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Through the "Camera Lens": How Do Students Grasp the Future of Learning via Online Platforms?

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Abstract

During the COVID-19 pandemic, the academic world came into contact with a virtual learning environment that allows students and educators to leave the boundaries of space and time and maintain academic interactions at unrestricted times and sites. After three semesters of remote learning, there is a feeling that the return to universities and to closed spaces will deter students and that they will prefer remote learning. Studying from home spares valuable time, time otherwise wasted in traffic jams, as well as petrol and other expenses. Remote learning gives a feeling of freedom, comfort, flexible time, and a better sense of control over one's studies than in the classroom. The current study, conducted about one year after the outbreak of the pandemic, examined students' background variables: gender, years of schooling, marital status, financial and employment status – with the goal of exploring the association between these variables and students' preference for either face-to-face or digital teaching. It is evident from the research findings that after this experience of e-Learning neither of these two methods shows a clear advantage over the other. Was the e-Learning experience during the crisis a one-time, incidental event? Or perhaps, in light of the crisis, academic institutions should prepare for a different type of learning, one that combines face-to-face with digital learning? The study illuminates an issue that is confronting educational institutions in general and academic institutions in particular, i.e., preparations for teaching and learning in the post-crisis world, after the considerable upheaval to which we were subjected.

Keywords: digital learning, face-to-face teaching, ICT environment, passive learner, independent learner, internet, e-Learning

1. Introduction

1.1 Virtual Learning

The development of information and communication technologies (ICT) and their assimilation in the educational system allow varied learning activities, even remote activities. These include diverse combinations of media information sources and experience simulations; teamwork and collaborative learning unrelated to geographical distance; dialogue between learners, including discussion, conversation, exchanging views and ideas, and cognitive sharing. By means of information and communication technologies, the typical classroom is no longer limited to four walls and its door is open to learners and experts from around the world. Teaching courses in an ICT environment requires a different conception of teaching and learning methods and of the role of the student and lecturer during studies (Salmon, 2019; Davidovitch & Wadmany, 2021a). The role of the lecturer changes from "knowledge imparter" to "mediator", which allows the lecturer to focus on developing the student's self-learning skills. The ICT environment transforms the student from a passive into an independent learner capable of finding information and evaluating its level and quality. This process is complex for both sides. Those who try to integrate the ICT environment in courses have accumulated little experience and it is therefore important for them to understand the difficulties based on personal experiencing (Palloff & Pratt, 2007; Nachmias, Mioduser, Oren, & Lahav, 1999; Joanna & Jason, 2016).

1.2 Online Platforms

In our research we chose Zoom amongst the online platforms. Learning via Zoom has become, as stated, a much-discussed topic during the COVID-19 pandemic crisis. In recent months the educational system in Israel and around the world has undergone a crisis that is essentially different from previous crises, and we must be

attentive to the insights arising from how the educational system handled the crisis, particularly remote teaching and learning. The ultimate solution indicated for continued functioning of the educational system, with regard to imparting knowledge in situations resembling the last crisis, consists of remote teaching and learning (DePietro, 2020). Recently this was indeed utilised as a temporary short-term solution, but there is a good chance that remote teaching and learning, as part of the academic and educational process, will become the new routine. E-teaching is no replacement for traditional education but it allows achievements side by side with risks. The premise is that remote teaching and learning will be an important component of the educational system in times of emergencies for short and unexpected periods of time, and perhaps also in times of routine and over time. Notably, entering the field of remote teaching creates an opportunity for empowering the capabilities of lecturers and teachers and also poses for them complex challenges of learning new areas and acquiring new capabilities. Remote teaching exposes the teachers and students to difficulties such as handling claims of parents or students or the administrative professional ranks in charge of them (Davidovitch & Wadmany, 2021b). In order to thoroughly analyse the advantages and disadvantages of this teaching method we conducted a study with the aim of examining the preference of students for the online learning method over the face-to-face method. For this purpose, background variables such as the students' gender, years of study, marital status, financial and employment status were examined. The study looks to the future as the voice of the students is meaningful for examining and analysing their preferences (Cohen & Davidovitch, 2020).

2. Literature Review

2.1 E-Learning in the Educational System

Until the digital revolution, studies took place face-to-face. Students sat physically in the classroom and the teacher taught, speaking most of the lesson, with the students remaining passive. According to Melamed (2017), the Zoom revolution, that of remote learning, is total, and its impact is no less intense and maybe even more than that of the greatest revolutions experienced by humanity.

The research literature relates to three generations of remote learning. For instance, Goldschmidt (2013):

- **The first generation** – Learning by correspondence, a method that evolved in the 19th century and was based on the ability to print study material and distribute it by mail. Learning by correspondence acquired momentum and was used in elementary, secondary, academic, and vocational education, so much so that even PhD studies by correspondence were offered (Allen & Seaman, 2007; Altbach & De Wit, 2020).
- **The second generation** – The pattern of learning by correspondence was replaced by "remote learning", a wider term perceived as better describing the expansion of teaching tools to include broadcast media, video and audio recordings, and to a limited degree also computers (Nichols, 2020).
- **The third generation** – Computer-mediated remote learning, which can be considered a continuation of the same trend of "one-way" learning, where interaction with the teacher or with the other students is limited or non-existent, using newer means such as the internet, modular courses, computerised questionnaires, and so on; this approach can also open a window to dialogic, joint learning, which is an act of communication, for instance through video conferencing technologies (Wahab, 2020).

Rotem (2013) claimed that remote learning has major advantages, such as: E-learning environments; leveraging learning by combining technology facilitates better accessibility, improves learners' involvement and motivation including achievements, and increases the efficacy of learning. In addition, he noted the topic of student involvement – as "digital natives", they have no difficulty becoming integrated in digital learning, which teaches them to study using the same technology they use for communication and entertainment in their leisure time outside school. This does not mean that students must engage only in technology, but instead of the normally uniform reference to the classroom, with study methods of traditional teaching and learning, digital learning allows adaptation to the personal needs of each learner, and much more enhanced active learning than in traditional learning (Frankiewicz & Tomas, 2020). Nevertheless, it should be remembered that utilising benefits and facilitating technology in learning depend first of all on proper functioning of the teacher, meaningful support by a clear vision of the educational leadership, and their implementation in the field. There is also a need for full involvement of the institution's headmaster/leadership and suitable guidance and training of the educational team. Digital learning increases equal learning opportunities for all students by providing access to a wide variety of tools, resources and study contents in all topics, unrelated to place of residence and social and economic status, so long as students have access to the internet (Ben-Amram & Davidovitch, 2021).

In addition, the digital study contents include a rich variety of topics and information, which enable interaction with materials, information sources, teachers, peers and experts from outside the classroom. Digital content can

be easily updated by its owners, as well as edited and adjusted to the context by learners and teachers, and in practice has almost unlimited quantity and variety as a means of learning in all areas of information and topics taught. These are the main strengths of remote learning. Notably, in practice the situation is slightly different and in any case teachers and students have different ways of handling remote learning (Guri-Rosenblit, 2010, 2018).

Students' ways of coping with e-Learning are presented in this context through the article by Cohen and Liberman (2017). They found positive attitudes to this type of learning and also statistically significant differences between boys and girls, between those with experience in ICT learning and those who lack it, and between those learning in a rich ICT environment and in a poor ICT environment. Moreover, it was found that students seek to learn in an ICT environment due to the availability of study materials and the improvement it generates regarding motivation.

In contrast, the objectors expressed concern of harm to concentration as well as infrastructure difficulties. The study revealed new aspects: some support learning in an ICT environment because they are "technological natives", some object to it as they prefer the "tangible" and "familiar", and some are concerned of addiction to technology. The findings suggested ways of improving students' attitudes.

Dorfberger and Karmi (2017) address differences and attitudes regarding the issue of technology use among teachers included in the national ICT program, compared to teachers who are not in the program. They compared between teachers who had been teaching for different lengths of time. Their conclusion is that the many resources allocated to the national ICT program were productive and generated more positive attitudes to technology use among teachers who participated in it. The program also had a secondary contribution that was not one of its aims, which is reducing the gaps between teachers with different levels of seniority with regard to technology use. These results reinforce the need for headmasters to examine the attitudes of members in their organisation, as well as the need to receive assistance in the form of guidance. The role of the headmaster in the educational organisation is critical and the chance that the change in the organisation will take root depends to a large degree on how the teachers deal with e-Learning.

Baranga and Levin (2006) presented the integration of information technology in the school through their study that followed, for four years, integration processes of information technologies in a school chosen to serve as an example in this area. The study describes analyses and interprets the processes that occurred in high schools and junior high schools following the integration of information technologies in the curricula and in teaching. The study also followed development patterns of educational outlooks among a group of teachers, the development of their learning processes and their use of information technologies in the classroom (7^{th}-12^{th} grades). The research results portray an optimistic picture regarding the possibility of forming an essential change in the school system, which focuses on unique development of the school culture on the educational-value-pedagogic sphere, in a gradual process of assimilating ICT in the school. The study also shows how teachers and students coped with e-Learning.

A notable example from the field is that brought by Baruch and Miller (2018), who explored the use of e-teaching in the subject of linguistics among high schoolers slated to take the matriculation exam in the 11^{th} grade. They explored patterns of website use and discussed the usage characteristics of students who access the site by statistical tests that indicated associations between patterns of website usage and the students' achievements. The research results showed the significance of the website and illuminated its strengths as evaluated by the students. The teacher collects the information, charts topics for further analysis, and detects students' difficulties. The ability to follow the quality of the instruction and students' progress is an advantage. But the question that remains is whether e-Learning is indeed beneficial for elementary and high school students.

2.2 E-Learning in Academia

The system of higher education has two study systems that exist concurrently, the face-to-face learning system and the online system. Only in the last decade has the option emerged of transferring to online teaching courses that in the past were taught physically at the university.

Goldschmidt (2013), in his article on online studies, revealed that these are given free of charge or for a fee and existed even before 2011. Due to the huge number of students, particularly in the last two years, the topic has reached public awareness and occupies a central place in academic and public discourse on higher education. Goldschmidt also explored the response of lecturers to e-Learning and showed that half the lecturers are of the opinion that their institution has efficient tools for evaluating the quality of regular face-to-face teaching, while only one quarter of the lecturers contend that their institutions have efficient tools for evaluating the quality of e-teaching. About 19% of lecturers had suggested an online course to a student consulting them; about 28% of lecturers who teach online courses had suggested such courses to those consulting them, and about 99% of

lecturers who do not teach online courses had also suggested them.

The results of the study conducted by Kirsch (2015) show that the vision of free elite education for the masses and reducing the cost of studies – was at first a source of considerable inspiration. This vision still exists – but it subsequently became clear that it could not be fully implemented in a short span of time. Online courses constitute an important addition to traditional teaching and an essential instrument for professional development. Even if they do not meet some of the expectations and will constitute, similar to textbooks, a means that complements traditional studies in class – this appears to be a timely innovation. It is necessary to check whether there are barriers to the topic of e-Learning.

Galusha (1998) explained that remote learning is not new, but it did not win acclaim in the academic community due to the number of problems presented here and their severity. In contrast, the dramatic growth in the graduate population has made remote learning a choice that is gradually becoming more popular than other study techniques. This is because e-Learning grants students more freedom and allows them to be in any location while still listening to the courses and watching the lecturer.

Wegner et al. (1999) showed in their study the effects of remote learning on students' achievements and on their attitudes with regard to the learning experience. The conclusions of this study are surprising considering the time in which it was written. They explored this for two years in order to reach precise results. The results showed that e-Learning is not negative, on the contrary. Learning on the internet supports students and their achievements, which showed improvement.

Towards the 21st century a change was evident in the attitude to e-Learning and it became necessary to explore the perspective of students and lecturers to the topic and to see the changes and developments. Marom, Chajut, Roccas, and Sagiv (2003) explored factors related to students' choice of their learning environment (e-Learning versus face-to-face learning). The study was conducted at the Open University with two different groups by demographics and academic achievements. The remote learning group had a higher proportion of males and a different age distribution. The result is not surprising and resembles previous studies: These students were born into a technological society and have more experience with computers than older populations. Moreover, in Israel Open University students are mostly comprised of outstanding high school students for whom high school is not sufficiently challenging and soldiers who are motivated to continue studying during their 3 years of compulsory military service. Hence, it seems that in addition to experience with computers they are also motivated to study. The researchers anticipated that some of the differences found in the current study would disappear in the future when computers and the internet will be an integral part of the learning environment at school and at home.

Accordingly, a trend is emerging whereby students themselves prefer e-Learning. Nonetheless, the topic of self-discipline should be explored. The answer arises from the study conducted by Artino and Stephens (2009), who indicated potential differences in e-Learning between undergraduate and graduate students. As expected, graduate students have more experience with studies than undergraduate students. Identifying such differences can help the teaching faculty utilise efficient online teaching strategies for students.

2.3 The Strengths of E-Learning in Academia

The e-Learning enforced on us by the distancing rules as a result of COVID-19 has benefits that are already evident in the field. The new means help develop cognitive autonomy, increase students' motivation and internal efficacy, and instil in them a sense of control over their studies. Many students perceive digital learning as personally adapted, effective, enjoyable and providing a framework and boundaries, together with flexibility, independence and freedom of action. At the same time, students from different fields admit that they miss the experience of face-to-face studies and the social contact. Nonetheless, they all are also appreciative of the advanced technology that allows them to continue studying in a lockdown period characterised by strict restrictions.

Students are being required to adjust to a new routine and to develop self-discipline that will help them maintain their achievements. Lecturers too are dealing with new challenges in the digital expanse. They have the privilege of being exposed to new technologies and learning techniques and are required to learn them and acquire good command of them. Notably, each lecturer has distinct technological abilities and skills; some give regular lectures on Zoom, others hold creative quizzes and surveys, and yet others excel and even know how to divide the class into separate groups that subsequently collaborate with the others.

The constraints of COVID-19 have transformed lecturers from agents of knowledge, previously imparted in a linear learning process, to full partners in the process. A large part of the students praises their lecturers for their

availability for responding rapidly through e-mail and even on WhatsApp. Some also note the consideration shown by their lecturers with regard to reasonable homework requirements that do not cause overload.

E-Learning utilises a variety of technological means, beginning from asynchronous means such as recorded lectures, technological cloud-based books, presentations and articles accompanied by various questions that the students must answer, to online synchronous means such as Zoom lectures that include interactive exercises and constitute academic lessons for all purposes (Al-Zahrani & Laxman, 2016).

Hence, the remote learning method has two facets. On one hand, the disrupted study routine and the violated daily balance are regrettable. On the other, there are also positive aspects, particularly as seen through the perspective of academic students. Their positive attitude to e-teaching is not merely subjective, as it is linked to the strengths of this method. The COVID-19 pandemic has given the academic community an opportunity to establish a new relationship between the students and the information acquired. This, while increasing awareness to the existence of digital study material that is uploaded to portals and digital study websites, and directions as to how to find it. This method is an opportunity for developing new learning and assimilating it. Moreover, it encourages students' motivation to study independently, manifested in the appropriate time, place, and personal pace of each and every one.

Autonomous learning, which is meaningful and experience-based and includes developing critical thinking, is compatible with the demands of the market. This type of teaching is also an opportunity to update academic faculty on issues of privacy and legal use of digital and open study material, and to encourage them to embrace the material and methods in the various courses, and finally it is also an opportunity to consider government policy that supports promoting the assimilation of new study material, as well as funding and implementing technologies based on new study material and advanced learning and teaching pedagogies that will establish meaningful future learning (Wadmany, 2017, 2018).

Despite the benefits of e-Learning, its shortcomings should also be noted. As mentioned, this teaching method requires self-discipline and time management capabilities – major qualities for learning, while e-teaching enjoys less guidance than traditional learning. E-Learning usually does not include regular meetings or adhering to a schedule. As a result, students must navigate independently with regard to their routine education. Social interaction too is reduced, there is little group discussion, and the responsibility for these rests more with the students.

2.4 Remote Learning During COVID-19 on the Zoom Platform

Since the 1950s and expansion of research to the social sciences, higher education and the integration of online educational methods versus face-to-face learning have been investigated. Comparative studies, where the benefit of these comparative studies has declined over the years due to the familiar result "no significant difference". As stated, the COVID-19 crisis generated a new reality in institutions of higher education as well, which consequently shifted to e-Learning. These were required to make the necessary changes and provide access to studies to some 300 thousand students through an open online space – enabling remote learning at any time and any place, through the technology available at present to everyone. Many will say that it is a blessing in disguise, as all this helps both students and lecturers develop different skills that can serve them and improve the learning qualities even after the crisis will abate.

After a year of experience with digital teaching, the purpose of this article is to examine students' preference for one of the teaching methods, whether face-to-face or digital. For this purpose, background variables of the students, such as gender, years of studies, marital status, financial and employment status, were examined.

3. Procedure Method

The current study, conducted about one year after the outbreak of the pandemic, examined students' background variables: gender, years of schooling, marital status, financial and employment status – with the goal of exploring the association between these variables and students' preference for either face-to-face or digital teaching. In order to answer these questions, a computerised quantitative questionnaire was prepared and posted on the social networks.

This study is a quantitative study based on an attitudes survey conducted among students at Ariel University as a case study. The survey presented the respondents with several claims concerning the impact of e-Learning on the quality of learning, to identify its advantages and disadvantages. The respondents were asked to rank their replies on a scale of 1 to 5 (where 1 means not at all and 5 means very much). to several statements related to the different effects of e-Learning on the quality of teaching and learning. The questionnaire used was that devised by Davidovitch and Wadmany (2021a).

The research questions examined whether and to what degree there is an association between:

- Gender and satisfaction with remote academic studies
- Years of study and satisfaction with academic remote studies
- Marital status and satisfaction with academic remote studies
- Financial and employment status and satisfaction with remote academic studies

3.1 Tools

The questionnaire included several questions: student's personal information such as age, gender, name of academic institution, study department, years of study, satisfaction with remote academic studies, employment status, and financial status. Responses were completely anonymous and the data collected were used for the study only. The questionnaire was distributed digitally to the students through the student social network.

3.2 Respondents

The main research tool was a questionnaire intended for academic students in the second and third year of their studies. The students questioned were in the second and third year of their studies, and had been subjected to the traditional educational method for at least one semester. The respondents were asked to answer several online questions that required about ten to fifteen minutes of their time. The research was approved by the university ethics committee. The questionnaire was open for student completion for about one week and then the data were collected using the SPSS. Students could choose whether to respond or not.

3.3 Data Analysis

A chi-square test, also called a Pearson's chi-square test or a chi-square test of association, was utilized, in order to examine the relationship between the research variables.

4. Research Findings

The participants included 143 students, 30 men and 113 women.

Table 1. The profile of the participants

			Considerable difficulty with remote learning	Moderate difficulty with remote learning	No difference between remote learning and learning in class	Prefer remote learning to learning in class	Total
Sex	Male	Count	0	8	15	7	30
		% Within gender	0	26.7%	50.0%	23.3%	100%
		% Within groups	0	29.6%	18.1%	23.3%	21%
		% of total	0	5.6%	10.5%	4.9%	21%
	Female	Count	3	19	68	23	113
		% Within gender	2.7%	16.8%	60.2%	20.4%	100%
		% Within groups	100%	70.4%	81.9%	76.7%	79.0%
		% of total	2.1%	13.3%	47.6%	16.1%	79.0%
Total		Count	3	27	83	30	143
		% Within gender	2.1%	18.9%	58.0%	21.0%	100%
		% Within groups	100%	100%	100%	100%	100%
		% of total	2.1%	18.9%	58.0%	21.0%	100%

The first research question related to the association between gender and satisfaction with remote academic studies.

Association between gender and satisfaction with remote academic studies

It is evident from the research findings that of the 30 male students who participated in the study, none felt that

online studies were very difficult. Eight students noted that they have a medium difficulty with remote studies (26.7% of the research participants) and 22 had no difficulty at all with online studies (73.3%).

Fifteen of the students reported that it does not matter to them whether they study from a distance or face-to-face (about half the participants) and only seven students prefer remote learning to a medium degree (about 23%) while eight students (26.6%) had a high preference.

Of the 113 female students who participated in the study, three reported a high difficulty with remote studies, 19 reported a medium difficulty (16.8%) and 68 (about 60%) were ambiguous about the study method. Twenty-three students (20.3%) reported that they prefer the online approach to a medium degree.

In summary, only three of all the students reported that they have a high degree of difficulty (2.1%), that they have a high difficulty. Eighty-three students (58%) reported that they are ambiguous as to whether they study from a distance or face-to-face, namely more than half the participants have no difficulty studying in either of the two methods. In addition, 30 of all the participants (21%) prefer remote studies to a medium degree.

Notably, at the same time – they also have no preference for one of the two methods. Hence, gender does not constitute a significant criterion for preferring the online to the face-to-face method, and vice versa.

The second research question related to the association between years of study and satisfaction with academic remote studies.

Association between years of study and satisfaction with academic remote studies

Table 2. The Asymptotic Significance of the association between years of study and satisfaction with academic remote studies

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.109[a]	3	.250
Likelihood Ratio	4.086	3	.252
Linear-by- Linear Association	.201	1	.654
N of Valid Cases	143		

[2 cells] (25.0%) have expected count of less than 5. The minimum expected count is 1.17.

One student, in his second year of studies, reported a high difficulty with remote studies, and two students, in their third year of studies, also reported a high difficulty with remote studies (2.1% of the research participants). Fourteen students in their second year of studies had a medium difficulty (16.1%), as did 13 students in their third year of studies. Namely, some 18.9% of all students had a medium difficulty. Moreover, 16 second-year students and 14 third-year students were found to prefer remote studies to a medium degree (some 21.0% of the research participants).

In addition, 56 second year students reported that they are ambiguous as to which study method is used. Together, they reflect 58.0% of all research participants.

Hence, year of study is not a significant criterion for preferring the online over the face-to-face method, and vice versa.

The third research question related to the association between marital status and satisfaction with academic remote studies.

Association between marital status and satisfaction with remote academic studies

Table 3. The Asymptotic Significance of the Association between marital status and satisfaction with remote academic studies

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.539a	3	.468
Likelihood Ratio	3.067	3	.381
Linear-by- Linear Association	.012	1	.913
N of Valid Cases	143		

It is evident that with regard to the research participants' marital status, only three single students had a high difficulty with the remote study approach (2.6% of the research participants). Four married and one divorced student had a medium difficulty with e-learning (18.9% of the research participants). More than half the single participants, 58.1%, said that they are ambiguous as to which study method is used and that remote studies make no significant difference (only 14 married students and one divorced student had no difficulty at all).

Hence, marital status too is not a significant criterion affecting preference for the online over the face-to-face method, and vice versa.

The fourth research question examined the association between financial and employment status and satisfaction with remote academic studies.

Table 4. The Asymptotic Significance of the Association between financial and employment status and satisfaction with remote academic studies

Table 4: The Symmetric Measures		Value	Asymptotic Standard Errora	Approximate Tb	Approximate Significance
Nominal by Nominal	Phi	.229			.275
	Cramer's V	.162			.275
Interval by Interval	Pearson's R	.060	.079	.719	.473c
Ordinal by Ordinal	Spearman Correlation	.043	.084	.509	.612c
N of Valid Cases		143			

[a] Not assuming the null hypothesis.

[b] Using the asymptotic standard error assuming the null hypothesis

[c] Based on normal approximation.

It is evident from the study that:

- Seventy-nine students reported that their employment status is poor and they are considered unemployed, namely, most of the students were unemployed and had no source of income for the duration of their studies.
- For 52 students there is no difference between the face-to-face and remote approach (about 66%), of whom 13 prefer remote learning to a medium degree. Twelve students reported a medium difficulty with remote studies and only two students reported a high difficulty with online studies.
- Of the 58 students who were working as employees during their studies, only one student had a high difficulty with online studies, while we found that 46.6%, representing some 27 students, noted no significant difference between the two study approaches. Thirty students were working and studying concurrently, half (15 students) had a medium difficulty with remote learning and they constitute about 26% of all students who work as employees and expressed an opinion about the method of remote learning, while the second half (15 students) were found to prefer remote learning. This may be a good way for them to balance studies with work. They also constitute the same percentage of those with a medium difficulty.

The research findings indicate that only six of the 143 research participants have their own business and are self-employed. None had a high or medium difficulty with remote learning. Four students reported no significant difference between the two approaches and only two self-employed students preferred remote learning to a medium degree.

In summary, by students' employment status it was found that:

- Three students reported that they have a high difficulty with remote studies, two unemployed and one employee, reflecting 2.1%.
- Twenty-seven students reported that they have a medium difficulty with remote studies, of whom 12 were unemployed and 15 employees, constituting 18.9% of the students.
- Eight-three students reported no difference, 52 unemployed, 27 employees, 4 self-employed, all together reflecting some 58% of all students.
- Thirty students preferred remote studies to a medium degree, 13 unemployed, 15 employees, and two

self-employed, who constitute some 21%.

Hence, financial status does not constitute a significant variable for preferring the online over the face-to-face method, and vice versa.

5. Summary and Discussion

In this study, conducted about one year after students' experience with studying online in light of the COVID-19 pandemic that broke out unexpectedly with no ability to prepare in advance, background variables of students were examined: gender, years of study, marital status, and financial and employment status. This, with the aim of exploring the association between these variables and students' preference for one of the teaching methods, whether face-to-face or digital. After the constraint encountered, the point of departure for this study is the preferences of students for one study method or another after the COVID-19 pandemic, which constitutes a significant criterion for the preparations by leaders of higher education for the post-crisis era (Wadmany, 2017, 2018).

It is evident from the research findings that after the students' experience with online studies and the feeling that they will show a preference for this method, no preference can be indicated for either this method or the traditional one. Was the study experience during the crisis a one-time, incidental event? Should academic institutions prepare for a different type of studies, one that combines face-to-face and digital learning, in light of the crisis? The study illuminates an issue encountered by educational institutions in general and academic ones in particular, as well as the need for a new alignment in teaching and learning in the post-crisis world and after the great shock to which we were exposed.

Although no major tendency was seen in favour of one of the teaching methods, it seems that remote teaching and learning will become an important component of the educational system in times of emergency, for short and unexpected time spans as well as in times of routine and continuously. This is because remote teaching has the potential to generate a considerable opportunity for empowering lecturers and teachers and their capabilities but also for simultaneously posing complex challenges of learning new fields and acquiring new skills, as well as exposure – which may feel threatening.

How is all this affecting students and are they managing to maintain a study routine? How are the lecturers coping with the new demands and how might the change enforced on us upgrade the learning and teaching systems in the future as well? Once the possibility of meeting in the classroom became unfeasible, new learning environments were formed, supported, as stated, by remote learning as well as use of open study materials and digital contents. Many would say that it is a blessing in disguise, as all these are helping both students and lecturers develop different skills that can serve them and improve the quality of learning after the storm dies down as well.

The COVID-19 crisis has undoubtedly created a new reality with regard to work and studies, leading to a significant leap in the use of digital tools (Altbach & De Wit, 2020). As mentioned, beside the huge opportunity there are also shortcomings (Ben-Amram & Davidovitch, 2021). The current reality that decrees for all of us behaviour patterns so far from those familiar to us might also affect the mental resilience of large parts of the populace, and mainly children and the elderly. Learning in front of a screen generates passivity and scientific studies have already found that cerebral changes might result from passive observation of a screen as well as by different life experiences acquired via virtual activities.

The COVID-19 crisis has led to new coping of academic institutions with students' digital study space (DePietro, 2020). The study shows that students do not prefer remote learning. It appears that even after the experience of institutions of higher education in Israel, which switched instantaneously to teaching some 300 thousand students in an open online space that would enable them to study from afar at any time and from any place through the smart devices owned at present by everyone – there is no clear conclusion as to where academic teaching is headed – what is students preferred academic space.

Remote learning seems to be a means that will gather momentum in the next few years and the research findings might have implications for the character of the lecturer as a source of knowledge and for the lecturer's role in the academic space. Notably, it offers us several benefits that were lacking in the traditional study method, including learning at anytime and anywhere, increasing the supply of studies without increasing budgets, and the possibility of equal opportunities in education.

The challenge of meaningful learning "from a distance" requires complex and integrative pedagogic thinking that includes the ability to combine hybrid learning from a distance. The new situation requires attention to and examination of the three dimensions of teaching – the student and the lecturer, the content world and teaching

methods, and the environmental dimension (physical environment, organisational climate, virtual environment).

Regarding the studying and teaching individuals – the interaction between student and teacher is different, the need to motivate students to learn is more challenging, but on the other hand there is an opportunity to reach each and every one with an emphasis on the struggling, the shy, those with a low sense of self-efficacy, and more…

The study contents are not "copy paste" from the classroom and physical lessons; here there is a need to adapt the contents masterfully – What is suitable for a synchronous encounter? What is appropriate for a synchronous encounter by a particularly small group? What about asynchronous studies? And what should be left for the student's active learning?

The research findings might have practical implications:

- Training lecturers and developers of pedagogic programs to construct the right mix of remote learning components;
- Developing and combining methods, more appropriate study, inquiry and examination tools;
- Using systems for managing learning and contents that support the process;
- And particularly, thinking about how to encourage students to be active and influential in the learning process.

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