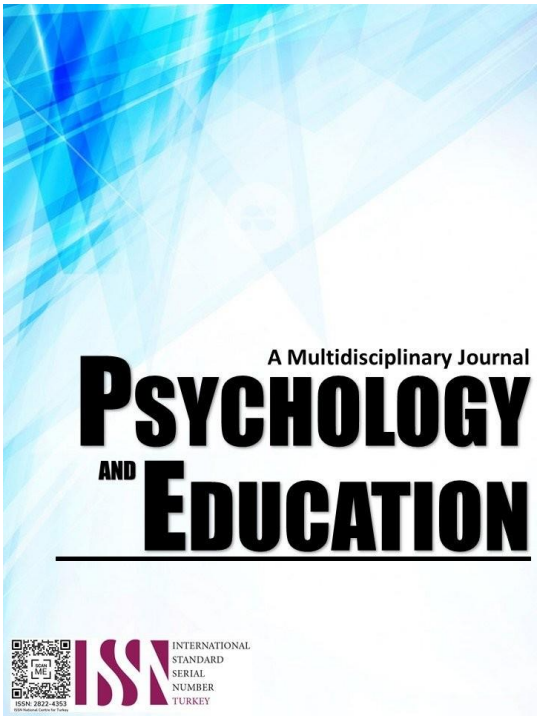
THE IMPACT OF ANDROID PHONE UTILIZATION TO THE ACADEMIC ACHIEVEMENT OF THE JUNIOR HIGH SCHOOL STUDENT IN MODULAR LEARNING



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Research Article

The Impact of Android Phone Utilization to the Academic Achievement of the Junior High School Student in Modular Learning

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Abstract

This study determined the impact of Android phone utilization on the academic achievement in Araling Panlipunan of junior high school students for the school year 2021–2022 in Macapari National High School, Damulog South District, Division of Bukidnon. Specifically, it focused on the relationship between general attitude towards using Android phones, interaction competency, self-efficacy, and behavioral intention in using Android phones and the academic achievement of junior high school students. The study employed a descriptive-correlational research design. A survey questionnaire was used as the primary data-gathering instrument. Descriptive statistics were used to describe the academic achievement of the students. Mean and standard deviation were used to determine the general attitude and the impact of interaction competency, self-efficacy, and behavioral intention on academic achievement. Pearson's r was utilized to assess the relationship among the variables. Findings revealed that students demonstrated a very good general attitude and a very high impact of interaction competency, self-efficacy, and behavioral intention in using Android phones. Their academic achievement was classified as very satisfactory. Furthermore, there was a significant relationship between general attitude, interaction competency, self-efficacy, and behavioral intention in using Android phones and academic achievement. Therefore, the null hypothesis is rejected.

Keywords: *general attitude, android phone, academic achievement, junior high school, modular learning*

Introduction

The utilization of technology has greatly advanced during the past ten years. In actuality, a lot of technologies have been developed to support us in our daily lives, particularly in the areas of employment and education, as well as communication and transportation. The majority of us use technology. The cellphone is among the most widely utilized technology. In addition to many other uses, a cellphone can be used for networking sites streaming, communication, and accessing an endless supply of information. Additionally detrimental to learning ability as well as health are cellphones. In 2018, Apolinario et al.

The COVID-19 pandemic that we are currently dealing with has impacted people's daily lives all around the world. Since the country's first lockdown, industry, public transportation, aviation, and educational institutions have all stopped operating, which has had a significant negative influence on the nation's overall progress and development. The complete closure of schools as a result of the COVID-19 pandemic affected not just the pupils but the nation's educational system as a whole (Indian Today, 2020).

The method of instruction and learning is being significantly impacted by mobile phones during this pandemic. To prevent scholastic losses, the majority of colleges and universities began offering courses to students online (via a computer, laptop, or mobile device). Because of the lockout, online courses or digital learning become essential to the process of teaching and learning. Both learners and educators now frequently use mobile devices for learning. More and more students can be connected thanks to portable devices' outstanding reliability and easy access, which may not be accomplished in any other method. In order to reach all of learners in the state, educational institutions, especially those offering higher education, are now widely using smartphones and tablets to provide their online courses. As portable education becomes more widely used, a study is usually required to determine its efficacy during the COVID-19 pandemic. (Sipankar Das and Hemanta Nath, 2020)

According to Apolinario et al. (2018), cellular phones have become one of the fastest-diffusing mediums on the planet, contributing to the rise of "mobile youth culture," particularly among the next wave of learners. Since smartphones are presently to stay, we must practice moderation in their use and find imaginative methods to use them as educational devices.

Learners are increasingly using handheld devices for learning, according to Hemanta Nath & Sipankar Das (2020). It allows learners to learn from any location, despite constraints (Hayath, 2017). A thorough picture of the efficacy of mobile instruction during the COVID-19 lockdown period may be provided by this research on how learners dealt with mobile learning.

Individuals have always wished to talk between themselves or just make something in their lives better. Throughout history, humans have utilized carrier pigeons, drumming, and smells to convey messages. That demonstrates unequivocally how crucial it is for us as people to be able to speak from a distance. For this reason, in 1932, Martin Cooper created the first mobile phone in history. In 2018, Sanchez et al.

As the period went on, cellular phones also changed. Initially, they were only colorless, but later on, they had built-in cameras, playlists, video players, memory for files, radios, the World Wide Web, and some even televisions, as requested by people or learners. Telephones are now seen as necessities rather than wants in today's culture (Sanchez and others, 2018)

Hemanta Nath and Sipankar Das (2020) both mentioned that the present system of education is moving into using more gadgets in lessons at all levels, from elementary to college. The devices most frequently utilized for classroom use in high schools and universities are computer systems, tablets, and mobile phones. The purpose of these instruments is to improve the performance of pupils in school. Learners use devices for exchanges, research, and note-taking, among other purposes. Modern technology in the classroom has had certain adverse effects, despite the devices' stated goals of enhancing the learning environment for students. However, nothing is known about the impact of learners. cell phone use on their educational performance.

Learners benefit from smartphones in more ways than just studying and having fun. Since we recognize the value of cellular phones in every aspect of our lives, we can conclude that they benefit our society in numerous capacities across the board. However, there is a growing issue with mobile phone use in schools. In addition to disrupting learning by ringing, it can also be used for texting, internet browsing, taking depicts of tests, and—most frequently—cheating on tests and tests. However, this does not suggest that all of these activities are bad because they have greatly improved instruction; nonetheless, everything ought to be used sparingly. Recognizing the pupils' beliefs is crucial. Pupils are more inclined to think they can use their phones and still concentrate in class if they think they can finish.

At Macapari National High School, it is evident that the majority of pupils in junior high school, if not every one of them, receive Android phones from their guardian. This is done to help their kids with the online courses and to prevent confusion. Additionally, it will relieve them of the responsibility of coming down with their kids to go over or explain specific issues in the self-education courses. All it takes is an impression, and the solution is available as long as they have an accurate internet connection and enough data to last the entire study session. The family members, who work together with the institution of instruction and the instructor to educate the child and ensure their learning, are further stressed out by this new regular instructional setup, according to some casual interviews and observations. Giving their kids an Android phone can relieve some of the strain because they can just browse the internet and look for answers and explanations for any topics that are unclear to them. In this manner, caregivers can optimize creativity while continuing with their various responsibilities. But will this always be beneficial, or are there going to be some drawbacks along way of example?

The examiner's decision to investigate the relationship between junior high school school performance in the selected area and their use of smartphones was based on this assumption. Not just for the learners, but for everyone on the planet, this is a pressing issue since it is alarming to realize how reliant we have become on gadgets, which is what led to this outbreak. The research will provide a thorough understanding of how Mobile phone use influences learners' academic performance and success in a modular educational format. Further growth and progress in the field of education depend on a comprehension of how productive the Android phone use is.

Research Questions

The goal of the study is to determine how junior high school students in Araling Panlipunan's use of Android mobile devices impacts their educational achievement in the 2021–2022 academic year at Macapari National High School, which is situated in the Bukidnon Division's Damulog South District. In particular, it attempted to respond to the following queries:

1. What is the junior high school students' academic standing?
2. How do junior high school students generally feel about using Android phones?
3. How do behavioral intention, self-efficacy, and interaction competency about Android phone use affect junior high school students' academic achievement?
4. Is there a noteworthy correlation between junior high school students' academic achievement and their overall attitude regarding using Android phones, as well as their interaction competency, self-efficacy, and behavioral intention?

Methodology

Research Design

In this study, the descriptive-correlational design was employed. The present state of the junior high school students' educational performance, self-efficacy, interaction competency, behavioral intention, and overall attitude regarding utilizing Android phones would all be described. The association between the junior high school students' academic accomplishment, self-efficacy, behavior intention, interaction competency, and general attitude towards using an Android phone will be ascertained using correlation.

Respondents

The study's participants would be the junior high school students in grades 7 through 10 at Macapari National High School in the Damulog South District of the Bukidnon Division in the academic year 2021–2022.

During the academic year 2021–2022, only one school—Macapari National High School Junior High School, Damulog South District, Damulog, Bukidnon—would be included in the study. The sample size was set by the researcher at 50% of the total population in each school.

During the academic year 2021–2022, 249 samples from 497 junior high schools in Macapari National High School, Damulog South

District, Damulog, Bukidnon, will be selected as study participants.

Instrument

A survey questionnaire that was semi-structured was used to collect the data. A questionnaire from the study The Impact of Smartphone Addiction on Educational Achievement of Higher Education Learners by Mukhdoomi, Arooba, et al. (2020) was modified by the researcher.

It consists of two sections: Part I: the Educational Achievement of Araling Panlipunan Junior High School Students for SY 2021–2022, and Part II: Android Phone Usage Questionnaire.

Procedure

The division superintendent received written consent to conduct the survey at Macapari National High School in Damulog South District, Damulog, Bukidnon. The researcher requested approval from the head of the school in question as well as the district supervisor.

Following approval of the request, the survey was carried out by the researcher with assistance from the enumerators. The researcher gave the enumerators a briefing to help them become familiar with the questionnaire.

One (1) set of questionnaires was provided to the participants. The letter-request to the school head, which was distributed by the grade-level adviser in question, provided the respondents with information. The respondents were given ample time to complete the surveys during administration in order to provide accurate results. In order for the respondents to understand all of the challenging terms and phrases in the questionnaire, the researcher and the enumerators provided definitions. The teacher's record contained the students' academic performance records.The researcher and enumerators distributed and collected the questionnaires from the respondents with the assistance of the junior high school instructors, adhering to the appropriate health and safety protocol. Once the data was collected, it was graded and categorized according to the study's issues.

Data Analysis

The collected data underwent analysis, translation, and summarization. The junior high school pupils' academic achievement was described using descriptive statistics including frequency count, mean, and percentage.

The mean, standard deviation, and rank were obtained in order to ascertain the overall attitude and the influence of behavioral intention, self-efficacy, and interaction competency in the usage of Android phones on the academic achievement of secondary school students.

The relationship between the educational outcomes of junior high school learners and their overall attitude toward using phones that run Android, as well as their interaction proficiency, self-assurance, and intent to behave was determined using Pearson r.

Results and Discussion

This section presents, evaluates, and interprets the information obtained from the survey to determine how the use of Android phones affected the educational outcomes of junior high school students at Macapari National High School in Damulog South District, Damulog, Bukidnon, during the 2021–2022 school year in modular learning. The impact of Android phone use on the performance of junior high school pupils in modular learning was the primary topic of the findings' discussion.

The Academic Performance of the Junior High School Students

The academic achievements of junior high school learners show that the majority performed in a very satisfactory manner, with grades ranging from 85 to 89 (54.2%). Those who achieved satisfactory academic achievement, with grades between 80 and 84 (39.8%), came next in frequency. Fortunately, every student met all the requirements for the specific grading period and passed the level with satisfaction. This demonstrates that most of them are meeting expectations and doing well in class.

According to Manuel, who was quoted by Galamgam (2012), there is a strong correlation between confidence and academic achievement. This further suggests that students should not be satisfied with simply passing the course; instead, they should persuade themselves of the true worth of performing well on all assignments.

General Attitude Towards Using Android Phones

Junior high school students showed excellent attitudes regarding the use of Android phones. The indicators "I can use Opera Mini, Internet Explorer, Mozilla Firefox, Opera, and Google Chrome applications to browse online such as e-mail, real materials and lectures" (mean = 4.41, sd = .741), "I enjoy learning" (mean = 4.39, sd = .780), "I can have a meaningful learning" (mean = 4.39, sd = .709), and "I can contact my classmates and friends through Facebook, Twitter, SMS, and so on" (mean = 4.38, sd = .694) demonstrated their very positive attitudes. Despite varying mean values, these indicators were consistently described as very positive, suggesting that Android phones are helpful for communication, idea exchange, and browsing to find answers and important information. This, in turn,

aids in their research.

This is corroborated by a study conducted by Samaha and Hawi (2016), which linked school performance, smartphone use, stress, and life satisfaction. Their findings revealed a negative correlation between smartphone addiction and educational achievement but a favorable correlation with life satisfaction.

The overall mean showed that junior high school students had a very positive attitude toward using Android phones (mean = 4.31, sd = .467), despite the indicator "I use it only for texts and calls" having the lowest mean (mean = 4.08, sd = .728). This suggests that smartphones, when used appropriately, can be beneficial. Additionally, they serve as a means of communication for receiving updates from people nearby or far away.

According to Mukhdoomi et al. (2020), students use various technologies for communication to build relationships with others. Students typically communicate with friends via Messenger, which allows them to respond quickly. They need to possess interaction competences, which are technology-related skills like using smartphones, to communicate effectively. Android phones are therefore helpful in many areas of life.

Effect of Android Phone Interaction Proficiency on Academic Performance

The data demonstrated that every parameter significantly affects learners' performance in school. The indicators "I can get feedback quickly" (mean = 4.28, sd = .743) and "I can maintain social relationships with others" (mean = 4.41, sd = .741) had the highest mean values. These reflect how students use communication platforms to build relationships. Messenger, for instance, allows quick interactions with peers, enhancing communication efficiency.

The indicator with the lowest mean value was "I can easily have a longer conversation with others" (mean = 4.33, sd = .755). The overall impact of interaction proficiency with Android phones on academic achievement was significant (mean = 4.34, sd = .589). When used appropriately, Android phones help students communicate and share information effectively.

Using an experimental methodology, Huznekoff (2015) found that message production and content—whether related or unrelated to class lectures—significantly impacted student learning. Participants who received or sent unrelated messages performed worse than those who stayed focused, showing that while relevant communication might not harm performance, irrelevant messaging could negatively affect learning outcomes.

Effect of Android Phone Self-Efficacy on Academic Performance

All indicators revealed a very high impact on academic achievement. The highest mean was recorded for the statement "Helps me to study more efficiently" (mean = 4.43, sd = .693), showing that students can manage their time and study effectively with smartphones.

Self-efficacy in this context refers to confidence in using mobile technology. For instance, someone confident in using a smartphone believes they can perform tasks efficiently. Factors like user-friendliness and training influence self-efficacy, enhancing the ability to use technology effectively.

The indicators "Is useful in my studies" (mean = 4.33, sd = .771) and "Improves my performance in studying" (mean = 4.33, sd = .738) shared the same mean values. The overall effect of self-efficacy on academic achievement was high (mean = 4.35, sd = .585). With information and assistance just a click away, Android phones enabled students to complete assignments efficiently.

According to Mukhdoomi et al. (2020), a person's judgment influences their actions. Students use smartphones confidently to complete academic tasks. Their ability to communicate effectively with tools like Messenger is a result of developing technical skills essential in today's educational landscape.

Impact of Behavioral Intention on Academic Achievement

Behavioral intention was also shown to have a substantial impact on academic achievement. The indicators "I want to send messages via Facebook to friends about classes" (mean = 4.38, sd = .759) and "I want to email friends about classes" (mean = 4.47, sd = .719) had the lowest and highest mean scores, respectively. Overall, behavioral intention had a strong impact (mean = 4.41, sd = .600).

Behavioral intention refers to one's subjective likelihood of engaging in a particular behavior. When aided by Android phones, students feel more confident expressing themselves. These tools allow for discreet and instant communication of academic-related messages.

Mukhdoomi et al. (2020) emphasize that students use various technologies to maintain communication and build relationships. Messenger, for example, allows real-time responses, helping students stay connected and informed.

Significant Relationship Between General Attitude, Interaction Competency, Self-Efficacy, and Behavioral Intention with Academic Achievement

There was a significant correlation between students' academic performance and the following variables: General Attitude Towards Using Android Phone ($r = .182$, $p = .004$), Interaction Competency ($r = .281$, $p = .000$), Self-Efficacy ($r = .136$, $p = .032$), and Behavioral Intention ($r = .224$, $p = .000$). Thus, the null hypothesis was rejected.

This suggests that academic success is strongly linked with students' general attitude toward Android phone use, their behavioral intention, interaction competency, and self-efficacy. In the context of the "new normal" and blended learning, Android phones play an important role.

According to Shuja Aleema et al. (2019), education needs technological innovation to address modern challenges. Mobile learning is transforming education by providing flexible solutions. As noted by West (2013), and Jacobs (2013), smartphone technology enables continuous access to up-to-date learning resources. West (2012) further points out that mobile learning empowers and engages students in a way that reshapes how they approach education**.**

Conclusions

Following the discovery of the findings, the following conclusions were developed.

Junior high school pupils were functioning well in class and meeting the expectations necessary for their level because their academic progress was generally extremely satisfactory.

Junior high school students have a generally positive attitude toward utilizing Android phones, therefore they have effectively employed them for their academic purposes.

Android phones can be a useful tool to help students learn because they have a significant impact on junior high school students' academic achievement in terms of interaction skills, self-efficacy, and behavioral intention.

Android phones can help students improve their academic performance because there was a significant correlation found between the academic achievement of junior high school students and their general attitude toward using them, as well as their interaction competency, self-efficacy, and behavioral intention.

The following suggestions are made in light of the results and conclusions.

The Department of Education should use appropriate educational guidance and other programs to help teachers develop and improve their knowledge and skills in order to maximize the use and positive effects of using Android phones, as the academic achievement of junior high school students is very satisfactory.

Although junior high school kids have a generally positive attitude toward using Android phones, it is nonetheless advised that parents and instructors closely supervise and control their students' time and usage of these devices.

Android phones can be a useful tool to help students learn, and their use has a significant impact on junior high school students' academic achievement in terms of interaction competency, self-efficacy, and behavioral intention. It is advised that teachers and the school fortify their relationships and collaboration in order to provide Android phones for educational purposes.

To determine the outcomes and conclusions of this study, more research should be done on the relationship between educational achievement and the overall attitude toward using an Android phone, interaction competency, self-efficacy, and behavioral intention when using an Android phone.

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