



The Impact of the COVID-19 Pandemic Crisis on Education in Israel: How do Students in Higher Education institutions evaluate the impact of the COVID-19 pandemic crisis on learning in higher education?

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Abstract

The aim of this study was to examine the impact of the COVID-19 crisis on the education system in Israel, specifically the impact of online learning during the lockout on the different levels and aspects of the students in higher education institutions in Israel. These aspects included level of satisfaction, students' achievement, students' goals, students' feelings, and student's academic and social interactions. In order to answer the research question, the researcher has chosen to conduct mixed-method research, which includes both qualitative and quantitative. While in the qualitative part, 50 students were interviewed, in the quantitative part a questionnaire was distributed to 400 students from higher education institutions in Israel. The main findings were, first a positive correlation between students' satisfaction and the flexibility of online learning was found. The second finding, a positive correlation was found between the variable being involved during online education and students' satisfaction. Third a negative correlation between students' satisfaction and the lack of face-to-face contact during online learning was found. Fourth, a negative correlation was found between the variable lack of communication during online education and students' satisfaction. Finally, both from the quantitative part and the qualitative part the students have indicated that COVID-19 and online learning have a significant impact on their social and academic interaction. The main conclusion was the COVID-19 pandemic has created many negative effects for students in higher education in Israel on different levels, social, emotional, psychological, and academic. Consequently, educational administrators and higher education leaders should take into account all facets of teaching and learning in higher education and adapt and adjust policies in emergency situations

Keywords: COVID-19, online learning, students' satisfaction, lack of engagement, social and academic interaction

1. Introduction:

Global economic, political, educational, social, and home systems all underwent changes as a result of the COVID-19 pandemic (Kolak et al., 2021). People's life were dramatically affected by the pandemic as protective measures including lockdown restrictions, school closings, and stay-at-home orders were put in place to stop the epidemic from spreading (Smith et al., 2020). In order to stop the illness from spreading, school closures were implemented, and as a result, the fundamentals of education changed. According to the United Nations Educational, Scientific, and Cultural Organization, the

COVID-10 pandemic has prevented 1.6 billion pupils, or half of the world's student population, from continuing their education (UNESCO, 2020). Local and state governments made a variety of laws and decisions that affected schools all around the world, resulting in a range of experiences for teachers, students, and parents.

The pandemic's effects on schools had an impact on how teaching, learning, and support were conducted. For many educators, students, and parents who found themselves in unexpected circumstances, these shifts offered new experiences. During the epidemic, several educators encountered a variety of unfamiliar difficulties. Studies examined educators' challenges with learning modern technologies, their lack of preparation and support for teaching online, and an increase in work-related stress during the shift to distant learning (Serhan, 2020; Trust & Whalen, 2020). The pandemic's detrimental effects on students' life are shown by research (Akcil & Bastas, 2020; Tumen, 2020). For example, online education is not the most efficient method for student learning or engagement. Parents encountered challenges as a result of the pandemic, including worries about their children's social development, taking on a brand-new and unprepared role in their child's education, and for many parents, handling their work life at home with their children also being at home (Kolak et al., 2021; Zhao, 2020). As the COVID-19 epidemic continues, the experiences of educators, parents, and students highlight how crucial it is to enhance and have an impact on the welfare of schools. It is crucial to make sure that all students' experiences are heard by stakeholders and used to influence education both during and after the COVID-19 epidemic since students' needs might vary substantially.

Following the shutdown of the majority of educational institutions throughout the world due to the pandemic, higher education institutions had to handle the effects of Covid-19 on the educational industry and continue their operations. The switch to online delivery mode was sudden, without previous planning or engagement with the relevant parties. This raises questions about educators' and students' satisfaction and their capacity for change throughout the crisis. During the pandemic, the teaching and learning process underwent a transformation that affected both educators and students. Governments made the decision to switch to an online education method in order to prevent the virus from spreading further and to guarantee the continuation of the academic year.

1.2 Statement of the problem

According to Zamani, and his colleagues (2016) and Adebisi and Oyeleke (2018), the idea of online teaching and learning is not new. Many institutions have thought about e-learning, online education, and correspondence courses in recent years, but the movement of higher education institutions during the crisis was unprecedented. Many institutions went toward digital services to enhance student learning to assure the continuance of teaching, but this change was accompanied by difficulties that produced mixed results in terms of faculty and student satisfaction and coping with these difficulties. In every situation, instructors and students participating in Covid-19 had the opportunity to learn in a way that is likely to influence the way higher education is delivered online in the future. It is necessary to examine the effectiveness of providing online courses and obtaining pertinent learning results.

It is very important to understand the experiences of students throughout the pandemic regarding online education. In a study conducted by Miller (2021) on educators' experiences during the pandemic, the research on students' experiences is not as widely available. Moreover, the study of Smith et al. (2021) it was shown that empirical evidence on the student's learning experience during the pandemic was also quite limited.

Consequently, this study will focus on the educational experiences of students in higher educational institutions in Israel during the pandemic. The focus on this issue can provide knowledge to influence the practices of all educational stakeholders to provide insight to improve the outcomes of the educational institutions and learn lessons from this experience in order to develop the methods of teaching.

1.3 Significance of the Study

Previous studies have examined the impact of the COVID-19 pandemic on students' learning. For example, the study by Byrnes and his colleagues (2020) showed that the COVID-19 pandemic has led to drastic changes almost in every aspect of our lives which led to negative consequences on students' learning in higher education. This study also revealed that the student's learning was suspended and they did not have classes for months. Furthermore, in their study, Onyema and others (2020a) claimed that the shutdown

of schools and educational institutions has a negative impact on students' motivation and engagement in learning, and consequently had a bad influence on the quality of education in general. In addition to these results, the study by Winters and Patel (2021) also added that the COVID-19 pandemic has a negative influence on students' education worldwide and universities need to adjust their teaching and learning policies.

However, as I presented before, there is very limited research regarding the students' learning in Higher Education in Israel during the COVID-19 pandemic crisis. Therefore, this study can be very important to bridge this gap and give insight on the experiences of higher education students in Israel regarding their experiences with online learning during the COVID-19 crisis

2. Materials and Methods

3. The Results:

Hypothesis 1: A high level of satisfaction regarding online education due to its flexibility and being actively involved will be reported by the students.

A ***Pearson correlation*** coefficient was computed to assess the relationship between flexibility and being actively involved with the students' satisfaction regarding online education

Table 1: Descriptive Statistics

	Mean	Std. Deviation	N
Avg. Construct 1	3.1145	.78082	383
Flexibility	2.67	1.425	398
Being actively involved	2.52	1.322	398

Table 2: Pearson Correlation

	Students' satisfaction	Flexibility	Being actively involved
Students' satisfaction	1	.459**	.464**
Sig. (2-tailed)		.000	.000
N	383	382	383

Flexibility	Pearson Correlation	.459**	1	.390**
	Sig. (2-tailed)	.000		.000
	N	382	398	396
Being actively involved	Pearson Correlation	.464**	.390*	1
	Sig. (2-tailed)	.000		.000
	N	398	396	398

** . Correlation is significant at the 0.01 level (2-tailed).

The results in table 4 show there was a positive correlation between students’ satisfaction and the flexibility of the online learning, $r=0.459$, $n=382$, $p=0.000$. Moreover, a positive correlation was found between the variable being involved during online education and students’ satisfaction, $r=0.464$, $n=398$, $p=0.000$. therefore, *Hypothesis 1* which indicates: *A high level of satisfaction regarding online education due to its flexibility and being actively involved will be reported by the students, was confirmed.*

Hypothesis 2: Low level of satisfaction regarding online education due to lack of face-to-face contact, lack of communication, and engagement in the online environment will be reported by the students.

A Pearson correlation coefficient was computed to assess the relationship between lack of face-to-face contact, lack of communication, and lack of engagement with the students’ satisfaction regarding online education

Table 3: Descriptive Statistics

	Mean	Std. Deviation	N
Students’ satisfaction	2.46	.918	400
Flexibility	2.67	1.425	398
Being actively involved	2.52	1.322	398
lack of engagement	2.62	1.361	398

Table 4: Pearson Correlation

		Students’ satisfaction	lack of face-to-face contact	lack of communication	lack of engagement
Students’ satisfaction	Pearson Correlation	1	-.486**	-.494**	-.463**
	Sig. (2-tailed)	.000	.000		
	N	400	398	398	398
lack of face-to-face contact	Pearson Correlation	-.486**	1	.388**	.376**

	Sig. (2-tailed)	.000		.000	
	N	400	398	398	398
lack of communication	Pearson Correlation	-.494**	.373*	1	.295*
	Sig. (2-tailed)	.000	.000		
	N	400	398	398	398
lack of engagement	Pearson Correlation	-.463**	.354**	.288*	1
	Sig. (2-tailed)	.000			
	N	400	398	398	398

** . Correlation is significant at the 0.01 level (2-tailed).

The results in table 6 show there was a negative correlation between students' satisfaction and the lack of face-to-face contact during online learning, $r=-.486^{**}$, $n=398$, $p=0.000$. Moreover, a negative correlation was found between the variable lack of communication during online education and students' satisfaction, $r=-.494^{**}$, $n=398$, $p=0.000$. Furthermore, a negative correlation was found between the variable lack of engagement during online education and students' satisfaction, $r= -.463^{**}$, $n=398$, $p=0.000$. therefore, *Hypothesis 1 which indicates: A high level of satisfaction regarding online education due to its flexibility and being actively involved will be reported by the students, was confirmed.*

Hypothesis 3: A significant impact of online learning during COVID-19 on students' achievement will be found.

Descriptive statistics of students' perception of the impact of online learning during COVID-19 on students' achievement in Israel higher education.

Table 5: Descriptive statistics about the impact of the COVID-19 pandemic on students' achievement

The impact of the COVID-19 pandemic on students' achievement					
Statements	SD	D	A	SA	Mean
Online learning during the COVID-19 pandemic impacted my learning performance.	2%	7%	60%	30%	3.31
Online learning during the COVID-19 pandemic impacted my subject knowledge.	2%	7%	57%	34%	3.28
Online learning during the COVID-19 pandemic impacted my class projects.	3%	5%	57%	36%	3.24
Online learning during the COVID-19 pandemic impacted the quality of my learning.	4%	7%	42%	47%	3.26
Online learning during the COVID-19 pandemic impacted the load of my class assignments.	2%	3%	44%	51%	3.38

SD= strongly disagree D= disagree A= agree SA= strong agree

The table 7 indicates that almost 90% of the respondents strongly agreed or agreed with the statements indicating that the COVID-19 pandemic affected students' achievement in higher education. Therefore, the third hypothesis which indicates that: significant impact of online learning during COVID-19 on students' achievement will be found *was confirmed*

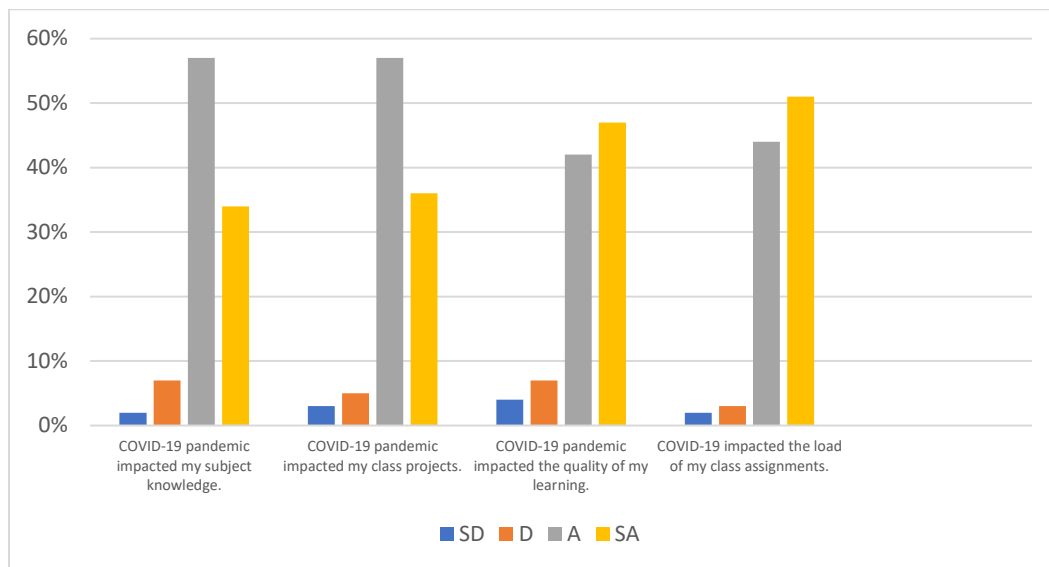


Figure 1: the impact of the COVID-19 pandemic on students' achievement

Hypothesis 4: A significant impact of online learning during COVID-19 on students' goals will be found.

Table 6: Descriptive statistics about the impact of the COVID-19 pandemic on Students' Goals

The Impact of the COVID-19 Pandemic on Students' Goals					
Statements	SD	D	A	SA	Mean
Online learning during the COVID-19 pandemic impacted my future educational goals.	2%	6%	52%	41%	3.23
Online learning during the COVID-19 pandemic impacted my educational activities.	3%	5%	57%	35%	3.31
Online learning during the COVID-19 pandemic delayed my graduation.	2%	1%	44%	53%	3.52
Online learning during the COVID-19 pandemic impacted my out-of-university courses.	2%	1%	44%	53%	3.49

SD= strongly disagree D= disagree A= agree SA= strong agree

The table indicates that almost the majority of the respondents strongly agreed or agreed with the statements indicating that the COVID-19 pandemic affected students' goals in higher education. Therefore, the fourth hypothesis that indicates: a significant impact of online learning during COVID-19 on students' goals will be found, *was confirmed*

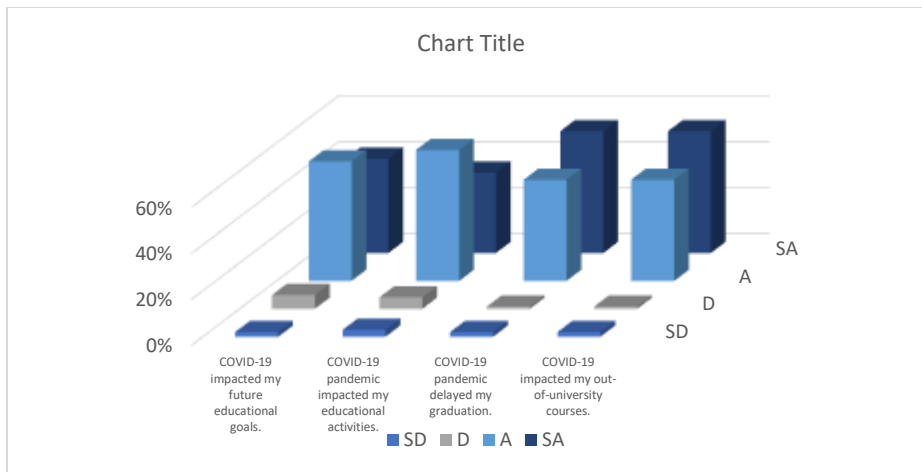


Figure 2: Students' Goals

Hypothesis 5: A significant impact of online learning during COVID-19 on students' feelings will be found.

Table 7: Descriptive statistics about the impact of the COVID-19 pandemic on Students' Feelings

The Impact of the COVID-19 Pandemic on students' Feelings					
Statements	SD	D	A	SA	Mean
Due to COVID-19, I feel I did not study for years.	8%	4%	54%	34%	3.26
I feel I lost educational opportunities during COVID-19.	1%	7%	53%	40%	3.14
The COVID-19 pandemic impacted me psychologically.	2%	6%	51%	40%	3.33
The COVID-19 pandemic impacted me spiritually.	1%	5%	45%	49%	3.3
The COVID-19 pandemic impacted my motivation for learning.	2%	3%	49%	45%	3.41

SD= strongly disagree D= disagree A= agree SA= strong agree

The table indicates that the majority of the respondents strongly agreed or agreed with the statements indicating that the COVID-19 pandemic affected students' feelings in higher education. The online education during COVID-19 also affected the students psychologically, spiritually and their motivation for learning. Therefore, the fifth hypothesis that indicates: A significant impact of online learning during COVID-19 on students' feelings will be found, **was confirmed**

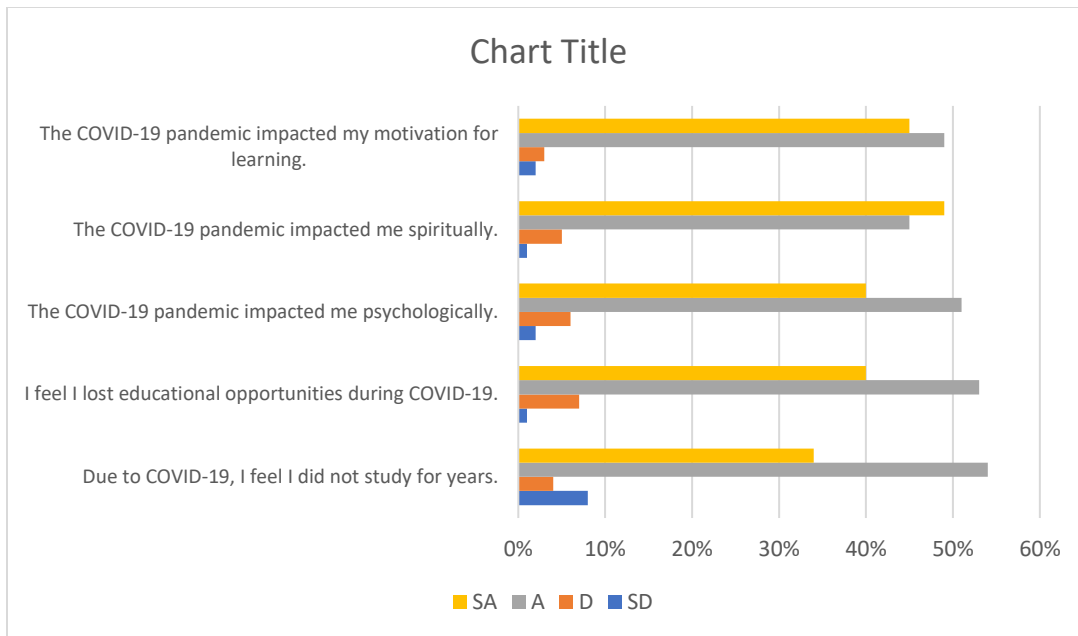


Figure 3: the impact of the COVID-19 pandemic on Students' Feelings

Then the researcher also conducted inferential statistical analysis (Regression) to examine the relationship between students' experience of teaching and learning and the impact of the COVID-19 pandemic on students' learning in higher education (see [Table 6](#)).

Table 8: Inferential statistical analysis (regression). ANOVA

ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.489	1	5.489	32.729	.000 ^b
	Residual	98.942	590	.168		
	Total	104.431	591			

^aDependent Variable: Impact of COVID-19 Pandemic on Students' Learning.

^bPredictors: (Constant), Students' Experiences of Teaching and Learning.

The results of the analysis showed that P- the value is 0.001, which is less than the significance level (0.05). Thus, it can be concluded that there was a statistically significant relationship between teaching and learning during COVID-19 pandemic and the students' learning in Higher education of Israel.

Hypothesis 6: A significant impact of online learning during COVID-19 on students' academic and social interactions will be found

Table 11 contains the descriptive statistics for the variables that were analyzed, as well as the correlations between those variables. Students face a modest degree of learning and self-regulation challenges while studying online, and the vast majority of them say that they suffer a lack of social contacts in the online learning environment. The values that have been averaged out reflect these findings. In addition, students have the impression that the epidemic will not create a significant amount of disturbance in their lives, and they consider themselves to be reasonably accustomed to the atmosphere of online learning.

Table 9: Means, standard deviations, and correlations between explored variables

	M	SD	1.	2.	3.	4.
1. Learning and self-regulation difficulties during online studying	3.37	1.059	-	0.47 **	-0.59 **	0.61 **
2. Perceived level of life disruption caused by the pandemic	2.44	0.823		-	-0.36 **	0.36 **
3. Adjustment to the online learning environment	3.72	1.028			-	-0.30 **
4. Perceived lack of social interactions in an online learning environment	3.98	0.918				-

The results of the parallel mediation of the association between a perceived lack of social interactions and learning and self-regulation difficulties in the online learning environment are displayed in Table 12.

Table 12. shows the regression coefficients, standard errors, and confidence intervals for the direct and indirect effects of online learning during COVID-19 on lack of social interactions (mediators: perceived level of life disruption caused by the pandemic and the adjustment to the online learning environment).

Table 10: Regression coefficients, standard errors, and confidence intervals for the direct and indirect effects

	B	t	SE	LLCI	ULCI
<i>Total effect</i>	0.709 **	16.682 **	0.043	0.6255	0.7926
<i>Direct effect</i>	0.495	12.893 **	0.038	0.4195	0.5704
<i>Indirect effects</i>					
<i>Perceived level of life disruption</i>	0.074 **		0.020	0.0377	0.1159
<i>Adjustment to the online learning environment</i>	0.140 **		0.025	0.0948	0.1908

Note: ** = $p < 0.001$.

The acquired results showed that challenges with learning and self-regulation in an online learning environment are a direct and indirect outcome of the pandemic's perceived lack of academic social interaction. According to the findings, students who feel that there are fewer academic social contacts also have more trouble learning and controlling their behavior when studying online. Furthermore, both mediators significantly contributed to the indirect consequences of the absence of social connections. More particularly, students' impressions of the absence of academic social contacts have a favorable impact on how disrupted they consider their lives to be, and this perspective worsens their learning and self-regulation challenges when studying online. On the other hand, the relationship between the perceived absence of social contacts and learning and self-regulation challenges during online education is also mediated by students' overall adaptability to the learning environment. Thus, students who experience a larger absence of academic social contacts also report being less adjusted to online learning overall and experiencing more learning and self-regulation challenges. Consequently, the sixth hypothesis which indicates that: *A significant impact of online learning during COVID-19 on students' academic and social interactions will be found*, **was confirmed**

4. Discussion:

All facets of human existence were impacted by the COVID-19 epidemic, including commerce, education, health, economics, sport, travel, places of prayer, interactions with others, politics, government, and entertainment (Kolak et al., 2021; Smith et al., 2020). In fact, everyone has been under stress, and the spread of the virus has had an impact on education (UNESCO, 2020). To avoid the spread of COVID-19, the Israeli government took certain measures. They almost closed all the educational institutions, locked down the cities, and banned people from traveling from one city to another city (Wiesbaley, 2020). Later, the Ministry of Higher Education asked educational institutions to conduct their classes online. The broad aim of this study was to examine the impact of the transformation from traditional learning methods to online learning as a result of the COVID-19 pandemic crisis on different aspects regarding the students in higher education institutions in Israel.

To fulfill this aim. The researcher conducted a mixed-method study among students in higher education institutions in Israel. The study was composed of two parts, the qualitative part, and the quantitative part. In the qualitative part, 50 students were interviewed regarding the impact of COVID-19 and the shift to online courses on them on different levels. On the quantitative part a questionnaire was distributed to 400 students to examine and measure the relationship between the study variables and to test the study hypotheses, the following results were obtained.

Regarding the first hypothesis which indicated that a high level of satisfaction regarding online education due to its flexibility and being actively involved will be reported by the students, this hypothesis was confirmed, the Pearson correlation test showed that show there was a positive correlation between students' satisfaction and the flexibility of the online learning, ($r=0.459$, $n=382$, $p=0.000$). Moreover, a positive correlation was found between the variable being involved during online education and students' satisfaction, ($r=0.464$, $n=398$, $p=0.000$)

The second hypothesis indicated that a low level of satisfaction regarding online education due to lack of face-to-face contact, lack of communication, and engagement in the online environment will be reported by the students, was also confirmed. The results show there was a negative correlation between students' satisfaction and the lack of face-to-face contact during online learning, ($r=-.486^{**}$, $n=398$, $p=0.000$). Moreover, a negative correlation was found between the variable lack of communication during online education and students' satisfaction, ($r=-.494^{**}$, $n=398$, $p=0.000$). Furthermore, a negative correlation was found between the variable lack of engagement during online education and students' satisfaction, ($r=-.463^{**}$, $n=398$, $p=0.000$). These findings go along with other studies in this area, such as the study of Nambiar (2020), who conducted an online survey regarding teachers' and students' perceptions and experiences related to online classes. The finding of his study showed also that the most important point in online learning is being flexible and convenient according to both students and teachers, the courses could be taken from the comfort of their homes, saving travel time, it did not seem to be effective when compared to classroom method. However, the findings of his research suggest that in terms of social presence, engagement, satisfaction, and overall

quality, face-to-face learning was regarded more favorably than online learning. Online learning was found to be more convenient in terms of time savings, but both teachers and students felt it was less organized and effective than studying in a traditional classroom (Nambiar, 2020).

Positive attitudes of students regarding online learning during the pandemic were also found in the qualitative part of this study, most of the students who participated in interviews noted that online education saves time and is therefore regarded to be more convenient. These results also go in line with the results of Hasan and Khan (2020) who conducted a qualitative survey on 408 students to examine their perspectives on online teaching-learning. According to the findings of their study, students were enjoying online learning, moreover, Flexibility was found to be the most liked thing about online learning, but poor network and connectivity, were the most disliked elements of online learning. Furthermore, they also found that lack of interaction, distractions, and one-sided learning was mentioned as part of the major disadvantages of online learning.

The third hypothesis indicates that a significant impact of online learning during COVID-19 on students' achievement will be found. This hypothesis was also confirmed. The results showed that almost 90% of the respondents strongly agreed or agreed with the statements indicating that the COVID-19 pandemic affected students' achievement in higher education. These results support the results of previous studies which indicated that the sudden shift to online learning without any preparation for both the students and the staff had a negative impact on the students' achievement (Bayrak, et al., 2020). Another study that showed the negative consequences of the COVID-19 disease affected the academic performance of Turkish students studying science and social sciences, was the study of Elhadary and his colleagues (2020), who found that a number of different factors contributed to the academic achievement of pupils during the COVID-19 pandemic. They found that anxiety (60.3% of cases), social issues (41.8% of cases), and poor internet connection (43.2% of cases) all had a negative impact on the motivation levels of students as well as teachers. Despite this, a majority of students (65%) and teachers (48%) are content with the e-learning platform that they make use of.

Regarding the fourth hypothesis which indicates that a significant impact of online learning during COVID-19 on students' goals will be found, this hypothesis was also confirmed. These findings are applicable to the findings of a study conducted by Daniels Goegan, and Parker (2021), the purpose of this research was to examine students' achievement goals and how they related to their engagement, concerns about cheating, and perceived success under two learning conditions resulting from the measures implemented during the COVID-19 pandemic. The main results of their study were that the level of achievement goals and engagement among students has decreased due to the shift from traditional learning to online learning.

The fifth hypothesis indicates that a significant impact of online learning during COVID-19 on students' feelings will be found, this hypothesis was also confirmed. The findings of the study indicate that the majority of the respondents strongly agreed or agreed with the statements indicating that the COVID-19 pandemic affected students' feelings in higher education, it also affected the students psychologically, spiritually, and their motivation for learning. The impact of COVID-19 on the student's emotional and psychological levels was examined by Moeller and his colleagues (2022), who examined the changes in undergraduate emotional sentiments and psychological well-being from before to after the onset of the pandemic. The main results of this study were that there were surprisingly few changes in student emotions from before and after the onset of the pandemic. The study also unexpectedly found that students' tiredness decreased while their engagement increased from before to after the pandemic onset (Moeller, et al., 2022).

The sixth hypothesis stated, a significant impact of online learning during COVID-19 on students' academic and social interactions will be found, and this hypothesis was confirmed. The results showed that students who feel that there are fewer academic social contacts also have more trouble learning and controlling their behavior when studying online. Similar findings also merged from the qualitative part, the majority of the participants who were interviewed believe that they have lost all or some of the interaction with the other students in their class and would prefer to have more face-to-face engagement. Moreover, the majority of those who participated in the interviews

thought that the lack of classroom interaction and the teachers' delayed email responses made it harder to learn while taking classes online. As a result, this had a negative impact on the students' academic achievement. The study by Azmat and Ahmad (2022) aimed to examine the impacts of a lack of social interaction in online learning. The results of the study found that a lack of social interaction affected students' satisfaction levels, and lead to psychological issues such as health, depression, fear of loneliness, and boredom. The results also suggest that lack of social interaction is a global challenge to the effectiveness of online learning.

Additional results came out from the qualitative parts regarding the recommendations that the students are willing to continue having blended and hybrid learning. The concept of blended and hybrid learning, which aims to improve both the teaching and learning experience, is gaining ground (Raes, et al., 2020). Blended learning is the combination of online and offline instruction in which students interact with teachers, peers, and the course material through physical classrooms and online learning platforms. Blended learning refers to the combination of online and offline training. A method of education known as "hybrid learning" is one in which some students participate in the class digitally while others participate in the class in person. The use of blended learning has garnered interest not just from students but also from educators. In-person instruction may be utilized for pedagogical activities such as seminars, labs, and lectures; however, student supervision conferences may take place online (Meydanlioglu, & Arikan, 2014). It provides an opportunity for kids to engage in bodily engagement with other pupils in the classroom. However, due to the difficulties associated with hybrid learning, there is a range of opinions held by educators. Participants in the interviews proposed that educators may be more motivated and should continue recording lectures and making them available on student platforms to make online learning more accessible to students. Participants in the interview expressed a need for increased laboratory support to address their questions and provide quick feedback.

The issue of blended learning is very important, blended learning appears to be increasingly popular among students' preferences for future studies. According to research conducted by Mukherjee and Hasan, (2022) among college students in the

Philippines, the majority of the students have chosen blended learning for their post-pandemic and future career education because it increases their satisfaction and retention while also promoting social interaction.

Additional result that emerged from the qualitative part was the technical problems, although many students have reported that they are familiar with the digital resources used at colleges and universities, other reported that they have many problems in this field, These problems were also found in other studies, A study conducted by Lepp et al. (2020) referred to some of these issues such as, the availability of technological facilities in students' homes, the preparation of schools for the use of technology, and adequate preparation for teachers.

5. Conclusion

The whole world has to work together and coordinate in order to address the critical issue of COVID-19 and minimize its impacts. Almost anywhere in the world, an infectious epidemic has completely changed peoples' ways of life. The global pandemic of a virus that threatened to disrupt education was declared by the World Health Organization (W.H.O.) in March 2020. Since the time of the Coronavirus, there have been several major changes and variances in teaching and learning. Higher education students now face obstacles to their studies as a result of these developments.

On the positive side, this pandemic has allowed all parties to explore and push the boundaries of educational institutions worldwide to upgrade their teaching approaches and facilities.

On the other side, the COVID-19 pandemic has created many negative effects for students in higher education in Israel on different levels, social, emotional, psychological, and academic. Consequently, educational administrators and higher education leaders should take into account all facets of teaching and learning in higher education and adapt and adjust policies in emergency situations. Particularly, it's possible that various issues with teaching and learning have arisen in different parts of the world. For instance, pupils went through significant changes during the COVID-19 epidemic, which had a severe impact on their learning. As a result, educational leaders and higher education management should take changing settings, flexibility in techniques, and enhancing

students' engagement and creativity in higher education into consideration as well as the incorporation of developing technology in teaching.

Furthermore, this experience has both its advantages and disadvantages. While the students enjoyed the online flexibility, the tools they used, and the variety of roles they played, they also worked under uncertainty, missed their comfort zones, and struggled with the lack of training and limited resources. On the other hand, the students felt safe working from home and avoiding the virus. Due to pressure and difficulties, many students have had trouble switching to the online way.

Although online learning enables students' learning and helped teachers in achieving their educational objectives, it has always been related to the internet with a high-bandwidth connection, and because rural areas usually lacked the infrastructure needed for online courses, students may be unable to participate in virtual classrooms, therefore we can conclude that lack of ICT infrastructure is considered a major problem in online learning.

References:

- Adebisi, T. and O. Oyeleke (2018). Promoting effective teaching and learning in online environment: A blend of pedagogical and andragogical models. *Bulgarian Journal of Science and Education Policy* 12(1).
- Akcil, U., & Bastas, M. (2020). Examination of university students' attitudes towards e-Learning during the COVID-19 pandemic process and the relationship of digital citizenship. *Contemporary Educational Technology*, 13(1).
- Bayrak, F., Tibi, M. H., & Altun, A. (2020). Development of online course satisfaction scale. *Turkish Online Journal of Distance Education*, 21(4), 110–123.
<https://doi.org/10.17718/tojde.803378>
- Byrnes, Y.M., Civantos, A.M., Go, B.C., McWilliams, T.L., Rajasekaran, K., (2020). Effect of the COVID-19 pandemic on medical student career perceptions: a national survey study. *Med. Educ. Online* 25 (1), 1798088
- Daniels, L.M., Goegan, L.D. & Parker, P.C. (2021). The impact of COVID-19 triggered changes to instruction and assessment on university students' self-reported motivation, engagement and perceptions. *Soc Psychol Educ* 24, 299–318
- Elhadary, T., Elhaty, I. A., Mohamed, A. A., & Alawna, M. (2020). Evaluation of academic performance of science and social science students in Turkish Universities during covid-19 crisis. *Journal of Critical Reviews*, 7(11), 1740–1751
- Kolak, A., Markic, I., Horvat, Z., Klemencic, M., & Stojanac, M. (2021). When the parent becomes the teacher: Attitudes on distance learning in the time of “corona-teaching” from parents' perspective. *Turkish Online Journal of Educational Technology*, 20(1), 85–94.

- Lepp, L., Aaviku, T., Leijen, I., Pedaste, M., Saks, K. (2021). Teaching during COVID-19: The decisions made in teaching. *Education Sciences* 2021, 11, 47.
- Meydanlioglu, A. & Arikan, F. (2014). Effect of hybrid learning in higher education. *Int. J. Inf. Commun. Eng.*, 8, 1292–1295.
- Moeller, J., Brackett, M.A., Ivcevic, Z., White, A.E., 2020. High school students' feelings: discoveries from a large national survey and an experience sampling study. *Learn. InStruct.* 66, 101301.
- Mukherjee, D.; Hasan, K.K. (2022). Learning Continuity in the Realm of Education 4.0: Higher Education Sector in the Post-pandemic of COVID-19. In *Future of Work and Business in Covid-19 Era*; Springer: Singapore,
- Nambiar, D. (2020). The impact of online learning during COVID-19: Students' and teachers' perspective. *Int. J. Indian Psychol.* 8, 783–793.
- Onyema, E.M., Eucheria, N.C., Obafemi, F.A., Sen, S., Atonye, F.G., Sharma, A., Alsayed, A.O., (2020). Impact of Coronavirus pandemic on education. *J. Educ. Pract.* 11 (13), 108–121.
- Serhan, D. (2020). Transitioning from face-to-face to remote learning: Students' attitudes and perceptions of using zoom during COVID-19 pandemic. *International Journal of Technology in Education and Science*, 4(4), 335–342.
- Smith, J., Guimond, F.-A., Bergeron, J., St-Amand, J., Fitzpatrick, C., & Gagnon, M. (2021). Changes in Students' Achievement Motivation in the Context of the COVID-19 Pandemic: A Function of Extraversion/Introversion? *Education Sciences*, 11(30).
- Trust, T., & Whalen, J. (2020). Should Teachers be Trained in Emergency Remote Teaching? Lessons Learned from the COVID-19 Pandemic. *Journal of Technology and Teacher Education*, 28(2), 189-199
- Tumen, S. (2020). College students' views on the pandemic distance education: A focus group discussion. *International Journal of Technology in Education and Science*, 4(4), 322–334.
- United Nations Educational, Scientific, and Cultural Organization. (2020). School closures caused by coronavirus (COVID-19).
- Winters, N., Patel, K.D., (2021). Can a reconceptualization of online training be part of the solution to addressing the COVID-19 pandemic? *J. Interprof. Care* 35 (2), 161–163.
- Zamani, B. E., et al. (2016). Major barriers for participating in online teaching in developing countries from Iranian faculty members' perspectives. *Australasian journal of educational technology* 32(3).
- Zhao, Y. (2020). COVID-19 as a catalyst for educational change. *Prospects*, 49, 29-33.