Saudi education postgraduates' (trainee teachers') perspectives on distance education

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Abstract

The purpose of this exploratory study undertaken in Saudi Arabia is to understand how in-service and new teachers perceive distance education. The study involved nineteen male and female postgraduates who were pursuing an education master's degree during the COVID-19 pandemic. This is a qualitative research asking participants to provide a 300-word response to the open-ended question: "How will you implement what you have learnt in your studies so that distance education can be effectively provided and convince others of the merit of this approach?" The task was presented in Arabic and the complete assignments were returned electronically. The 11,181-word corpus underwent content and thematic analyses yielding eight themes. Participants addressed issues pertinent to teaching and learning, equity in technological access and digital literacy. To make DE in Saudi Arabia successful, thorough preparation of involved parties, including educators and learners, and their digital teaching and learning skills should be mastered.

Keywords: Distance education, e-learning, education postgraduates, Saudi Arabia, "Vision 2030";

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1. Introduction

Through their plans and programmes, education policymakers are taking the educational process through a massive information and technological revolution both abroad and more recently in the Kingdom of Saudi Arabia (KSA). This revolution has resulted in modern visions of education that strive to keep pace with the requirements of the post-modern era. By virtue of new technologies, both ways of teaching and acquiring new knowledge are no longer confined by space and time. Modern technologies and interactive learning have affected educational orientations and strategies of educational entities (Alnjm, 2019).

An example is distance education (DE) made possible because of increased use of the Internet and the availability of important applications that facilitate communication requirements in the digital age (Kaplan & Haenlein, 2016). This shift in education delivery and learning mode is quite natural given the increasing demand for easy-to-use educational programmes that can also improve the quality of educational outcomes, if they account for learners' functional, social and cultural needs. Education is no longer limited to physical universities and training centres; both Saudi educational institutions and learners are attracted to online tools that serve as major sources of learning at a distance (Alahmari, 2017).

Since the advent of the COVID-19 global pandemic in 2020 and the imposed mandatory distance learning at the global level, DE has emerged as a dominant theme in the educational literature. But even before that, Vision 2030 (Saudi Arabia's current national development plan) (KSA, 2016) had considered the quality of its educational process. Envisioned modifications included changes to educational curricula, administrative cadres and teaching staff as well as the provision of appropriate educational environments and requirements for DE. Traditional educational methods were deemed insufficient for preparing talented generations to compete in the age of knowledge. Modern technology, digital learning and DE are now being employed (Alahmari, 2017; Al-Omari & AlRehili, 2020).

Bunaiyan (2019) referenced Saudi Arabia's Afaq project with its focus on facilitating DE access through access to technology. "In pursuit of this goal, the Kingdom established [the] National Center for eLearning and Distance Education (NCeL)" (p. 65). The centre is tasked with building a vision for distance education that makes it accessible to all Saudi citizens (ALsayi, 2016). This accessibility will be achieved by increasing universities' capacity to deliver DE through improving the quality of necessary infrastructures, offerings, programming, and training and professional development (Alahmari, 2017; ALsayi, 2016).

1.1 Purpose and question of this research and its importance

Alhathlol (2017) noted the absence of Saudi students' voices around the DE phenomenon, in his instance, undergraduate students. Fidalgo, Thormann, Kulyk, and Lencastre (2020) recently found that Arab undergraduate students were apprehensive about, but somewhat willing to enrol in, DE courses. The voice of Saudi teachers (or soon-to-be teachers) who are enrolled in postgraduate education programmes, and their perceptions of DE in the KSA, is thin in the literature. Walabe (2020) affirmed this assertion, claiming that "as online learning in Saudi Arabia is still relatively new, there is limited documentation available in the scholarly literature" (p. 5) with most of it focused on undergraduate students.

In a one-university study, Alajlan, Aljohani, and Peterson (2014) reported that Saudi university students had positive experiences with synchronous DE. That said, those same students recommended that universities support this mode of delivery and any adjustments in the transition

from traditional to online learning. Abedalla, Pinchot, Samgrandi, and Al-Masri (2014) reported that Saudi university students were inclined to opt for real-time learning (on-ground) instead of DE. However, this choice was replaced with mandatory DE in the KSA in March 2020 because of the national lockdown.

Respecting the lack of research on this topic from Saudi education postgraduate students' perspective, it is important to gauge the standpoint of teachers (either in-service or soon-to-be) who are an integral part of DE. Thus, the guiding research question of this study that was put forward to the respondent was: "What are Saudi Arabian postgraduate education students' perspectives on distance education?" Their perspective matters, because they are both (a) experiencing DE during the pandemic lockdown as postgraduate students enrolled in an education master's degree course and in their own teaching careers and (b) facing its continued implementation until the global health crisis is resolved. Furthermore, Vision 2030 (KSA, 2016) intended e-learning and distance learning as key factors in growth and development, implying that experienced and novice educators must be comfortable with DE.

1.2 Limitations of this research

Reaching as many citizens as possible through education to achieve Vision 2030 and meeting the demands of the pandemic both depend on distance education in Saudi Arabia. Researchers are encouraged to move beyond small-scale exploratory qualitative studies, so they can begin to build an empirical, evidence-based approach to Saudi DE especially given the predicted future prevalence of this mode of education. This means both expanding the sample frame to other Saudi provinces beyond the Eastern Province and including many more Saudi higher education institutions across the country.

1.3 Emergence of distance education

Educational adjustments and adaptations are required to cope with global changes and modern times (Al-Hefni, 2015). Educational systems and attendant policies thus seek digital empowerment (Almasaid, 2017). Innovations include modern information technology and distance education delivery platforms (Al-Hefni, 2015). Distance education is so named because students are at a geographical distance from the actual buildings, campus, teachers and fellow learners. Nowadays, they mainly connect via computers (hardware and software), the Internet and other interactive telecommunication devices (Kaplan & Haenlein, 2016), such as iPads and android phones.

In detail, DE requires (a) special methods of education and design, (b) electronic communication technology and (c) organisational and administrative structures. It is programmed education provided in a location other than the place of teaching and it can occur anywhere, at any time (Moore & Kearsley, 2015). DE depends on educational institutions creating a multiple communication media and information technology system that delivers education (Alqahtani, 2010; Alnjm, 2019). Despite its growing popularity, DE is still considered an alternative, or complement, to traditional brick-and-mortar, in-person education (Salem, 2010). As a caveat, synonyms for distance education include distance learning, online learning, e-learning, m-learning (mobility devices) and virtual learning with distance education "the most renowned descriptor" (Moore, Dickson-Deane, & Galyen, 2011, p. 129).

Distance education emerged in response to changes in modern technology and the requirements of the third millennium. It has been around for nearly 200 years and progressed through several generations all of which are still in use today (Anderson & Dron, 2011). These stages are noted herein, because the KSA did not follow this full trajectory. The first DE generation before computers entailed

mailing printed resources with accompanying instructions and eventually audio-visual aids (e.g. film strips, Kodachrome slides, cassette tapes). The second stage pulled in television, radio, satellite and film (multimedia systems) to deliver live or recorded lessons. Video/audio tapes, compact disks (CDs) or digital versatile disks (DVDs) of these recordings were mailed to students who in turn mailed back assignments (Al-Omari, 2019; Moore et al., 2011). Students and instructors stayed in touch by telephone or postal correspondence. The third DE stage (multimedia systems) built on stage two by adding computers as teaching and learning tools (Al-Omari, 2019; Alrashoud, 2015) to enable personalisation of content (Aoki, 2012). This stage manifested in computer-assisted instruction (CAI) and computer-assisted instructional design (CAID) systems (Anderson & Dron, 2011) especially in the early and mid-eighties.

The fourth DE stage built on stage three by adding interaction via information and communication technologies (ICT) along with content delivery. Beginning in the early 1990s, it stemmed from the advent of the Internet, email, electronic databases, online library holdings, advanced telecommunications, social media platforms, interactive video, and class management systems (e.g. Collaborate Blackboard). Engagement between students and teachers is synchronous (live, everyone at the same time), asynchronous (perhaps live but not everyone at the same time) or a hybrid (Almulla, 2016; Al-Omari, 2019; Aoki, 2012).

1.4 Benefits of distance education

Education at a distance has many benefits for students. It helps people gain an education while balancing the growing demands of work, school, life, and family. It helps people begin, continue and complete their academic studies despite circumstances hindering them from doing so in person and on site (Alshehri, 2014; Burns, 2012). Kanwar and Taplin (2001) reported that distance education learning opportunities increased students' self-confidence and eventually reduced their fear and anxiety regarding advanced technology, so they could benefit from it.

Once enrolled in DE, students can enjoy flexible scheduling through online or hybrid learning (de Oliveira, Penedo, & Pereira, 2018; Monarch Media, 2016). They can repeatedly re-access the material to review as often as required (de Oliveira et al., 2018). Flash video lectures help students better understand course material. Voluntary discussion boards and chat rooms provide opportunities to discuss difficult concepts, confirm course information, and even discuss topics unrelated to the course material. The teachers' role in this regard is to clarify any incorrect information posted (Bušelić, 2012).

Colman (2020) explained that although both formative and summative assessment protocol still apply to distance learning, different strategies are available (and maybe preferred) due to interactive technology. Examples of this benefit include drag-and-drop assessment (measures ability to apply knowledge to solve problems), dialogue simulations, online polls, game-based assessment (not real tests, per se), peer evaluation using rubrics or prescribed questions, and forums (online discussion boards).

1.5 Disadvantages of distance education

The most prominent disadvantage is the absence of real-time, face-to-face interaction between teacher and student and among students. While some believe that lack of human contact can severely compromise learning, others say people learn better via DE, because they can learn at their own pace and through ways best suited to their learning style. Challenges do exist around ensuring that the home learning environment is conducive to learning given the array of distractions. Other disadvantages include a shortage of teaching staff trained in this approach and their lack of technical

skills to deal with various aspects of electronic devices and e-learning platforms. When something goes wrong, there is often inadequate support – a lack of quick and direct response to technical problems – which compromises teaching and learning (Al-Maghdawi, 2009; ALsayi, 2016).

Sampson (2003) reported that university students were satisfied with course modules and attendant course materials and the time they had to complete assignments and any resultant feedback. However, students reported significant issues for access to learning materials provided by instructors and availability of student support both of which impact the successful provision of DE. Other disadvantages include depending on learner autonomy and unsupervised, self-directed learning in environments often shaped by teacher-centred approaches (e.g. lectures, memorisation, rote learning) as in Saudi Arabia (Hamdan, 2014). Students who are not mature, self-motivated and self-disciplined may be disadvantaged with DE. It should not be assumed that DE will resonate with all learners (ALsayi, 2016; Sampson, 2003).

Also, it is challenging to just keep up with the tremendous and rapid developments in the field of modern technologies let alone master them for educational purposes. Furthermore, students often do not initially understand the special advantages of DE that distinguish it from traditional education – mostly related to time, place of learning and flexibility. Their resistance to this alternative mode of content delivery and learning engagement must be anticipated and accommodated. Also, a culture of distance education must be inculcated, and the necessary human and material resources to implement DE must be provided. Additionally, training for computer usage and attendant teaching and learning software must be made available for everyone involved (Al-Maghdawi, 2009; ALsayi, 2016; Moore & Thompson, 1990).

Another DE challenge is digital literacy; the two go hand in hand. Distance education demands that learners form new learning habits like learning anywhere and anytime by using new generation technologies. Succinctly, digital literacy is "related to learners' abilities to find and choose reliable as well as relevant information within complex networks" (Ozdamar-Keskin, Ozata, Banar, & Royle, 2015, p. 76). It involves being tech savvy as well as using critical thinking, sound reasoning and judgements, and meaning making. Digitally literate learners are more apt to be active participants in their educational and intellectual lives (Ozdamar-Keskin et al., 2015).

1.6 Distance education in the KSA

This paper is about distance education in Saudi Arabia, which did not move through all the aforementioned DE stages, because it lacked a communication infrastructure. Instead, the KSA started with the third stage via the construction and use of multimedia systems. Historically, in response to changes in Saudi society, a 2002 symposium on the previous national development plan (2000-2020) prioritized opening new study options in higher education such as DE and the Open University. An earlier national Saudi plan for information technology had aimed to prepare national cadres in the field of information technology who would ensure the use of technology in education and support national projects in this endeavour (Al-Omari, 2004). Technology is an important educational resource for developing and modernising university education. DE helps achieve fairness in providing information and higher education online learning opportunities to students in any part of the Kingdom and to both sexes (Al-Omari, 2019).

Indeed, DE in the KSA has recently been embraced as a suitable and pragmatic way of continuing education in light of the COVID-19 global pandemic. As indicated, a suitable technolgoical environment, integrated educational system and DE infrastructure have existed for some time in most Saudi state universities and educational institutions (ALsaysi, 2016). Research and academic data

regarding educational outputs attest to the proven effectiveness and efficiency of distance learning in the KSA by those who have used it so far. Saudi Arabia uses DE for social, cultural, economic and psychological reasons (Almulla, 2016). Tikkanen (2005) reported that Saudi university professors felt that DE was effective and fruitful for students' social, cultural, educational and economic development with no gendered differences.

Razan (2010) reported faculty members' perspectives on the extent of distance education's effectiveness in Saudi Arabian higher education. Faculty expressed concerns about any disparity between the effectiveness of traditional versus distance approaches to education, real and perceived. Faculty also recommended heeding best practice via learning from other Saudi institutions' experiences with the planning, management and implementation of e-learning. Razan (2010) highly recommended ongoing research on this phenomenon in the KSA including (a) promoting studies to identify the problems and obstacles regarding the use of e-learning and education management systems in different universities, (b) submitting appropriate suggestions to solve these problems and (c) conducting studies on the technical readiness of students and faculty members in universities. Alshehri (2014) reported the importance of providing training for Saudi higher educational information system specialists and university librarians.

Alqahtani (2010) reported that Saudi university faculty members approved of virtual learning (which is synonymous with "DE" in this paper) and agreed to its importance. Recommendations included (a) expanding the scope of DE in all Saudi colleges and education programmes, (b) intensifying training and awareness of its importance as an education delivery mode, (c) attracting and hiring qualified faculty members who would engage in and encourage DE programming and (d) developing electronic courses and teaching methods that comply with DE requirements. Aljuhani (2008) stressed the importance of adapting and applying his proposed educational management expert DE model in the Arab Open University and other open universities that have similar students and organisational structures.

Alattas (2010) was concerned with developing DE in Saudi universities including the philosophy, goals, and dimensions of DE as well as best practices around contemporary global trends in the DE field relative to the reality of DE in Saudi universities. Alattas (2010) commented on how the emergence of DE and programmes was related to the social reality of specific countries in terms of technical aspects and the qualification of human resources. Another finding was the moderate usage of DE in Saudi universities with one of the most important challenges being the development of high-quality education that is in line with both the culture of Saudi society and DE beneficiaries (Alattas, 2010).

To conclude this section, Alhathlol (2017) observed that although Saudi Arabia "has a short history and little experience of [DE] compared to many other nations" (p. 16), it has now increased usage of and commitment to DE learning platforms, infrastructures and training. Distance education is now in place to some degree in Saudi higher education institutions with pioneering universities including Saudi Electronic University, King Abdulaziz University, Imam Abdulrahman bin Faisal University (IAU), and King Saud University (Al-Omari, 2004). The Kingdom remains keen to expand the scope of DE evident in its recent national development plan's (Vision 2030) mention of distance learning and e-learning (KSA, 2016).

1.7 Distance learning during the pandemic

Khalil et al. (2020)'s thematic content analysis of their qualitative study revealing four themes. The researchers held virtual focus group discussions synchronously with 60 Saudi medical undergraduate

students from whom the researchers wanted to gain students' perceptions of the effectiveness of online learning. Like any other students in the country, they experienced a sudden switch from traditional mode of learning to online learning because of the pandemic. The four themes emerged from the group discussions include: educational impact, time management, challenges encountered and preferences for the future. Moreover, Mann, Schwabe, Fraser, Fülöp, and Ansah (2020) offer a boarder view of how the COVID-19 pandemic is changing education from a perspective from Saudi Arabia. Their report compared the responses to the pandemic in ensuring education continuity from both OECD (i.e. Organisation for Economic Co-operation and Development) and non-OECD countries (including Saudi Arabia).

2. Methods

When little is known about a phenomenon in a specific context, exploratory research can serve to generate broad, initial insights and understandings that can lead to more conclusive future studies. Data tend to be gathered using smaller samples and open-ended questions (Dudovskiy, 2016; McGregor, 2018). This study explored how Saudi postgraduate education students (teachers and soon-to-be teachers) perceived DE and did so by employing a qualitative research design in the form of content and thematic analyses.

2.1 Study context and sample frame

In her role as Vice Dean in the female education section at IAU for several years, the lead author has advised or taught nearly 300 female postgraduate students. IAU is a university in the Eastern Province of Saudi Arabia. The second author had been Dean of Student Affairs at IAU for seven years. Using convenience sampling, both authors compiled a final sample frame of 19 Saudi male and female postgraduate students (at master's level) aged 25 to 45 and specialised in Arts, Education, or Basic Sciences. Their time at IAU ranged from four to five years. IAU has separate female and male campuses and faculty complements.

2.2 Data collection

Data were collected in August 2020 during the pandemic. Participants received an email asking them to write 300 words (maximum) in response to the following open-ended prompt: "To limit the spread of the novel coronavirus, the Saudi Ministry of Education started to apply the distance learning method since the middle of the second semester of 1441 AH. This situation may continue until the first semester of next year 1442 AH. How will you implement what you have learnt from your study so that the distance learning process can be effectively provided and then convince others of the merit of this mode of education? Write from the perspective of a teacher taking consideration of your learning of the curriculum theory; curriculum development theories, principles and concepts; curriculum planning and processes; and teaching methods. The assignment was written in Arabic and completed tasks were returned to the researchers electronically. The responses were then translated into English.

Given the 300-word limit, the authors anticipated an approximately 5,000-word written corpus for analysis. The final data set comprised of 11,181 words with most data pertaining to the pros and cons of DE rather than the two sub-tasks, which were addressed just not to the extent anticipated. In detail, participants were first asked to explain how DE could be improved (i.e. used more effectively) based on (a) the curriculum theory and process-oriented content they were learning and (b) their own learning experience during the 2020 pandemic lockdown. Ineffective distance education will appear fruitless, unsuccessful and counterproductive. Students will not learn as well nor be engaged learners,

and teachers will not feel self-efficacious and effectual. Study participants were also tasked with convincing others of the merits of distance education.

A second data point was the authors' reflections about their own experiences with mandated DE garnered over the last term at IAU during COVID-19. Each researcher had tracked his/her lived experience with this mode of teaching and drawn on that self-knowledge in this study. Reflection is an ongoing component of practice that enables practitioners to learn about themselves and their work by giving it serious thought and consideration. Insights into one's practice are generated through exploring and articulating experiences that one would not normally pay attention to on a regular basis. Reflection is very useful when people need to explore what they can change in their context and how to work with what they cannot change (Bolton, 2009).

An abrupt (almost over night) compulsory shift to DE impelled the authors to step back and examine such a dramatic transition in their own teaching. They judged it timely to ask their students (who were teachers [or soon to be] in their own right) to apply what they were learning in their postgraduate class to a real-world dilemma – using DE in the midst of and beyond a global pandemic.

2.3 Data analysis

Before analysis, all Arabic written responses were translated to English and saved to a WORD document, which became the corpus of the study. The initial coding process involved a content analysis, wherein the researchers coded for redundant and similar ideas. After this coding process, the rearranged data underwent a thematic analysis, which involved aggregating similar codes to form major themes (Allen, 2017). The thematic analysis helped filtering and highlighting the important content of the dataset.

In detail, for the content analysis, the corpus was scanned for keywords and variations (i.e. a code list) using a word processing editing function (Ctrl F). Keywords were located and colour coded including but not limited to 'learning,' 'curriculum,' 'education,' 'technology,' 'distance,' and 'digital.' For example, 'learning' and 'e-learning' were highlighted green. 'Education' and 'educational' were highlighted in a different colour. To determine any meaning associated with these keywords, the surrounding text was identified and recorded as well (Krippendorf, 2004; List, 2012). The intent was to improve accuracy by understanding the contextual meaning of words as they appeared in the searchable document (Bast, Buchhold, & Haussmann, 2016).

The analyst then (a) singled out the participants' responses to the two sub-tasks in the prompt; (b) paraphrased and expressed these responses in point form; and (c) reacted to/interpreted these responses by adding supplementary notes (including references and definitions), so that the second analyst and co-author could make any further analysis. To facilitate this process, data were transferred to an Excel workbook with separate worksheets for each participant's answers to the prompt. Thematic analysis (i.e. searching for repeating patterns) lead to initial themes being assigned. After a second analyst examined the coding results, the themes were subsequently refined (Allen, 2017).

3. Findings and discussion

The research question was 'What are Saudi Arabian postgraduate education students' perspectives on distance education?' The participants were teachers (or would be ones) enrolled in an education master's degree course. The authors (being the instructors of the participants) expected the respondents, who have been engaging with learning via DE platforms, to be aware of the importance and familiar with ideas around the effective implementation of DE. Participants' overall thoughts were categorised into eight themes (see Table 1).

Table 1. Themes embedded in participants' overall thoughts on distance education

1	Flexibility	Providing the subject matter content and material anywhere and anytime satisfies the different needs of all types of learners based on their inclinations and motivation.
2	Need support	Distance education requires support from both parents and community partnerships. Also, education entities are supposed to ensure well-trained teachers and provide them with educational resources for the distance learning mode.
3	Home learning environment	The school environment is somewhat controllable, but in distance education, many elements need to be considered to both make the home a place for learning and help learners stay focused amongst a myriad of distractions. Issues of securing necessary technological equipment and accessing the Internet at home should be addressed especially in villages, isolated locations and low-income urban neighbourhoods.
4	Availability of learning resources	There should be special curriculum materials that consider individual learning differences through varied levels. Fees for such materials should be reasonable, if not free. The new curriculum should still meet learners' needs, which is achievable by involving teachers in curriculum planning initiatives.
5	Digital literacy	Digital literacy skills are essential for distance learning; *parents* must acquire these skills so they can monitor their children's e-learning at home.
6	e-learning skills	e-learning skills are required for effective and successful distance education. Teachers with e-learning skills can better utilise available Internet resources while considering students' diverse learning needs. Learners should be able to choose from educational activities based on their preferences and abilities and yet reaching their learning targets.
7	Teacher's role and competencies	In-service teacher training (professional development) is needed with a view to raising their performance through specially tailored programmes that both help teachers deal with digital educational platforms and students interact with the learning material. The teachers' role is different with remote teaching. They are no longer a prompter, but an organiser. Teachers can also design their own programmes to cope with different situations.
8	Teaching strategies and techniques	Effective e-teaching strategies can provide opportunities for applying varied techniques, such as the flipped classroom; Know, What to Know, Learned (K.W.L.); and problem-solving strategies. PowerPoint, videos, maps and more are helpful for teachers and appealing to learners. There are also different strategies concerning evaluation of distance learning.

These eight themes revolved around the (a) nature of the delivery method (flexible but requires supportive measures, partnerships and technological access); (b) efficacy of the home learning environment; (c) necessity of new skill sets like digital literacy; and (d) changing roles of teachers and how they teach (see Table 1). This collection of concerns is echoed in the literature (e.g. Al-Maghdawi, 2009; ALsayi, 2016; Bušelić, 2012; de Oliveira et al., 2018; Ozdamar-Keskin et al., 2015; Mann et al. 2020). The voices of Saudi teachers attending education postgraduate school proved to be in line with the DE literature. Participants expressed clear understandings of the pros and cons of distance education. They further appreciated that it can be synchronous or asynchronous (Almulla, 2016; Al-Omari, 2019; Aoki, 2012).

3.1 Sub-task one: Applying curriculum theory to distance education

Emergent from their own reflections (Bolton, 2009) while teaching during the pandemic using DE platforms, the authors thought it would be prudent to prompt their students (i.e. in-service or trainee teachers) with this query: "How will you implement what you have learnt in your studies so that distance education can be effectively provided?" The participants shared a rich repertoire of ideas drawing on their curriculum theory courses. They addressed issues pertinent to teachers and teaching, students and learning, stakeholder communication and collaboration, equal access to distance learning and digital literacy.

Respectively, participants said that new and in-service teachers must be taught about both distance learning platform usage and DE pedagogy, including student assessment. Alajlan et al. (2014) concurred that teachers need support when shifting to DE. Pedagogical recommendations from our study participants included moving beyond traditional lecture, rote learning and memorisation. Instead, teachers must learn how to use small-group learning activities, project-based learning and collaborative learning, and they must know how to use interactive technology (Colman, 2020). Participants also said teachers will have to loosen up their expectations around the teacher-centred approach and make room for flexibility in assignments, meeting times and communication methods (de Oliveira et al., 2018; Monarch Media, 2016).

To continue, participants said teachers will face changing roles shifting from lecturers who hold all information to facilitators, guides, coaches, and leaders that help students when the latter ask for it or appear to need it (Bušelić, 2012). Teachers' new role in DE is to move beyond preparing lessons full of content delivered in person to planning, designing and creating an online learning environment. Moore and Kearsley (2015) concurred that DE requires special methods of education and design; teachers must be supported in this process (Alajlan et al., 2014). Participants also said that teachers must gain new respect for differential learning (i.e. modify teachings to meet learners' styles and needs) and differentiated student assessment (Colman, 2020).

Participants felt that assessment and evaluation should change from summative to formative with more attention to assignments rather than just tests and finals (per Bušelić, 2012; Colman, 2020). Differentiated learning means teachers must take extra effort to discern students' different academic needs and strengths. In an interesting twist, some participants recommended that teachers themselves should be evaluated to discern how well they are doing with DE pedagogy.

Regarding students, participants affirmed that more than rote learners, students must be socialised to engage with self-directed learning, gain self-motivation, and learn and practise time management skills (ALsayi, 2016; Sampson, 2003). Participants believed that learning alone in a home environment means students will have to monitor themselves rather than be managed in a structured classroom (Al-Maghdawi, 2009; ALsayi, 2016). This process will be more assured with improved communication among students, teachers and parents. To that end, participants suggested using questionnaires, video chats, audio clips, social media, and educational platforms to stay on task in DE.

Distance education is totally dependent on technology (Alqahtani, 2010; Alnjm, 2019; Kaplan & Haenlein, 2016). Participants said that for students to learn, both students and their parents must be supported as they master digital literacy, which means making of new habits engaging learning anywhere and anytime while using a new generation of technologies (Ozdamar-Keskin et al., 2015). Regarding the latter, participants said educational agencies and institutions must ensure equitable access to distance learning technology (e.g. computers, Internet access). This will require enhanced support from (Alsheri, 2014; Razan, 2010) and collaboration (maybe first ever) amongst a variety of

stakeholders to make DE successful (e.g. education government offices, school administration, parents and guardians, and ICT service providers) (Sampson, 2003).

3.2 Sub-task two: Advocating merits of distance education

Again, emergent from their own reflections (Bolton, 2009), the authors were interested in their postgraduate students' ability to "convince others of the merit of distance education." Approximately one fifth of the participants addressed this subtask. Their thoughts mostly revolved around its (a) flexibility, (b) learners' acquisition of specific skills and (c) time and money savings. Respectively, they touted distance education's ability to reach students anywhere, anytime at any age if learning is adapted to learners' preferences, styles and talents (de Oliveira et al., 2018; Monarch Media, 2016). This flexibility was the most mentioned benefit.

Participants further believed that studying via DE, if effective, enables learners to acquire or nurture skills such as self-motivation, self-reliance and self-refection. Students who lack these skills may be disadvantaged with distance learning (ALsayi, 2016; Sampson, 2003). Kanwar and Taplin (2001) reported that DE learning opportunities increased students' self-confidence. Participants in our study said that DE can help students gain the opportunity to become independent learners who can practise their communication and collaboration skills and enhance their digital literacy (Ozdamar-Keskin et al., 2015). Also, they suggested that DE saves time and money, which is beneficial in times of teacher and/or classroom shortages (Al-Maghdawi, 2009; ALsayi, 2016).

To a lesser extent, study participants commented on (a) distance education's usefulness for insuring education continuity during crises (Alshehri, 2014; Burns, 2012); (b) learners' novel access to diverse types of information, learning techniques, other's knowledge and teachers from around the world; and (c) parents' increased ability to communicate with teachers and be involved in their child's education process.

In summary, the literature is rich with discussion of the benefits of DE (e.g. Alshehri, 2014; Burns, 2012; Kanwar & Taplin, 2001) most of which were embedded in the data. Participants agreed that DE can be flexible, economical, empowering, and it can effectively bring learners, teachers and parents together (de Oliveira et al., 2018; Monarch Media, 2016). Education interrupted due to crises can continue unabated albeit differently, and learners benefit from exposure to people and pedagogy far beyond their regular learning environment. Some participants effectively argued that people can be convinced that learning at a geographical and temporal distance has its benefits (Kaplan & Haenlein, 2016).

4. Conclusions

This exploratory study reflects perspectives of students who are current practitioners or future practitioners in education in a country that is investing in distance learning by importing technologies developed in other parts of the world. However, Khalil et al. (2020)'s research involves medical students who have a need to conduct clinical and lab work. Their study participants are in favour of live sessions although simulators can be used to some extent when DE is the only option. Both Khalil et al. (2020) and Mann et al. (2020)'s findings confirm students' need for support from others (such as IT providers, course providers, faculty, teachers and parents) in making DE successful in Saudi Arabia (Khalil et al, 2020, pp. 5-7; Mann et al., 2020, Part 2). The findings of this exploratory are also meaningful, because the KSA's (2016) Vision 2030 aspires to educate a new generation that is equipped with advanced scientific information and knowledge, which positively affects the growth and development of Saudi society on all levels. Increased focus on and awareness of distance education in

the KSA behoves education officials and curriculum planners to create a suitable and supportive DE environment. Existing and future teachers' comfort with and confidence in this mode of teaching, as evidenced in this exploratory inquiry, bodes well for the KSA and its intent to support distance education. For further research on DE in Saudi Arabia, it is recommended to expand the sample frame to other Saudi provinces beyond the Eastern Province and include many more Saudi higher education institutions across the country.

Acknowledgements

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