



Research Article

University Student-parents' Experiences in the UAE during COVID-19: Future Implications for Higher Education

خبرات الطلاب الجامعيين وأولياء الأمور في الإمارات العربية المتحدة خلال كوفيد-19: التداعيات المستقبلية على التعليم العالي

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Abstract

The COVID-19 pandemic began in 2020 and threw higher education institutions worldwide into a rapid transition from face-to-face to online learning modes. While students everywhere were grappling with the changes to their learning experiences, those with parenting responsibilities had additional pressures. This study investigated how university student-parents across the United Arab Emirates experienced the change, and their perceptions of the impact of COVID-19 on their studies. One hundred seventy-five students responded to a questionnaire exploring domains such as their domestic set-up for study, levels of support from family and their institutions, and the situation's impact on their learning, well-being, and peer and instructor interactions. It was found that while many students relished being more involved with their children's online schoolwork, this caused tremendous strain for some. Many students had responsibility for at least one child beside them as they studied, leading to multiple distractions that affected their learning and ability to meet deadlines. While most students reported keeping up social support networks with peers, a majority also stated feeling less supported academically by peers and faculty. Many students also felt that their mental health and well-being had been diminished due to the situation. The implications of the findings to higher education are discussed.

الملخص

بدأت جائحة كوفيد 19 في عام 2020 ورمت بمؤسسات التعليم العالي في جميع أنحاء العالم في انتقال سريع من أوضاع التعلم وجهاً لوجه إلى التعلم عبر الإنترنت، وبينما كان الطلاب في كل مكان يتصارعون مع التغييرات التي طرأت على تجاربهم التعليمية، كان لدى أولئك الذين يتحملون المسؤوليات الوالدية ضغوطاً إضافية. بحثت هذه الدراسة في كيفية تجربة الطلبة أولياء الأمور في الجامعات في كافة أنحاء دولة الإمارات العربية المتحدة للتغيير،

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وتصوراتهم لتأثير كوفيد-19 على دراستهم. وقد أجاب مائة وخمسة وسبعون طالباً على استبيان يستكشف مجالات مثل: إعدادهم المنزلي للدراسة، ومستويات الدعم من الأسرة ومؤسساتهم، وتأثير الوضع على تعليمهم ورفاههم وتفاعلات الأقران والمدرسين. وقد وُجد أنه بينما كان العديد من الطلاب يستمتعون بالمشاركة بشكل أكبر في العمل المدرسي لأطفالهم عبر الإنترنت، فقد تسبب ذلك في ضغوط هائلة للبعض. ويتحمل العديد من الطلبة مسؤولية وجود طفل واحد على الأقل بجانبهم أثناء دراستهم، مما يؤدي إلى تشتيت الانتباه الذي يؤثر على تعلمهم وقدراتهم على الالتزام بالمواعيد النهائية. وفي حين أفاد معظم الطلاب عن مواكبة شبكات الدعم الاجتماعي مع أقرانهم، ذكرت الغالبية أيضاً أنهم يشعرون بدعم أكاديمي أقل من قبل أقرانهم وأعضاء الهيئة التدريسية. وشعر العديد من الطلاب أيضاً أن صحتهم العقلية ورفاههم قد تضاءلا بسبب الموقف. تم مناقشة آثار نتائج الدراسة على التعليم العالي.

Keywords: *Students, Parents, Higher education, Caring responsibilities, Support, COVID-19, Blended learning*

الكلمات المفتاحية: الطلاب، أولياء الأمور، التعليم العالي، مسؤوليات الرعاية، الدعم، كوفيد-19، التعلم المدمج.

1. Introduction

It is well-established in the research literature that students with additional caring responsibilities, such as to young children, have a different student experience to those who do not, and they negotiate more stressful situations than their non-parent counterparts (Lynch, 2008; Rockinson-Szapkiw et al., 2017). They usually adapt their studies around their children's lives, juggling the demands of their academic assignments, exam preparation, etc., with the practicalities of child-rearing. These practicalities may include the physical care of young children, transport of children to care facilities and schools, and related chores such as cooking, cleaning, and homework supervision (Mahaffey et al., 2015). The COVID-19 pandemic, which began in early 2020, may have exacerbated the strains and responsibilities on those with caring responsibilities, such as student-parents. Already, research literature from around the world indicates the potential impact on students' abilities to work toward degrees without the protected time a schooling day may have provided prior to the pandemic. An examination of the situation for students in the United Arab Emirates (UAE) was timely for several reasons. Firstly, there are no studies (as yet) on this in the country, and perhaps not in the Gulf region. Secondly, in a country where many students are parents due to cultural trends and traditions, the pandemic is even more likely to affect a large segment of student bodies. The possible effect on students' study experience and retention is therefore critical to document and begin to address.

The paper begins with a literature review of how student-parents worldwide have struggled to cope with the effects of the pandemic, and how higher education institutions have attempted to support this important student body demographic. We then lay out the study methodology before presenting findings of the UAE student parents' experiences during this time. The paper closes with a discussion of the implications of these findings, and some recommendations to key stakeholders in higher education.

2. Literature Review

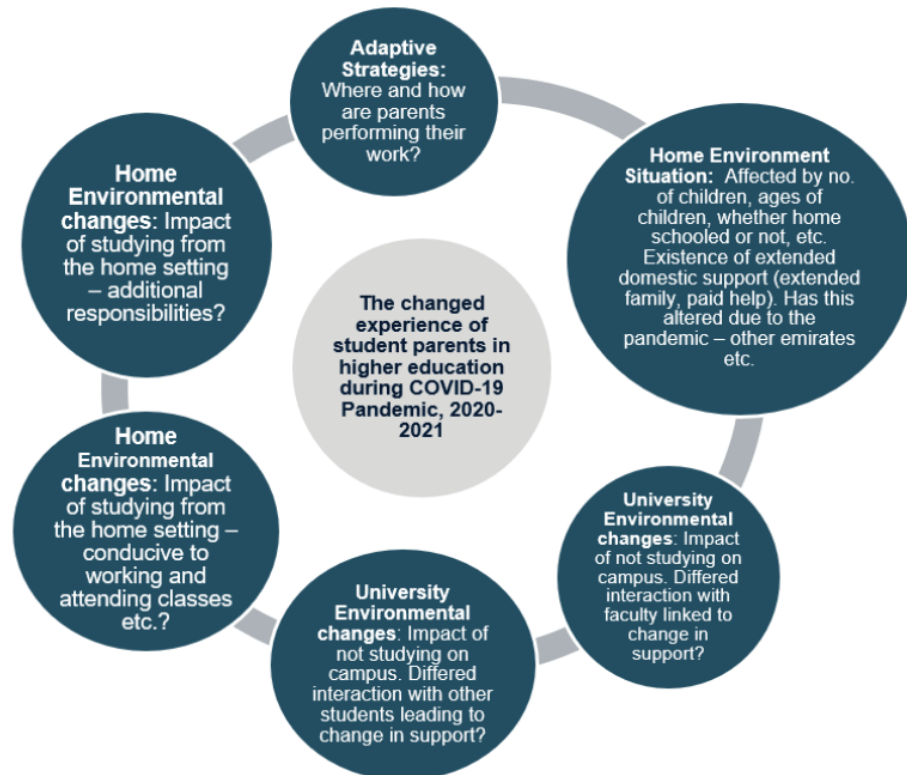
2.1. Student-parents: Juggling the dual role during the COVID-19 pandemic

In addition to the juggling of academic and domestic work, student-parents also perform emotional work which is intrinsic to effective parenting but which is often less visible, including the emotional labor of parenting such as listening to children's worries or anxieties, helping them to handle challenging situations, and performing the work involved in organizing and planning schedules involving recreation and educational experiences. This kind of work is also much less likely to be assigned to other carers involved with child-rearing, including extended family members and paid domestic help. The experience of faculty support for student-parents can often be variable (Dickson & Tennant, 2019; Ricco et al., 2008). However, research also indicates that student-parents can be more dedicated to their studies than non-parents (e.g., Thomas et al., 2012), and faculty often perceive them to be resilient and self-reliant (Dickson, 2019). Student-parents may develop coping mechanisms such as optimal time management, peer support networks, and studying during times when their spouses and extended family can support them to enable them to progress with their studies (Dickson & Tennant, 2019; Kulp, 2020).

By March 2020, the seriousness of the pandemic, which was beginning to take over the world, had become clear to authorities, leading to mass closures of educational institutions and a move to distance learning for students and faculty in the UAE. While some institutions had programs with elements of blended learning, the rapid transition, in parallel with sporadic school closures, meant that an unprecedented situation was created for parents. Students were studying online, and some also had full-time jobs, many of these also hastily moving online. They were simultaneously trying to adjust and help their children adapt to their new home learning situation. An initial theoretical framework built upon previous literature on student parenting is shown in Figure 1.

Figure 1

A conceptual framework of the critical elements of effect on the student-parent experience during the COVID-pandemic.



The COVID-19 pandemic and lockdowns compounded challenges for student-parents worldwide. As a result of the ongoing pandemic, student-parents were coping with the closure of colleges and universities, transitions to remote instruction, along with childcare and school closures, among other crises (Cruse et al., 2020). Student-parents (particularly mothers) were faced with the unprecedented challenge of readjusting their time extensively for homeschooling and childcare along with their own studies (Arowoshola, 2020; Manze et al., 2021; Savage, 2021), since childcare provided by schools or others outside their immediate household was no longer accessible (Lantsoght et al., 2021). This added role presented challenges to student parents' ability to complete their own college assignments while homeschooling and/or caring for their children (Lantsoght et al., 2021; Manze et al., 2021). These changes have further complicated the boundaries of study with family life. Student-mothers who had shifted to online classes while simultaneously caring for children experienced negative impacts on their physical and mental well-being because of these competing and challenging intersecting roles (Ajayi, 2021; Lantsoght et al., 2021). Completing assessments online

from home, with all the associated stresses and distractions, has further aggravated the situation (Arowshola, 2020). Additional parental challenges included supporting children's physical and social well-being in lockdown (Lantsoght et al., 2021).

The current study, described in this paper, looks at student-parents, both mothers and fathers. However, it is notable that the vast majority of literature on student parenthood is based on studies of student motherhood, and all indications are that mothers are more impacted by their dual student-parent status than fathers. Students and females have been found to be two sub-groups that reported higher psychological impacts due to COVID-19 (Alkhamees et al. 2020; Alsalman et al., 2020; Cheikh et al., 2021; El-Zoghby et al., 2020). In particular, student mothers' vulnerabilities have been shown to have increased during the pandemic due to anxieties over their ability to keep their families healthy and secure on top of maintaining their studies remotely (Cruse et al., 2020). It is likely that the uncertainties associated with the pandemic impacted student-parents' ability to engage fully with their courses and affected their ability to attain high levels of academic achievement.

Students in the UAE commonly marry at a relatively young age, and many undergraduate students are parents of young children. University students in Saudi Arabia (KSA) who were parents of young children (zero to five years old) reported higher academic negative self-perception, low academic self-efficacy, and lower course satisfaction when taking virtual classes during the COVID-19 pandemic (Hassan et al., 2021). In a different study, university students and parents of young children in KSA were found to be among the groups more likely to be depressed during the pandemic (Sonbol et al., 2021). The study also showed the age of the children to be correlated with depression rates, with parents of younger children more vulnerable to higher rates of depression. University students in Israel who had young children reported higher anxiety scores during the pandemic. This was attributed to the fact that the children were isolated, the parents lacked support, and online learning placed an additional burden on the parents' shoulders (Savitsky et al., 2020).

2.2. Support for student-parents during the COVID-19 pandemic

Cruse et al. (2020) advocate that communities and policymakers must prioritize student mothers' and their families' mental health during the pandemic. Similarly, university and college administrators must reach out to student-parents and prioritize their academic needs to ensure their continued engagement and completion of studies (Lin et al., 2020). Multiple strategies and targeted-mental health services need to provide special attention to student-parents, their children, and families to mitigate the pandemic's

impact. There may also be implications for public health, policy, and research (Ajayi, 2021).

Several accommodating strategies were reported to be productive in supporting university student-parents during the initial months of the COVID-19 pandemic. As children of student-parents would commonly need to attend classes during the same time as their parents, and some families did not have more than one computer, some universities have provided student-parents with recordings of classes and allowed for flexible attendance at the synchronous sessions, in order to accommodate this issue (Savitsky et al., 2020). Students have benefited from compassionate and flexible pedagogies and approaches to learning, including appropriate adjustment of the curriculum and assessments along with consistent, effective communication to support students' well-being and success (Gelles et al., 2020). Additional protective factors against academic stress during the pandemic have been suggested, including responsible togetherness and a strong sense of belonging (Procentese et al., 2020). Other factors include increased faculty flexibility, synthesized information about remote resources, and provision of one-on-one make-up classes for those who missed a synchronous lecture (Manze et al., 2021).

3. Methodology

This study investigated how student-parents across the United Arab Emirates experienced the changes to daily life caused by the COVID-19 pandemic and their perceptions of its impact on their studies. Two key research questions guided this study:

1. In what ways have student-parents been affected by the COVID-19 pandemic in their domestic spheres (e.g., additional responsibilities, changes to the working environment, etc.) and various aspects of their studies?
2. Is there a significant difference in factors of study productivity and levels of ease experienced with their study between parents with varying home circumstances, such as the provision of private study space, children of varying ages, or different numbers of children?

3.1. Research participants

The participants in the research study were undergraduate and graduate students studying full-time in both private and public higher education institutions in the UAE. In addition to their full-time study status, a criterion was that they should be parents of at

least one child under 18 years old living full-time at home with them. Around 85% of the 175 respondents were female, and 15% were male.

The bilingual survey was sent to eight institutions in the UAE, recruiting participants via purposive sampling. Initially, the research proposal was approved by the Institutional Review Board (IRB) of the institution of the PI of the research team. Since no cooperative agreements for reciprocal IRB arrangements exist in the UAE, IRB approval from each university was then sought and received, as per current national practice. Invitation emails containing the survey link were then sent to the higher education institutions' Research Office or equivalent office for administration to the student bodies. As a result of the slightly differing timeframes between institutions, while we awaited their IRB and other internal permissions to administer the survey, the overall data collection period was between February and June of 2021.

3.2. Data collection tool

A mixed-methods design was adopted for the research study. The data collection tool was a survey questionnaire containing 33 questions. Fifteen items were demographic questions relating to the number and ages of their children, gender, study location, domestic help, etc. The other survey questions pertained to study-home life balancing and comparative study productivity (with various selections, tick-boxes, and Likert scale-type questions). The survey also contained three open-response style questions, generating qualitative data about their perceptions of life as student-parents during COVID-19 compared to prior – asking about whether their life was easier in some ways and whether they felt that their institutions could have done more to support them as student-parent during this time.

The research team developed the survey questionnaire based on the literature-informed conceptual framework shown earlier (Figure 1). While we searched for pre-developed tools that could be used or adapted for this study, we could not find an appropriate tool. This was likely because COVID-19 is a relatively recent phenomenon. While at the time of writing, some publications were beginning to emerge on the subject, these have tended to be theoretical, secondary data, or small-scale qualitative data-based. Furthermore, the Gulf region, which includes the UAE, has particular contextual and cultural nuances which arguably cannot be captured via a tool developed to suit a different global region.

The developed tool was administered in both English and Arabic. Most higher education institutions in the UAE have English as the medium of instruction; some institutions

teach courses in Arabic, and Arabic was likely to be the first language for many participants. By providing the survey bilingually, we ensured all students could access the survey. The survey was anticipated to take participants about 15 minutes to complete.

3.3. Data analysis procedures

3.3.1. Quantitative data analysis

The quantitative data were first analyzed descriptively using frequency, mean, and standard deviation. In particular, the frequency of selecting each option for each statement was calculated, as were the mean and the standard deviation of each option for each statement. Second, inferential statistical tests were conducted to investigate whether there were statistically significant differences between the means of two or three groups of students. Specifically, independent *t*-tests were carried out to explore whether there are significant differences between students' responses regarding the level of ease in dealing with several aspects of student life due to the following independent variables: (i) the physical working environment in the home (i.e., dedicated private closed space versus dedicated space which is not private nor closed or no dedicated workspace) and (ii) the number of children they have living at home with them (i.e., one to two children versus three or more children). In addition, independent *t*-tests were conducted to explore whether there were significant differences between students' responses regarding how aspects of their academic life have been affected since the pandemic began due to the previously mentioned independent variables. A set of one-way analysis of variance (ANOVA) tests was carried out to examine whether there are significant differences between students' responses regarding the level of ease in dealing with aspects of student life, as well as how aspects of their academic life have been affected since the pandemic began, compared to whether children are present or near their parents when they are studying online from home. Where overall statistically significant differences between the group means were detected, post hoc tests (i.e., Tukey's honestly significant difference; HSD) were conducted to determine which specific groups differed.

3.3.2. Qualitative data analysis

The three open-ended questions were analyzed using a predominantly thematic-based method. Relevant codes were extracted and grouped using a phenomenological lens

to create themes and sub-themes. These were guided mainly by the conceptual framework, but we were also open to the possibilities of in-vivo data-generating themes.

3.4. Research ethics

We considered that the risks to participants in this study and responding to the survey were minimal. However, given the turmoil of the pandemic and the potential trauma or stress that participants might have gone through, we were aware that we might have been touching upon subjects in which participants felt psychologically vulnerable and stressed. Much research indicates the unpredictable nature of this and that the nature of a study topic is not necessarily a predictor of participant response since “what is highly sensitive and emotional for one person may be matter-of-fact for another” (Hutchison et al., 1994, p. 162). We also reflected, though, that people may appreciate the opportunity to communicate freely (and anonymously) about a difficult period in their lives, and so in this sense, participation in the research may provide some comfort as sharing can be cathartic for some (Hutchison et al., 1994; Wolgemuth et al., 2015).

Nevertheless, we worked to avoid any potential upset by taking measures such as reminding participants, both in the invitation text and consent information at the beginning of the survey, of the voluntary nature of the study and their right to not respond to any individual question. Moreover, the survey instrument was shared with several UAE national colleagues to check for the cultural sensitivity of the survey items. The survey went through various feedback rounds, with the research team carefully debating and refining each item. We could maintain complete anonymity of the survey responses in the following ways. Firstly, the survey questionnaire does not ask participants to provide any personal identifying features beyond gender, the number of children, and the age range of children. Since the data was collected in one centralized database, it would be impossible for researchers to identify institutions from these responses, let alone from individuals. Critically, the survey platform the research utilized (QualtricsTM) enables responses to be collected with no identifiable email IDs or IP addresses. The data was, therefore, entirely anonymous.

4. Findings

4.1. Participant demographics

The surveyed sample was made up of 175 students, the majority (149 or 85%) of whom were female and 15% male. Of these 175, 89% were UAE Nationals, and the

Table 1*Participants' physical working environment in the home.*

	Percentage
Dedicated private, closed space	33.2
Dedicated space which is not private nor closed	31.3
No dedicated workspace	35.5

remaining 11% of the sample were expatriates. Participants had at least one child as per the inclusion criteria of the study, and almost half (47%) had four or more children living at home with them. A relatively large proportion of participants (63%) employed domestic help for household work or chores. Those with school-aged children placed their children in a diversity of schooling systems. Provision of care for children was undertaken predominantly by the student-parent themselves (44%), but also by spouses (20%), nannies (18%), and extended families (18%).

Of the sample, 16% had infants between the ages of zero and two years, and 18% had at least one child between the ages of three and five. Approximately one quarter (24%) of participants said they employed educational support for their children outside of school (e.g., tutoring). The breakdown of student participants per degree type was 81% undergraduate and 19% graduate (6% of whom were doctoral students). While 77% of the sample stated that they did not work in addition to study, 16% worked full-time and 7% part-time.

How have the participants been affected by the COVID-19 pandemic in their domestic sphere?

More than half (54%) of the participants had studied completely at home since the onset of the pandemic in March 2020, with the remainder experiencing a mixture of home and on-campus study, which had varied throughout the pandemic. Table 1 shows the participants' physical working space provision in the home. This was important, as we hypothesized that this might have a direct bearing on the likelihood of being able to work effectively in the house, which we use in further analysis later in the paper.

The majority of participants (71%) said that their child or children's school learning situation had been completely at home throughout the pandemic, with the remainder having children who were educated in a varying model of home and school. The participants were asked about their personal effect of illness due to COVID-19, and just over half (53%) stated that either they or their immediate family had the virus, giving the research team a helpful insight into the situation faced by participants. In addition, 65% of the students had been affected due to issues such as close contact with a positive case and needing to isolate due to this or travel.

Table 2

The effect of the pandemic on support levels experienced by student-parents.

	Less	Unchanged	More	Not applicable
Spousal support	11.9%	27.3%	38.5%	22.3%
Extended family support	19%	24.6%	31%	25.4%

Table 3

Perceptions of changes to domestic responsibility since the pandemic.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
My domestic responsibilities for children at home have increased	52%	27.6%	14.5%	3.3%	2.6%
My domestic responsibilities about things other than my children have increased	38.5%	23%	29.7%	6.1%	2.7%
I have had to supervise and help my children with their schoolwork more frequently	44.1%	23.7%	23%	6.6%	2.6%

Table 2 shows how support from others in looking after children had varied due to the pandemic, with 38.5% of participants experiencing more significant levels of support from their spouses, presumably due to their increased physical presence in the home of both parents. The student-parents indicated that a large proportion (almost 80%) had either agreed or strongly agreed that they had experienced that their domestic responsibilities in relation to their children had increased (see Table 3). Domestic duties other than in connection with children also increased predictably, as did involvement with children's schoolwork.

This finding, that the online learning situation increased students' domestic responsibilities, is similarly echoed in qualitative responses. Many felt responsible for doing chores that they may not have previously, such as one woman who felt that:

It made it harder. It is difficult to focus on online lectures and manage between studying, caring about children, and doing chores.

Table 4 presents the levels of ease or difficulty with which the student-parents experienced academic life during the pandemic, compared to before. Around half of the sample found certain study elements easier, such as class attendance, taking exams online, and meeting deadlines. Predictably, aspects of student life that were much less likely to be organized face-to-face (such as community service) became more challenging. Since access to a private, closed workspace was an essential consideration

Table 4

Levels of the comparative ease of dealing with academic aspects of student life during the pandemic.

	More difficult	Same	Easier
Attending classes	35.5%	10.7%	53.8%
Taking exams online	32.7%	18.2%	49.1%
Taking exams face to face	48.8%	26.2%	25%
Meeting assignment deadlines	24.6%	25.1%	50.3%
Finding quiet time for reading or revising	46.2%	16.4%	37.4%
Carrying out mandatory volunteering or community service	57.7%	9.2%	33.1%
Carrying out workplace internships	58.3%	15%	26.7%

Table 5

Comparing the academic experiences of student-parents with, and without, private closed spaces at home.

Aspects of student life	n		M (mean)		SD		t	df	P-value
	Private closed space	Not private or closed/no workspace	Private closed space	Not private or closed/no workspace	Private closed space	Not private or closed/no workspace			
Attending classes	47	100	2.72	1.94	0.65	0.94	5.16	145	0.000*
Taking exams online	48	96	2.63	1.96	0.67	0.89	4.56	142	0.000*
Meeting assignment deadlines	49	100	2.61	2.02	0.64	0.86	4.26	147	0.000*
Finding quiet time for reading or revising	49	100	2.49	1.55	0.74	0.81	6.85	147	0.000*
Carrying out mandatory volunteering or community service	45	81	2.09	1.51	0.97	0.81	3.60	124	0.000*

for participants (see Table 1), we then used *t*-tests to compare these responses to those of Table 4. Table 5 presents these results, showing statistically significant differences between these two groups of student-parents (with/without a private, closed space) in all aspects of student life presented in Table 4.

A lack of a dedicated workspace in which to focus on studies was a challenge also mentioned in the qualitative responses. Even where they were happy not to have to

Table 6

Proximity of children during online lessons and the effect of this.

	Yes	No	Sometimes
When studying online from home, are your children present or near you?	46.6%	18%	35.4%
If children are present or near during your online lessons, does this cause you to experience distractions or interruptions?	53.1%	18.8%	28.1%

commute to face-to-face learning, some student-parents simply did not have adequate space in the home to allow them to study effectively, as these quotes show:

There is no quiet time at home to focus on studying.

The situation became harder since I always get distracted by my children.

I like that I don't have to go to campus but I don't have the right space to study at home.

The relative position of children while the student-parents were studying at home is important, given the possibility of interruptions to study. Table 6 below shows almost half had children present or near them while studying, and just over half had been distracted or interrupted as a result.

One participant directly related her decreased academic performance with having had to take care of her children during online learning. The necessity to time manage, and deal with blended learning modes and adjustments to schedules which meant classes were held in the evening, was problematic for some:

No, it became way more difficult as now I have to divide my time for online classes, face-to-face classes, online labs, exams held late online, and also allocate time for my child and life partner.

Further analyses (one-way analysis of variance) were carried out to investigate the possible effect of students having children beside them (yes, no, and sometimes), on each of the aspects of student life noted in Table 4 (attending classes, taking classes online, meeting assignment deadlines, and finding quiet time for reading or revising). See Appendix A for a full table of this analysis. Similarly, since this test showed an overall difference between the three groups, we used a follow-up post hoc test (Tukey HSD) to check what specific pair had led to this overall difference (see Appendix B). The results indicate a significant difference in the level of ease in taking exams online between those who have their children near them and those who do not. Also, there is a significant difference in the level of ease in taking exams online between those who have their children near them and those who sometimes have their children near them.

Table 7

Participants' perceptions of changes to student life as a result of learning online during the pandemic.

	Diminished/ Decreased	Unchanged	Improved/ Increased
Interaction with my peers	62.5%	23.7%	13.8%
Interaction with my teachers	53.9%	20.4%	25.7%
Support with my studies from my peers	42.3%	29.5%	28.2%
Support with my studies from my teachers	44.7%	22.4%	32.9%
The quality of my submitted assignments	32.7%	24.7%	42.7%
My course workload	29.6%	31.6%	38.8%
My ability to effectively manage my time	48%	13.2%	38.8%
My academic grades	40.1%	22.4%	37.5%
My personal health and well-being	51%	17.9%	31.1%

Over a third of participants said that they were responsible for their children while they were studying online and attending lessons, while for a similar proportion, a helper, nanny, or family member was responsible. Only 19% of participants said their spouses were accountable for the children while attending online, possibly due to them not working at home or for other reasons.

Table 7 shows the participants' perceptions of how a range of aspects of student life have been affected by the pandemic and resulting online learning, such as interaction with and support from peers and teachers, and academic outcomes. Again, we used *t*-tests to analyze differences between the groups of parents who had private closed spaces in which to work online and those who did not. All responses were significantly different between the groups ($p < 0.05$; see Table 8).

Some students describe the difficulty of interacting effectively with peers in the qualitative responses, one of whom said:

Peer to peer interactions have been awkward at best and there is no way of reaching out to new people (study related or socializing) as the need arises.

Others simply struggled to understand course content while learning online. Perhaps due to all of these aspects of the challenges of learning online, some described the impact on mental health, for example:

I don't think mental damage is considered as much it should be. Stress and anxiety are common problems with students yet we still suffer from them.

We also analyzed the aspects of academic life outlined in Tables 4 and 7 for comparison between parents of children of particular ages, hypothesizing that it might be possible that parents with only one or two children might be experiencing these things

Table 8

Comparing the study experiences of student-parents with, and without, private or dedicated workspaces.

Aspects of student life	<i>n</i>		<i>M</i>		<i>SD</i>		<i>t</i>	<i>df</i>	<i>p</i>
	Private closed space	No private or closed workspace	Private closed space	No private or closed workspace	Private closed space	No private or closed workspace			
Interaction with my peers	38	94	1.92	1.31	0.82	0.61	4.74	130	0.000*
Interaction with my teachers	38	94	2.21	1.52	0.84	0.79	4.47	130	0.000*
Support with my studies from my peers	37	93	2.22	1.73	0.79	0.82	3.07	128	0.003*
Support with my studies from my teachers	38	94	2.39	1.62	0.79	0.81	5.05	130	0.000*
The quality of my submitted assignments	38	93	2.61	1.87	0.64	0.86	4.74	129	0.000*
My course workload	38	94	1.58	2.03	0.64	0.86	-2.93	130	0.004*
My ability to effectively manage my time	38	94	2.45	1.69	0.80	0.92	4.45	130	0.000*
My academic grades	38	94	2.42	1.79	0.76	0.88	3.90	130	0.000*
My personal health and well-being	38	94	2.39	1.52	0.79	0.80	5.70	130	0.000*

with lesser challenge than those with three or more. Still, none of these differences were statistically significant. In other words, we did not find that student-parents with larger numbers of children were any more or less likely to find student life during the pandemic more challenging.

4.2. Positive experiences of being a student-parent during the pandemic

The qualitative responses that were received indicated that for some students, there were aspects of life that were easier (this was also indicated in the quantitative data presented in Tables 4 and 7).

4.2.1. Online modes of learning provide greater flexibility

Sub-themes within this theme of “flexibility” include, for example, not having to commute to a physical campus, which some utilized as more time to spend with their families. For example, those who could attend lectures asynchronously by watching recorded lectures appreciated the flexibility that this afforded them. One participant expressed this:

Live lectures are not useful for me as I am always busy with my children. Therefore, recording the lectures gave me the opportunity to listen to them again whenever I am free.

Those who had only been offered synchronous learning wished to have other options to increase this learning flexibility. Some participants also extrapolated this beyond the pandemic and made statements about wanting these elements of flexibility, such as blended learning modes, to extend permanently. This seemed particularly helpful to them as parents and allowed them to balance their studies with their parenting responsibilities.

4.2.2. Stronger family bonds

An interesting theme that arose from these responses was from participants who felt that their bonds within their family units had grown stronger due to spending more time with them. One participant described feeling closer to her children, while another explained:

Because of the lockdown, my relationship with my family members became much stronger.

Some also felt that their lives were more balanced between work and home environment and had a sense of well-being in proximity to their family, as one participant explains:

The life for a student parent is easier [during COVID-19], as you feel comfortable that you are with your child in home. Eating well in home and your health. Manage time properly.

This well-being may have arisen with regard to the feelings of conflict and guilt, which are often themes within student parenting literature, and perhaps the ability to be at home more alleviated these feelings. Greater well-being from students could foreseeably lead to positive outcomes such as greater levels of student retention.

4.2.3. Other areas considered “positives” of the pandemic situation

One participant also mentioned that they had developed their computing skills since the move to online learning, which they perceived as a benefit to them. This came about as a result of increased professional development offerings by institutions, online communities for online pedagogies, and perhaps the fact that everyone was moving to online teaching at the same time meant that faculty felt a sense of community learning together. Another felt supported by their university in the reduction of assignments, and preparation of materials and resources, which they were able to use in their learning. Other support experiences mentioned by participants were health and well-being lectures and programs provided by their institutions. The Ministry of Education created a pass/fail system for a previously graded course, which was perceived by some to reduce pressure.

5. Discussion and Implications

The key ways participants were affected by the pandemic were firstly connected with online learning. While some positive comments arose from the qualitative responses, and a small percentage of participants felt that aspects of their lives as students had become more accessible since the pandemic, this was not the prevailing sense from the participants. Instead, many found working at home, often without a dedicated workspace, with simultaneous childcare responsibilities and distractions, was extremely challenging, mirroring similar findings in the Gulf region and beyond, for example, in KSA (Hassan et al., 2021), in Israel (Savitsky et al. 2020), in the USA (Cruse et al., 2020; Manze et al., 2021), in the UK (Arowoshola, 2020), and Australia (Savage, 2021). In addition, for some, it affected their academic outcomes. Interestingly, significant differences in the challenges faced in multiple aspects of student life between those who had dedicated space at home and those who did not, were observed (as seen in Table 5). The fact that a space was created in the first place possibly indicates some degree of status within the home, or perhaps (physical space allowing), the importance of this, which has its own indications of both power dynamics and the priority placed upon education. This may indicate a need for support beyond the pandemic, such as extended opening hours for study areas such as libraries in universities, quiet “pods” or other types of study spaces.

Our findings strongly indicate that the situation caused by the COVID-19 pandemic affected student-parents’ mental health and well-being, with over half of parents stating that their personal health and well-being had diminished or deteriorated throughout the

pandemic (Table 7). This result supports worldwide findings (e.g. Lantsoght et al., 2021). This is an essential reminder to institutions of the need to support students' mental health and continue to reach out to them online with various well-being strategies. Loss of peer-to-peer interactions has had adverse effects on student-parents, unsurprisingly, given what is known about the importance to students of social relationships (e.g., Maymon et al., 2019). Creating online substitutes for this is challenging, given the often informal, spontaneous nature of face-to-face student interactions. . However, it is an issue worthy of reflection among administration and student services departments. Facilitating peer groups' discussions through interactive online breakout rooms, and moving away from didactic lecturing methodologies, would also help in this regard. Perhaps universities could facilitate small student groups (such as tutor group models) where a small number of students meet with faculty or academic advisors regularly. None of these suggestions are likely to truly fill the gap created by the lack of face-to-face interaction. One implication of this study is that we now have a better understanding of the importance of these elements of student life – that student well-being is not just about academics and that more focus on holistic student issues is required. Many student-parents have been directly affected by illness, shielding, or isolation due to COVID-19. Falling ill can be stressful, especially when domestic and study-related tasks cannot then be attended to. With illness relating to the pandemic, there are a raft of state and institutional rules and procedures to comprehend and follow – a situation that can add further anxiety and stress to student-parent experiences.

The findings around students experiencing less interaction with teachers (54% stated that this decreased during the pandemic, Table 7) and a significant proportion also reported feeling less supported by teachers, which may also have contributed to feelings of loss in terms of relationships. However, this may also imply an over-dependency on faculty. It seems unlikely that faculty would be actively choosing not to support students who reached out to them. Perhaps students need to be guided to develop more self-regulation, self-dependency, and metacognitive skills, particularly as the student-parents also reported that the online learning environment had a detrimental impact on academic attainment (through exam grades, course work, etc.). Our study did not indicate perceptions of a lack of empathy on the faculty's part, but instead, where there were negative perceptions, these were more aimed at institutions as a whole. The findings that some students struggled with synchronous learning due to this inflexibility and the incumbent issues around attendance suggest that perhaps, where lectures can be recorded and shared, this should be an option for students. The disadvantage of this, of course, is that students are then unable to participate "live" and ask questions as they occur during more student-centered classes.

A large proportion (63%) of participants reported having domestic help at home to help with cooking and other household chores. However, this help was in place before the pandemic, so it could be that the student-parent's presence in the home meant that they became involved in domestic tasks, which they otherwise would not have been. It is well-researched that domestic duties and responsibilities tend to be highly gendered, with women shouldering a heavier burden than men (Perales et al., 2015; Sangawe, 2020), so this perhaps was a heavier burden for the student mothers in the study than for the student fathers. It is possible, then, that duties that were not expected of student mothers while they were outside of the home and studying on campus became an expectation during the pandemic. Supporting this idea, one UAE-based study showed that the presence of domestic help does not necessarily reduce the workload of student mothers in the home (Dickson & Tennant, 2019). Furthermore, almost a quarter of participants also reported working full or part-time in addition to their study, which added to the relative burden of their experience.

Significantly, almost half of the participants reported experiencing difficulty in finding quiet, focused time (Table 4) in which to perform the academic work which requires this – namely – the thought and reflection processes around reading and writing involving higher-level thinking skills. The fact that the majority of the study participants were female indicates that participating in the study in the first place somehow resonated more with female parenting identity. It also shows that the lack of “quiet time” is a significant issue for female students. Institutions in the UAE and worldwide must ensure that this does not have long-term ramifications for women's academic success and access to higher education.

6. Conclusion

This study has highlighted the challenges faced by university student-parents in the UAE during the pandemic. Given that students in the UAE and the wider Gulf region, commonly marry at a relatively young age, and many undergraduate students become parents during their studies, these challenges affect a group of students proportionally more prominent than in other areas of the world. Thus, while the findings of this study are essential for all higher education institutions, they are particularly so for the Gulf region. We have demonstrated that most student-parents have found it challenging to fit childcare, supporting children's online learning, and domestic chores alongside their own learning during the pandemic. This study also highlighted the challenges faced in doing this without more interactive support from peers and faculty. Institutions need an increased focus on the mental health and well-being of all our students, particularly

vulnerable student groups such as parents. We hope these findings and the implications presented will provide scope for discussions and actions in higher education institutions not only in the UAE, but in the wider Gulf region and beyond.

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Competing Interests

No conflicts of interest are reported.

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References

- [1] Ajayi, K. V. (2021). Meeting the mental health needs of college student-mothers during the COVID-19 pandemic in the United States. *Women, 1*(3), 137–142. <https://doi.org/10.3390/women1030013>
- [2] Alkhamees, A. A., Alrashed, S. A., Alzunaydi, A. A., Almohimeed, A. S., & Aljohani, M. S. (2020). The psychological impact of COVID-19 pandemic on the general population of Saudi Arabia. *Comprehensive Psychiatry, 102*(152192). <https://doi.org/10.1016/j.comppsy.2020.152192>
- [3] Alsalman, A., Mubarak, H., Aljabal, M., Abdunabi, M., Ishaq, A., Yusuf, A., Nicola Luigi Bragazzi, N. L., & Jahrami, H. (2020). The psychological impact of COVID-19 pandemic on the population of Bahrain. *Social Science Research Network, 91*(4). <https://doi.org/10.23750/abm.v91i4.10336>
- [4] Arowshola, L. (2020). Medical education engagement during the COVID-19 era—A student parents' perspective. *Medical Education Online, 25*(1), 1788799. <https://doi.org/10.1080/10872981.2020.1788799>
- [5] Cheikh, I. L., Mohamad, M. N., Bataineh, M. A. F., Ajab, A., Al-Marzouqi, A. M., Jarrar, A. H., Abu Jamous, D. O., Ali, H. I., Al Sabbah, H., Hasan, H., Stojanovska, L., Hashim, M., Shaker Obaid, R. R., Saleh, S. T., Osaili, T. M., & Al Dhaheri, A. S. (2021). Impact of the coronavirus pandemic (COVID-19) lockdown on mental health and well-being in the United Arab Emirates. *Frontiers in Psychiatry, 12*, 265. <https://doi.org/10.3389/fpsy.2021.633230>
- [6] Cruse, L. R., Contreras Mendez, S., & Holtzman, T. (2020). Student parents in the COVID-19 pandemic: Heightened need & the imperative for strengthened support. # C492. *Institute for Women's Policy Research*. <https://files.eric.ed.gov/fulltext/ED612659.pdf>
- [7] Dickson, M. (2019). Student mothers' experiences of workplace internship. *Journal of Workplace Learning, 31*(7), 465–480. <https://doi.org/10.1108/JWL-12-2018-0151>
- [8] Dickson, M., & Tennant, L. (2017). The accommodation I make is turning a blind eye': Faculty support for student mothers in higher education. *Studies in Continuing Education, 40*(1), 76–97. <https://doi.org/10.1080/0158037X.2017.1392296>
- [9] Dickson, M., & Tennant, L. (2019). Emirati university student mothers post-childbirth: Support systems in the home. *Journal of Women and Gender in Higher Education*,

- 12(1), 88–105. <https://doi.org/10.1080/19407882.2018.1533479>
- [10] El-Zoghby, S. M., Soltan, E. M., Salama, H. M. (2020). Impact of the COVID-19 pandemic on mental health and social support among adult Egyptians. *Journal of Community Health, 45*, 689–95. <https://doi.org/10.1007/s10900-020-00853-5>
- [11] Gelles, L. A., Lord, S. M., Hoople, G. D., Chen, D. A., & Mejia, J. A. (2020). Compassionate flexibility and self-discipline: Student adaptation to emergency remote teaching in an integrated engineering energy course during COVID-19. *Education Sciences, 10*(11), 304. <https://doi.org/10.3390/educsci10110304>
- [12] Hassan, S., Algahtani, F. D., Zrieq, R., Aldhmadi, B. K., Atta, A., Obeidat, R. M., & Kadri, A. (2021). Academic self-perception and course satisfaction among university students taking virtual classes during the COVID-19 pandemic in the Kingdom of Saudi Arabia (KSA). *Education Sciences, 11*(3), 134. <https://doi.org/10.3390/educsci11030134>
- [13] Hutchinson, S. A., Wilson, M. E., & Wilson, H. S. (1994). Benefits of participating in research interviews. *The Journal of Nursing Scholarship, 26*(2), 161–166. <https://doi.org/10.1111/j.1547-5069.1994.tb00937.x>
- [14] Kulp, A. M. (2020). Parenting on the path to the professoriate: A focus on graduate student mothers. *Research in Higher Education, 61*(3), 408–429. <https://doi.org/10.1007/s11162-019-09561-z>
- [15] Lantsoght, E. O., Crepaldi, Y. T., Tavares, S. G., Leemans, K., & Paig-Tran, E. M. (2021). Challenges and opportunities for academic parents during COVID-19. *Frontiers in Psychology, 12*. <https://doi.org/10.3389/fpsyg.2021.645734>
- [16] Lin, H. C., Zeanah, P. L., Olivier, D. F., Bergeron, M. A., & Liu, C. H. (2020). Responding to the pressing yet unrecognized needs of student-parents amid the COVID-19 pandemic. *Journal of American College Health, 70*(8), 1–5. <https://doi.org/10.1080/07448481.2020.1870474>
- [17] Lynch, K. D. (2008). Gender roles and the American academe: A case study of graduate student mothers. *Gender and Education, 20*(6), 585–605. <https://doi.org/10.1080/09540250802213099>
- [18] Mahaffey, B. A., Hungerford, G., & Sill, S. (2015). College student mother needs at regional campuses: An exploratory study. *AURCO, 21*, 105–115. https://aurco.org/journals/AURCO_Journal_2015/Mahaffey.pdf
- [19] Manze, M. G., Rauh, L., Smith-Faust, P., & Watnick, D. (2021). Experiences of college students with children during the COVID-19 pandemic. *Emerging Adulthood, 9*(5), 631–638. <https://doi.org/10.1177/21676968211020225>
- [20] Maymon, R., Hall, N. C., & Harley, J. M. (2019). Supporting first-year students during the transition to higher education: The importance of quality and

- source of received support for student well-being. *Student Success*, 10(3), 64. <https://doi.org/10.5204/ssj.v10i3.1407>
- [21] Perales, F., Baxter, J., & Tai, T. O. (2015). Gender, justice and work: A distributive approach to perceptions of housework fairness. *Social Science Research*, 51, 51–63. <https://doi.org/10.1016/j.ssresearch.2014.12.010>
- [22] Procentese, F., Capone, V., Caso, D., Donizzetti, A., & Gatti, F. (2020). Academic community in the face of emergency situations: Sense of responsible togetherness and sense of belonging as protective factors against academic stress during COVID-19 outbreak. *Sustainability*, 12(22), 9718. <https://doi.org/10.3390/su12229718>
- [23] Ricco, R., Sabet, S., & Clough, C. (2008). College mothers in the dual roles of student and parent: Implications for their children's attitudes toward school. *Merrill-Palmer Quarterly*, 55(1), 79–110. <https://www.jstor.org/stable/23096278>
- [24] Rockinson-Szapkiw, A. J., Spaulding, L. S., & Lunde, R. (2017). Women in distance doctoral programs: How they negotiate their identities as mothers, professionals, and academics in order to persist. *International Journal of Doctoral Studies*, 12(7), 50–72. <https://doi.org/10.28945/3671>
- [25] Sangawe, I. S. (2020). *The experiences of undergraduate student mothers in balancing between studies and mothering: A case of the University of Dodoma* [Doctoral dissertation]. The University of Dodoma. <http://hdl.handle.net/20.500.12661/2760>
- [26] Savage, S. (2021). The experience of mothers as university students and pre-service teachers during Covid-19: recommendations for ongoing support. *Studies in Continuing Education*, 1–15. <https://doi.org/10.1080/0158037X.2021.1994938>
- [27] Savitsky, B., Findling, Y., Erel, A., & Hendel, T. (2020). Anxiety and coping strategies among nursing students during the Covid-19 pandemic. *Nurse Education in Practice*, 46, 102809. <https://doi.org/10.1016/j.nepr.2020.102809>
- [28] Sonbol, H., Alahdal, H. M., Alanazi, R. A., Alsamhary, K., & Ameen, F. (2021). COVID-19 pandemic causing depression in different sociodemographic groups in Saudi Arabia. *International Journal of Environmental Research and Public Health*, 18(13), 6955. <https://doi.org/10.3390/ijerph18136955>
- [29] Thomas, J., Raynor, M., & Al-Marzooqi, A. (2012). Marital status and gender as predictors of undergraduate academic performance: A United Arab Emirates context. *Learning and Teaching in Higher Education: Gulf Perspectives*, 9(2). <http://lthe.zu.ac.ae/>
- [30] Tukey, J. W. (1977). *Exploratory data analysis*. Addison-Wesley.
- [31] Wolgemuth, J. R., Erdil-Moody, Z., Opsal, T., Cross, J. E., Kaanta, T., Dickmann, E. M., & Colomer, S. (2015). Participants' experiences of the qualitative interview:

Considering the importance of research paradigms. *Qualitative Research*, 15(3), 351–372. <https://doi.org/10.1177/1468794114524222>

Table 9

Appendix A One-way analysis of variance of aspects of academic study by attendance of children when studying.

Attending classes					
Source	SS	df	MS	F	P-value
Between groups	13.30	2.00	6.65	8.71	0.000*
Between groups	96.24	126.00	0.76		
Total	109.54	128.00			
Taking exams online					
Source	SS	df	MS	F	P-value
Between groups	5.59	2.00	2.80	3.69	0.028*
Between groups	92.52	122.00	0.76		
Total	98.11	124.00			
Finding quiet time for reading or revising					
Source	SS	df	MS	F	P-value
Between groups	1.16	2.00	0.58	0.85	0.431
Between groups	80.38	118.00	0.68		
Total	81.54	120.00			
Meeting assignment deadlines					
Source	SS	df	MS	F	P-value
Between groups	9.00	2.00	4.50	7.57	0.001*
Between groups	75.47	127.00	0.59		
Total	84.47	129.00			
Finding quiet time for reading or revising					
Source	SS	df	MS	F	P-value
Between groups	6.78	2.00	3.39	4.39	0.014*
Between groups	97.42	126.00	0.77		
Total	104.20	128.00			

Table 10

Appendix B Post Hoc comparisons- Tukey HSD – Aspects of academic study by attendance of children when studying

Attending classes				
		Mean difference	SE	P-value
Yes	No	-0.829*	0.21	0.001
	Sometimes	-0.481*	0.17	0.016
Sometimes	No	-0.35	0.22	0.268
Taking exams online				
		Mean difference	SE	P-value
Yes	No	-0.582*	0.215	0.021
	Sometimes	-0.176	0.174	0.57
Sometimes	No	-0.406	0.224	0.170
Meeting assignment deadlines				
		Mean difference	SE	P-value
Yes	No	-0.706*	0.189	0.001
	Sometimes	-0.35	0.15	0.056
Sometimes	No	-0.356	0.196	0.169
Finding quiet time for reading or revising				
		Mean difference	SE	P-value
Yes	No	-0.638*	0.216	0.01
	Sometimes	-0.203	0.172	0.469
Sometimes	No	-0.435	0.225	0.133