Artículos científicos

La influencia del smartphone en el rendimiento académico de universitarios en la nueva normalidad: caso Universidad Juárez Autónoma de Tabasco

The Influence of the Smartphone on the Academic Performance of University Students in the New Normality: The Case of Universidad Juárez Autónoma de Tabasco

A influência do smartphone no desempenho acadêmico de estudantes universitários na nova normalidade: o caso da Universidad Juárez Autónoma de Tabasco

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Resumen

Esta investigación fue realizada durante las clases en línea en el contexto de la nueva normalidad con la finalidad de conocer la influencia del teléfono inteligente en el rendimiento académico de estudiantes de la Universidad Juárez Autónoma de Tabasco (UJAT). Y precisamente el objetivo fue identificar los usos que le dan los estudiantes al *smartphone*, en específico los alumnos de sexto semestre de la licenciatura en Ciencias de la Educación (ciclo enero-junio 2021). El método fue de corte cuantitativo. Del universo de 270 estudiantes de la licenciatura en cuestión, 30 fueron los que formaron la muestra de estudio. El instrumento utilizado fue una encuesta de 10 preguntas cerradas con escala tipo Likert. Entre los resultados obtenidos, destaca que 93 % de los participantes refirió que cuenta con un teléfono inteligente, sin embargo, lo utilizan para estar en las redes sociales; solamente 6.67 % lo utiliza para realizar sus tareas. Igualmente destaca que la mayoría de la muestra,

40 %, le dedica de 8-10 horas a este dispositivo. Esto a pesar de que 73 % de los estudiantes considera que sí puede llegar afectar su salud el utilizar el teléfonopor mucho tiempo. En conclusión, el *smartphone* es utilizado de manera irresponsable, ya que el mayor tiempo es dedicado a las redes sociales y el mínimo como una herramienta pedagógica. Con estos datos se pueden tomar decisiones que ayuden a concientizar a los estudiantes sobre la manera en que el teléfono inteligente puede contribuir con su formación profesional.

Palabras clave: estudiantes universitarios, nueva normalidad, rendimiento académico, *smartphone*.

Abstract

This research was carried out during online classes in the context of the new normality to know the influence of the smartphone on the academic performance of students at the Universidad Juárez Autónoma de Tabasco (UJAT). And precisely the objective was to identify the uses that students give to the smartphone, specifically the sixth semester students of the Bachelor of Science in Education (January-June 2021). The method was quantitative cut. Of the universe of 270 students of the degree in question, 30 were the ones who formed the study sample. The instrument used was a survey of 10 closed questions with a Likert-type scale. Among the results obtained, it stands out that 93 % of the participants reported that they have a smartphone, however, they use it to be on social networks; only 6.67 % use it to perform their academic tasks. It also highlights that most of the sample, 40 %, spend 8-10 hours on this device. This despite the fact that 73 % of students consider that using the phone for a long time can affect their health. In conclusion, the smartphone is used irresponsibly, since most of the time is dedicated to social networks and the least as a pedagogical tool. With this data, decisions can be made that help educate students about how the smartphone can contribute to their professional training.

Keywords: covid-19, university students, academic performance, smartphone.

Resumo

Esta pesquisa foi realizada durante as aulas online no contexto da nova normalidade, a fim de conhecer a influência do smartphone no desempenho acadêmico dos alunos da Universidad Juárez Autónoma de Tabasco (UJAT). E precisamente o objetivo foi identificar os usos que os alunos dão ao smartphone, especificamente os alunos do sexto semestre do Bacharelado em Ciências da Educação (ciclo janeiro-junho 2021). O método foi de corte quantitativo. Do universo de 270 alunos da licenciatura em questão, 30 foram os que compuseram a amostra do estudo. O instrumento utilizado foi um questionário de 10 questões fechadas com escala do tipo Likert. Dentre os resultados obtidos, destaca-se que 93% dos participantes relataram que possuem smartphone, porém, utilizam para estar nas redes sociais; apenas 6,67% o utilizam para realizar suas tarefas. Destaca também que a maioria da amostra, 40%, dedica de 8 a 10 horas a esse aparelho. Isso apesar de 73% dos alunos considerarem que o uso prolongado do telefone pode afetar sua saúde. Em conclusão, o smartphone é usado de forma irresponsável, pois a maior parte do tempo é gasto nas redes sociais e o menor como ferramenta pedagógica. Com esses dados, decisões podem ser tomadas para ajudar a conscientizar os alunos sobre como o smartphone pode contribuir para sua formação profissional.

Palavras-chave: estudantes universitários, nova normalidade, desempenho acadêmico, smartphone.

Introduction

Today, smartphones are used to surf the Web and to access a wide variety of applications, which are also highly dependent on an Internet connection. To manage all these programs and take advantage of their functions, smartphones have a specific operating system installed. Although there are many models of smartphones with different operating systems, most of the market is monopolized by devices with Android system and iPhones with iOS system.

Arias et al. (2011) cite the following definition:

A smartphone (smartphone in Spanish) is an electronic device that works like a mobile phone with characteristics similar to those of a personal computer. Almost all smartphones are mobile phones that fully support an email client with full functionality of a personal organizer. An important feature of almost all smartphones is that they allow the installation of programs to increase data processing and connectivity. (p. 26).

While Siemens (2004) defines connectivism in this way:

Connectivism is the integration of principles explored by chaos, network, complexity, and self-organization theories. Learning is a process that occurs within diffuse environments of changing core elements—not entirely under the control of the individual. Learning (defined as applicable knowledge) can reside outside of us (within an organization or a database), it is focused on connecting sets of specialized information, and the connections that allow us to learn more are more important than our current state. of knowledge.

Connectivism is guided by the understanding that decisions are based on rapidly changing principles. New information is continually being acquired. The ability to distinguish between important and unimportant information is vital. Also critical is the ability to recognize when new information alters an environment based on earlier decisions. (p. 6).

The present investigation was approached within the area of study of education. The starting point was to inquire about the use of the smartphone as a learning strategy in sixth-semester students of group D of the Universidad Juárez Autónoma de Tabasco (UJAT). Throughout the work, the importance of new information and communication technologies (ICT) for education in this new normality caused by the 2019 coronavirus disease (covid-19) pandemic is highlighted, and how these favor and strengthen the training of students for insertion in the labor field. In such a way that the objective was formulated as follows: to identify the use that university students of the sixth semester group D of the Bachelor of Education Sciences at UJAT give to the smartphone.

This research will mainly benefit the students of said degree. With a total of 270 students, the sample consisted of 30 students from the sixth semester group D (the sampling technique was by strata). The research was carried out during the January-June 2021 cycle.

The data obtained are indicators of the level of educational quality, and will allow a greater integration of the smartphone as a tool in the educational task in this aforementioned new normality.

The world is changing, therefore education must change too.

One of the characteristics that define development today is the appearance and expansion of the world of cybernetics, with the stimulus represented by the spectacular increase in Internet connectivity and the generalization of mobile devices. We live in a connected world (Organización de la Naciones Unidas para la Educación, la Ciencia y la Cultura [Unesco], 2015).

Faced with this: "Schools have yet to take advantage of the potential of using technologies in the classroom to address the existing digital divide and offer each student the digital skills they need in the interconnected world in which we live" (Santos, September 16, 2015. paragraph 1).

Along the same lines, Arias and Cristia (2014) underline:

The new century requires that young graduates of the educational system master ICT to perform successfully in the labor market. In particular, new technologies open opportunities to increase student learning and reduce gaps between socioeconomic groups. (p. 3).

Finally, regarding ICT, Sunkel and Trucco (2012) mention the following: "Within a quality teaching-learning process, ICT can significantly support the development of the so-called 21st century skills" (p. 62). For these authors, in these new scenarios of the 21st century it is a priority to know, diagnose, conceptualize and analyze, all from a comparative perspective, the effects that new digital technologies have on the cognitive development of young people, as well as what values they reflect, styles of life and their educational expectations and, on the other hand, to examine the responses that arise from this phenomenon in terms of educational policies and practices that exist in the different regions and countries of the world.

Higher education institutions face a great challenge within the knowledge society: from obtaining technological goods, through the training of their teaching staff in the use of technological tools, to the development of digital competence in students. . Indeed, "graduates must have the habit of innovating, producing and transforming, from and with the management of science and technology" (Cuevas, 2014, p. 2). What has been described

above forms a pillar to be at the forefront and meet the demands of this competitive world, especially in this new normality caused by covid-19.

The interest in researching the use and exploitation of ICTs in the context of universities worldwide arises at the end of the 20th century, when various international organizations such as UNESCO, the OECD, the IDB and ECLAC carried out the first diagnostic studies to obtain information on the impact of these technologies within the academic processes. Regarding a study carried out by ECLAC, it is established that

University students classified as digital natives are immersed in the knowledge society, which demands a high level of knowledge and digital competence, however, the impact of their training regarding the use and mastery of technological resources is unknown with true data. that, as professionals, they must have during the new normality that the appearance of covid-19 brought to the world.

Based on the above, this research is focused on analyzing the use of the smartphone as a learning strategy in students. Thus, to obtain the indicators, a 10-question questionnaire was applied to a sample of 30 students. The number of respondents and the distribution were selected using the stratified sampling technique. The last one is to know how the apprehension of knowledge is taking place with the help of the smartphone in the learning process of university students of the UJAT during the new normality.

Method

This research was approached from a quantitative approach. The quantitative methodology is one that is supported by numbers to investigate, analyze and verify information and data, as well as to identify and define the variables. The research has a measurable scope, as Hernández, Fernández and Baptista (2003) support. It should also be noted that the survey technique was used for the development of this study. This survey had a total of 10 closed questions on a Likert-type scale and was distributed through a Google Forms form. Of a total universe of 270 students, 30 were the ones who formed the study sample, 6 men and 24 women, with an age ranging between 19 and 43 years.

The survey is a highly fundamental technique for data collection; it has long since become indispensable for many investigations. Thus, it has been possible to know the behavior of different interest groups, which has served as the basis for decision-making. Without a doubt, the survey has contributed significantly to the advancement of knowledge

in multiple areas. Due to its massive use and dissemination, it continues to be frequently used to this day in the field of social research, and particularly in the educational field.

In short, this research is quantitative in nature and aims to test the following hypothesis: the more educational use there is of smartphones, the lower the apathy, reluctance, boredom and sleep of the students of the sixth semester group D of the Bachelor of Science in Sciences UJAT Education.

Results

This section shows the results obtained from the survey of the 30 students who participated in the research. The most representative are the following:

Tabla 1. ¿Cuentas con un teléfono inteligente?

Válido	Frecuencia	%
Sí	28	93.30
No	2	6.70
Total	30	100

Fuente: Elaboración propia.

Most of the students reported that they do have a smartphone.

Tabla 2. ¿Utilizas el teléfono inteligente para realizar tus actividades escolares?

Válido	Frecuencia	%
Poco frecuente	6	20.00
Nada	4	13.30
Frecuente	20	66.70
Total	30	100

Fuente: Elaboración propia

Of the total, 20 students indicated that they frequently use the smartphone for their school activities.

Tabla 3. ¿Conoces aplicaciones del teléfono inteligente para poder realizar una búsqueda?

Válido	Frecuencia	%
Poco	11	36.70
Mucho	18	60.00
Nada	1	3.30
Total	30	100

Fuente: Elaboración propia

Tabla 4. ¿Consideras que puedes buscar información confiable a través del teléfono inteligente?

Válido	Frecuencia	%
Poco	14	46.70
Mucho	13	43.30
En exceso	3	10.00
Total	30	100

Fuente: Elaboración propia

However, 46.70% considered it unlikely to find reliable information through a smartphone, while 43.30% believed the opposite.

Tabla 5. ¿Qué sitios utilizas frecuentemente en la búsqueda de la información?

Válido	Frecuencia	%
Google	18	60.00
Google Académico	9	30.00
Bibliotecas virtuales	3	10.00
Total	30	100

Fuente: Elaboración propia

The site most used to search for information among the sample is Google.

Tabla 6. ¿Consideras que al navegar en un teléfono inteligente es más rápido que una computadora?

Válido	Frecuencia	%
Sí*	18	60
No	9	30
Desconozco	3	10
Total	30	100

Fuente: Elaboración propia

Tabla 7. ¿Tus profesores te han alentado a utilizar el teléfono inteligente para realizar investigaciones durante la clase?

Válido	Frecuencia	%
Sí	20	66.70
No	8	26.70
Nunca	2	6.60
Total	30	100

Fuente: Elaboración propia

From the point of view of the respondents, teachers have encouraged the use of the smartphone to conduct research.

Tabla 8. ¿En qué lugar utilizas más el teléfono inteligente?

Válido	Frecuencia	%
Casa	18	60.00
Universidad	5	16.70
Lugares Públicos	3	10.00
Cuando te trasladas de un lugar a otro	4	13.30
Total	30	100

Fuente: Elaboración propia

On the other hand, at home is where the students who participated in this research use a smartphone the most.

Tabla 9. ¿Para qué utilizas frecuentemente el teléfono inteligente?

Válido	Frecuencia	%
Redes sociales	20	66.70
Llamadas y mensajes	8	26.70
Tareas	2	6.60
Total	30	100

Fuente: Elaboración propia

Social networks are frequently used by students through smartphones; They rarely use them for homework.

Tabla 10. ¿Cuántas horas le dedicas a tu teléfono inteligente?

Válido	Frecuencia	%
2-4	3	10.00
4-6	11	36.70
8-10	12	40.00
Más	4	13.30
Total	30	100

Fuente: Elaboración propia

Discussion

From this research, scientific knowledge was generated around a little studied phenomenon in the state of Tabasco, Mexico, and which is a priority in the national and international scenarios in this new normality.

As is well known, on March 20, 2020, the World Health Organization (WHO) launched a global health alert through its website, as well as on Facebook, WhatsApp and other social networks, to ensure the dissemination of information. because of their importance as sources of communication for current and future generations. On April 20, the WHO and the International Telecommunications Union (ITU), with the support of the United Nations Children's Fund (UNICEF), issued the joint statement "Unleashing the potential of information technology to defeat the covid-19". Telecommunications companies have agreed to send messages of vital information about the pandemic via mobile phones to protect the

health of the estimated 3.6 billion low-income people around the world without an Internet connection.

The different campaigns promoted both in the country and in the rest of the world point to a sense of solidarity from the individual, which has led to the closure of schools and not to go to public places where hundreds of people attend, such as offices or shopping centers, all with the aim of avoiding contagion. Given these measures, distance education, mediated by technology, has become the main tool to continue educational work at all levels. (Barrón, 2020, pp. 66-69).

In this same direction, the National Association of Universities and Institutions of Higher Education [Anuies] (2020) issued a series of agreements to continue academic work. All these measures were implemented in Mexican educational institutions as of March of that year. In addition to the above, each school has taken on the task of designing proposals to continue academic work during the health contingency, with the main support of ICT. The challenges and the challenges have not been minor, and they are of various kinds, either technological or the training of teachers and students for the use and management of digital platforms. In addition, it should be considered that in our country 60% of the population does not have a computer and does not have access to the Internet, and despite having these, bandwidth and connectivity are usually limited for the intense work that is required. .

Due to the above, and based on the results of this study, indicators and profiles were obtained on the roles in terms of the performance and use of the smartphone by students and how it affects their academic performance. With this, it will be possible to develop institutional policies that promote programs aimed at consolidating technological and computer skills in the proper use of the smartphone in the academic processes of UJAT students in the new normality.

Conclusions

Based on the results of the research, the hypothesis is verified that a better and greater use of smartphones by students is reflected in better academic performance, reducing apathy, school lag, anxiety and school dropout, increasing thus the terminal efficiency.

However, the indicators given in each of the questions in the survey show that students use the smartphone irresponsibly, since it is frequently used as a means of entertainment, and very few use it as a pedagogical tool. Even with everything, with these

data, teachers, directors and parents already have indicators for decision-making that promote continuous improvement in the learning of university students.

Future lines of research

This research is supported by the line of generation and application of knowledge of socio-educational studies for higher education. The movement of the variables studied, the influence of the smartphone on academic performance in university students during the new normality, requires the continuity of more studies and review of the literature worldwide, in order to be able to have indicators that allow to know the trend of the movement of the variables studied and why students use the phone irresponsibly. And with this, being able to count on data that serve as a basis for making decisions in relation to the use of the smartphone to contribute to student learning. The foregoing is necessary because with the arrival of the covid-19 pandemic there were changes in education and in this new normal, new strategies are required to enhance the teaching-learning process.

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