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RESEARCH ARTICLE

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"The pandemic of distance learning": How Arab high school students see online-learning during Covid-19

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Abstract

Emergency transition to online due to the coronavirus disease 2019 (Covid-19) pandemic has created unprecedented challenges in schooling. There is a dearth of information on the perception of Arab high school students and parents regarding the negative effects of online learning during Covid-19. Qualitative analysis of data from a multisite ethnographic-centered study collected in nine Arab countries. Data presented are only the ones recorded from students and parents. Raw data were abstracted using a mind-mapping software and coded using words. The perceived negative effects of students and parents on several aspects of the transition to online learning such as the needed technical adjustments, impact on parents, perceptions of learning online versus face to face, pedagogical drawbacks, and psychological effects are described and discussed in light of results of previous studies. In spite of cultural differences, Arab high school students and parents face the same challenges and difficulties reported in other parts of the world. The overarching theme that emerges both for parents and children is the perceived superiority of face-to-face learning in the structured environment of the school for a more holistic learning and socialization experience of students and for better long-term outcomes.

KEYWORDS

Covid-19 pandemic, high school students' perceptions, online distance learning

1 | INTRODUCTION

The coronavirus disease 2019 (Covid-19) pandemic has forced many countries to transition to online learning to gain a sense of normalcy and ensure accessibility of education while protecting public health. This situation has created unprecedented challenges in schooling, leaving children isolated from teachers, peers, and their social environment, altering routines and disrupting the structure of formal schooling while quickly having to adapt traditional school learning and pedagogies to distance learning facilitated by technology.

Although online learning is not a new phenomenon, the abrupt transition to online emergency learning during 2020 due to the COVID-19 pandemic left educational systems, parents, and students unprepared for the new challenges. Concerns about the effects of school closures and the abrupt transition to online learning, in particular for children and young students, is reflected in the growing amount of research on the effects of online learning during the pandemic (Viner et al., 2022).

Most empirical findings regarding student's perceptions and engagement in online learning are drawn from a higher education context (Kusmaryono et al., 2021; Martin et al., 2020; Yan et al., 2021). While meta-analyses have shown that online formats and technologies can be as effective as face-to-face in terms of learning outcomes for adults, this may not be the case for younger students (Boon et al., 2021). Online learning entails a greater level of motivation, discipline, independence, and self-regulation than face-to-face school learning, skills which young people may not have developed (Li et al., 2021; Pelikan et al., 2021).

While some studies among school students in developed and technologically prepared countries like Norway indicate the majority of students found their online experience had a positive effect on learning (Bubb & Jones, 2020), this is not the case for all countries. For example, in one study of 1018 students in China, nearly half of the students were not satisfied with the results of online-learning and more than half considered that the efficiency of online-learning during home quarantine was lower than studying at school, being eager to return to face-to-face schooling (Zhang et al., 2020). Likewise, Yates et al. (2021) also reported that over half of high school students preferred in-class collaboration over online collaboration as they value the immediate support and the proximity to teachers and peers from in-class interaction. A recent study in Australia reported that two in three young people (62.6%) felt that the pandemic had negatively impacted their learning (Li et al., 2021).

Students' relationships with teachers and peers in school settings are basic for student's school engagement, improving student's perceived value on learning (Wang & Eccles, 2012). Social isolation, lack of contact and proximity to teachers and peers, lack of collaborative experiences, and difficult communicating with teacher and obtaining teacher's feedback have been found to be major concerns reported by students through several studies (Ben-Amram & Davidovitch, 2021; Kovács Cerović et al., 2021; Li et al., 2021; Pelikan et al., 2021; Yates et al., 2021). This loss of connectedness may exacerbate the risk of educational disengagement (Drane et al., 2021) since social relatedness is considered to be important for students' intrinsic motivation, and learning engagement (Pelikan et al., 2021) as well as for overall well-being (Loades et al., 2020).

School closures due to the COVID-19 pandemic have had a serious emotional and behavioral impact on young people, including increased restlessness, hyperactivity, inattentiveness, and difficulty concentrating (Panchal et al., 2021; Viner et al., 2022), and increase the risk for anxiety and depressive symptoms (Panchal et al., 2021; Viner et al., 2022). In Spain and Italy, countries in which COVID-19 had a strong impact, the majority of parents (85.7%) reporting changes in their children's emotional state and behaviors during lookdowns, including difficulty concentrating, feelings of loneliness, irritability, boredom, restlessness, anxiety, uneasiness, and worries (Orgilés et al., 2020). Worsening of mental health among school children and adolescents has also been reported in Germany (Ravens-Sieberer et al., 2021), Turkey (Turk et al., 2021), Austria (Pieh et al., 2021), Australia (Li et al., 2021), China (Liang et al., 2020; Zhang et al., 2020) and many other countries (Panchal et al., 2021), with reported negative impacts on learning, friendships, and family relationships (Li et al., 2021).

The necessity to switch to online learning to maintain educational continuity may have compounded the stressful effects of lockdowns and fears associated with COVID-19. A recent study among high school students in

Ohio (USA) showed that online learning had the highest impact on the degradation in mental of students after controlling for other stressors (Rao & Rao, 2021). High school students find emergency online learning more demanding than regular school, with increasing pressures from teachers and homework (Korzycka et al., 2021; Pelikan et al., 2021; Rao & Rao, 2021; Zuo et al., 2021), increased stress due to homework (Rao & Rao, 2021; Setoningsih, 2021), heavy workload and fatigue (Niemi & Kousa, 2020; Zuo et al., 2021); and reporting online learning being more difficult and less engaging compared with face-to-face (Jiang et al., 2020; Li et al., 2021; Setoningsih, 2021). These new demands posed by online learning may increase stress and anxiety, reduce students' motivation for learning and increase disengagement, which can have negative consequences on both academic performance and psychological wellbeing (Li et al., 2021; Niemi & Kousa, 2020; Yates et al., 2021).

In addition to the above, lack of motivation (Li et al., 2021; Niemi & Kousa, 2020), poor self-management (Zuo et al., 2021), disengagement due to environmental disturbances during online classes (Bubb & Jones, 2020; Kovács Cerović et al., 2021; Li et al., 2021; Niemi & Kousa, 2020; Yan et al., 2021), difficulties with concentration (Ben-Amram & Davidovitch, 2021), physiological challenges like eye fatigue and eye strain while using technology (Ge et al., 2021; Korzycka et al., 2021; Yan et al., 2021; Zuo et al., 2021) and less number of hours engaging in learning (Huber & Helm, 2020) during online learning will all have impacts on students' academic success. Distance learning requires high self-regulation and intrinsic motivation and may lead to passive procrastination (Pelikan et al., 2021). Trait self-regulation has been found to improve the experience of online learning in school children during covid-19 (Blume et al., 2021) and low self-regulation has been found to be associated with lower number of hours spent on online learning (Huber & Helm, 2020).

While studies on school students' perceptions on online learning and the effects on their learning experiences or psychological wellbeing have been increasing during the last year, there is a paucity of studies reflecting the experience of high school students in the Arab world and most studies have been done either in university students (Al-Fadhli, 2008; Alkinani, 2021; Almahasees et al., 2021; El-Sayad et al., 2021; Elshami et al., 2021; Shawaqfeh et al., 2020) or teachers (Almahasees et al., 2021; Elshami et al., 2021; Mounjid et al., 2021). As with non-Arab countries, countries with high-intensity technological preparedness, good infrastructure, and pre-covid era commitment and development to online education, report better students experiences with online learning during Covid-19, showing overall strong student satisfaction, positive attitudes and minor challenges (Bawa'aneh, 2021). However, some students may find online learning difficult for specific subjects and courses. For example, a recent study in high school students from Grades 9–12 from Al Ain in the UAE reported that 76.7% felt that online learning was unsuitable to learn mathematics and that 78.3% would not choose mathematics distance learning if they had the choice (Almarashdi & Jarrah, 2021).

Due to the lack of studies representing the voice of the high school students in the Arab world, we present the results of a multisite ethnographic-centered study on the perception of high school students and parents focusing on the negative effects of emergency switch to online learning during Covid-19.

2 | METHODS

The data utilized in this article comes from a multisite collaborative effort to understand the educational experience of different groups in various Arab countries during the Covid-19 pandemic and has been profusely described previously (Al Lily et al., 2021). The sampling methodology followed a maximum variation sampling to include normal education, special education, adult education, prisoner education, nonformal education, and international education. In addition, individuals of different sociodemographic characteristics (i.e., economic backgrounds, age, genders, place of residence, etc.) were contacted. A total of 1292 observations of offline life, 1012 observations of online life, 986 individual interviews, and 306 focus groups were collected in total from UAE, Jordan, Bahrain, Saudi Arabia, Kuwait, Sudan, Qatar, Egypt, and Oman. In this study, the operational definition of “Arab culture” denotes a language-based mosaic and ethnic group whereby one identifies oneself as an Arab irrespective of one's residence,

religion, accent, nationality, or place of birth. Interviews were conducted with various groups, such as students, teachers, supervisors of teachers, parents, directors of regional education departments, and academics. Interviews were conducted using a videoconferencing system (zoom), lasted around 1 h, and were unstructured, encouraging interviewees to speak freely about their educational experience. The interviews were not be recorded, for ethical considerations, however exhaustive notes following a standardized methodology were taken.

The raw data were abstracted using a mind-mapping software. Data were marked with codes using words to symbolized meanings for each observation. Codes of the same meaning were grouped into "marks." The different emerging "marks" were then combined to form "micro visions," similar micro-visions were grouped into "meso-visions," and alike meso-visions were gathered into "macro visions" to understand the main educational problems encountered by participants. Specific statements and quotations were selected to identify main negative effects of online learning on students' psychosocial wellbeing and learning experiences.

3 | RESULTS AND DISCUSSION

3.1 | The effects of "spacial reconfiguration" and technical adjustments to learning at home

Shifting the class environment from school to home, or as Al Lily et al. (2021) describe, the "reconfigured spatiality of covidian education" has created the need for structural rearrangements by families inside the home to ensure continuity of learning. These structural rearrangements, such as the accessibility to internet, acquiring or sharing devices, as well as providing the right space in homes, were the main problems stated by parents. Acquiring the necessary devices to ensure access to online learning, even for parents with enough resources, was difficult, as reflected in the following statement – "…Do you know we are a large family …three sons and one daughter, in secondary school and intermediate school … I am working in the uni [university] and my wife is a teacher… so, imagine how many computers we need!! Minimum … four computers or tablets? I had purchased two this month otherwise the kids will use their phone which can harm their eyes…". While for parents with less economic resources acquiring the necessary tools was an additional burden – "…Online education put my budget under pressure like most of people, I have to by two tablets and upgraded the internet plan as we cannot work at the same time with the previous internet plan… we have one desktop and one printer, now we need to turn our home into a 'students' service center'… almost every month I have to change the ink of the printer…".

Parents adjustments to their children's online learning include personal barriers such as lack of training and skills to use the technology, lack of qualifications to teach their children, as well as financial barriers to acquire technology or pay for internet connectivity (Abuhammad, 2020).

Adjusting the home for online learning, finding the right place at home, sharing spaces and technology, and interference with family life was reported as a challenge by parents since homes were not prepared for the abrupt transition and was reflected in the following statements - "…One of our daily arguments is where we will sit at home during school time, everyone wants to be in the living room, where the signal is better. I asked my wife to take our disabled son out when I do my class otherwise, I cannot teach with his noise and cry…" – "…The house is like a battlefield, we fight to dominate the source [laughing]… who will take over the quiet area and strong internet signal and, of course, the comfortable chair…"

There is a lack of information regarding parents' perceived challenges in providing the adequate learning environment at home. Not finding the right place for online learning at home and having to share the space with other family members to access online classes has not been a major focus of the literature. However, there is no doubt that the learning environment is essential for a better online learning experience and engagement with online learning (Barrot et al., 2021; Mohan et al., 2021). Several authors have reported on students' difficulties in engaging due to environmental disturbances during online classes (Bubb & Jones, 2020; Kovács Cerović et al., 2021;

Li et al., 2021; Niemi & Kousa, 2020; Yan et al., 2021) and in some cases this has been a major barrier for effective online learning reported by college students in underdeveloped countries (Rahman, 2021).

3.2 | Perceptions about learning on-line versus face to face

Overall perceptions about the effectiveness and adequacy of online learning, for both parents and students, were not enthusiastic. Parents perceived that online learning was not suitable for the overall educational development of their children, compared to face to face, as it lacked several characteristics essential for a holistic learning process, as stated by one father - "…Neither us as parents, me as university lecturer, nor our son as a student, feel online learning is suitable. Students need to communicate with each other, develop relationship with their teachers and peers. With online teaching this not possible. Face to face teaching is the only suitable way to learn because attending classes is not only to acquire knowledge but also to develop a long list of skills…"

In addition, parents felt that the tasks given to teachers as educators in schools, were somehow "transferred" to them without given the proper support, time and skills, thereby negatively impacting their children's learning, as a parent stated – "…When my son used to go to school, I could rely on the teachers to make him focus and learn efficiently, but now, I have to be the person guiding him which I don't have time to do and it's affecting his learning…"; "…I found my son playing Roblox on his iPad while attending his online class. I Deleted the game but he found another. We cannot control this as he is on iPad most of the time and, we too have work to do. In class his teacher will overwatch him but at home this requires a lot of effort from us…"

This transition to a parent-centered education and "outsourcing of tasks" (Al Lily et al., 2021) due to school closures, has negatively affected parents financially, in their jobs and careers, and even in their mental health, especially for disadvantaged families (Christie et al., 2021; Thorell et al., 2021), women (Yamamura & Tsustsui, 2021), and parents with a child with mental health problems (Thorell et al., 2021), leaving parents overburden with additional responsibilities and worry over their children's learning due to parents' personal, technical and financial barriers (Abuhammad, 2020; Wen et al., 2021).

Students' perceptions were mixed between the freedom of not having to attend school on a daily basis and missing connections with peers and teachers, as the following statements from students indicate: - "…now we can have enough sleep and we can go out whenever we want and we also learn… but we miss schools. I wish we can go to schools whenever we want… not like every day."; "…when I am at home I have free time to do whatever I want before class or even when I have a class…."; "…I miss talking to my friends face-to-face. In online classes we do not have much freedom to talk and we do not see each other. The teachers do not allow video call to be used…"; "…in online classes, I cannot chat with my friends as my teachers won't allow it most of the time. The only way we communicate with each other is through our WhatsApp group…"

Students concerns about the loss of connection with peers and teachers has been reported profusely as the main drawback of emergency online learning and is probably the most important variable having a negative effect on students' education and mental health (Ben-Amram & Davidovitch, 2021; Kovács Cerović et al., 2021; Li et al., 2021; Loades et al., 2020; Pelikan et al., 2021; Yates et al., 2021).

3.3 | Pedagogical drawbacks of online learning

In addition to missing relationships and communication with peers, students also reflected the limited connection with teachers and lack of adequate feedback, for example, and as several students pointed out - "…I think because of everything having to be automated that there is no extra chats and advice from teachers…"; "…We usually ask our family members to explain anything we do not understand as teachers are not available to take our questions and when we talk in the online class they shush us…"; "…I think the lack of clear and concise feedback is affecting me

because of teachers must adapt to the new system…" It seems that online learning, unless it is done with very small groups, is not the best platform for allowing fluent teacher-student communication and feedback for highschoolers. This drawback has been previously reported as an important concern for students, (Ben-Amram & Davidovitch, 2021; Kovács Cerović et al., 2021; Li et al., 2021; Pelikan et al., 2021; Yates et al., 2021), as well as parents (Abuhammad, 2020), negatively affecting students' education.

Students perceived emergency online learning as extra demanding and carrying an additional homework load, as reported by other studies (Korzycka et al., 2021; Niemi & Kousa, 2020; Pelikan et al., 2021; Rao & Rao, 2021; Zuo et al., 2021). Students felt overburden, "…I always get overwhelmed with the amount of adaptation I must do to complete a simple task and it's effecting work schedule…", - and sometimes unable to focus enough to learn – "…teachers ask us to pay attention to them but the next class I feel as if the topic is new when we are asked about last class's topics…"

Whether the amount of homework during emergency online learning was higher compared with the one assigned normally during face-to-face schooling is difficult to estimate. However, this was the perception of Arab high school students in our study, replicating the experiences of students in other countries. This perception of work overload and burden may have been related to difficulties in dealing with several online platforms and new technology demands for which the students may not have the skills (Drane et al., 2021), coupled with the extra effort to maintain focus on the screen (Ben-Amram & Davidovitch, 2021), especially in the home environment where more distractions are likely (pets, other siblings, inadequate space for learning, etc.) (Bubb & Jones, 2020; Kovács Cerović et al., 2021; Niemi & Kousa, 2020; Yan et al., 2021). Adaptation to these new demands may increase students' pressure and anxiety, reduce focus or motivation and increase disengagement with negative consequences both on learning and psychological wellbeing (Li et al., 2021; Niemi & Kousa, 2020; Yan et al., 2021; Yates et al., 2021).

Feeling overburdened and having difficulties to stay focused could have been secondary to students' lack of self-discipline or lack of skills to organize their workdays outside the structured framework of the school. Like one student reflected - "…I always struggled to manage my work schedule because of lack of discipline that we use to have by teachers in person…"; or as another student stated, - "…In schools we need to be at campus from 7 to 12 am, but now we do not know how to get organized…"; and as a third reported - "…I feel that I struggle to focus in class because of the routine that I am adapting to and the lack of discipline…".

Finally, the specific characteristics of online learning during the school lockdowns, lacking the discipline and structure of face-to-face learning, increases the chance for young students to get bored and easily distracted reducing their engagement in learning, as naively put by one student: "…. We are good actors. We pretend that we are following what the teacher says but in fact we play videogames and chat with other classmates….".

Distance learning implies being capable of study independently and requires high motivation, discipline, and self-regulation (Pelikan et al., 2021). Poor self-management including working-leisure time management and lack of self-regulation skills may have left students unprepared for the complexities of mixed asynchronous or synchronous modes of teaching, too many distractions in the home environment and technological barriers. Trait-self regulation in school children has been found to be associated with increased capacity to study independently and higher task enjoyment (Blume et al., 2021), while low self-regulation has been found to be associated with increased disengagement and higher need for teacher's control over students' work to keep children engaged in learning (Huber & Helm, 2020). For the majority of children, self-regulation, discipline, prioritizing, and time-management skills need to be acquired, supported, and reinforced throughout their educational journey, which is best provided in the structured environment of the school setting.

3.4 | Psychological effects of online learning

Social isolation has been one of the most reported concern by students across studies (Ben-Amram & Davidovitch, 2021; Kovács Cerović et al., 2021; Li et al., 2021; Pelikan et al., 2021; Yates et al., 2021). Likewise, among Arab students in this study, parents reported their worries about their children feeling alone and

disconnected from peers; "…the last time my son told me about something that happened between him and his classmates was when he physically attended school. He is not developing memories with his friends, they are not communicating and he feels lonely." –"…my son really feels alone, he has lost his relationship with his friends and became more and more focused on electronic devices. He is normally a very social child but with this situation, he cannot practice what he is best at…".

Students also expressed being dettached from peers and feeling of isolation: "…I feel like my social skills has declined because of not meeting or working with my classmates and that causes the feeling of being isolated which causes boredom which makes you concentrate on everything negative about schools and how it affects you mentally…".

Loss of connectedness impacts learning through disengagement and loss of motivation (Drane et al., 2021; Pelikan et al., 2021), and was clearly expressed as a concern for parents: "…. my son does not enjoy studying anymore. He is moaning all the time about attending his online classes, he also does not want to do his homework. A homework that used to take few minutes, now takes hours to complete because of lack of motivation…"; "…my son has lacked motivation, before the pandemic he was energetic and ready to go to school, but now he looks tired and uninterested…"; and stated by several of the students: "…I hate when my parents wake my up for the class. I go to bed late and sometimes I do not do my homework…."; "…attending school is an issue for me because I just cannot find the motivation that makes me thrive in this kind of environment…."; "…I cannot find motivation to attend class because I couldn't find enough activities…".

Social isolation and loss of motivation were the themes most reported. We presume these feelings had an impact on the psychological wellbeing of Arab students although, due to the methodology of this study, we did not inquire specifically about the mental health or psychological effects that learning online learning has had on students. Social isolation and loneliness in children during the COVID-19 pandemic has been shown to increase the risk of depression and anxiety (Loades et al., 2020) and a recent review has revealed that school closures have had important negative emotional and behavioral impacts on young people (Viner et al., 2022). In addition, the worsening of mental health among school children and adolescents during Covid-19 has been reported globally (Li et al., 2021; Liang et al., 2020; Orgilés et al., 2020; Panchal et al., 2021; Pieh et al., 2021; Ravens-Sieberer et al., 2021; Turk et al., 2021; Zhang et al., 2020). However, although participants reported feeling of isolation loneliness and lack of motivation, they did not disclose other major psychological concerns such as depression, anxiety, or other psychological problems. This may have been influenced by the type of questions in the interviews and by the fact that this type of discussion is not an integral part of Arab culture.

4 | LIMITATIONS

Although this study has the usual limitations of qualitative research, the usual small sample size inherent to the difficulties of these studies has not been one of them, thanks to the collaborative effort of several institutions and nationalities, providing a large sample size and a considerable amount of data. Although interpretation of data maybe subjective, the methodology has tried to maximize the number of explored views and experiences. The major themes extracted through the analysis however reflect what other studies, both qualitative and quantitative, have reported worldwide regarding perceptions of students and parents on online learning. Although there are indications that emergency online learning has had pedagogical and psychological negative effects on students the real impact in terms of learning outcomes and mental health outcomes cannot be measured with a qualitative design.

5 | CONCLUSION

In spite of cultural differences, Arab high school students and parents face the same challenges and difficulties reported in other parts of the world. From the effects due to "spacial reconfiguration" of the learning environment, the shift of responsibilities from teachers to parents and the challenges regarding technical skills and adjustments,

to the specific pedagogical and psychological drawbacks of online learning, the overarching theme that emerges both for parents and children is the perceived superiority of face-to-face learning in the structured environment of the school for a more holistic learning and socialization experience of students and for better long term outcomes.

CONFLICT OF INTEREST

The author declares no conflict of interest.

ETHICS STATEMENT

All applicable international, national and institutional guidelines for the care and use of humans were followed. Written consent was obtained from the *National Research Centre for Giftedness and Creativity* (reference no. 1533/4/9). Written consent was obtained from the participants.

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