Analysis of the behavior of the consumption of multiscreens in generation Z, during the confinement by COVID-19. Case of the Universidad Politécnica de Francisco I. Madero

Análisis del comportamiento del consumo de multipantallas en la generación z, durante el confinamiento por COVID-19. Caso Universidad Politécnica de Francisco I. Madero

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Abstract

The pandemic caused by the SARS-CoV-2 virus is one of the most devastating of this century. In Mexico, the first case occurred in March 2020, causing a statement to be issued for the population to stay at home for the last few 18 months, including students and for this reason, a new distance education model was implemented. The objective of the research is to analyze the behavior of generation Z during this period. The approach of the methodology used during the investigation was quantitative, carried out through an online survey applied with google forms to 161 Financial Engineering students of the Polytechnic University of Francisco I. Madero, belonging to the aforementioned generation. As a result of this research, it was observed that generation Z had a greater impact in the use of audiovisual media, taking into account that they are characterized by mastering technology since almost all activities are mediated by the simultaneous use of screens. The use of multi-screens in times of Covid-19 increased, taking as a fundamental factor that most students spend more than 6 hours a day in front of a screen or a mobile device.

Behavior, Generation Z, Multiscreen, Technology

Resumen

La pandemia causada por el virus SARS-CoV-2 es una de las más devastadoras de este siglo, en México el primer caso se presentó en marzo del 2020, provocando que se emitiera un comunicado para que la población se quedara en casa durante los últimos 18 meses, incluidos los estudiantes y por tal razón, se implementó un nuevo modelo de educación a distancia. El objetivo de la investigación es analizar el comportamiento de la generación Z durante este periodo. El enfoque de la metodología utilizada durante la investigación fue cuantitativo, realizado mediante una encuesta en línea aplicada con google forms a 161 alumnos de Ingeniería Financiera de la Universidad Politécnica de Francisco I. Madero, pertenecientes a la generación ya mencionada. Como resultado de esta investigación se observó que efectivamente la generación Z, tuvo un mayor impacto en el uso de medios audiovisuales, tomando en cuenta que se caracterizan por dominar la tecnología pues casi todas actividades están intermediadas por el uso simultaneo de pantallas**.** El uso de multipantallas en tiempos de Covid-19, aumentó, tomando como factor fundamental que la mayoría de los estudiantes pasa más de 6 horas al día frente a una pantalla o un dispositivo móvil.

Comportamiento, Generación Z, Multipantalla, Tecnología

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Introduction

Today's society moves around technology as never before. Therefore, it is highly influenced by new emerging technologies, there is a close relationship between society and technology, education does not escape this reality and is greatly influenced by technological development, which comes to complement and improve the educational process of students, providing new learning tools that are used appropriately. For this reason, the aim is to carry out a research article to find out about the behaviour of multiscreen consumption in generation Z during the pandemic period of the students of the financial engineering degree, and to analyse the changes that have caused the student population to adapt to this new way of life and the continuous interaction with electronic devices, as well as the time they spend in front of a screen and which devices they use simultaneously. We also seek to observe how they have acquired new consumption habits, and the increase in time spent on entertainment, leisure and education.

Methodology

Approach

The quantitative methodology consists of contrasting existing theories based on a series of hypotheses arising from the same, being necessary to obtain a sample, either randomly or discriminated, but representative of a population or phenomenon under study (Tamayo and Tamayo, 2007).

Data collection tools

Data collection tools are any resource that the researcher can use to approach phenomena and extract information from them (Sabino, 2002).

The survey is a research tool that involves obtaining information from respondents through the use of pre-designed questionnaires to obtain specific information (Naresh, 2004). A representative online survey was conducted through google forms to assess the impact of multiscreen consumption during the confinement by Covid-19, this survey was structured in three sections, as first section the general data of the respondent, as second section the audiovisual consumption and finally the changes in consumption by Covid-19.

Having as population 279 students of Financial Engineering belonging to generation Z, obtaining a finite sample of (N= 160 participants) conducted from 04 to 20 November 2021.

Population and sample

Having the information regarding the size of the population (279 students), the formula for calculating the sample was applied, working with a confidence level of 95%, with a probability of failure of 50%, probability of success of 50% and standard error of 5%, as follows:

$$n = \frac{N*Za^2*P*Q}{e2*(N-1)+Za^2*P*Q}$$

n=Sample size
N=Size of the population or universe
Z= Statistical parameter that depends on N
e=maximum accepted estimation error
P=Probability of occurrence of the event
Q=(1-p)=probability of the event not occurring

| Parameter		Sample size
N	270	**n= 160**
Z	1.96	
P	50%	
Q	50%	
e	5%	

Results

According to the first section of the survey, referring to the general data of the respondent, it was obtained that of the 100% of the students surveyed, 65% stated that they belong to the female gender and the remaining 35% stated that they belong to the male gender, this shows that most of the students who answered the survey are women, with an age range of 16 to 26 years, according to their occupation 87.4% of the respondents are currently studying and only 6. The predominant region according to the results was the municipality of Francisco I. Madero, in terms of the area, 74.5% were predominantly rural, while 25.5% said they belonged to an urban area.
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A1. Sexo

160 respuestas
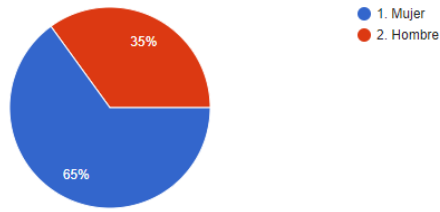
Graph 1 Question A1 Gender
Source: Own Elaboration

A2. Edad

160 respuestas
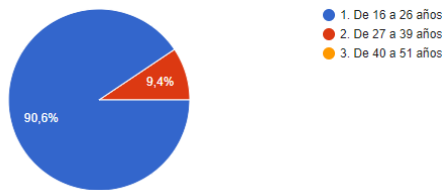
Graph 2 Question A2 age
Source: Own Elaboration

According to the second section of the survey, concerning audiovisual consumption, 97. 5% of the students surveyed indicated that they have a mobile device and 60% of the students who responded indicated that they have interaction with a laptop or laptop, this shows that the use of electronic devices has increased significantly in recent years, and it seems to be a trend that is unlikely to be reversed, according to the use they give to the electronic devices they have.

According to the multiscreen consumption, 62% of the students surveyed stated that they have no difficulty using electronic devices, only 5% stated that they have some difficulty using them. 1% indicated that they use 1 or 2 devices simultaneously, while 10.1% responded that they use 2 or 3 mobile devices at the same time, and finally 1. 9% of the population stated that they use 3 or 4 devices during the day, in terms of time spent, 40% stated that they spend more than 6 hours in front of a screen during the day, as a result of the various activities they do for school, work or entertainment, this derived from the fact that most people belonging to generation Z, have used the internet since they were very young and feel comfortable with technology and social networks, and use them more than three times a day.
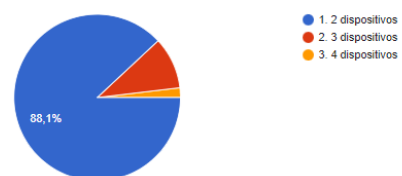
In second place, 31. 3% of the population uses a screen for 5-6 hours for what they have pending to update, in third place, 18.1% only gets to be in front of a technical device between 3-4 hours because according to the survey only 15. 1% use it at least once a day, and finally only 4% of the population use it only once a week, so it is clear that Generation Z is becoming increasingly familiar with technology and its advances and will not cease to amaze us, Generation Z has the ability to control different devices and use the internet in various tasks because according to the results 67. According to the results, 67.5% of those surveyed use the mobile phone and the computer at the same time, as a result of work to be done, meetings to be held or for their own entertainment, or for educational purposes. 73.8% of the population said that they do school work and 54.4% of the students send messages or listen to music via a mobile device, in second place they use a computer or laptop and Tablet with a percentage of 28.7%, to watch videos or films online and 24.4% indicated that while watching television they do another activity.

B2. Del 1 al 5, siendo 5 el que más utiliza y 1 el que menos utiliza. Seleccione el dispositivo que utiliza con más frecuencia
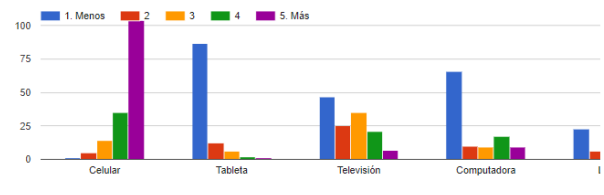
Graph 3 Question 7 from 1 to 5, with 5 being the most frequently used and 1 the least frequently used. Please select the device you use most frequently
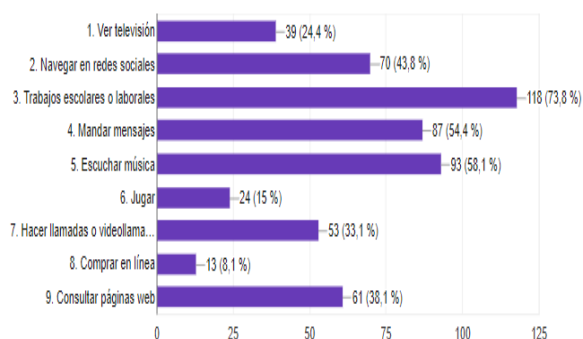*Source: Own Elaboration*

B3. ¿Cuántos dispositivos de los anteriores ocupa al mismo tiempo con mayor frecuencia?

159 respuestas

Graph 4 Question 8 How many devices do you occupy at the same time most often?
Source: Own Elaboration

TREJO-ENCARNACIÓN, Patricia, CRUZ-SÁNCHEZ, Eduardo and HERNÁNDEZ-GÓMEZ, Diana. Analysis of the behavior of the consumption of multiscreens in generation Z, during the confinement by COVID-19. Case of the Universidad Politécnica de Francisco I. Madero. Case of the Polytechnic University of Francisco I. Madero. Journal Schools of economic Thought and Methology. 2022

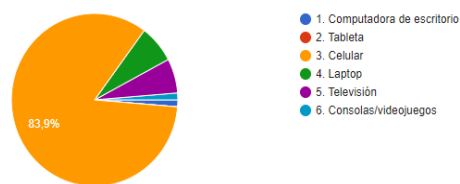**Graph 5** Question 12 Which combination of devices do you use most often?
Source: Own Elaboration
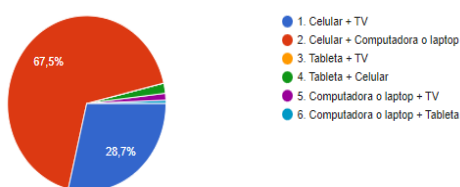
Graph 6 Question 14 What activities do you do while occupying more than one device at a time?
Source: Own Elaboration

Graph 7 Question 16: Which device do you consult while watching TV?
Source: Own Elaboration

According to the third section of the survey, concerning changes in consumption due to Covid-19, the results of the survey show that 85.5% of students claim to increase their screen and digital media time due to the Covid-19 pandemic before the quarantine, only 12% of the population considers that they continue to spend the same amount of time in front of the screen as before the pandemic, and only 1.9% consider that their usage decreased.
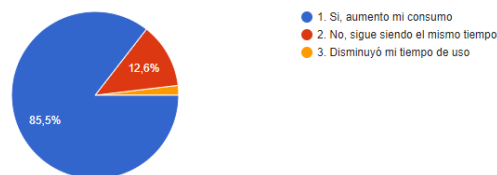
The survey also reveals that 47.2% of the population did not purchase online entertainment service accounts during the pandemic time, preferring not to spend, and 45.9% of the population hired online entertainment services because they needed to be distracted by something, according to the survey 6.9% of the students think about purchasing an entertainment service because they are tired of the programming offered by traditional television. According to the survey, 38.4% of those surveyed did not purchase or buy any audiovisual device, while 7.5% made their purchase for work or school and for entertainment, and only 3.8% purchased or bought for simple entertainment.

Finally, the survey revealed that 39.6% of respondents prefer to learn about the pandemic through Facebook, 32.1% of respondents prefer television as the main source of information, according to a study published in the latest issue of the journal Current Medical Research & Opinion, people who consider Facebook and television as reliable means to learn about the coronavirus have worse knowledge about the disease, the survey found that there is a 20. 1% of the population prefer to be informed through the use of web pages, only 6.3% are informed through twitter and 1.3% through radio news.

Finally, according to the students' criteria, it is considered that studying as a digital media activity led to an increase in multiscreen consumption, as during the contingency generated by Covid-19, young people and adolescents increased their time in front of screens for educational reasons by an average of 2.5 to 3 hours. Other important factors were the use of social networks, research and online procedures, with a percentage of 47.8%, multiscreen consumption for work was considered at 35.2% and multiscreen use for leisure or entertainment at 27.7%.
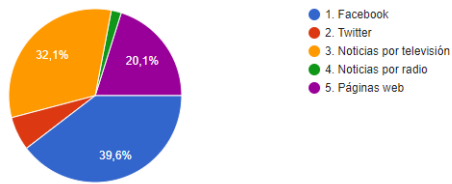

Graph 8 Question 18 Do you think that in the face of the Covid 19 pandemic you increased your screen time?
Source: Own Elaboration

C2. ¿Qué medio prefiere para informarse sobre la pandemia por COVID-19?
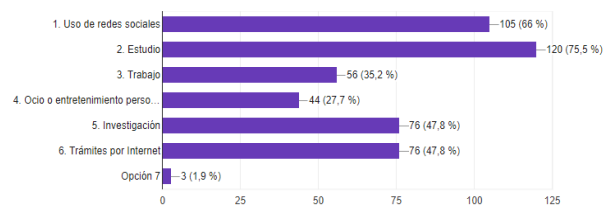159 respuestas

Graph 9 Question 19 Which medium do you prefer to use to find out about the covid19 pandemic?
Source: Own Elaboration

C5. Con base en su experiencia de consumo multipantalla durante la pandemia ¿Cuáles actividades con medios digitales cree usted que aumentaron en su vida diaria? Escoja una o más opciones
159 respuestas

Graph 10 Question 20 Based on your experience of multiscreen consumption during the pandemic, which digital media activities do you think increased in your daily life?
Source: own elaboration

Conclusions

According to the results of the surveys and the diagnostic analyses carried out, it can be concluded that the use of multiscreens in Covid-19 times has increased, taking as a fundamental factor that most students spend more than 6 hours a day in front of a screen or a mobile device, and this has led to the use of technology being considered an everyday occurrence, They have also had to adapt to the new normal and so have been able to give a positive response to the changes that the world has undergone, society has moved from traditional consumption to many different ways of viewing the content of their choice, i.e. on many different devices, entertainment devices and even devices such as tablets and mobile phones.

Through real-time electronic or virtual online media and this allows them to multitask while watching the content of their choice. According to the analysis, Generation Z young people watch TV as their first screen, interact with their friends on mobile devices as a second screen, watch or listen to an advertisement on their first active screen and seek to relate the content to the second screen and even to a third screen (laptop, PC, video games or tablet).

They can switch between being on their computer or laptop and at the same time using their mobile phone, many of them confirmed that they use it because they are engaged in sending messages or listening to music, others as a consequence of work to be done, Another very frequent combination is that of using their mobile phones to watch television and use their mobile phones, stating that while watching television they use their mobile phones to complement the information on the web with what they have seen on television advertisements or play online games with their mobile phones with other people.

Similarly, it was observed that most people make simultaneous use of screens more than 3 times a day, among the daily activities they carry out with different devices at the same time are school work, listening to music, sending messages using social networks, consulting web pages, making video calls and shopping online, during the pandemic, according to the analysis, half of the surveyed population made purchases of audiovisual devices for work and education purposes, and it was also observed that in terms of hiring content on digital platforms such as Blim, Netflix, Crunchyroll, In terms of multiscreen consumption during the pandemic, the digital media activities that led to an increase in the use of digital media in their daily lives were mainly study, due to the fact that a large part of the measures that schools have adopted in the face of the crisis are related to the suspension of face-to-face classes at all levels, which has given rise to the deployment of distance learning modalities, through the use of a diversity of formats and platforms, increasing the use of screens simultaneously.

Another activity was the use of social networks, as most of those surveyed were informed of important events in the pandemic through Facebook, while online research and procedures also led to an increase in their consumption, and finally multi-screen consumption for leisure or entertainment was also responsible for the increase in this period of confinement by Covid-19.

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