Interdisciplinary Journal of Virtual Learning in Medical Sciences

Original Article

Educational Experts' Lived Experiences of the Virtual Education Networks for Students of Secondary Schools in Selected Countries (Iran, Iraq, Lebanon, and Syria)

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ABSTRACT

Background: The rapid adoption of virtual education has reshaped teaching and learning globally. This study explores the lived experiences of secondary school educational experts in Iran, Iraq, Lebanon, and Syria, focusing on the impact of virtual education networks on students' scientific, personality, cultural, and religious development.

Methods: A qualitative phenomenological approach was employed during the academic year 2022–2023. Semi-structured interviews were conducted with 24 educational experts selected through purposeful and snowball sampling. All interviews, each lasting between 30 and 80 minutes, were recorded and then transcribed. The data was analyzed following Colaizzi's seven-step approach. To ensure the validity of the findings, member checking and peer debriefing were conducted, and inter-coder reliability was confirmed with a Holsti's coefficient of 0.87.

Results: Analysis of 131 open codes revealed 21 components across four domains. Key findings included enhanced learning and technological skills alongside challenges like student boredom and reduced education quality (scientific); increased educational efficiency but also psychosocial problems and cyberspace addiction (personality); shifts in thought patterns, lifestyle, and interpersonal communication (cultural); and ambivalence toward religious beliefs alongside exposure to inappropriate content (belief).

Conclusion: The findings indicate that while there are some unfavorable outcomes, the positive aspects are significant. They underscore the importance of parental and school supervision in guiding students effectively and minimizing vulnerabilities.

Keywords: Distance, Education, Educational Technology, Secondary Level, Education Experts, Lived Experiences, Phenomenology

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Please cite this paper as:
AL-Tameemi OKL, Nadi MA, Aljbara RRY, Yazdani Z. Educational Experts' Lived Experiences of the Virtual Education Networks for Students of Secondary Schools in Selected Countries (Iran, Iraq, Lebanon, and Syria). Interdiscip J Virtual Learn Med Sci. 2024;15(1):76-94.doi:10.30476/IJVLMS.2024.99405.1243.

Received: 10-07-2023
Revised: 18-01-2024
Accepted: 22-01-2024

Introduction

In late 2019, symptoms of the coronavirus pandemic were reported in China (1). The virus spread affected all institutions and the planet (2, 3). New technologies and knowledge of internet-based technologies have significantly changed teaching and learning approaches, and virtual education now offers numerous advantages (4). A learning environment that allows students to study whenever and wherever they want without traveling or meeting in person reduces study time (5). In a virtual classroom, students are provided with online and offline resources, while instruction and content are delivered via the Internet (6). Traditional teaching and learning techniques have changed with online education. Effective interaction is essential and plays a central role in the educational process. Online education provides complete contact with cutting-edge technology, offering simple, quick, and thorough access to the latest information.

In contrast, traditional school education offers minimal and unremarkable interaction (7, 8). Since they can use educational resources and multimedia programs during an online course, students (especially those in remote locations) can complete their assignments more effectively and actively solve their academic problems. Learners acquire self-awareness and self-knowledge through this type of instruction, which inspires them. Learners are more capable of evaluating themselves when they have achieved self-knowledge (9). The attitudes and feelings of learners and students in virtual education are more favorable than in traditional education. Thus, the main advantage of virtual education is time- and location-independent learning in individual and group work and a positive attitude toward it (10).

Researchers have increased their efforts to study the role of virtual education and its positive and negative effects, examining these effects quantitatively (using questionnaires) and qualitatively (using educational experts' experiences) at different levels of education. This is due to the epidemic of virtual education triggered by the Corona pandemic. The study's results reveal various opportunities, limitations, strengths, and weaknesses, which can be insightful and informative. For instance, developing technological skills, advancing and renewing curriculum elements, addressing emotional and psychological needs, fostering social skills, developing science education, and addressing aspects of biological and physical education are all successful pedagogical experiences that elementary educational experts have had in the e-learning environment (8).

The experiences of educational experts during the COVID-19 pandemic have shown some positive outcomes, including improved media literacy, elimination of expensive transportation costs for both experts and students, creating a more attractive classroom environment, increasing the dignity of education experts, engaging parents in the education process of their children, compensating for academic difficulties by expanding educational resources, and fostering a spirit of cooperation and self-directed learning (11). The results of the research about the effects of virtual education refer to the following points: the unfamiliarity of students with virtual education, mocking and joking with virtual education, poor participation of students, lack of familiarity with educational techniques, lack of suitable software, insufficient content, non-objectivity of content, and lack of direct communication. Educational experts have identified insufficient parental involvement, excessive assignments, and exclusion of students from the school atmosphere as major issues (7).

In addition, the impact of e-learning on criteria such as student engagement, recognition, performance expectations, control and satisfaction, students' willingness to continue learning online, self-esteem, and confidence in the e-learning system was highlighted (12). According to recent research, e-learning positively impacts students' academic performance. It improves their GPA (Grade Point Average) by providing quick access to vast information with minimum effort. E-learning also helps cater

to individual differences, adapting to each student's unique characteristics, making learning more flexible. Moreover, there are statistically significant differences between the average grades of male and female students. A good impact on learning and information transfer through the e-learning system is also ensured by the three aspects of simplicity and usefulness, email contact, and growing social connections (13). The results of Makri and colleagues' study on three countries (Austria, Indonesia, and Thailand) in 2021 showed that virtual networks have triggered a trend toward global homogeneity, leading to an alignment of cultures worldwide. The efforts of some nations to develop their national identities and traditions have been thwarted and undermined (14).

Furthermore, the rise of virtual networks would have enabled influential individuals worldwide to communicate with each other, leading to exposure to diverse cultures and religious beliefs, which could have threatened their national and religious identities. There is evidence of users' motivations for using virtual spaces, which show the same nations' characteristic patterns. Virtual systems provide an interactive approach to education, which enhances student participation (15), self-efficacy (16), enjoyment (17), self-regulation of their learning skills, and socialization (18).

To compensate for the academic setbacks caused by quarantine, parents need to take more responsibility for and get involved in their children's education. Teachers can facilitate this by sharing information quickly and providing updates as soon as they become available. They should also make learning more exciting and engaging for students daily and provide flexibility in the starting times of classes. Finally, teachers can encourage students' creativity by allowing them to present their assignments in novel and innovative ways. These are all effective ways to improve the teaching and learning process. (19). However, the findings of several studies suggest that this teaching style also has drawbacks, including superficial learning by learners. Inadequate education expert administration and monitoring of tests, doubts regarding the accuracy of homework (19-21), lack of student concentration, the disinterest of virtual learners (21, 22), lack of human contact (23), social exclusion, lack of engagement, and increasing screen use (18), lack of infrastructural facilities, problems of Internet connections, lack of student familiarity with virtual education, or digital illiteracy (24) and virtual education, particularly in underprivileged areas, as well as promoting educational inequity through the inability to assess students' actual learning progress and the loss of education experts control, the increased use of the Internet and cell phones by some students, the inappropriate and excessive use of others' materials, the use of software as a promotional tool, and the reduction of some students' motivation to learn through the new teaching method (19). The COVID-19 pandemic has not only affected the healthcare system but also has significant impacts on global education systems. The urgency for virtual education has been highlighted. Education experts, students, and parents experienced school closures in March 2018 in Iran and for a similar period in other countries following the coronavirus pandemic, under medical recommendations and due to compliance with social distancing to contain and eradicate the disease (21). All educational planners and practitioners were therefore forced to actively engage with virtual education, establish a direct link between the world of education, technology, and educational approaches, and ultimately accelerate the process of virtual education. During the COVID-19 pandemic, many schools had to adapt to virtual education, resulting in students experiencing it for the first time. While students in advanced countries were familiar with virtual education and had experience with it, there needed to be familiarity and experience in developing and low-income countries.

The researchers are interested in studying the impact of virtual education on Muslim students. In the past, students used to live in

a small and closed environment where their identity, beliefs, and attitudes were shaped by environmental factors and face-to-face communication. Their identity was derived from their environment and they adhered to the local traditions, rarely subject to change or transformation. This poses a challenge in identifying ways to help students adapt to new environments and experiences. In today's world, virtual networks and online/offline educational systems have made it possible for students to be influenced by non-local and global environments, which in turn has led to multiple sources for their identification. As a result, location is becoming less significant.

The digital generation gap between parents and children has become a critical challenge, alongside the issue of educational inequality. Due to the lack of teachers in deprived and underprivileged areas of the country, even the neighboring countries that have problems due to political, economic, or geographical reasons cannot have proper education. Still, by identifying the opportunities and limitations of virtual education, a practical step can be taken toward educational justice and help the students of deprived areas. With all its drawbacks and problems, this crisis provided a perfect opportunity for the universal adoption of online learning.

Many studies have discussed the challenges that come with virtual education. It appears that studying the impact of virtual education on teenage students (in the secondary stage) in Islamic countries with regard to their culture, religion, age of puberty, and specific challenges they face is necessary. Since this age group is strongly influenced by their environment, it is important to pay special attention to them as they approach the time of entering university. This research gap needs to be investigated. The current study holds great significance as education experts and students were compelled to shift from traditional to virtual teaching methods due to the COVID-19 pandemic. Moreover, there is a growing need for a suitable learning environment owing to the expanding student population, increasing demand for education, and the technological advancements of the global scientific revolution. In this context, the two critical pillars of the online learning process are the education experts and students. The roles of educational experts, students, and teaching content have evolved in virtual education. In addition to formal instruction, informal virtual instruction has direct and indirect effects. Valuable lessons can be learned from personal experiences. In this research, the following question will be addressed: According to educational experts' personal experiences, what impact do virtual education networks have on the scientific, personality, cultural, and belief aspects of students in specific countries such as Iraq, Iran, Lebanon, and Syria?

Methods

Study Design and Setting

The current research was conducted using a qualitative approach. The researcher studied the lived experience of education experts using a phenomenological method regarding the role of virtual education networks on the scientific, personality, cultural, and religious concepts of secondary school students in selected countries (Iran, Iraq, Syria, and Lebanon).

Participants and Sampling

Participants of this study were educational experts who had experience in virtual education and worked in four selected countries during the academic year of 2022–2023. The researchers used the purposeful and snowball sampling method to choose the participants. It is important to note that there was no formal and comprehensive virtual education in Syria and Lebanon due to infrastructure problems, war, and lack of smartphone access. Therefore, the snowball sampling method was used to select the participants. The chosen participants were educational experts with a master's degree and at least 15 years of teaching experience.

Tools/instruments

Semi-structured interviews were used as

the research tool to gather information from educational experts in the selected countries of Iran, Iraq, Lebanon, and Syria.

Validity and Reliability - Last but not least, to validate the qualitative research findings, the researcher's self-review criteria, member review method, peer review, and holistic approach were applied according to the criteria offered by Creswell and Miller. To ensure the validity of the qualitative findings, Holsti's coefficient of reliability was used. One of the professors of *Bu-Ali Sina* University of Hamedan helped the researchers in the analysis phase as the second coder. The following is the formula used:

PAO: (Holsti's coefficient of reliability=0.87), M: (the number of shared encodings between two encoders=131 open codes), N1: (the number of codes extracted by the first coder=148 open codes) and N2: (the number of codes extracted by the second coder=153 open codes).

- PAO=2M / (n1+n2)
- PAO=2(131) / (148+153)
- PAO=0.87

The reliability rate between the two coders was obtained using Holsti's method (0.87).

Data Collection

The interviewer in Iraq, Lebanon, and Syria was a male Ph.D. student of educational management who worked for the Iraqi parliament. The interviewer in Iran was a female Ph.D. of educational management with 17 years of experience, who was an official personnel of the university. Both interviewers started by briefly explaining the research objectives, topics, and methods to the interviewees. Participants were notified that their involvement was voluntary, personal information would be protected, and results would be interpreted upon request.

After obtaining prior consent, semi-structured individual interviews were conducted for a period of 30 to 45 minutes each. The duration of the two interviews was 80 and 65 minutes respectively. Due to language barriers between Persian and Arabic, an Iranian translator was employed as a liaison. The translator had a master's degree in educational management and was proficient in the Arabic language to assist the researchers in this study. The researcher conducted 24 semi-structured interviews to gather information. Out of these, 15 interviews were conducted face-to-face, and 9 interviews were conducted over WhatsApp. The researcher gathered sufficient data after these interviews and reached theoretical saturation. All the interviews were recorded with the permission of the interviewees. Four interviews were conducted on video with Iraqi participants. The interviewer did not have to repeat any interviews. During the interviews, the researcher took notes of the important points discussed by the interviewees. Face-to-face interviews were conducted at the workplace of the interviewees after prior coordination. However, three participants declined to be interviewed, citing personal reasons.

Data Analysis

The interviews were analyzed using Colaizzi's seven-stage analysis method. The interviews were initially recorded, and a complete transcript was produced. Colaizzi's strategy consists of seven stages as follows: A) a thorough reading of all descriptions; B) extraction of key terms and phrases related to the phenomenon; C) sorting and comprehension of key terms and phrases related to the phenomenon; D) coding and extraction of subcategories; E) grouping of subcategories and extraction of main categories; F) creation of a truthful and concise description of the phenomenon under study; and G) interviewing participants to develop further the discovered concepts (three interviews were conducted). Finally, the qualitative results of this research (inductive approach) yielded 21 components and 131 open codes, proving the role-playing and vital elements of virtual education for students.

Results

This study conducted semi-structured interviews with nine female and fifteen male

educational experts. Their teaching fields were English language, education management, physics, biology, literature, geography, and religious studies. Fourteen interviewees had Ph.D. degrees, three were Ph.D. students, and seven had master's degrees. The interviewed candidates had 15 to 23 years of work experience. Throughout the interviews, they discussed the various ways virtual education networks affect students, highlighting both positive and negative impacts. The complete details of these aspects are provided in the tables. The data analysis was performed using manual coding and content analysis, and the results were categorized into four concepts, as shown in Table 1. The final research model is also depicted in Figure 1.

Question 1: What were the impacts of virtual education networks on the scientific concept of students?

The researcher asked the education experts to share their educational experiences. After analyzing and coding the interviews, 6 components and 41 open codes were identified for the scientific concepts (Table 2).

Table 2 lists the components and open code factors that affect scientific concepts, according to education experts' experiences. This demonstrates that virtual teaching has a positive impact on scientific concepts by providing more prosperous and sustainable learning experiences and avoiding boredom and frustration that may result from a lack of familiarity.

Table 1: Research concepts, components, and open codes

Concepts	Components	Open codes
Scientific	6	41
Personality	4	33
Cultural	6	33
Belief	5	24

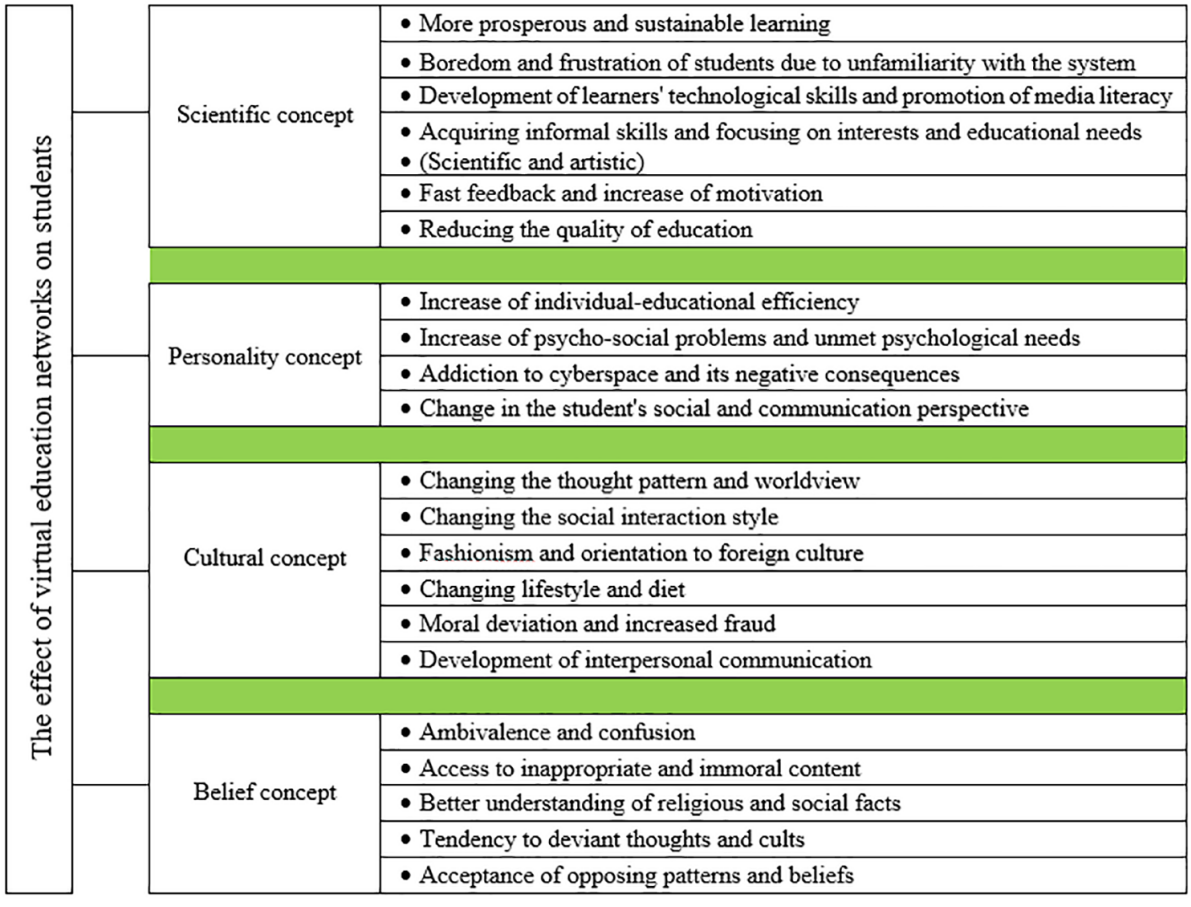

Figure 1: Final research model.

Table 2: The impacts of virtual education networks on students' scientific concepts

Concepts	Components	Open codes (41 Codes)
Impacts of virtual education networks on students' scientific concepts	More prosperous and sustainable learning	Acquiring new abilities like independent learning and self-learning.
		Providing the possibility to review the material several times, especially for students with learning problems.
		Less forgetting and longer retention of the material in the mind are possible due to the possibility of the study time, method, and so on.
		Due to the higher adaptability of virtual training and the possibility of it doing so in inclusive conditions, there will be more and deeper learning.
		Mental development brought on by engaging in virtual schooling and developing critical and creative thinking abilities.
		Improve your grammar, writing, and reading abilities.
		Access to the Internet and search engines has increased linguistic proficiency and vocabulary depth.
		Having enough time to read and share information.
	Boredom and frustration of students due to unfamiliarity with the system	Students' exhaustion results from their unfamiliarity with how to use virtual education systems and tools.
		Due to the education expert's lack of preparation of instructional materials in the online learning environment, much time is wasted.
		Due to students' lack of experience with instructional software and programs, there is little efficacy.
		The insufficiency of virtual education and its capacity to satisfy students' educational demands.
		Students' discontent and education experts' lack of preparation and expertise in virtual education methodologies
		Due to the Internet's slowness and the system's challenges, pupils and education experts are discouraged and lack enthusiasm.
	Development of learners' technological skills and promotion of media literacy	Allowing access to more instructional resources for kids through technology tools.
		The use of Internet databases is rising.
		Pupils' exposure to the educational practices, infrastructure, and resources used in advanced nations.
		Instructors and students using educational resources from other nations.
		Increasing student understanding of information technology.
		Lowering the time and effort needed to access information, learning tools, and materials.
		Through virtual reality applications, detailed observation and interaction with abstract circumstances are possible.
		Increased learning due to information networks and visual and auditory effects being used simultaneously.
		Increasing student and instructor familiarity with the creation of electronic material.
	Acquiring informal skills and focusing on interests and educational needs	Raising pupils' knowledge and awareness of numerous topics, such as sports, health, etc.
		Ideas are expanded as a result of collaboration and reciprocal assistance.
		Due to their participation in worldwide educational conferences and seminars, learners are more informed.
		Gaining knowledge by allowing access to lecturers, professionals, and experts in various places and nations.
		Interaction with various educational contexts and autonomous learning of necessary knowledge and information.

	Components	Open codes (41 Codes)
	Fast feedback and increased motivation	Increasing student performance feedback online and learning more about their strengths and shortcomings.
		Parents who work with their children become more aware of their strengths and flaws.
		Greater learning assurance as a result of quicker access to more knowledge.
		Education's adaptability and students' greater desire to be in charge of their learning.
		Because it offers a range of possibilities, it is appropriate for interested students.
		Putting students first and teaching with an emphasis on the facilitator and guide roles in teaching and learning.
	Reducing the quality of education	Lack of planning and preparation before implementing virtual education.
		Lack of accurate and coherent assessment of virtual education's effectiveness.
		Ignoring or reducing inquiry-based learning in the online classroom.
		Minimizing the likelihood that education experts will check students' assignments.
		Decreasing the quality of instruction and learning because there is no infrastructure for virtual learning.
		The reduction in educational quality brought on by instructors' lack of experience in developing content and interacting in virtual spaces.
		Increasing pupils' grades and grade point average as opposed to decreasing their intellectual and practical aptitude.

Working with the system helps students develop informal skills, media literacy, and focus on their educational interests and requirements (both scientific and creative), leading to better quality instruction, increased motivation, and timely feedback. Unlike face-to-face education, virtual education networks have a significant impact on students' scientific skills and knowledge capacities, which can be either positive or negative. Traditional and face-to-face education can have different outcomes. For better clarification, we have provided two verbatim quotes from the interviews as follows:

- During the virtual class, the students and I learned how to use computers and the Internet. The class improved the students' knowledge in these areas and effectively developed our ability to interact with children. As a result, both the education experts and the students have developed their computer skills. Furthermore, the engagement in group work increased significantly, as reported by Interviewee 8.

- The students who participated in virtual classes learned about modern technologies and how to use them. They developed their technical skills, learned how to use computers, gained more knowledge about the general and medical fields, and received instruction in technical and creative disciplines through various networks. According to one of my students, I even used virtual training to fix the washing machine at home, as reported by interviewee 15.

Question 2. What were the impacts of virtual education networks on the personality concept of students?

The researcher asked the education experts to share their educational experiences. After analyzing and coding the interviews, 4 components and 33 open codes were identified for the science concepts (Table 3).

According to education experts' experiences, the components and open code factors affecting the personality concepts are listed in Table 3. Experts in education have had experiences that make it possible to describe the impact of virtual education on personality concepts.

Table 3: The impacts of virtual education networks on students' personality concepts

Concepts	Components	Open codes (33 Codes)
The impacts of virtual education networks on students' personality	Increasing individual-educational efficiency	Students feel more psychologically secure since they are less afraid of being teased by their peers.
		Increasing the level of demand among students, particularly among female students.
		Increased self-confidence as a result of independent learning and action.
		There are fewer issues with timid and anxious pupils because of recording and access to resources outside of the classroom.
		The students' persistence, use of rational thought, critical analysis, and criticism.
		Increasing one's self-assurance and attempts to see the fruits of one's labor.
		Growing in bravery and boldness as a result of seeing it more in others.
	Increasing psycho-social problems and unmet psychological needs	Decrease in pupils' communication abilities due to fewer in-person contacts.
		Comparing one's life to what it appears to be in other people's lives in virtual networks and feeling inferior and unpleasant as a result.
		Drop in the number and quality of students' communication, which results in a decline in their mental health and happiness .
		Reduced mental and physical health due to insufficient sleep and continual brain attentiveness.
		Due to the abundance of virtual information, there is a distraction and a consequent decline in accuracy and focus.
		Among students, there is an increase in negative psychological traits such as neuroticism, worry, and dread.
		Depression, loneliness, and poor self-esteem brought on by comparing oneself to others.
		Lowering creative thinking in the classroom and increasing celebrity emulation.
		A rise in pupils' usage of computer games, physical and aggressive interactions, and anxious tics.
		Students are becoming more physically involved and engaged in their face-to-face interactions.
		Indiscriminately following and imitating others' lifestyles.
		Reducing the motivation to participate and eliminating group and team games.
		A strong desire to leave the challenging contemporary world and enter a simple virtual reality.
		Kids' identity crises are getting worse; they're weak, and they have doubts about their religious beliefs.
		Student's false identity in a cyberspace setting.
	Addiction to cyberspace and its negative consequences	Utilizing the Internet for pleasure and recreation rather than to support learning.
		Cyberspace addiction and the propensity of most students to drop out of school.
		Sharing private images and videos while endangering the privacy of students.
		Premature emotional and sexual development as a result of seeing illicit films.
		Physical and mobility issues, particularly those involving the neck muscles, the eyes, the hand and foot joints, and inactivity.

	Components	Open codes (33 Codes)
	Change in the student's social and communication perspective	Greater boldness and heroism than pupils from previous generations due to greater learning independence.
		Boosting the self-assurance of timid and ashamed youngsters.
		Increasing the academic performance of shy adolescents who struggle with low self-esteem.
		Blindly copying and embracing the personality tics of celebrities.
		Reducing shyness and embarrassment due to lack of face-to-face communication and Education experts-student interaction.
		More impact of extroverted students on other students due to more participation in virtual groups.

While virtual education can improve personal and academic efficiency, there are also negative effects, such as dependence on virtual space, an increase in psychosocial difficulties, violation of psychological requirements, and changes in the social and communicative perspectives of learners. One of the crucial criteria for evaluating the quality of education is personality concepts, which can be affected by virtual educational networks in many ways. It's essential to understand how virtual education can influence the personality and psyche of learners. For better understanding, two verbatim quotes from the interviews are provided below:

- There has been an increase in negative emotions experienced by students, such as sadness, guilt, hatred, anger, and anxiety, leading to low resilience and increased stress and anxiety levels. This is supported by observations of the environment, conversations between parents, and news reports. In addition, many students are experiencing loneliness, which has resulted in self-mutilation with a razor (as a way of relaxation), frequent headaches, and other related symptoms, as reported by interviewee 16.

- In today's world, there seems to be less news about group and team games and activities as students have taken to the virtual world instead. Children and students today use the Internet frequently, making it both a refuge and a source of frustration for them. This excessive use of technology has led to their isolation. Students now often have an exaggerated perception of themselves and their online identity, which can be fictional and fleeting, as reported by interviewee 16.

Question 3: What were the impacts of virtual education networks on the cultural concept of students?

The researcher requested educational experts to share their learning experiences. After analyzing and coding the interviews, they identified 6 components and 33 open codes related to science concepts (Table 4).

According to education experts' experiences, the components and open code factors affecting the cultural concepts are listed in Table 4. Thus, it is conceivable to describe the impact of virtual teaching in terms of the cultural concepts of changing thought patterns and worldviews based on education experts' experiences. Style, fashion, and the propensity for foreign cultures in social interactions are changing, as are the way we eat and live, the skewness, the increasing rate of cheating, and the growth of individual partnerships. One of the most critical factors that can significantly impact individuals and society is the cultural component of education. Virtual training, like other training techniques, can have good and bad cultural impacts, and attention to these impacts can be the basis for their identification and constructive development. Two verbatim quotes from the interviews are provided below for better understanding:

- Children's views and personalities changed, eventually changing the culture of each individual and our society as a whole. Despite virtual networks, our culture (in Iraq) was one of social interaction and meeting and visiting family, friends, and acquaintances, which is no longer possible today.

Table 4: The impacts of virtual education networks on students' cultural concepts

Concepts	Components	Open codes (33 Codes)
The impacts of virtual education networks on Students' cultural concepts	Changing the thought pattern and world view	Characteristics are being reversed and interchanged, particularly within informal online communities.
		Educating kids about many cultures and fostering the development of new cultures in them.
		Acknowledging the valuable of advanced societies and abandoning obsolete traditions and baseless beliefs.
		Inclination to live a more contemporary lifestyle and to utilize virtual networks more often.
		Focusing on the elegance and beauty of the virtual world without knowing its hidden truths.
		Filtering one's limits and flaws while observing the outward manifestations of other people's lives.
	Changing the social interaction style	Sharing personal data and images online.
		Interacting, conversing, and squandering time to make or reconnect with friends.
		Spending much money on the phone and the internet while eliminating and filtering in-person conversations.
		Reducing parental involvement, escalating the values clash between parents and kids, and not paying attention to the pupils.
		Students are moving away from their parents and reducing interpersonal communication with family and friends.
	Fashionism and orientation to foreign culture	Western fashion trends are increasingly overshadowing traditional ethnic clothing and styles in today's fashion landscape.
		The fading of traditional practices and religious models and the emergence of celebrities and bloggers as role models.
		Fashion and a propensity for embracing non-native and foreign cultures.
		Altering the way people look and concealing and creating body tattoos.
		The student body's homogeneity, the adoption of Western models, and the bending of borders, traditions, and local customs.
		Due to their awareness of new knowledge and advances in life, certain pupils are receiving more attention for their ambition and general well-being.
		Reduction of cultural and linguistic diversity caused by the adoption of foreign practices and vocabulary.
	Changing lifestyle and diet	Altering eating habits and consuming more unhealthy foods and fast meals.
		Altering eating habits and consuming more unhealthy foods and fast meals.
		Along with weight gain and obesity, there is a lack of healthy enjoyment, exercise, and inactivity.
		Focusing on how others seem and raising expectations for shared lifestyles, particularly among the younger generation.
	Moral deviation and increased fraud	Increased likelihood of data theft and hacking of private files and important information.
		Increasing the likelihood that pupils will plagiarize and copy.
		Exchange of vulgar remarks and moral transgressions among students.
		Girls' and boys' increased emotional attachment in cyberspace and their propensity for hidden partnerships.
		Spreading misleading information, falsehoods, and rumors among many groups
		Knowledge of and dependency on modern and industrial pharmaceuticals
		Exam plagiarism and cheating are on the rise.

	Components	Open codes (33 Codes)
	Development of interpersonal communication	Despite its drawbacks, it provides great assistance during illness and quarantine.
		Increasing the family's involvement in the virtual environment and their understanding of the student's progress.
		Increasing communication between students who share interests.
		Increasing the acceptance of participation and diverse viewpoints.

Our culture was based on the Arabic language and Iraqi dress, both of which have significantly changed. The Arabic-inspired cuisine that was part of our culture was influenced and changed by the new media and internet advertising trends. Unfortunately, these changes can also be observed in the daily lives of some students, as reported by interviewee 1.

- Students acquire new morals and beliefs and then adopt new actions. Ideally, we can transform misconceptions into correct beliefs and actions using helpful educational resources and networks. However, some students have misunderstood and underestimated themselves after seeing scenes and images of a false and unreal life in online communities, as well as the satisfaction of people such as celebrities and bloggers. Instead of focusing on the real them to regain their lost self-confidence, they began to compete with them, which has dramatically harmed Iraqi students. As reported by interviewee 1, this is dangerous.

Question 4: What were the impacts of virtual education networks on the beliefs concept of students?

The researcher asked the education experts to share their educational experiences. After analyzing and coding the interviews, 5 components and 24 open codes were identified for the science concepts (Table 5). The main components and open codes affecting the belief concepts are listed in Table 5. Thus, from the education experts' observations, it can be inferred that the impacts of virtual teaching on belief concepts include ambiguity and confusion, access to inappropriate and immoral content, a better understanding of religious and social facts, inclination to deviant thoughts and sects, and acceptance of contrary models and beliefs. The belief concepts, which are affected by virtual education networks in several aspects, are one of the most important criteria for evaluating the quality of education, as well as other concepts and components of education. For better understanding, two verbatim quotes from the interviews are provided below:

- According to the second interviewee, the ability of Iraqi students to change false views, correct beliefs, and obtain reliable information that confirms their opinions is significantly affected by virtual education, as reported by Interviewee 2.

In the concepts of religious impact, I must mention that informal virtual education networks have helped students better understand the issues related to religion, so they have a higher understanding than those who use these tools to reach and meditate on religious truths, including explanations and interpretations of the Holy Quran and the Sunnah of the Prophet's Sunnah. Not to do or have, especially in leisure time, as reported by Interviewee 3.

Discussion

Virtual education has become essential to enhance the efficiency of teaching and learning. The traditional approach to teaching and learning is no longer sufficient to meet the increasing demands of people due to the advancements in technology, such as the Internet and social media platforms, the expansion of knowledge and technological frontiers, and the rise in the demand for education. Due to the COVID-19 pandemic, many schools have shifted from in-person to virtual classes (25), affecting 1.6 billion students across 195 countries (26).

This study investigated the influence of

Table 5: The impacts of virtual education networks on students' belief concepts

Concepts	Components	Open codes (24 Codes)
The impacts of virtual education networks on students' belief	Ambivalence and confusion	A religious experience of duality brought on by contrasting one's life with how other people appear to spend their lives.
		Students' fantasies and departure from the objective, actual reality.
		Parents and students are increasingly at odds over religious and personality values.
		High-level and odd religious inquiries and parents' unwillingness to respond.
		Making unrealistic goals and wishes for a future marriage through false promises.
		Expansion and normalization of indiscriminate communication with different genders.
		Unwillingness to get married, have kids and take on family responsibilities.
		Duality in evaluating the veracity of online content vs. family-friendly instructional materials.
	Access to inappropriate and immoral content	Access to unsuitable and immoral information is simpler.
		Encouraging drug usage among kids.
		Increasing unorthodox and unlawful interactions with acquaintances and people of different genders.
		Increased cybercrime and moral issues due to releasing private documents and images.
	Better understanding of religious and social facts	An improved comprehension of religious realities, as well as an explanation of and meditation on the Prophet's Sunnah and the Holy Quran.
		Quickness, adaptability, and facilitation of responses to numerous pupils in religious discourse.
		Understanding of the precise dates for pilgrimages, special festivals, and the proper approach to praying.
		Pupils' virtual empathy and increased sharing of their joys and sorrows.
		In a biased society, reducing gender bias and simultaneously educating different genders.
	Tendency to deviant thoughts and cults	Spending too much time online causes one to neglect their religious obligations.
		The diminishing influence of religion and its relative insignificance versus earlier times.
		Promoting phrases, ideas, and even the attire of fringe groups such as homosexuals.
		Due to easy access to and familiarity with extremist faiths and cults online.
	Acceptance of opposing patterns and beliefs	Opposition networks and organizations attempting to change students' attitudes and views.
		Incorrect modeling of Western personalities and celebrities due to the overabundance of information.
		Losing chastity and modesty when attending to occupations that are incompatible with Islamic culture and Western culture.

virtual learning networks on the education of secondary school students in Iraq, Iran, Lebanon, and Syria. The researcher used qualitative methods (phenomenology) to answer the questions. After analyzing the interviews and reaching theoretical saturation with 24 interviews, 131 open codes were identified and classified into 21 components. The scientific concepts included: more prosperous and sustainable learning, boredom and frustration of students due to lack of familiarity with the system, development of

learners' technological skills and promotion of media literacy, acquiring informal skills and focusing on interests and educational needs (Scientific and artistic), fast feedback and increase of motivation, reducing the quality of education; the personality concepts included: increasing individual-educational efficiency, increasing psychological-social problems and harming psychological needs, addiction to cyberspace and its negative consequences, change in the student's social and communication perspective; the cultural concepts included: changing the thought pattern and worldview, changing the social interaction style, fashionism and orientation to foreign cultures, changing lifestyle and diet, moral deviation and increased fraud, development of interpersonal communication; and the belief concepts included: ambivalence and confusion, access to inappropriate and immoral content, better understanding of religious and social facts, tendency to deviant thoughts and cults, and acceptance of opposing patterns and beliefs.

Many of the research findings are consistent with previous studies. The extraction of the component of "more prosperous and sustainable learning" is consistent with the findings of Jawad and Shalash (27), which showed that attention to individual differences, adaptation to individual characteristics, and greater flexibility in learning are among the positive effects of virtual education when various educational tools and methods are used in the teaching process. Students can choose the best teaching method according to their differences and repeat and review lessons without time and place restrictions. As a result, the learning process becomes deeper and forgetting occurs less frequently.

Extraction of the component of "boredom and frustration of students due to unfamiliarity with the system" is consistent with the findings of Ahmadi (7), Dhawan (24), Azmi and colleagues (28) who reported digital illiteracy, the unfamiliarity of students with the virtual education system, and non-participation in education as some of the adverse effects of virtual education on students. Previous findings indicate that online education is boring and stressful, leading to anxiety about exams.

Extraction of the components of "development of learners' technological skills and promotion of media literacy, acquiring informal skills, and focusing on interests and educational needs (scientific and artistic)" is consistent with the results of Ahmadi (7), Tari and colleagues (8), Al-Samarraie and colleagues (29) reported that virtual education provides a perfect connection with advanced technology that provides simple, fast and complete access to the latest information. Virtual education plays an influential role in acquiring informal skills due to its ease of use, usefulness, and quality of information. This led students to acquire new skills, focus and think about new job opportunities and their skill requirements, and even benefit from these pieces of training in order to earn money for themselves and their families.

The extraction of the component of "fast feedback and increase of motivation" is consistent with the findings of Chiriac (9), Hamutoglu and colleagues (30), Bao (31), and Harandi (32), which showed that virtual education had increased motivation and success of students. Online tests and the announcement of results in the shortest time made students aware of their strengths and weaknesses. The more students feel good about their abilities, the more diligent they are facing challenges and the more effort they make. The more internal the person's motivation is; the more academic progress it brings. Internal motivation is more permanent and makes a person not easily disappointed when he/she fails.

Extraction of the component of "reducing the quality of education" is in accordance with the findings of Ahmadi (7) and Niksirat (33). The unfamiliarity of teachers and students with online teaching methods, lack of preparation of appropriate educational content, and students' lack of access to smartphones and tablets. The unfamiliarity of teachers with the design of online questions and the lack of strict supervision ultimately

lead to a decline in educational quality.

Extraction of the component of "increasing individual educational efficiency" is in line with the results and findings of McKimm and colleagues (23), Ayeni and colleagues (34), Ergun and Adibatmaz (35), and Zhu and colleagues (36), who believe that online education is an opportunity for self-education, self-awareness, and self-knowledge, increasing acceptance of responsibility, faith in one's ability, and affecting self-evaluation and self-control of students.

The findings of this research achieved two important points: increasing psycho-social problems and unmet psychological needs, as well as addiction to cyberspace and its negative consequences. Along with the positive aspects of virtual education, concerns have been raised about the challenges it poses for students. The following are some challenges that affect students' well-being at a deeper level. Watching inappropriate movies, comparing oneself with the virtual life of others, hiding one's true identity, and turning educational devices like smartphones and tablets into mere sources of entertainment can all have a negative impact on students' spirits and souls. Additionally, sharing private photos and videos can compromise students' privacy. This addiction has led to early puberty, inactivity, and other related issues. The students frequently navigate between various online platforms. In other words, they became addicted to the Internet and virtual networks. The results of this section are consistent with the findings of Besser and colleagues (37), Casagrande and colleagues (38), and Tajik and Kaveh (39). In their studies, virtual education is reported to cause isolation and insecurity, promote self-disclosure, and lead to high levels of distress, while also providing additional information.

Extraction of the components of "change in the student's social and communication perspective, changing the social interaction style, and developing interpersonal communication" is aligned with the results and findings of Ergun and Adibatmaz (35), and Niksirat (33). They reported that virtual education has resulted in a decreased role for teachers, an increased level of interaction among students, an increased involvement of families, and more teamwork among students. This indicates that one of the benefits of virtual education is the enhanced communication between students, their parents, and their academic subjects.

Extraction of the components of "changing the thought pattern and worldview, fashionism and orientation to foreign culture, changing lifestyle and diet" is in line with the results and findings of Makri and colleagues (14), and Davvetas and colleagues (40). They reported that virtual networks have caused a convergence of cultures across the world. As a result, some nations' efforts to promote their national identity and traditions have proven ineffective and weakened. The widespread impact of globalization and virtual networks has led to changes in the behavior, attitudes, clothing, and food choices of students.

Extraction of the component of "better understanding of religious and social facts" is consistent with Amber's results (41). The advancement of virtual education has provided a platform for students to explore religious sites and seek knowledge about religious issues with ease. The quick response time and specialized discourse have opened up new opportunities for students.

Extraction of the components of "ambivalence and confusion, moral deviation and increased fraud, access to inappropriate and immoral content, the tendency to deviant thoughts and cults, and acceptance of opposing patterns and beliefs" are in line with the results and findings of the Niksirat study (33). The research results indicate that virtual education negatively impacts students' religious, moral, social, and political growth.

Limitations and Suggestions

Qualitative research has the advantage of exposing researchers to new settings and providing them with access to participants' perspectives. Organizing interviews is generally challenging, as respondents may be hesitant to share their thoughts due to personal

or professional reasons. Gaining trust was a challenge, as many interviewees were hesitant to give their consent to having their words recorded. In discussing research results, it is important to note that the Corona pandemic posed a great challenge for educational cadres, experts, and families. Despite the challenges and limitations of virtual education, students were able to achieve good opportunities.

Conclusion

The findings from this study offer valuable support for both educational authorities and families. Despite potential drawbacks, the benefits underscore the significance of parental and school oversight. This guidance can aid students in navigating their academic journey effectively and with reduced risk. Implementing a fresh educational strategy involves guiding students toward enhancing their academic, spiritual, moral, and religious growth. With the backing of families and educators, children can navigate this path with minimal harm.

Acknowledgments

The researchers thank the interviewees in the selected countries.

Authors' Contribution

All authors (OA, MAN, RA, and ZY) were major contributors to the manuscript. OA was responsible for study design, data acquisition, statistical analysis, and manuscript preparation. Meanwhile, MAN, RA, and ZY provided administrative, technical, and material support for the study supervision. All authors reviewed and approved the final manuscript.

Conflict of Interest

The authors declare no conflict of interest.

Ethical Consideration

This study was authorized by the University of Khorasgan Azad University's ethics committee, with the Ethical Approval Code of IR.IAU.KHUISF.REC.1402.286. Before conducting the research, the interviewees were assured of the objectives, confidentiality of their information, voluntary participation, and withdrawal.

Funding/Support

There was no support or funding for this research article.

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