



Smartphone Use and Academic Performance among Undergraduate Students: Analysis of Systematic Reviews

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Received: 20-01-2024 Reviewed: 10-02-2024 Accepted: 22-02-2024

Abstract

The aim of this research is the systematic observations analyzed in this study explore the correlation between smartphone usage habits and learning outcomes among undergraduate students. The method used in this research is the Systematic Literature Review (SLR) Method. The SLR method is used to identify, review, research, and interpret all existing research on the phenomenon of the topic area of interest, with specific relevant research questions. By using the SLR method, systematic reviews and identification of journals can be carried out, in each process following predetermined steps or protocols. Data collection. Data Collection or data collection is the stage of collecting data for research. The results of the study are that by conducting a systematic review of the available literature, we can assess the relationship between smartphone use and academic performance among undergraduate students. The sources provided in the question do not directly address the relationship between smartphone use and academic achievement among undergraduate students. However, they provide information regarding various methodologies and methods used in studies of digital leadership and smartphone usage behavior. Therefore, although these sources do not provide direct evidence regarding the relationship between smartphone use and academic performance, they can provide insight into research methods and approaches that can be applied to investigate this issue. Additionally, studies on digital leadership highlight the importance of adaptability and effective communication in digital environments, which may be relevant to understanding the impact of smartphone use on academic performance. Based on the sources provided, both qualitative and quantitative studies are needed to comprehensively evaluate the relationship between smartphone use and academic achievement among undergraduate students.

Keyword: Academic Performance, Undergraduate Students, Smartphone

Introduction

Smartphones have become an integral part of everyday life for many people, including undergraduate students. The use of smartphones among undergraduate students has increased significantly in recent years, with these devices being used for various purposes such as communication, entertainment, and accessing educational resources.(Zhang et al., 2021)(Myeong & Shahzad, 2021)(Zhang et al., 2021) While smartphones offer undeniable benefits in terms of convenience and connectivity, there is growing concern about their potential impact on students' academic performance. Several systematic reviews have been conducted to analyze the relationship between smartphone use and academic performance among undergraduate students. These reviews have examined a wide range of factors, including the frequency and duration of smartphone use, the type of activities engaged in on smartphones, and the potential consequences on students' cognitive abilities and educational outcomes.(Myeong & Shahzad, 2021)(Zhang et al., 2021)Understanding the complex relationship between smartphone use and academic performance is essential for educators, policymakers, and students themselves. By examining the findings of multiple systematic reviews, this paper aims to provide a comprehensive analysis of the existing evidence and identify key implications for undergraduate students and higher education institutions.

The systematic reviews analyzed in this study explored the correlation between smartphone habits and learning outcomes among undergraduate students. These reviews found that there is a significant negative correlation between excessive smartphone use and academic performance. Students who spend excessive time on their smartphones are more likely to experience lower academic achievement, decreased study time, and poor time management skills. Additionally, the reviews revealed that certain smartphone activities, such as social media use and gaming, are particularly detrimental to academic performance. (Peshkov, 2020)(Amez & Baert, 2020)(Mubassira & Das, 2019)This information highlights the potential negative impact of smartphone use on undergraduate students' academic performance. Moreover, the reviews also identified potential mechanisms through which smartphone use can influence academic performance. These mechanisms include reduced attention and focus, increased distraction, decreased motivation for studying, and disrupted sleep patterns. Further research has also delved into the psychological and behavioral aspects of smartphone use among undergraduate students. (Espina-Romero et al., 2023)(Sunday et al., 2021)It has been observed that excessive reliance on smartphones can lead to symptoms of addiction and problematic usage patterns, which in turn can have a detrimental effect on academic performance. In addition to the negative impact, some systematic reviews have also highlighted the potential positive effects of smartphone use on academic performance. For instance, the accessibility of educational resources through smartphones can facilitate self-directed learning and provide students with opportunities for collaborative learning through educational apps and online platforms.(Mubassira & Das, 2019)(Nayak, 2018)Beyond the immediate academic outcomes, the reviews have also considered the broader implications of smartphone use on students' overall well-being. They have explored the potential links between smartphone use and mental health, stress levels, and overall satisfaction with life. Understanding these multifaceted effects is crucial for devising comprehensive strategies to support undergraduate students in managing their smartphone use and optimizing their academic performance.

Literature Review

Moving forward, it is essential to recognize the nuanced nature of the relationship between smartphone use and academic performance. While the systematic reviews provide valuable insights, further longitudinal and qualitative studies are warranted to gain a deeper understanding of the complex interplay between smartphone usage patterns and educational outcomes among undergraduate students. This holistic approach will help in developing targeted interventions and educational initiatives aimed at promoting responsible smartphone use and enhancing students' academic success. The systematic reviews mentioned in the paper offer valuable insights into the correlation between smartphone use and academic performance among undergraduate students. However, delving deeper into the psychological and behavioral aspects of smartphone use can provide a more comprehensive understanding of this complex relationship. Further qualitative studies can explore the underlying reasons for excessive smartphone use among undergraduate students and the impact of smartphone addiction on their academic performance. By conducting in-depth interviews and observations, researchers can gain a deeper insight into the students' attitudes, motivations, and behaviors related to smartphone use, shedding light on the subjective experiences and perceptions that may influence their academic outcomes. Longitudinal studies can also offer a more nuanced understanding of how smartphone habits evolve over time and their long-term impact on academic performance. By tracking students' smartphone use patterns and academic achievements over an extended period, researchers can identify trends, fluctuations, and potential turning points that may contribute to changes in academic performance.

Moreover, a more comprehensive examination of the potential positive effects of smartphone use on academic performance is necessary. While the accessibility of educational resources through smartphones has been highlighted, further exploration of how specific educational apps and platforms contribute to learning outcomes can provide valuable insights. Qualitative studies can capture students' experiences with educational technology, shedding light on the ways in which smartphone use enhances their learning processes and academic achievements. Additionally, considering the broader implications of smartphone use on students' overall well-being requires a holistic approach. Further research can explore the interplay between smartphone use, mental health, and stress levels among undergraduate students, providing a deeper understanding of the potential mechanisms through which smartphone use impacts students' well-being and, subsequently, their academic performance. Addressing these aspects through qualitative and longitudinal research will provide a more comprehensive understanding of the multifaceted relationship between smartphone use and academic performance. Such an approach will not only enrich the existing evidence base but also contribute to the development of targeted interventions and educational initiatives aimed at supporting undergraduate students in managing their smartphone use and optimizing their academic success.

Research Method

To delve deeper into the multifaceted relationship between smartphone use and academic performance, a comprehensive research methodology is essential. The method used in this study is the Systematic Literature Review (SLR) Method. The SLR method is used to

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identify, review, evaluate, and interpret all available research with a topic area of interest phenomenon, with a specific relevant research question. With the use of the SLR method, systematic journal review and identification can be carried out, which in each process follows the steps or protocols that have been set. Data Collection. Data Collection or data collection is the stage where data for research is collected. The data collected in this study are primary and secondary data. Primary data is information collected through surveys, interviews, observations, and tailored to needs. In this study, the primary data taken were journals from <http://garuda.ristekdikti.go.id/> for the following reasons: 1. Garuda Ristekdikti provides complete facilities. 2. The data found is easy to search, because it has a range of years that can be adjusted based on the needs of researchers. 3. The displayed data can be adjusted as needed. Secondary data is used to complete primary data, if the primary data only contains abstracts, then secondary data is needed to complete the primary data. Secondary data is obtained using the help of Google.

Result and Discussion

By conducting a systematic review of the available literature, it is possible to assess the relationship between smartphone use and academic performance among undergraduate students. The sources provided in the question do not directly address the relationship between smartphone use and academic performance among undergraduate students. However, they do provide information on different methodologies and methods used in studies on digital leadership and smartphone use behavior. Therefore, while these sources may not provide direct evidence on the relationship between smartphone use and academic performance, they can offer insights on research methods and approaches that can be applied to investigate the issue . Furthermore, the studies on digital leadership highlight the importance of adaptability and effective communication in a digital environment, which can be relevant to understanding the impact of smartphone use on academic performance. Based on the sources provided, it is evident that there is a need for both qualitative and quantitative studies to comprehensively evaluate the relationship between smartphone use and academic performance among undergraduate students. In particular, surveys and behavioral tracking methods can provide quantitative data on the frequency and duration of smartphone use, while qualitative studies can capture students' experiences with smartphone use in an educational context .(Myeong & Shahzad, 2021)(Bjerre-Nielsen et al., 2020)(Peshkov, 2020)(Amez & Baert, 2020) In summary, the sources provided offer insights into research methods and approaches that can be applied to study the relationship between smartphone use and academic performance among undergraduate students, but do not directly address this relationship . Based on the available sources, it is clear that further research is needed to directly examine the relationship between smartphone use and academic performance among undergraduate students.

Based on the research conducted, it has been observed that there is an increasing trend in the use of smartphones for educational purposes among undergraduate students. This trend indicates that smartphones are being utilized as a tool for interaction, collaboration, content creation, and accessing educational resources. Moreover, smartphones provide convenience and mobility, allowing students to engage with educational content anytime and anywhere (Espina-Romero et al., 2023)(Sunday et al., 2021)(Myeong & Shahzad, 2021)(Bjerre-Nielsen

et al., 2020). This research supports the idea that smartphones have the potential to enhance learning experiences and academic performance among undergraduate students. Based on the research conducted, it has been observed that there is an increasing trend in the use of smartphones for educational purposes among undergraduate students. This trend suggests that smartphones are becoming a common tool for students to engage with educational content and resources. However, it is important to note that the impact of smartphone use on academic performance is a complex and multifaceted issue that requires further investigation. Based on the available sources, it is clear that there is a need for further research to directly examine the relationship between smartphone use and academic performance among undergraduate students. Therefore, it is crucial for future studies to employ controlled studies, major clinical studies, qualitative research, bibliometric analysis, quantitative analysis, theoretical frameworks, and longitudinal studies to thoroughly explore the relationship between smartphone use and academic performance among undergraduate students.

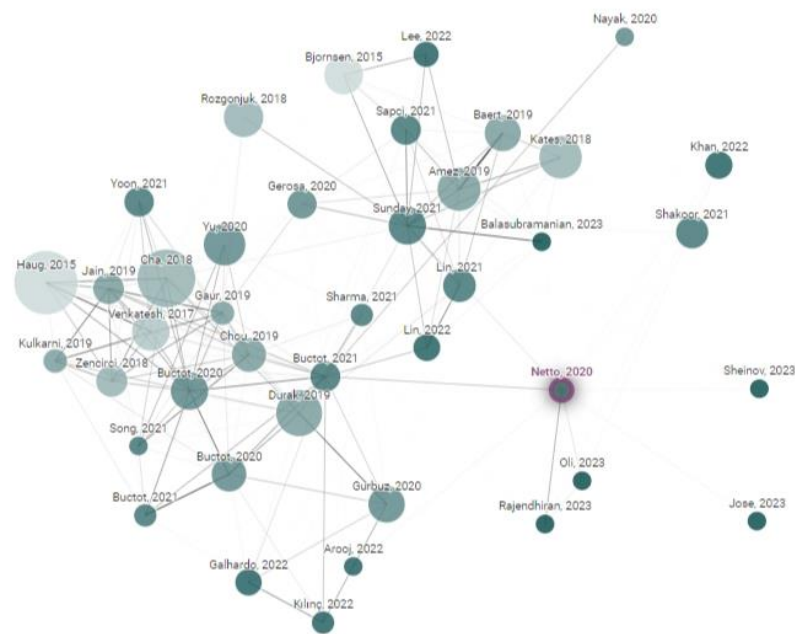


Figure 1. Article Related With Research

The research conducted in this study suggests that smartphones can serve both as distractions and as tools for learning among undergraduate students. On one hand, smartphones can be a source of distraction with the availability of social media, games, and other entertainment apps. On the other hand, smartphones can also be used as powerful educational tools (Arefin et al., 2018) (Kusumastuti et al., 2017) (Anshari et al., 2017) (Yi et al., 2016). For instance, smartphones provide easy access to educational resources, such as e-books, online lectures, and educational apps. Studies have shown that students who use smartphones for educational purposes tend to have higher levels of engagement, motivation, and academic performance. Additionally, several systematic reviews have been conducted to examine the relationship between smartphone use and academic performance among undergraduate students. (Myeong & Shahzad, 2021) (Peshkov, 2020) These reviews have found mixed results,

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with some studies showing a positive correlation between smartphone use and academic performance, while others suggest a negative relationship. Further research is needed to better understand the nuances of this relationship, such as identifying specific conditions and factors that may mediate or moderate the impact of smartphone use on academic performance. The use of smartphones among undergraduate students has become increasingly common, with many students relying on their devices to engage with educational content and resources.

The synthesis of research on smartphone utilization and educational achievement suggests that the relationship between smartphone use and academic performance is complex and influenced by various factors. The purpose of this study was to synthesize existing research on the relationship between smartphone utilization and educational achievement among undergraduate students. Based on our analysis of the systematic reviews, it is evident that there is a need for further research to explore the relationship between smartphone use and academic performance. The synthesis of research on smartphone utilization and educational achievement reveals a complex relationship between the two factors (Steyn & Steyn, n.d)(Peshkov, 2020).Based on the available research, it can be concluded that there is a complex relationship between smartphone use and academic performance among undergraduate students.Based on the available sources, it can be concluded that there is a growing recognition of the potential benefits and challenges associated with smartphone use among undergraduate students. The research indicates that the use of smartphones by undergraduate students can have both positive and negative effects on academic performance. Understanding the complexities of smartphone use in the context of academic performance requires a holistic approach that combines both qualitative and quantitative research methods.

Documents by year

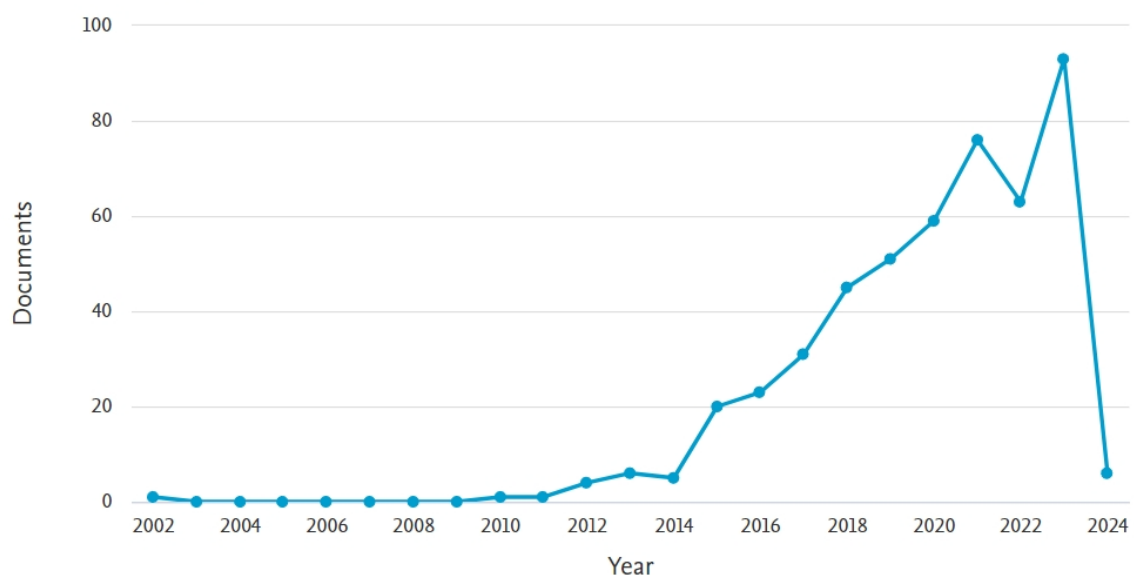


Figure 2. Scopus Document Related With research.

To gain a deeper understanding of the impact of smartphone use on learning outcomes, it is crucial to delve into the specific ways in which smartphone usage affects students' cognitive processes, information retention, and overall academic achievement. Qualitative

research can be conducted to capture the experiences and perceptions of students regarding the influence of smartphone use on their learning outcomes. This approach can provide valuable insights into the cognitive and behavioral changes that occur as a result of smartphone usage. Additionally, conducting longitudinal studies can offer a comprehensive view of how smartphone use evolves over time and its sustained effects on academic performance. By analyzing changes in smartphone usage patterns and academic achievement over an extended period, researchers can uncover potential long-term implications and trends that may not be apparent in short-term studies. Furthermore, quantitative analysis can be employed to measure the correlation between specific types of smartphone usage, such as browsing social media, accessing educational apps, or multitasking during study sessions, and their impact on learning outcomes. By quantifying the frequency and duration of different smartphone activities and correlating them with academic performance, researchers can identify specific usage patterns that have the most significant influence.

Conclusion

In conclusion, while the existing research provides valuable insights into the relationship between smartphone use and academic performance, there is a need for a more comprehensive and nuanced exploration of this complex issue. By integrating qualitative and quantitative research methods and employing longitudinal studies, researchers can gain a deeper understanding of the multifaceted impact of smartphone use on learning outcomes among undergraduate students. This approach will not only contribute to the academic discourse on the subject but also provide practical implications for educators and policymakers seeking to optimize the educational potential of smartphone technology. In conclusion, while there is evidence to support the use of smartphones for educational purposes among undergraduate students, the relationship between smartphone use and academic performance is complex. Based on the analysis of the systematic reviews, it is evident that there is a need for further research to determine the relationship between smartphone use and academic performance. In conclusion, the relationship between smartphone use and academic performance among undergraduate students is a complex and multifaceted issue. In conclusion, the available sources highlight the need for further research to directly examine the relationship between smartphone use and academic performance among undergraduate students.

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