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Study and work in times of pandemic, how do university students solve technological-digital situations?

Estudiar y trabajar en tiempos de pandemia, ¿Cómo solventan las situaciones tecnológico-digitales los estudiantes universitarios?

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Abstract

After the declaration of a health contingency by the WHO and the Mexican government, the university community took refuge in their homes, waiting to return to face-to-face classes. As the confinement dates lengthen, online educational interactions are hampered because students' manifest problems related to the internet and technological-digital resources, since now they must be shared with relatives who are also in confinement; In addition, some students work online, which complicates the situation in which they live, study and work. Although learning is involved in these situations, it is not addressed in the present study; The results provide elements that lead to lines of research where, from the student perspective, the role of the teaching-learning process, academic performance and learning are reviewed, as well as the relationship between education and online work. In this context, the proposal of the study is exploratory, quantitative, and longitudinal; The sample is for convenience and 31 (August 2020) and subsequently 28 students (March 2021) voluntarily participated. The objective is to explore the conditions in which undergraduate students solve socio-educational-labor situations with the use of technological-digital resources during the COVID-19 pandemic.

Technological-digital resources, COVID-19, Socio-educational-labor context

Resumen

Tras la declaración de contingencia sanitaria por parte de la OMS y el gobierno de México, la comunidad universitaria se refugia en sus hogares esperando el regreso a clases presenciales. Conforme se alargan las fechas del confinamiento, las interacciones educativas en línea se ven obstaculizadas porque los estudiantes manifiestan problemáticas relacionados con el internet y los recursos tecnológicos-digitales, ya que ahora se tienen que compartir con familiares que también están en confinamiento; además, algunos estudiantes trabajan en línea, lo que complejiza la situación en que viven, estudian y trabajan. Aunque el aprendizaje está implicado en estas situaciones, no se aborda en el presente estudio; los resultados aportan elementos que derivan en líneas de investigación donde, desde la perspectiva estudiantil, se revisa el rol del proceso de enseñanza-aprendizaje, el rendimiento académico y los aprendizajes, así como la relación de la educación y el trabajo en línea. En este contexto, la propuesta del estudio es exploratorio, cuantitativo y longitudinal; la muestra es por conveniencia y participaron voluntariamente 31 (agosto 2020) y posteriormente de 28 estudiantes (marzo 2021). El objetivo, explorar las condiciones en que los estudiantes de licenciatura solventan las situaciones socioeducativo-laborales con el uso de recursos tecnológico-digitales durante la pandemia COVID-19.

Recursos tecnológico-digitales, COVID-19, Contexto socioeducativo-laboral

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Introduction

University students, the focus of this study, not only face the dilemma represented by the sanitary confinement derived from the COVID-19 pandemic, but they also must deal with an unsuccessful online education both in operational and pedagogical terms. But in addition, most of them do not have adequate technological-digital resources for online interaction, which further aggravates their situation.

In this regard, ILO Director General Guy Ryder states "The pandemic has a very adverse impact on young people. Not only does it reduce their employment and professional future, but it also greatly undermines their education and training, and therefore their mental well-being. "(OIT August 2020)

How do university students solve technological-digital situations? In Mexico, INEGI through the Measurement of the Impact of COVID-19 on Education (ECOVID-ED) and the Telephone Survey on COVID-19 and the Labor Market (ECOVID-ML, help to visualize the conditions in which they develop classes and online work, accommodation, and adaptation situations that families and young people carry out.

The article Study and work in times of pandemic How do university students solve technological-digital situations? presents the results of the diagnosis (August 2020) and follow-up (March 2021) on the socio-educational-labor situation and the types of technological resources -digital (RTD) available to young people to carry out their studies and, where appropriate, work online.

To frame and give fluidity to the information, section 2, *Pandemic Evidence*, succinctly addresses the chronology and contingency measures indicated by international organizations, government, and university institutions.

What refers to the description of the type of research, the scope of the study, the type of sample and the variables, is in section 3, *Methodological process*.

The *Results* and their analysis are explained in section 4, which is subdivided according to the design of the instruments used: General data**,** Technology, and interaction and, Work and education.

Section 5, *Conclusions*, presents the empirical evidence contrasting with what is referred to by organizations, institutions and authors consulted; finally, in section 6, the *Documentary references* reviewed and analyzed for the development of the article are included.

Objectives

General

Explore the conditions in which undergraduate students face socio-educational-labor situations with the use of technological-digital resources during the COVID-19 pandemic

Specific

- Describe the demographic and socio-educational characteristics of the participants.
- Identify the types of technological-digital resources that students have.
- Identify the technological situations involved in online education in times of pandemic.
- Describe the educational-working conditions of the students.
- Identify if there were changes in the educational-work situations in the two moments of study.

Evidence of the transition

At the end of December, it was thought that the transition from 2019 to 2020 would be within the daily routine in which each new year would arrive with the usual increases in the prices of food, electricity, medicines and, among others, the increase in the minimum wage in force in the country.

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However, on December 31, 2019, the Chinese authorities report cases of pneumonia, which are later reported to be caused by a new coronavirus; On January 30, the Emergency Committee recommended to Dr. Adhanom, WHO Director General that the outbreak constitutes a public health emergency of international concern (ESPII). It is March 11 when the WHO "determines in its evaluation that COVID-19 can be characterized as a pandemic." (OMS, abril 2020)

On March 10, the WHO, UNISEF, the International Federation of Red Cross Societies, among other organizations, published a guide where the most important issues that allow safety in educational institutions are found, as well as practical recommendations directed to the parents of family / guardians, their children, and students in general. (OMS, enero-junio, 2021).

Disruption in education

In the case of Mexico, as indicated by the WHO, Agreement number 02/03/20 is published in the Official Gazette (DOF), where the Ministry of Public Education (SEP) officially initiates the suspension of face-to-face classes from March 23 to April 17, as a preventive measure to prevent the spread of COVID-19.

From now on, agreements are published where the class suspension dates are extended at the national level and, at the same time, the previous agreements are modified (for instance, Agreement number 03/06/20, the suspensive period is extended from March 27 to April 30; Agreement number 04/09/20 the period is from March 23 to May 30). (SEP, enero-diciembre, 2020). On the part of the National Association of Universities and Institutions of Higher Education (ANUIES), the rectors and directors meet on March 20 and address the recommendations of the National Council of Educational Authorities, in coordination with the Health Secretariat of the Federal Government; meeting where the document COVID 19 Action Guidelines for Public Institutions of Higher Education is released and, in accordance with the secretarial agreements, the first date of suspension of face-to-face classes in the HEIs is notified, as well as the health prevention measures (UAdeC, marzo 2020).

Alcántara (2020), points out that international studies by Brown and Salmi (2020) show that "… many university institutions have closed and tried to adopt online learning, very few are well prepared to make this change quickly and abrupt", adding that "… again, students from the most vulnerable groups have been the most affected". (pp. 76-78)

In Mexico, a similar situation is experienced at all educational levels, since the pandemic has made visible:

> … The shortcomings of our institutions in terms of infrastructure and training of academic staff to successfully carry out online education. … Has clearly exhibited the enormous inequalities that exist among the student population, which raise concerns that the digital and learning divide may continue to widen. (Alcántara, 2020, p.80)

For her part, Barrón (2020) comments that:

> … Each school has taken on the task of designing proposals to give continuity to academic work during the health contingency, with the main support of the ICT. The challenges and challenges have not been minor, and are of a diverse nature, whether of a technological nature or the training of teachers and students for the use and management of digital platforms. … In our country 60 percent of the population lacks a computer and does not have access to the internet, and whoever has it, bandwidth and connectivity are limited for the intense work required. (p. 68)

For the specific case of the Autonomous University of Coahuila (UadeC), Communiqué 03 is published where, in addition to the recommendations and indications derived from the suspension of face-to-face activities, it is indicated:

> … To the teachers to coordinate with the students to establish mechanisms of work at home or remotely, using the platforms and systems of the University, or assigning readings or work to take home during the period of the contingency. (UAdeC, marzo 2020)

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Likewise, the Actions against the COVID-19 Health Contingency are published and that impact on the continuity of the learning-teaching process:

> ... guarantee an online work scheme so as not to interrupt the classes, using technological tools such as Microsoft Teams, Google Classroom and Zoom so that their students can continue with the discussions, readings, tasks, and evaluations, also, teachers were trained to handle digital platforms on the distance teaching-learning process. (UAdeC, June 2020)

In the Academic Continuity Plan, programs are established to serve students, such as the opening of computer centers at the different Infotech libraries in Saltillo, Torreón, Monclova and Nueva Rosita. (UAdeC, junio 2020)

In the student population, the problems, in addition to the damage to emotional health, whether they like online training, focus on having technological-digital resources that facilitate synchronous or asynchronous interactions to advance their professional studies.

As Fernández (2020) comments:

> [the] Online classes, work meetings through platforms, communicated by internet mail, by WhatsApp and other social networks made it possible for us to stand up to the educational process ... It is true that the conditions and technological capacities vary among these, as also happens and it is natural among those who make up the teaching and student community…. (p.27)

Study and work online

Lloyd (2020) refers that since 2018 the National Survey on Availability and Use of Information Technologies in Homes (ENDUTIH) shows that:

> … Only 45 percent of Mexicans have a computer and 53 percent have access to the Internet at home, [but] such access is not distributed equally, since 73 percent of the population in urban areas has access to Internet, compared to 40 percent in rural areas. Even more worrying, only 4 percent of rural residents have Internet at home (as cited in Ordorika, 2020, p.3)

The results of the Survey to Measure the Impact of COVID-19 on Education (ECOVID-ED) for the 2019-2020 school year, shows a reality like ENDUTIH 2018, since the results indicate that not all the higher-level population counts with technological-digital resources to pay for education, and where appropriate, online work, since:

> … 33.4% have smartphones; 52.4% laptop and 12.9% desktop computer. Of which 67.7% refer that the appliances or devices are property of the home and were for exclusive use; 28.5% are property of the house and shared it with other people of the same; 2.7% indicated that they had to borrow it from people in another home and 0.5% had to rent it or pay for its use.

For the 2020-2021 school year, it is observed:

> … A decrease in the use of smartphones (31.8%) and desktop computers (11.2%) and an increase in the use of laptops (55.7%). (INEGI, 2020)

There are no significant variations in the behavior of the data, however the increase in the use of laptops also refers to the ease and comfort of / in their use.

Families to pay for online classes make accommodations at home, which represents additional expenses in their economy, already diminished by the contingency and closure of jobs; according to ECOVID-ED:

> … 28.6% indicate buying smartphones; 26.4% contract a fixed internet service; 14.3% spend on laptops / desktops and 6.2% spend on phone recharges or internet chips. (INEGI, 2020)

In general, it is indicated that 56.4% of families in Mexico have fixed or mobile internet connection (data purchase), but when asked if they have a computer at home, this percentage drops to 43%. (Trejo, 2020)

In April-July, INEGI carries out the Telephone Survey on COVID-19 and the Labor Market (ECOVID-ML), whose target population is 18 and over, a telephone user; The results indicate that the conditions for working online are not entirely ideal either, since:

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> … In April of the 23.5% who work, 70% have the equipment, 25% have part of the equipment and 5% do not have equipment to work with. In contrast, in July, the 15.2% who indicate that they work, 81% have equipment, 16% have part of the equipment and 3% do not have it. (INEGI abril-julio 2020)

In addition, ECOVID-ML shows that during the health contingency, the jobs performed are, among others, domestic work, caring for people, paperwork; what refers to the simultaneity of work-education stands out that:

> In April, 24% of women and 19% of men were working and studying; In contrast, in July the percentages decreased: 11% for women and 13% for men. It is observed that as the months pass, the participation of women decreases (24, 17, 16 and 11%). (INEGI, abril-julio 2020)

According to the results of the surveys carried out by the INEGI, the lack of technological resources does not facilitate the educational-labor processes of the students, and, in addition, they upset the family economic environment.

Methodology

Type of research

The study begins with an exploration that would allow diagnosing the educational situations of 31 students, at that time in the 3rd semester of August 2020, already in a confinement and online education scenario, with the purpose of making didactic adjustments in the virtual classroom.

However, in March 2021 the evidence that show problems for students to join their academic activities online are reiterated and, students combine study and work, which increases difficulties in the subjects studied in that semester; Therefore, it is decided to carry out a follow-up to detect if there were changes in the situations of the students, now in the 4th semester.

With the resulting data, the differences are reviewed and compared, finding that although the variations are minimal, they impact online interactions, not only with the subject itself, but with other subjects.

For this reason, it was decided to share the results in the study called Study and work in times of pandemic how do university students solve technological-digital situations? Which due to its characteristics is mostly quantitative, exploratory, and longitudinal (August 2020-March 2021).

The results are explored and analyzed from the experiential perspective in the family, training, and work contexts of undergraduate students (3rd-4th semester); However, it is considered that the results allow new and convergent lines of research where not only the situations referring to technological-digital resources are reviewed, but also the changes in the teaching-learning process, academic performance, and other variables of equal importance.

Scope of study and sample

The study was carried out at the Autonomous University of Coahuila with the participation of students from a single academic unit.

The non-probabilistic sample used was for convenience or availability, since the voluntary participation of students from 3rd to 5th semester (except those who had just entered) of the career was requested; however, this was not possible, since the students expressed fatigue to respond to instruments that addressed the "Covidian" situation from different approaches: psychological, sociological, economic ... not only from the degree itself, but from other schools / faculties of the university.

Although it is not a sample in the statistical sense of the term, it is a sample population, in this case of a semester.

However, although it is not a representative population of the total population of the undergraduate degree, its results do provide relevance in the daily life of online interactions and the situations that young students experience.

Variables

The variables that make up the first part of the study refer to sociodemographic data: age, marital status, if you are a foreigner and with whom you live.

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The complex variable Technology and Interaction is made up of the types of technological-digital resources available; in the case of not having them, how is it solved; with whom and why are they shared; the type of wired / wireless connection, among others.

The complex variable Education and Work, variable was incorporated into the Follow-up (March 2021) and is composed of work shift, study-work simultaneity, problems with their teachers and with employers. In both complex variables, the answer was used by option or multiple selection.

Finally, a space was left for the students, in the case of presenting connection problems, to explain the reasons for it; Due to its characteristics, it is an open question, which was post-coded according to the answers given by the respondents.

The measurement instrument was designed and shared on MS Forms © and Teams ©; platform used for online education and interaction.

Sociodemographic results

There was the voluntary participation of 31 and 28 students (diagnosis, follow-up, respectively); This was perhaps due to temporary withdrawal from their studies or not wanting to continue participating. In both cases, diagnosis 70.97% (n = 22) and follow-up 71.43% (n = 20) are women.

About age, in both studies the ages are concentrated in the 17-20 years; however, variations in age are observed, for example, the 25- to 28-year-old group disappears in the follow-up; and the students aged 29 and over increased.

The marital status of the students is mostly single without children (both studies); the divorced group (with or without children), previously present in the diagnosis, no longer appears in the follow-up.

Most of the participants live and are from Saltillo, Coahuila; only four students are foreigners, some of them live in cities in the state of Zacatecas or in ejidos of Coahuila; this occurs both at diagnosis and at follow-up.

Diagnosis			Follow-up		
Parents/ brothers/ family members	22	70.97	Parents/ brothers/ family members	23	82.14
With parents	4	12.90	With parents	3	10.71
Husband/ childless couple	3	9.68	Husband/ childless couple	2	7.14
Shared apartment	1	3.23			
Alone	1	3.23			

Table 1 Description of the population: Who do they live with

Most live in / with their family, identifying that there is variation in both cases of the study; in the follow-up the answers of shared department or alone no longer appear; this due to the situation derived from COVID-19 and returning to their place of residence (Table 1)

Technology and interaction

The purpose of this section is to identify which RTDs students count on for their online interaction, with whom and how they are shared. Table 2 and 3 identify the variations that occur in diagnosis (August 2020) and follow-up (March 2021).

Indicator	Fr	%	RTD	Fr	%
Parents/ brothers/ family members	18	58.06	Personal computer (Laptop), Tablet	24	77.42
No need to share	10	32.26	Smartphone	3	9.68
Husband / partner and sons	2	6.45	Computer desk Laptop and Smartphone	3	9.68
Friends/ roommates, care home	1	3.23	Computer desk	1	3.23

Table 2 Sharing technological-digital resources: Diagnosis (August 2020)

In the first stage of the study (Table 2) the tablet RTD still appears, along with personal computers; In March 2021, the use of smartphones increased, and personal computers (Laptop) decreased slightly.

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What refers to the shared use of RTDs, presents variations; In Table 3 the students who indicated sharing with their partners or colleagues, no longer appear in March 2021, which are the people who no longer answered the instrument (Follow-up) and / or returned to their city of origin derived from the suspension of face-to-face academic activities.

Indicator	Fr	%	RTD	Fr	%
Parents/ brothers/ family members	17	60.71	Personal Computer (Laptop) Smartphone	18	64.29
No need to share	11	39.29	Smartphone	3	10.71
			Computer desk Laptop and Smartphone	2	7.14
			Computer desk	1	3.57

Table 3 Sharing technological-digital resources: Follow-up (March 2021)

In addition to the above, it is observed that not sharing remains> 30% and sharing it with the family increases slightly in the second stage of the study (Table 2 and 3).

More specifically, Table 4 shows that seven students indicate the number of people they share with (22.58%), only one student shares it with five people (Diagnosis, August 2020).

Diagnosis	Fr	%	Follow-up	Fr	%
2 people	4	12.90	3 people	8	28.57
1 person	2	6.45	2 people	6	21.43
5 people	1	3.23	4 or more people	2	7.14
Total	**7**	**22.58**	**Total**	**16**	**57.14**

Table 4 People with whom RTDs are shared

In addition to the above, in both studies a balance is observed in the need to share RTDs, which refer to studying and working online (Table 5); variations in frequencies / percentages are observed, but they are not significant.

Diagnosis	Fr	%	Follow-up	Fr	%
They study online	16	51.61	They study online	14	50.00
They study and work online	14	45.16	They study and work online	13	46.43
They work online	1	3.23	They work online	1	3.57

Table 5 Need to share technological-digital resources

The reference of the way in which the student and their family members would solve the problems in the given case of not having RTD and / or for the shared use of these could not be missing; In this regard, the students indicated several solution options.

Diagnosis	Fr	%	Follow-up	Fr	%
Go to Internet Cafe Borrowed / Take out on credit	16	51	Buy RTD Borrowed Relatives will help to buy it / Take out on credit	19	68
Family help to buy RTD Take out on credit	8	25.81	Borrowed	5	17.86
Inst. Infrastructure Borrowed Cyber coffee	7	23	Infra. Inst. Borrow Buy RTD Family members will help buy it	4	14.29

Table 6 Problem solution: technological-digital resources

In the exploration and as a recent fact after the closure of the schools, the solutions to have / acquire RTD are varied; For example, Internet cafes are used and / or they go to institutional spaces / infrastructure, both as an emerging measure to later take out the RTD on credit or buy (Table 6).

In March 2021, buying or borrowing the RTD predominates with family support for it (Table 6); although cases were detected where it is assumed that they will assume this expense (those who work) - Relying on the infrastructure of their institution seldom appears.

Continuing in the *Technology and Interaction* section, they were also asked about the types of networks they used / use to connect and if this was shared with someone, 74.19% (n = 23, diagnosis) and 96.43% (n = 27, monitoring) the wireless network is used, only one student refers to the purchase of data (diagnosis).

And as in the case of sharing technological resources, wireless/wired networks are no exception, since it is mostly shared with family members (Table 7); in the diagnosis the answers are very similar with sharing the technological resources.

Diagnosis	Fr	%	Follow-up	Fr	%
Family	26	83.87	Family	25	89.29
With my children	2	6.45	Wives / Husband couple	2	7.14
Shared (friends, colleagues ...)	1	3.23	Familiar, but only you use it	1	3.57
Wives / Husband couple	1	3.23			
Exclusive for your use but with data purchase	1	3.23			

Table 7 Share wired and wireless connection

In the space that was presented to them to comment on the instrument (August 2020), or something related to it, a man and a woman indicated that:

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> “I think it should have been asked how many people need electronic devices for online classes and if these are enough for everyone; since in my case we only have 2 laptops to be able to carry out work / tasks and we are 5 people who are taking classes online”.
>
> "I live in Concepción del Oro, Zacatecas and the internet fails a lot, and here the data does not work."

After the review of the first instrument carried out for the exploration (August 2020) and by recommendations of the participants, in the Follow-up (March 2021) a space was included that requested If you have connection problems, explain the reasons for it; The answers were grouped by problem and are based on the 28 students who participated in the second stage of the study:

> *Problems with the Internet*. “Slow and several people use it at the same time; "The network is somewhat unstable"; "... the contracted service is of very low quality." "Few megabytes of navigation." "Eventually they come to do maintenance on the internet lines and cut the service"
>
> *Power failures.* "Problems with the modem, external interventions such as electrical services that sometimes damage the connection"; "... absence of electricity." "Power outages and interfering with the modem."
>
> *Share and low-quality RT.* “I consider that it is due to two main reasons: the first is because my parents work and use the Wi-Fi connection and my brother is studying so he connects to his classes and the second reason, I think it is because sometimes my computer it tends to be slow or hangs when sharing screen, but I solve this on certain occasions by entering through the mobile device”.
>
> *Network sharing.* "Several people using the network at the same time ..."; "There are many of us who take classes at the same time"; “… We are many people who work with this Wi-Fi”.
>
> *Unexplained problems*. "Sometimes the air or the passing of the cars lower the signal and interrupt the connection." "In my town there is no data, and the internet is the most basic. It doesn't work for video calls”. "When calls come in, the Wi-Fi signal goes out, I don't know why."

Work and Education

This section has the purpose of identifying the students who fulfill this double activity; Based on this question, the redesigned instrument for the Follow-up on Tools and Digital Access (March 2021) incorporated the questions about whether after the pandemic I continued in the same job, its turn and whether there is simultaneity between both activities.

The obligatory question is whether to work. Table 10 allows us to identify that after the pandemic there is a slight decrease in both “no” and “yes” to work; what is reflected in the Follow-up (March 2021) is "eventually”.

Diagnosis	Fr	%	Follow-up	Fr	%
No	20	64.52	No	15	53.57
Yes	11	35.48	Yes	8	28.57
			Eventually	5	17.86

Table 8 You currently work

Of the 11 students who indicated that if they worked (Table 8) in the March 2021, there is a decrease, of which eight are men and one indicates being divorced (29 years old) with an 8-year-old son; likewise, six indicate that they study and work online.

As for the three single women, two study and work online. Both men and women had smartphones. Only two, a man and a woman are foreigners.

To the question of If in August 2020, you worked, is it the same workplace what are you currently working on? 28.57% (n = 8) indicated that they did; only one said no.

Regarding the question, what is the line or type of job in which you currently work? They were given nine possible answers, in addition to the "other" to give them the opportunity for their own reply.

However, the students only selected the five that are observed in Table 9; one student indicates that “eventually he works in fast food establishments”; the one who stated that he "does not work in the same place" currently works in fast food establishments. For their part, the students who work in educational institutions are women.

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Indicator	Fr	%
Fast food establishments	3	10.71
Department store	2	7.14
Private educational institutions	2	7.14
Restaurant	1	7.14
Health establishments	1	7.14

Table 9 Work shift (Follow-up, March 2021)

They were questioned regarding If work and study are simultaneous, does this represent difficulties with your teachers? In Table 10, opinions are divided; the student who indicated "eventuality at work" indicates that the teachers are understandable with the situation.

Two men, one who works in a department store and the other in fast food establishments, point out that most of the time they have difficulties with their teachers.

For their part, one of the students who works in a private educational institution and the student who works in a restaurant (foreign) state that they do not have difficulties with their teachers because they strive to be active in their subjects.

Indicator	Fr	%
Sometimes	3	10.71
They are understandable of the situation	2	7.14
Most of the time	2	7.14
No, because you try not to miss with works and exhibitions	2	7.14

Table 10 Study-work simultaneity: difficulties with teachers

Regarding the difficulties with employers (Table 11), both those who work in restaurants, health establishments (i.e., doctor's office, pharmacy), as well as those who work in fast food establishments and a woman who works in an educational institution, state who strive to meet their obligations as an employee, which helps to avoid problems with their bosses.

Indicator	Fr	%
No, because I strive to meet my obligations	4	14.28
Sometimes	3	7.14
They are understandable with the situation	2	3.57

Table 11 Work-study simultaneity: difficulties with employer

At the end of the instrument, a blank space was left for comments or clarification to further explain their situation; One of the young people who indicated that they work in a fast-food establishment, wrote that “it was necessary to ask about the salaries that are received” and, in the same line of work, another expressed that “only add options of 2 or more jobs”. In both cases their ages range between 17-20 years.

Conclusions

Study and work in times of pandemic, how do university students solve technological-digital situations?

Most of the participants have more than one RTD and wired-wireless network, however the problem lies in shared use; complicating the situation in families where several members work online and the students themselves who combine study-work.

This duplication of activities has resulted in the need to make expenses outside the student-family budget, as shown in the ECOVID-ED results (INEGI, 2020), since it has made it necessary to buy or take out RTD credit to cope with the problematic.

This worsened from the moment when it was definitely impossible to go out to work-study; These same situations are presented in ECOVID-ML (INEGI, April-July 2020) where from April to July the percentage of both people who worked as well as the equipment necessary to carry out work online decreased; In the case of UAdeC students, borrowing, going to an internet café, or seeking support from the institutional infrastructure was not a viable option in the health contingency.

On the other hand, three students indicated that the duplication of activities has brought them difficulty with their teachers; those who said they had no conflicts is because they are active in their studies; the majority indicated that they do not have problems with their employer-bosses.

In addition, everything indicates that the people who live in Saltillo, Coahuila, although they manifest problems, for foreign students their situation is complicated by "internet instability, electricity failures and not being able to buy data."

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Same situation raised by Alcántara (2020), "… again, students from the most vulnerable groups have been the most affected"; and "the enormous inequalities that exist among the student population have been clearly exhibited, which makes us fear that the digital divide and that of learning may continue to widen."

Regarding the study-work relationship, only three women work in privately supported educational institutions, strongly related to their studies; however, most students work in fast food establishments and department stores.

It is intended to continue with the study, including the recommendations made by the students, such as the salaries received, the number of hours worked and if more than one job is done and some others that are considered could allow to continue describing the conditions in that students live, study and work in this new normal.

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