



The Effects of Social Media-Induced Distractions on the Students' Academic Performance

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Abstract

This study investigates the Effects of Social Media-Induced Distractions on the Academic Performance of General Aviation students at Indiana Aerospace University for the academic year 2024–2025. With social media becoming an increasingly integral part of students' daily routines, especially in the wake of increased digital learning, concerns have arisen about its potential to distract from academic focus and productivity. Framed within the Uses and Gratifications Theory, the Theory of Planned Behavior, and Cognitive Load Theory, this research examines how motivations for social media use, behavioral intentions, and cognitive limitations interact to influence student performance. Employing a quantitative research design, data were gathered from 100 students through structured survey questionnaires, with results analyzed using weighted means and ranking. The findings reveal that while social media offers some educational benefits, excessive use contributes to decreased time management, diminished concentration, and lower academic motivation. Students agreed on the positive impact of managed media use on academic outcomes but acknowledged significant challenges associated with unregulated usage. The most reported issues included difficulty managing time, delayed assignment completion, and reduced study motivation. Based on these findings, the study proposes actionable strategies to mitigate the negative effects of digital distractions, aiming to foster healthier study habits and improved academic outcomes among aviation students.

Keywords: *academic performance, social media usage, and media-induced distractions*

Introduction

Social media use has become nearly ubiquitous, transforming how students worldwide interact, connect, and socialize. This integration into students' daily routines intensified during the COVID-19 pandemic, as online learning became the primary educational modality. Globally, students are increasingly relying on digital platforms for not only academic activities but also social interaction and recreation. Social media platforms are digital tools, such as websites and applications, that facilitate communication, collaboration, and information sharing. These platforms enable users to maintain connections with peers, family members, and broader communities, playing a central role in daily interaction. For instance, at Mzumbe University in Tanzania, students used platforms like TikTok, Instagram, and Facebook primarily for entertainment and stress relief, a pattern that contributed to diminished study time and academic focus (Kidindima & Andrea, 2025). This trend is particularly concerning in demanding fields such as engineering, where sustained concentration and uninterrupted study are essential. General aviation students, in particular, face cognitively taxing academic tasks, including simulations, technical drawings, and analytical problem-solving, that are highly vulnerable to digital distractions. Zhang (2024) noted that while social media can serve as a tool to enhance academic engagement through communication and access to learning resources, it also poses a risk of distraction and poor time management. In the Philippine context, similar patterns have been observed. A study by Tus (2021) highlighted that Filipino students spent a significant amount of time on social media during the period of remote education, a behavior that negatively impacted their academic performance. This raises concerns about how social media may affect students' ability to focus on learning responsibilities and manage their cognitive resources effectively. Despite the growing use of social media among students, limited empirical research has specifically examined its cognitive and academic consequences in intensive disciplines, such as general aviation, in local settings.

This research project investigates the impact of social media use on academic performance among General Aviation students, employing three theoretical frameworks: Uses and Gratifications Theory (UGT), Theory of Planned Behavior (TPB), and Cognitive Load Theory (CLT). These correspond to social media use, academic behavior, and media-induced distractions, respectively. Social media is deeply

embedded in students' daily routines, but its constant flow of notifications and updates disrupts focus and learning. Prior studies (Alrahmi et al., 2022; Giunchiglia et al., 2018; Brooks, 2015) have found that multitasking and frequent switching between academic tasks and social media can harm concentration, memory, and academic outcomes. UGT explains that students' motivations, entertainment, stress relief, and social connection all affect their academic focus. TPB analyzes how attitudes, norms, and self-control influence usage and predict disruptive behaviors. CLT highlights how digital distractions overload working memory, impairing focus and posttest performance (Halubanza et al., 2023; Eduljee et al., 2022; Blasiman et al., 2025).

Asamoah (2018) and Azizi et al. (2019) link social media overuse to addiction symptoms and performance drops, especially in males. In cognitively demanding fields, such as general aviation, which require deep focus for simulations and problem-solving, these effects are especially detrimental. Although platforms can aid academic collaboration (Zhang, 2024), they often lead to time mismanagement and overload. Despite this, few studies quantitatively assess these effects in STEM fields. This theory-driven research addresses that gap by analyzing how behavioral intentions, motivations, and digital distractions interact to influence academic achievement in modern engineering education.

Grades are a primary measure of a student's academic ability, reflecting their performance across various subjects. However, academic performance can be influenced by numerous factors, one of the most prominent being the distraction caused by social media platforms. As Nath et al. (2015) noted, "Internet addiction significantly influences the intensity of student in-class digital distraction." This concern is especially relevant in fields such as general aviation, which is known for its mathematical rigor and cognitive demands. As Charalambides et al. (2023) stated, "Students are not aware of how mathematically demanding their education could be." To succeed, students must devote long periods of focused study, free from frequent interruptions. Unfortunately, the addictive nature of social media, driven by reward systems similar to those found in gambling, poses a significant barrier to maintaining focus.

According to Nasser et al. (2020), "Social media interactions activate the same neural networks as substance addiction, affecting lasting changes that influence behavior and well-being." These constant digital temptations interfere with the deep concentration required for mastering complex engineering concepts. The core problem lies in students' ability to maintain strong academic performance while facing the persistent and often subconscious distractions of social media. Understanding the extent of this impact is crucial for developing effective strategies to help students manage their time, attention, and mental health, ultimately enhancing academic outcomes.

Social media use has become a regular part of students' daily routines, but its distractions, particularly the effects of social media-induced distractions, often interfere with their ability to focus on academic tasks. Many students turn to platforms for a short break, only to lose valuable study time in endless scrolling. This habit significantly impacts concentration and productivity, which is especially detrimental in demanding fields of general aviation, where sustained attention is crucial for success. The constant pull of notifications and the lure of quick entertainment make deep focus increasingly difficult, ultimately undermining time management and academic performance. These distractions highlight a growing challenge: the toll of social media on students' learning outcomes.

Examining how social media affects students' academic performance is the goal of this study. The study specifically aims to determine a correlation between the frequency and length of students' social media use. The study aims to assess the impact of social media use on academic outcomes by focusing on Indiana Aerospace University's General Aviation Students enrolled in the 2024–2025 academic year. It is anticipated that the results of this study will suggest that social media use may contribute to mediocre academic achievement. The creation of tactics or interventions to mitigate or manage the detrimental effects of social media on students' academic performance can therefore be guided by this.

This study examines the impact of social media use on the academic focus and study habits of general aviation students, who are particularly susceptible to digital distractions due to their cognitively demanding curriculum. Although previous research has recognized the disruptive potential of social media in general education settings, there is still much to be learned about how it affects technical subjects that require extended periods of focus. To determine how routine social media use affects sophisticated learning activities, such as simulations and analytical problem-solving, the study focuses on general aviation students at Indiana Aerospace University in 2024–2025. This research will aid in the development of focused interventions that support students in maintaining focus by identifying patterns of digital distraction specific to STEM classrooms. The researchers possess the necessary academic background, research assistance, and familiarity with both general aviation and behavioral research methodologies to carry out this study effectively. Their combined competencies in data collection, analysis, and ethical research practices ensure the project will be conducted with rigor and successfully completed.

Research Question/ Objectives

The study aimed to assess the effects of social media-induced distractions on the academic performance of General Aviation students at Indiana Aerospace University for the Academic Year 2024–2025. Specifically, this study sought to answer the following sub-problems, in terms of:

1. To assess the academic performance of General Aviation students.
 - 1.1. academic performance;
 - 1.2. social media usage; and
 - 1.3. media-induced distractions?
2. Rank the Problems encountered by the General Aviation students.

Methodology

Research Design

The research method that will be used is a quantitative method. Quantitative research involves a structured approach to collecting and analyzing numerical data to measure variables, test hypotheses, and discover patterns or relationships. Using statistical tools, researchers can draw conclusions about a population from a representative sample (Toring et al., 2024). The researchers aim to evaluate the impact of social media-induced distractions on the academic performance of general aviation students for the 2024-2025 academic year.

Participants/Respondents

One hundred general aviation students from Indiana Aerospace University will participate in this study as respondents. A.Y. 2024-2025. Students' lives now revolve around social media, especially those studying general aviation. Convenience sampling would be applied to the respondents, as it is for easy accessibility for the researchers and can be achieved within the given time frame. These distractions often lead to poorer academic performance, as they hinder students' ability to focus on complex engineering concepts and study-related problem-solving exercises.

Instrument

To collect the necessary data, the researchers will develop a self-constructed survey questionnaire that will be answered via Google Forms by General Aviation students. The instrument was divided into three main sections, aligned with the study's objectives. The first section focused on the respondents' demographic profiles, including age and gender. The second part assesses the effects of social media-induced distractions on academic performance. It was rated using a Likert-type scale survey, where 4 indicated "Strongly Agree," 3 indicated "Agree," 2 indicated "Disagree," and 1 indicated "Strongly Disagree."

Data Analysis

The statistical treatment of data utilized a four-point scale with numerical ranges, descriptive equivalents, and interpretations. Furthermore, we also included frequency, rate, weighted mean, and ranking in assessing the effects of social media-induced distractions on the academic performance of General Aviation students in AY 2024-2025.

Ethical Considerations

The researchers will ensure ethical integrity by obtaining informed consent through written forms, clearly communicating the study's objectives, procedures, potential risks, and the intended use of participant information. To protect confidentiality, data will be securely stored with restricted access and only shared in aggregate form to prevent the identification of individuals. Researchers will be transparent about the steps taken to maintain confidentiality and will avoid any violations of participant privacy. Additionally, robust data security measures will be implemented, including the encryption of electronic files and the physical protection of hard copies, to prevent unauthorized access and misuse of data.

Results and Discussion

Academic Performance

Academic performance refers to the measurable outcomes of a student's learning and achievement in educational settings, typically assessed through grades, test scores, and other evaluative measures. In the context of "The Effects of Social Media-Induced Distractions on Students' Academic Performance," academic performance is a key indicator used to evaluate how digital distractions, particularly those originating from social media platforms, impact students' ability to focus, retain information, and meet academic expectations.

Table 1 presents the perceptions of aviation students (tentative) regarding their academic performance.

Table 1. *Academic Performance*

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Description</i>
Social media helps me to connect with classmates about school works	3.75	Strongly Agree
Social media have educational content that helps me understand my lessons	3.38	Strongly Agree
Social media improves my mood mid study session	3.16	Agree
Managing my social media habits helped me improve my academic performance	3.16	Agree
Social media helps me manage my study time effectively to meet deadlines	2.78	Agree
Average Weighted Mean	3.25	Agree

Legend: 4.21-5.00 = Strongly Agree, 3.41-4.20 = Agree, 2.61-3.40 = Neutral, 1.81-2.60 = Disagree, 1.00-1.80 = Strongly Disagree

Social Media Usage

Social media usage refers to the frequency, duration, and manner in which individuals interact with online platforms for communication, entertainment, information, or networking purposes.

Within the scope of "The Effects of Social Media-Induced Distractions on Students' Academic Performance," social media usage is examined as a contributing factor to digital distractions that may interfere with students' focus, time management, and ultimately, their academic outcomes.

Table 2 presents the perceptions of aviation students regarding social media usage.

Table 2. *Social Media Usage*

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Description</i>
Distracting myself with social media while studying to relieve anxiety.	2.79	Disagree
I keep track of time while using social media, which improves my study schedule.	2.52	Disagree
The constant notifications and alerts from social media doesn't affect my academic performance.	2.4	Agree
Social media improves my attention span during study sessions.	2.23	Agree
Constant use of social media doesn't affect my sleeping schedule or create fatigue.	1.96	Disagree
Average Weighted Mean	2.38	Disagree

Legend: 4.21-5.00 = Strongly Agree, 3.41-4.20 = Agree, 2.61-3.40 = Neutral, 1.81-2.60 = Disagree, 1.00-1.80 = Strongly Disagree

Media-Induced Distractions

Media-induced distractions refer to the disruptions in focus, productivity, or task performance that occur when consuming or being interrupted by digital media content. In relation to The Effects of Social Media-Induced Distractions on students' Academic Performance, these distractions are primarily triggered by social media platforms, which interrupt cognitive processes, reduce attention spans, and interfere with students' ability to engage effectively in academic tasks.

Table 3 presents the perceptions of aviation students regarding media-induced distractions.

Table 3. *Media-Induced Distractions*

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Description</i>
I perform better academically when I limit my social media use.	3.39	Strongly Agree
Social media has enhanced my capability to contribute in group works and projects	3.3	Agree
I am informed of academics topics and resources through social media	3.3	Agree
I manage to maintain concentration on academic tasks despite having access to social media.	2.87	Strongly Agree
I am productive during study sessions, regardless of my social media usage.	2.81	Strongly Agree
Average Weighted Mean	3.13	Agree

Legend: 4.21-5.00 = Strongly Agree, 3.41-4.20 = Agree, 2.61-3.40 = Neutral, 1.81-2.60 = Disagree, 1.00-1.80 = Strongly Disagree

Problems Encountered

The problems encountered due to social media-induced distractions include poor time management, missed deadlines, low study motivation, reduced productivity, difficulty concentrating, frequent social media checking, sleep-related tardiness, and overall negative academic impact.

Table 4 contains the following encountered in The Effects of Social Media-Induced Distractions on the Students' Academic Performance.

Table 4. *Problems Encountered*

<i>Indicators</i>	<i>Frequency</i>	<i>Rank</i>
I struggle to manage my time effectively because of constant social media use.	73	1
I rarely complete my assignments on time because I get distracted by social media.	55	2
I feel less motivated to study after spending a lot of time on social media.	52	3
Social media has made me less productive in my schoolwork.	44	4
I find it difficult to concentrate in class due to excessive social media use.	43	5.5
I cannot study for long periods without checking my social media accounts.	43	5.5
I am often late to my classes due to sleep deprivation due to long social media screen time.	39	7
I often forget academic deadlines because I'm focused on social media.	37	8
I perform poorly in exams because I spend more time on social media than preparing.	36	9
Social media has had a mostly negative impact on my academic performance.	33	10

The top five problems encountered by students due to social media-induced distractions are as follows. 1) Students struggle to manage their time effectively because of constant social media use. 2) They rarely complete their assignments on time due to getting distracted by social media. 3) Many feel less motivated to study after spending a lot of time on these platforms. 4) Social media has made them

less productive in their schoolwork. 5) Students find it difficult to concentrate in class due to excessive social media use.

Ranking first with a frequency of 73, students struggle with time management due to excessive social media use, as constant engagement leads to procrastination and less time for academics. This behavior creates a cycle where students feel overwhelmed by unfinished tasks, leading to increased stress and poor academic performance. Over time, poor time management becomes a habit, making it difficult for students to prioritize academic responsibilities effectively.

Second-highest with a frequency of 55, many fail to complete assignments on time due to social media distractions, as notifications and endless scrolling disrupt their focus and delay work. The accessibility of social media on mobile devices means distractions are just a tap away, making it harder to maintain consistent study sessions. As deadlines approach, students often rush their work, compromising quality and learning outcomes.

With a frequency of 52, the third highest, extended social media use reduces motivation to study, as the instant gratification from these platforms makes academic tasks feel less appealing. The entertaining and fast-paced nature of social media content lowers students' tolerance for the slower, effortful process of studying. This shift in attention preference can lead to disinterest in academic goals and decreased long-term commitment to schoolwork.

Fourth highest in frequency, productivity in schoolwork declines due to social media, with students becoming less efficient and producing lower-quality work. Frequent interruptions disrupt concentration and hinder the depth of focus required for complex tasks. As a result, students may complete tasks more slowly and with less critical thinking, impacting overall academic performance.

Fifth highest in frequency, with 43, excessive social media use harms classroom concentration, as the habit of frequent checking makes it harder to stay engaged and retain information. Even short periods of attention loss can disrupt the learning process, especially in lecture-based or technical subjects. This fragmented attention affects comprehension, memory retention, and ultimately test or project performance.

Conclusion

The study revealed that General Aviation students hold mixed views on the effects of social media-induced distractions on academic performance. While students acknowledged that social media can be beneficial for learning when used purposefully—for example, through accessing educational resources and engaging in group discussions—they also recognized its negative impact when usage is excessive and unregulated. Many reported that distractions from entertainment and non-academic content significantly reduced their ability to focus, complete tasks on time, and maintain productive study habits. Thus, the study concludes that social media can either enhance or hinder academic performance depending on how it is managed, underscoring the importance of structured time management and intentional use.

To minimize distractions and maximize the academic benefits of social media, the study recommends that students adopt self-regulation strategies and healthier usage habits. Creating daily schedules that set clear boundaries for study and social media use, turning off notifications during schoolwork, and limiting screen time before study sessions can help improve focus and motivation. In addition, prioritizing academic tasks through daily to-do lists and reducing social media use before classes are practical steps toward enhancing productivity. Keeping phones on silent or out of sight during lectures can further enhance concentration. With these strategies, students can harness the academic benefits of social media while mitigating its disruptive effects on their performance.

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