) had a statistically significant negative influence on the academic performance of the study participants. Participants who were not live streamers outperformed their counterparts who were live streamers. As shown earlier, students who use TikTok for money-making performed least in CGPA implying that they are live streamers. A possible explanation for this could be that live stream demands excessive time for preparing and producing (publishing) interesting or humorous activities that attract large followers, and this in turn could affect students' studying time. We could not compare and contrast this finding to other studies because of access limits.

6. Conclusion

This study investigates the association between TikTok engagement experience and the academic performance of Jimma University undergraduates. Descriptive statistics and parametric tests were employed to describe and measure the influence of the predictor variables (demographic variables and TikTok usage) on CGPA. Thus, based on the major findings of the study, the following four conclusions are drawn. First, age, sex (being male or female), origin (countryside or urban), and residence (living in a dormitory or out of dorm), currently using or not using TikTok did not significantly affect the CGPA of the students. Secondly, compared to using TikTok for money making, using it for education, entertainment, and information-seeking positively influence students' CGPA. Thirdly, having 1k and above followers on TikTok, ever posting videos on TikTok, and ever making live streams on TikTok have a negative influence on students' CGPA. Finally, the number of

months since TikTok was joined, time spent on TikTok per day (in hours), and frequency of TikTok browsing per day uniquely and inversely influenced students' academic performance. That is to say, as the number of months, frequency of browsing, and time spent on TikTok increased, the CGPA of the student reduced by a certain proportion.

7. Implication of the Study

The finding from this study has theoretical and practical implications.

7.1 Theoretical Implication

The research findings provide valuable insights into the specific TikTok-related factors that affect students' academic performance. The finding enhanced our knowledge about how purpose difference and type of TikTok engagement affect students' academic performance. Put another way, unlike most of the reviewed sources in this study, our study identified that having a large number of followers and making live streams negatively influence CGPA. Also, the hypothetical model, as revealed by this study, is a good fit model implying retesting and considering it in the investigation of TikTok-related factors that may influence academic performance. The finding also strengthens studies that concluded that spending less time on TikTok relates to better academic performance. Our finding also confirms the appropriateness of UGT theory which states that people use media to gratify their needs related to entertainment, information, and education. Hence, the study filled these theoretical gaps. On the other hand, our study determined that the background characteristics of TikTok app users did not affect academic performance, contrary to a few previous studies, implying further studies.

7.2 Practical Implication

The study has practical implications for students, instructors, and management and ICT. The practical implication of the finding for the students is time management. As 4th-year students sit for an exit exam, they should moderately use their time when engaged in TikTok. Limiting or reducing the time they spend on TikTok, increasing their study time, and monitoring their TikTok app is important.

The other practical implication of the finding is for instructors and instructional material developers. The finding implies the importance of revising the traditional teaching-learning approach, yes bridging to e-learning through social media. In this regard, preparing e-learning materials (e.g. educational videos) that gratify students' academic, informativeness (updated), and entertainment needs could be an assignment for instructors and academic material developers. Further, the implication of the finding for instructors, especially those who did not use the app for academic purposes, is to integrate the TikTok app into the teaching and learning process, as an educational tool, for students prefer to learn from TikTok than the traditional approach. They can do this by giving assignments/class projects to create educational videos related to short stories, dramas, and films, for example. Students can also be asked (by teachers) to review and report about the advantages and disadvantages of TikTok use, to create awareness on the way.

However, first, it is important to assess instructors' and students' knowledge, attitudes, and practices toward the incorporation of TikTok into the curricula. The assessment can be carried out by the College of Social Sciences and Humanities of Jimma University to reach an informed decision about considering TikTok as a medium for instruction. TikTok needs Wi-Fi service (most students use Wi-Fi more than data) for classroom and post-classroom educational activities. The implication of this for the management of the college and ICT is providing dependable and accessible internet service if TikTok is wanted to be used effectively as a teaching aid.

8. Limitation and Recommendation for Future Research

The limitations of the study are categorized into four. For one thing, as the sample size represents only a population of the College of Social Sciences and Humanities, the findings may not be generalized to other universities. Secondly, the study used only a quantitative method and cross-sectional correlational design to examine the influence of TikTok on fourth-year (GC) students' CGPA from the CSSH. The cross-sectional correlational design of the study limits our ability to make statements about the causal relationship between the independent and dependent variables. Related to this, the study did not examine the possibility that the observed relationship between TikTok use and academic performance may be bidirectional.

Thirdly, TikTok app-related variables (TikTok engagement type) —number of TikTok followers, posting videos on TikTok, and making live streams collectively explained 91.8% (Adjusted 91.8%) of the variance in the dependent variable implying the importance of repeating similar studies for testing the dependability of the model. Finally, the current study did not consider factors such as study habits, overall engagement with academic activities, and the potential cultural, social, or educational context differences that may influence the relationship between TikTok use and academic performance.

Therefore, the researchers encourage further research to extend the results of this study and improve the results by minimizing the study's limitations. Additionally, they recommend using an explorative qualitative or a mixed approach with a large sample size and casual experimental (Quasi-Experimental) studies to minimize the gap in the effect of TikTok on students' academic performance. Future researchers can also investigate teachers' knowledge, attitudes, and practices towards incorporating social media in general and TikTok, particularly in the teaching-learning process at elementary, high school, and public and private universities.

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3 Tesfaye Gebeyehu Tessema: Supervised the project, wrote the manuscript, corresponded the manuscript, enriched and edited the manuscript.

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