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Artículos científicos

Efecto covid-19 en las finanzas personales en alumnos de pregrado

COVID-19 Effect on Personal Finances in Undergraduate Students

Efeito da Covid-19 nas finanças pessoais em estudantes de graduação

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Resumen

El objetivo de esta investigación fue identificar el efecto covid-19 sobre las finanzas personales en alumnos de pregrado del Centro Universitario de los Altos de la Universidad de Guadalajara. Se trabajó con 342 casos, de los que se analizaron pruebas de independencia estadística entre variables. Entre los principales resultados destaca que para 49.1 % de los estudiantes el ingreso proviene de sus padres y que más de 50 % de los alumnos vieron afectados sus ingresos y sus gastos se modificaron como efecto de la pandemia. Por otro lado, un alto porcentaje mostró tener el hábito del ahorro (83.6 %), de por lo menos 10 % de sus ingresos, aunque no consideraron tener un ahorro adicional como efecto de la pandemia. Asimismo, 84.5 % de ellos indicaron no tener que recurrir a un endeudamiento. En suma, el efecto covid-19 fue negativo en los ingresos de los estudiantes. Los encuestados señalaron en su mayoría que los gastos aumentaron con la pandemia.

Palabras clave: educación financiera, finanzas personales, planeación financiera.

Abstract

The objective of this research was to identify the covid-19 effect on personal finances in undergraduate students at the Centro Universitario de los Altos of the University of Guadalajara. We worked with 342 cases, from which we analyzed tests of statistical independence between variables. Among the main results, it was found that for 49.1 % of the students the income comes from their parents and that more than 50 % of the students had their income affected and their expenses were modified as an effect of the pandemic. On the other hand, a high percentage showed a savings habit (83.6 %), of at least 10 % of their income, although they did not consider having additional savings as an effect of the pandemic. Likewise, 84.5 % of them indicated not having to resort to indebtedness. In sum, the covid-19 effect was negative on student income. Respondents overwhelmingly indicated that expenses increased with the pandemic.

Keywords: financial education, personal finance, financial planning.

Resumo

O objetivo desta pesquisa foi identificar o efeito da covid-19 nas finanças pessoais em estudantes de graduação do Centro Universitario Los Altos da Universidade de Guadalajara. Trabalhamos com 342 casos, dos quais foram analisados testes de independência estatística entre variáveis. Entre os principais resultados, destaca-se que para 49,1% dos alunos a renda vem dos pais e que mais de 50% dos alunos viram sua renda afetada e suas despesas alteradas em decorrência da pandemia. Por outro lado, uma alta porcentagem mostrou que tinha o hábito de poupar (83,6%), de pelo menos 10% de sua renda, embora não considerasse ter poupança adicional como efeito da pandemia. Da mesma forma, 84,5% deles indicaram não ter que recorrer ao endividamento. Em suma, o efeito da covid-19 foi negativo no rendimento dos alunos. A maioria dos entrevistados observou que as despesas aumentaram com a pandemia.

Palavras-chave: educação financeira, finanças pessoais, planejamento financeiro.

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Introduction

Due to the 2019 coronavirus disease (covid-19) pandemic, university life worldwide, as in any other sector, economic or social, underwent a radical change that affected millions of students, not only emotionally due to isolation, but also economically. The teaching-learning tasks from the beginning of this health contingency and in some instances to date have been carried out virtually with the help of information and communication technologies (ICT). This exposed social inequalities and the limited scope of technology in terms of coverage, which caused education in general to be negatively affected, including the financial education of students (García, Grifoni, López and Mejía, 2013).

Derived from the above, the main concerns of students lie in internet access or connectivity, maintaining a regular schedule and the financial aspect (United Nations Organization for Education, Science and Culture [Unesco], 2020). The financial issue in university students depends largely on the contribution of parents, which implies that they must be properly managed according to their possibilities (regardless of sex or age), this practice can be acquired from home and can be scaled to life professional (Caranguí, Garbay y Valencia, 2017).

As they grow older, people acquire skills that allow them to assess the appropriateness of making an expense for individual or collective well-being; However, international studies show that there is not a sufficiently solid culture for managing finances (Davoli and Rodríguez, 2020; De Beckker, De Witte and Van Campenhout, 2020; Hussain and Sajjad, 2016; Sánchez, November 2, 2020). The expenses that students face with the new normality are worrying, since, to cover them and to support the family economy, they decide to look for work and leave the classrooms aside. Indeed, a higher dropout rate in education has begun to be reflected, mainly in low-income students (Cherney, December 8, 2020). This may be due in part to poor financial practices and poor management of personal finances. Needless to say, poor financial and personal finance management practices can lead to anxiety and adverse health effects (Alvarado & Alvarado, 2020).

For Riveros and Becker (2020), it is relevant to create habits about reducing expenses on unnecessary things and leaving them for unforeseen events, as well as reviewing income and expenses, mainly in difficult times such as those we are experiencing. Taking all of the above into account, the objective of this research was to identify the covid-19 effect on personal finances in undergraduate students at the Los Altos University Center (CUAltos) of the University of Guadalajara (UdeG).

Materials and methods

The research design is descriptive-cross-sectional. A measurement instrument was designed with reagents that address questions about the income, expenses, savings and indebtedness of the target population. The measurement instrument was applied with the objective of determining the covid-19 effect on personal finances in undergraduate students through a Google form. The link to the form was sent to the students through the Academic Secretary of the CUAltos of the UdeG, through the coordinators of the different campus degrees.

For the determination of the sample size, the enrolled undergraduate students (sample framework), registered in the Comprehensive System of Information and University Administration (Siiu) in the period August-December 2021 (school calendar 2021-B) in the CUAltos of the UdeG. That is: an active student population of 4107 students. The sample size was calculated using the following formula:

$$n = \frac{N \cdot Z^2 \cdot p \cdot q}{e^2 \cdot (N - 1) + Z^2 \cdot p \cdot q}$$

As:

- n = number of sample items.
- N = elements of the population (4107 students enrolled).
- $Z = 1.64$ for a confidence level of 90 %.
- e = error of ± 5 %.

p = probability of success 0.5

q = probability of failure 0.5

Based on the above, it was decided to take a minimum of 252 students as a sample.

The analysis of the results was carried out through contingency tables and the chi-square test, with the help of the statistical package IBM-SPSS version 20. The total number of surveys obtained was 342 records.

Results

The average age of the students was 20 years old, students from the first to the tenth semester participated, all from the different degrees offered on campus. In general, the highest participation was from first-year students (34.2%), followed by third-year students (19.6%), seventh-year students (12.9%) and fifth-semester students (10.2%). Regarding gender, the highest participation was female students (74.3%). The following table shows the participation by career and gender of the students who answered the form.

Table 1. Relationship of students by gender and career

Carrera	Género		Total	P valor
	Femenino	Masculino		
Abogado	10	5	15	(0.0001)
	66.7 %	33.3 %	100.0 %	
Contaduría Pública	47	12	59	
	79.7 %	20.3 %	100.0 %	
Enfermería	26	12	38	
	68.4 %	31.6 %	100.0 %	
Ingeniería en Computación	3	21	24	
	12.5 %	87.5 %	100.0 %	
Medicina Veterinaria y Zootecnia	10	5	15	
	66.7 %	33.3 %	100.0 %	
Negocios Internacionales	39	16	55	
	70.9 %	29.1 %	100.0 %	
Nutrición	42	5	47	
	89.4 %	10.6 %	100.0 %	
Psicología	77	12	89	
	86.5 %	13.5 %	100.0 %	
Total	254	88	342	
	74.3 %	25.7 %	100.0 %	

Source: self made

In table 1, differences ($p < 0.05$) were observed between the male and female gender and the career they study. As already mentioned, the participation of the female gender stands out (74.3%), mainly from the Psychology career (30.3%); while the male gender (25.7%) highlights the preference for Computer Engineering (23.9%). It is important to highlight that there is a greater participation of women in all the careers of the students who voluntarily answered the instrument, except in the degree in Computer Engineering.

Table 2 shows where the CUAItos students of the UdeG obtain their income.

Income

Table 2. Student Income Source

Pregunta 1. ¿De dónde obtienes tus ingresos?		
	Frecuencia	Porcentaje
1) Padres o tutor	168	49.1
2) Trabajo	137	40.1
3) Becas	14	4.1
4) Padres y becas	13	3.8
5) Otro	10	2.9
Total	342	100.0

Source: self made

Table 2 shows that the majority of the students surveyed receive income from their parents (49.1%); highlights that the age range of this group of students is from 17 to 23 years. In second place are the students who work and study in parallel (40%), whose ages range between 18 and 25 years. In general, few students receive scholarships (4%), fewer students apply for scholarships and are financially dependent on their parents (3.8%), and even fewer students receive financial support from others (2.9%).). In the study by Chiñas, Sainz, Sánchez and Guillén (2017), similar to the present one, it is mentioned that most of the students dedicate themselves exclusively to studying, since they have the financial support of their parents and it is they who decide in financial issues of students. Table 3 shows the relationship that exists between who provides the student with income and the amount received monthly.

Table 3. Relationship of the amount you receive monthly with the source of income

1. ¿De dónde obtienes tus ingresos?	2. ¿Cuánto obtienes de ingreso mensual? *				Total	P valor
	1)	2)	3)	4)		
1) Padres o tutor	73	49	30	16	168	(0.0001)
	21.3 %	14.3 %	8.8 %	4.7 %	49.1 %	
2) Trabajo	25	32	39	41	137	
	7.3 %	9.4 %	11.4 %	12.0 %	40.1 %	
3) Becas	1	3	1	9	14	
	0.3 %	0.9 %	0.3 %	2.6 %	4.1 %	
4) Padres y becas	3	4	5	1	13	
	0.9 %	1.2 %	1.5 %	0.3 %	3.8 %	
5) Otro	4	4	0	2	10	
	1.2 %	1.2 %	0.0 %	0.6 %	2.9 %	
Total	106	92	75	69	342	
	31.0 %	26.9 %	21.9 %	20.2 %	100.0 %	

*1) Menor a 1000 pesos; 2) De 1001 a 1500 pesos; 3) De 1501 a 2000 pesos; 4) Más de 2000 pesos

Source: self made

Table 3 shows that the amount of student income depends on its source ($p < 0.05$). The majority of undergraduate students receive less than 2,000 pesos per month (79.8%). On the other hand, it is observed that, of the total, the income that comes only from their parents is 49.1%. Likewise, it highlights that 40.1% of them receive labor remuneration, while only 20.2% of the student population receives income greater than 2,000 pesos per month.

This same behavior has been previously reported: the main source of income for undergraduate students comes from their parents and in most cases the amount is less than 2,000 pesos per month (López, Espinoza de los Monteros, Rojo, Flores and Rojas, 2014).

Given the previous results, it would be expected that at least 40.1% of the students surveyed would have better personal finances because they must make an effort to work to obtain their income, different from the other students, who do not have to carry out any activity to earn their livelihood, and in both situations can be reflected the habit of saving.

Table 4 shows whether students consider that their income has decreased as a result of the pandemic.

Table 4. Impact on income as a result of the pandemic

2. ¿Cuánto obtienes de ingreso mensual?	4. ¿Tus ingresos se vieron disminuidos a consecuencia de la pandemia?		Total	P valor
	1) Sí	2) No		
1) Menor a 1000 pesos	71	35	106	(0.003)
	67.0 %	33.0 %	100.0 %	
2) De 1001 a 1500 pesos	55	37	92	
	59.8 %	40.2 %	100.0 %	
3) De 1501 a 2000 pesos	40	35	75	
	53.3 %	46.7 %	100.0 %	
4) Más de 2000 pesos	27	42	69	
	39.1 %	60.9 %	100.0 %	
Total	193	149	342	
	56.4 %	43.6 %	100.0 %	

Source: self made

In general, Table 4 shows that the students indicated that their income was affected during the pandemic. The affectation depends on the amount they receive ($p < 0.05$); mainly students with incomes of less than 1,000 pesos per month (56.4%) indicated that they were affected by the pandemic, since they usually depend on their parents' income (see table 3). In a similar study carried out at the Francisco Morazán National Pedagogical University in Honduras, it was found that the family income of the majority (57.7%) of the students, due to the pandemic and control strategies, was affected (Morales, Paz, Castro, Barahona and Fonseca, 2020)

The behavior may be due to the fact that students with lower incomes have to cover their basic needs with less money, since they depend directly on their parents (see table 2), who were affected by the pandemic. Conversely, those who receive more than 2,000 pesos per month indicated that their income did not change as a result of the pandemic, perhaps

because at that time they were allowed to work from home and receive the same income; or in the case of those who depend mainly on their parents, they received their income in a similar way. The following table 5 shows the range of affectation in relation to your income.

Table 5. Percentage of affectation of income due to the effect of the pandemic

2. ¿Cuánto obtienes de ingreso mensual?	4. Porcentaje en que se ha visto afectado tus ingresos				Total	P valor
	1) 5-10 %	2) 10-20 %	3) Mayor a 20 %	4) No aplica		
1) Menor a 1000 pesos	16 15.1 %	21 19.8 %	30 28.3 %	39 36.8 %	106 100.0 %	(0.001)
2) De 1001 a 1500 pesos	17 18.5 %	21 22.8 %	16 17.4 %	38 41.3 %	92 100.0 %	
3) De 1501 a 2000 pesos	14 18.7 %	16 21.3 %	7 9.3 %	38 50.7 %	75 100.0 %	
4) Más de 2000 pesos	10 14.5 %	10 14.5 %	3 4.3 %	46 66.7 %	69 100.0 %	
Total	57 16.7 %	68 19.9 %	56 16.4 %	161 47.1 %	342 100.0 %	

Source: self made

Most of the students (52.9%) mention that their income was affected by the effect of the pandemic ($p < 0.05$), at all income levels, as shown in table 5. According to the same table, the The percentage that has been affected for incomes less than 1,000 pesos is 63.2%, while in the other income ranges the affectation was lower. The behavior of the information is similar to table 4, since those with the lowest income indicated that they were affected in a higher percentage, it may be due to the fact that their salaries were reduced, the closure of some establishments or the same effect if they received their income. Mainly from their parents. Conversely, those who indicated receiving more than 2,000 pesos are the ones whose income was affected in the lowest percentage, this may be due to having carried out their work activities from home.

The impact of the reduction in income affects not only the students' pockets, but also the emotional aspect, due to the concern of said event, which can affect school performance, as it is a distraction. The following table 6 shows how much students spend on internet or mobile data to attend virtual classes.

Expenses

Table 6. Spending on internet or mobile data to attend virtual classes

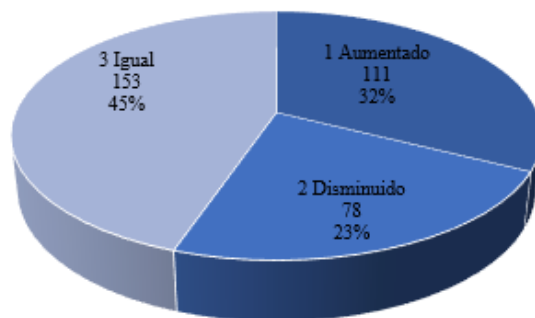
5. ¿Cuánto gastas en internet o datos móviles para cursar tus clases virtuales, ahora transformadas en <i>home office</i> al mes? *					
Carrera	1)	2)	3)	4)	Total
Abogado	0	11	4	0	15
	0.0 %	73.3 %	26.7 %	0.0 %	100.0 %
Contaduría Pública	10	27	16	6	59
	16.9 %	45.8 %	27.1 %	10.2 %	100.0 %
Enfermería	3	16	11	8	38
	7.9 %	42.1 %	28.9 %	21.1 %	100.0 %
Ingeniería en Computación	4	14	6	0	24
	16.7 %	58.3 %	25.0 %	0.0 %	100.0 %
Medicina Veterinaria y Zootecnia	3	7	5	0	15
	20.0 %	46.7 %	33.3 %	0.0 %	100.0 %
Negocios Internacionales	6	23	22	4	55
	10.9 %	41.8 %	40.0 %	7.3 %	100.0 %
Nutrición	8	25	10	4	47
	17.0 %	53.2 %	21.3 %	8.5 %	100.0 %
Psicología	13	40	28	8	89
	14.6 %	44.9 %	31.5 %	9.0 %	100.0 %
Total	47	163	102	30	342
	13.7 %	47.7 %	29.8 %	8.8 %	100.0 %
* 1) Menos de 300 pesos; 2) De 301 a 500 pesos; 3) De 501 a 800 pesos; 4) Más de 800 pesos					

Source: self made

Table 6 shows the spending ranges made by university students on the Internet or mobile data in order to have access to virtual classes and fulfill their academic activities. In general, 47.7% of students spend between 301 and 500 pesos per month on internet service or mobile data, while 8.8% spend more than 800 per month for this service. The expense for the internet service represents up to 50% of the monthly income that some students receive. In a similar study, 45% of participants reported an increase in their expenses related to internet connectivity (Morales et al., 2020). Even more, Esteche and Gerhard (2021) mention that another obstacle regarding the use of the internet in times of pandemic is coverage, since 67% of the students indicated that they did not have said service because they were in locations with connectivity problems, in addition to lack financial resources. In addition to this, a similar study has reported that 85.1% of students use the internet from their homes and 8.2% use data on their cell phones; however, only 39.1% of students have a regular internet connection (Edelstein et al, 2020). Figure 1 shows the impact of spending in relation to the pandemic.

Figure 1. Impact of the relationship of spending with the pandemic

¿ Tus gastos en relación con la pandemia han aumentado, disminuido o permanecen igual? 1)Aumentado, 2)Disminuido, 3)igual



Source: self made

Overall, college student spending has changed (55%) (Figure 1) during the pandemic. Those who registered higher spending may be due to the fact that they bought items that they did not require before the pandemic, as well as a greater consumption of services; For those who indicated that their expenses decreased, perhaps because they spent more time at home they were able to consume food at home and the means of transportation was reduced; For those who indicated that they maintained their expense ratio in the same way in confinement, it can be explained that there was no change in their lifestyle.

The pattern of expenses of the students was modified, mainly, in terms of the way of making the expenses, since not leaving home implies that the acquisition and purchase of products on virtual platforms increases considerably, as can be seen in table 7. , where the increase in digital platforms for making purchases is shown.

Table 7. Impact on spending through digital platforms

2. ¿Has notado un incremento en tus gastos mensuales con el uso de plataformas digitales de comercio electrónico a domicilio (a partir del confinamiento por la pandemia)?	5. ¿Cuánto gastas en internet o datos para cursar tus clases virtuales, ahora transformadas en <i>home office</i> al mes? *				Total	P valor
	1)	2)	3)	4)		
1) Sí	20	75	64	22	181	(0.003)
	11.0%	41.4%	35.4%	12.2%	100.0%	
2) No	27	88	38	8	161	
	16.8%	54.7%	23.6%	5.0%	100.0%	
Total	47	163	102	30	342	
	13.7%	47.7%	29.8%	8.8%	100.0%	
* 1) Menos de 300 pesos; 2) De 301 a 500 pesos; 3) De 501 a 800 pesos; 4) Más de 800 pesos						

Source: self made

Table 7 shows that the expenditure that students have during the pandemic depends on the increase in the use of digital platforms for electronic commerce at home ($p < 0.05$). It was observed that, of the total number of respondents, 52.9% of the students have seen the need to increase their expenses in relation to the use of digital e-commerce platforms at home as an effect of the pandemic, in a greater proportion by students than they spend between 301 and 500 pesos per month. A study on electronic commerce supports that there was an

increase in this way of acquiring products or services during the start of the pandemic (Peña and Rocha, 2020). In general, the acquisition of food and health products has increased rapidly, including those services necessary to meet the educational offer (Lechuga, 2020).

Saving

Table 8 indicates the association of the variables of the percentage that the students surveyed allocate to saving and the habit of saving.

Table 8. Savings habits and percentage allocated to savings

9. ¿Tienes el hábito del ahorro?				
11. Aproximadamente, ¿qué porcentaje de tu ingreso mensual representa la cantidad de tu ahorro?	1) Sí	2) No	Total	P valor
1) Menos de 10 %	89	50	139	(0.0001)
	26.0 %	14.6 %	40.6 %	
2) 10 %	74	6	80	
	21.6 %	1.8 %	23.4 %	
3) Entre 10 % y 20 %	75	0	75	
	21.9 %	0.0 %	21.9 %	
4) Más de 20 %	48	0	48	
	14.0 %	0.0 %	14.0 %	
Total	286	56	342	
	83.6 %	16.4 %	100.0 %	

Source: self made

Table 8 shows that there is a dependency between the percentage of income allocated to savings and the saving habit of students ($p < 0.05$). In general, students indicate that they do have savings habits, however, the amount of savings is less than or equal to 20%. Even with everything, 83.6% of the surveyed population indicates having the habit of saving. A similar study reports that 76.8% of the students surveyed have the habit of saving (and a higher percentage do it for unforeseen expenses), which suggests that the university population has a saving culture that is usually formed from the family environment (

Montoya, Ruiz, Sierra and Bermúdez, 2016) The following table 9 indicates what percentage of their income is allocated to savings by income level.

Table 9. Percentage of income allocated to savings

2. ¿Cuánto obtienes de ingreso mensual?	10. Aproximadamente, ¿qué porcentaje de tu ingreso mensual representa la cantidad de tu ahorro? *				Total	P valor
	1)	2)	3)	4)		
1) Menor a \$1000	49 14.3 %	22 6.4 %	21 6.1 %	14 4.1 %	106 31.0 %	(0.075)
2) \$1001 a \$1500	36 10.5 %	30 8.8 %	18 5.3 %	8 2.3 %	92 26.9 %	
3) 1501 a \$2000	32 9.4 %	15 4.4 %	19 5.6 %	9 2.6 %	75 21.9 %	
4) Más de \$2000	22 6.4 %	13 3.8 %	17 5.0 %	17 5.0 %	69 20.2 %	
Total	139 40.6 %	80 23.4 %	75 21.9 %	48 14.0 %	342 100.0 %	
* 1) Menos de 10 %; 2) 10 %; 3) Entre 10 % y 20 %; 4) Más de 20 %						

Source: self made

In general, the percentage of savings of university students is independent of the monthly income they receive ($p > 0.05$) as shown in table 9. In this context, the majority (40.6%) of university students save less than 10 % of their monthly income (table 9), followed by those who save 10% of their income (23.4%), between 10% and 20% (21.9%) and finally those who save more than 20% of their income (14.0 %). In a similar study it is mentioned that 92% of university students save very little (it refers to an amount less than 3000 pesos, but they have the habit, which is relevant, which shows that there is financial education) (Zamora, García and Ramos, 2018). Table 10 indicates whether there are additional savings as a result of virtual classes since the pandemic.

Table 10. Additional savings as a result of the pandemic

	11. Desde que tus condiciones escolares se trasladaron a la virtualidad, ¿has generado un ahorro adicional por mes?			
9. ¿Tienes el hábito del ahorro?	1) Sí	2) No	Total	P valor
1) Sí	149	137	286	0.006
	43.6 %	40.1 %	83.6 %	
2) No	18	38	56	
	5.3 %	11.1 %	16.4 %	
Total	167	175	342	
	48.8 %	51.2 %	100.0 %	

Source: self made

Table 10 shows that 51.2% indicate that they do not have additional savings in their monthly expenses, however, the statistical test shows that there is dependence on the habit of saving, so it is inferred that there is additional savings in their expenses. monthly as a result of social confinement ($p < 0.05$). It is observed that 48.8% of the surveyed population indicates that they did notice having additional savings. There is no information from similar investigations regarding this item. Table 11 shows information on indebtedness.

Indebtedness

Table 11. Indebtedness as a result of the pandemic

		12. A consecuencia de la pandemia, ¿te has visto en la necesidad de endeudarte o solicitar algún tipo de préstamo?			
1. ¿De dónde obtienes tus ingresos?	1) Sí	2) No	Total	P valor	
1) Padres o tutor	22	146	168	(0.045)	
	6.4 %	42.7 %	49.1 %		
2) Trabajo	26	111	137		
	7.6 %	32.5 %	40.1 %		
3) Becas	1	13	14		
	0.3 %	3.8 %	4.1 %		
4) Padres y becas	0	13	13		
	0.0 %	3.8 %	3.8 %		
5) Otro	4	6	10		
	1.2 %	1.8 %	2.9 %		
Total	53	289	342		
	15.5 %	84.5 %	100.0 %		

Source: self made

Table 11 shows that there are students who found it necessary to take on debt during the confinement associated with the pandemic ($p < 0.05$). It should be noted that those who indicated having debt mostly work, this could have been because their expenses increased due to confinement or their income was affected by budget cuts in their workplaces. In general, 84.5% of students did not find it necessary to take on debt due to the pandemic. According to Montoya (2016), indebtedness is not something negative, as long as the payment capacity is not exceeded. Table 12 shows the effect of the pandemic on the school performance of students by major.

Academic performance

Table 12. School performance during the pandemic by career

	¿Tu promedio con la pandemia ha aumentado, disminuido o permanecen igual?			Total	P valor
	1) Aumentado	2) Disminuido	3) Igual		
Abogado	1	3	11	15	(0.012)
	6.7 %	20.0 %	73.3 %	100.0 %	
Contaduría Pública	9	25	25	59	
	15.3 %	42.4 %	42.4 %	100.0 %	
Enfermería	11	5	22	38	
	28.9 %	13.2 %	57.9 %	100.0 %	
Ingeniería en Computación	5	4	15	24	
	20.8 %	16.7 %	62.5 %	100.0 %	
Medicina Veterinaria y Zootecnia	3	3	9	15	
	20.0 %	20.0 %	60.0 %	100.0 %	
Negocios Internacionales	16	9	30	55	
	29.1 %	16.4 %	54.5 %	100.0 %	
Nutrición	12	4	31	47	
	25.5 %	8.5 %	66.0 %	100.0 %	
Psicología	17	17	55	89	
	19.1 %	19.1 %	61.8 %	100.0 %	
Total	74	70	198	342	
	21.6 %	20.5 %	57.9 %	100.0 %	

Source: self made

In general, academic performance was affected depending on the career they study ($p < 0.05$), as can be seen in table 12. It is observed that 57.9% of the students surveyed indicated that they remain in their learning process, and only 20.5% of the students mentioned having decreased their academic performance, this due to the skills of the career

to be developed. For those who indicated that they had increased their school performance, it could have been because the virtual modality favors them as a means of learning, due to their skills in handling ICT. Valdivieso, Burbano and Burbano (2020) affirm that there are effects on academic performance associated with the pandemic and social confinement.

Discussion

It should be noted that a similarity was found with the study by Chiñas et al. (2017), which points out that most of the students have economic dependence on their parents, who are the ones who make the financial decisions of their children, mainly due to the fact that due to the average age of the students, their main activity is to dedicate themselves to study and not to another that is paid.

For the comparison between the amount and the source of income, there is agreement with the study by López et al. (2014), who indicate that, for the most part, the income received is less than 2000 pesos per month and there is dependence on the source from which they come. This similarity reverberates in the study by Morales et al. (2020), where it is mentioned that income was affected by the pandemic, however, the authors took family income as a reference and the present investigation was carried out with students, which could mean that the amounts of income and expenditure are different.

Regarding the percentage of impact on income, the students mention that they were affected by the effect of the pandemic for all levels, without finding evidence in similar studies, this may be due to the fact that they worked at home as a result of the confinement and others were in the need to quit their job, their income was reduced by cuts in companies or family income was affected.

Overall, college student spending has changed during the pandemic. It may be that, being in confinement, there were higher spending factors such as basic household services and consumption of unusual products; and others that involved less spending, for example, not having to use the means of transportation, as well as reducing expenses for recreation; however, the students who indicated having had a decrease in their spending was in a smaller proportion than those who considered having an increase in this item. It should be noted that as such a similar study was not found to contrast with the results obtained in the present investigation.

Most students report Internet connection costs between 301 and 500 pesos per month. In this regard, the study by Morales et al. (2020) found an increase in their expenses directly related to internet connectivity, which represents a percentage similar to that determined in the findings of this study.

Regarding the savings of the respondents, they indicated that they have this habit and up to 20% of their income is destined for this purpose, which coincides with what was found by Montoya (2016). In the present investigation it was determined that there is a statistically significant difference between the percentage of income destined for savings and the habit of this. In addition to this, more than half of the respondents did not have additional savings through confinement due to covid-19. This may indicate that there was an affectation in the family economy and, therefore, in that of the students, because their income was affected and there was an increase in expenses not usually necessary. Similar research is not available.

Regarding indebtedness, it can be mentioned that a small proportion of students found it necessary to borrow during the pandemic. And here it stands out that there is a significant difference between indebtedness and the source of income, so there is an association between having indebted with the source of income, this is reflected in students who work, perhaps due to the increase in their expenses or decrease in their income due to confinement.

The academic performance of the respondents remains the same before and during the pandemic, which reveals an association between school performance and the career they study, this may be due to the fact that all the courses were transferred virtually, the systems were used learning management (Moodle, Classroom, Microsoft Teams, etc.), training courses for teachers on the use of virtual tools, permanent advice from the Coordination of Technologies for Learning. Contrary to this, Valdivieso et al. (2020) indicate that they have found an impact on academic achievement due to confinement due to covid-19.

The main limitation of this study was that, although the minimum significant sample size was exceeded, it would have been interesting to have greater participation of all the courses offered in the CUAItos of the UdeG, since the invitation to students to answer the instrument it was done electronically.

Conclusion

The pandemic has brought consequences on physical and emotional health, as well as family, economic, political-social, educational problems; Although the fact of being isolated reduced the spread of the virus, it prevented socialization.

Most undergraduate students at CUAltos of UdeG depend financially on their parents and most receive less than 1,000 pesos a month, which represents a great effort for families, according to the data obtained here. On the other hand, the association between the amount of monthly income they obtain and the source of income was highly significant, considering that in Mexico some families receive income equivalent to the minimum wage.

The majority of students still depend on their parents and must manage their personal finances optimally, since more than half of the students indicate that their income was affected by the pandemic (56.4%, of which 55% saw their incomes change). bills).

On the other hand, students indicate that they spend between 301 and 500 pesos on the internet or data to be able to take their classes virtually (47.7%). It was observed that there is a highly significant dependency between the variables on spending on the internet or data to attend their virtual classes and the increase in monthly spending with the use of digital platforms for home delivery e-commerce.

It is important to highlight that students have the habit of saving, as stated by 83.6% of them; indicated that they save less than 10% of their monthly income. Similarly, they consider that they do not have additional savings as an effect of the pandemic, since the statistical test highlights ($p < 0.05$) the dependence between the saving habit and the percentage of savings of their monthly income. Regarding indebtedness, it is important to point out that 84.5% of them indicated that they had not resorted to it, however, there is dependence between the indebtedness variables as a result of the pandemic and the source of income ($p < 0.05$), although it is not bad to go into debt provided you do not exceed your ability to pay. In this period of pandemic, in the academic part, 57.9% of the students indicated that their school performance has not been affected. Likewise, 21.6% mention that they have been favored and only 20.5% indicate that their average has decreased.

The covid-19 effect in the confinement due to the pandemic had a negative result in the income of the students, since the majority indicated that they did see it diminished. On the other hand, to a greater extent, those surveyed indicated that their expenses were modified by the pandemic. It was statistically observed that there is no difference in the behavior of the levels of savings and indebtedness as a consequence of the covid-19

pandemic. It is relevant that students learn how they manage their personal finances to optimize their resources, financial practices, quality of life, as well as their financial education.

Future lines of research

With the return to attendance, it will be interesting to apply the instrument to review the post-pandemic effect, the proportional participation of all the races, to verify if the same behavior is maintained or if there is any significant difference in the results.

It will be important to analyze the variables of income, spending, savings and indebtedness from the family context, since it is the main cell of society, as the main source of income for students, to measure the post-confinement effects on the household economy.

In order to strengthen the line of research, it is suggested to analyze in greater depth the expenses in an expense classification matrix to determine the importance given to the type of expense made by undergraduate students.

Analyze the curriculum of the degrees that students study in order to determine if there are learning units that allow them to develop good management of their personal finances by optimizing their resources, since as professionals they also apply the knowledge they have about financial education. as a productive entity within society.

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