The Role of the Metaverse in Building Human Relationships

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Abstract - **Objectives: This study aims to explore the role of visual technologies in enhancing interpersonal relationships within educational settings and to examine the extent to which these emerging tools support the development of social and collaborative learning within educational institutions, including teachers. methodology: The study adopted a descriptive quantitative approach, and the study sample included all faculty members at the University of Sharjah for the 2025 academic year. A random sample of 260 faculty members from various scientific disciplines was selected. Data was collected through a formal questionnaire designed to measure participants' perceptions of improving personal relationships, and the results were analyzed using appropriate statistical tools. Results: The results indicated that interactive technologies are an effective means of supporting human interaction in educational contexts. Average scores were highest for educational interaction, followed by emotional and social support, and lowest for developing personal relationships. However, it was confirmed that integrated platforms provide new opportunities to enhance communication and collaboration in the educational field. conclusion: The study recommends enhancing the use of metaverse technologies in educational institutions, given their pivotal role in improving virtual learning environments and fostering interactive and inclusive environments at the social and psychological levels. It also calls for further in-depth studies to assess the long-term impacts and develop pedagogical models that are adaptable to the nature of digital education.**

Keywords: **Metaverse, Interpersonal Relationships, Interactive Learning, Psychological Support, Higher Education, Virtual Environments**

I. INTRODUCTION

The concept of the metaverse has gained prominence in recent years as a new technology for human-technology interaction. The metaverse is defined as a digital space that enables interaction between the real and virtual worlds. It is considered the next step in the development of the current cyberspace (Li et al., 2022).

The metaverse can be defined as a centralized, persistent, three-dimensional online environment where users can interact socially and economically in a virtual space separate from the real physical world (Ritterbusch and Teichmann, 2023).

After decades of development in virtual and augmented reality technologies, the metaverse has become an emerging reality, attracting investment from major technology companies and realizing its potential in all aspects of life. The metaverse is defined as a multi-user digital environment that combines the physical and virtual realities, allowing people to coexist. These characteristics make it a unique space that has attracted the attention of researchers for its ability to simulate human communication and interaction (Bibry and Alam, 2022).

The importance of studying the metaverse is demonstrated as it extends to a new environment of human interaction that transcends the boundaries of time and space (Vora & Mishra, 2024). The metaverse is based on digital avatars that allow people to present themselves and interact with others in a censored and direct way that is similar to what they encounter in real life (De Roiz et al., 2017; Duan et al., 2021).

The metaverse is presented as a multi-user, post-realistic world that merges the physical and the virtual. This concept builds on the continuity of previous virtual environments, such as virtual worlds, but represents a qualitative shift in roles and continuity. It's not just a typical gaming or social media platform, but regular, always-on environments where people simultaneously share everyday activities—such as work, education, shopping, entertainment, and social. The name serves to describe the metaverse as a new social environment in which human relationships are structured differently from traditional electronic media (Mystakidis, 2022; Praetorius & Görlich, 2021; Marhoon et al., 2025).

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The novelty of the metaverse is that it is a sociotechnical phenomenon that emerged in the 2010s. It has only recently begun to emerge as a publicly available environment. While the concept of virtual worlds is not entirely new, with the advent of virtual/augmented reality technologies and high-speed communication networks, the deployment of this idea is quite possible (Bassett et al., 2013; Bibri & Allam, 2022; Blackwell et al., 2019; Clark, 2021).

The significance of studying the metaverse as a sociology is demonstrated by understanding how it is changing models of human relationships and society. Immersive virtual environments provide a space to test concepts such as limited interaction, identity construction, and self-organization in new contexts. In the metaverse, individuals can assume different social roles through their avatars and interact with others in different and ethical ways (Sharifi, et al, 2021). This raises the fundamental question of how social and cultural norms are constructed in virtual spaces and how they affect behaviour. For example, does the limited discourse theory of 'self-presentation' in everyday life apply to ways of presenting oneself through avatars? Do users develop digital social identities that are separate or transcendent from their real-life identities? These tests are becoming particularly relevant as technology becomes more integrated into social life.

Recent reports suggest that the metaverse may limit people's ability to communicate in real life (Hackle, 2021). In addition, it is important to study the metaverse to understand the future of social relationships in the current shift towards digitalization and generations that have grown up using social media platforms and electronic games (Awadzi, 2018; Pereira et al., 2021). Today's children and adolescents may find the metaverse a creative space for future interactions, allowing researchers to explore potential or negative effects on social construction. Business and educational interest in the metaverse as future markets and services is also growing, as many institutions have begun developing immersive virtual platforms for working, learning, and shopping (Allabergenov et al., 2024). These changes make the current study particularly important, as it explores the social aspects that were most important before the metaverse became integrated into our daily lives. Based on the above, the research for this study revolves around understanding how the metaverse can influence human relationships and social communication.

II. LITERATURE REVIEW

Recent studies have focused primarily on how human communication affects the planning and effectiveness of human communication. Researchers have shown that metaverses are more likely to be social, as participants gather in the same space (Smith et al., 2020). Through virtual reality technology and sensory interfaces, people can communicate musically and physically through their avatars (Eldmrat et al., 2024). A study by (Allam et al., 2022) demonstrated that the metaverse provides unique opportunities to socialize with

friends and family despite geographical distance. This ability to bridge space gaps in human communication makes the metaverse a natural extension of real-life encounters, as people can converse, interact, and collaborate instead of being in the same room, benefiting from a three-dimensional environment, including interaction, interaction, and speech.

Lee et al., 2021 Determine it showed in their comprehensive study of the metaverse that the technological features of these environments (such as spatial audio and head and hand movement tracking) enhance users' sense of presence and create richer communication contexts than traditional social networks. Therefore, the metaverse can be considered as the evolution of communication platforms, i.e. lively interactions in a shared virtual space by sending text and images through a flat screen.

The metaverse gives people more freedom to create and express their own virtual language, which has attracted researchers and studies to study its implications for social language (Liao & Miao, 2022; Liu, 2025; Miao et al., 2021). Moreover, the appearance and characteristics of an avatar can significantly alter users' behavior and perceptions within the virtual environment (Ritorbusch et al., 2023; Abad & Nejad, 2019). According to this review, which included 46 experimental studies, the effects of avatars on users are real and measurable, as people use them as images in the virtual world. If the user adopts an attractive or flattering avatar, they may appear more confident or bold than they actually are (depending on the avatar image). This effect, documented through studies, shows that the virtual identity is not simply a mask distinct from the self, but dynamically interacts with one's attitudes and behaviors (Gunkel et al., 2018; Heckl, 2021; Filfilan & Alattas, 2025; Ratan et al. 2020).

The dynamics interact with an individual's attitudes and behaviors (Ratan et al. 2020).

Recent studies have shown that virtual reality enables people to break free from the constraints of their real lives and communicate in new ways. For example, shy people or those facing social challenges may find it easier to connect with abstract ideas, as the virtual distance facilitates conversations and friendships (Pratorius and Gorlich, 2021).

Virtual identities can enhance the social status of certain vulnerable groups (such as the elderly) by giving them a greater sense of belonging without discrimination. These interventions can help them understand diversity and other languages more deeply than they might experience in person. These findings are consistent with studies indicating that virtual experiences help people build confidence in themselves and others (De Rooij et al., 2017).

Recent literature has shown that identity formation is a complex and multifaceted process: on the one hand, it is a place where creativity, freedom, and behavior can have psychological and social benefits, but on the other hand, it

can hinder a person's identity in real-life situations (Kaplan, 2021).

The Process of Reading

This study was based on the descriptive-analytic method, which is an appropriate scientific method for studying contemporary educational and social phenomena. The purpose of this methodology is to gather data related to the use of metaverse technologies in educational settings and to accurately describe the phenomena under study and derive scientific insights. This method was adopted because of its ability to accurately assess reliability as well as inter-rater reliability, making the results generalizable to the study community.

Study Population and Sample

The study population consisted of all academic staff at the University of Sharjah in the academic year 2025, including their different academic majors. (260) A random sample of teachers was selected. Such a sample provides an accurate and complete representation of the study population, which increases credibility and generalizability to other teachers in the same educational context.

Reading Tool

The main research instrument was developed into a closed-ended questionnaire containing (25) statements distributed across five main areas reflecting the dimensions of human relationships affected by the use of metaverse technologies, namely, relationships.

1. Professional Communication: Measures the metaverse's ability to foster professional relationships among teachers.

2. Psychological and social support: Measuring the role of the virtual environment in providing moral and social support.

3. Community Belonging: Measures the teacher's sense of belonging to a cohesive learning community.

4. Educational interactions: Focus on educational interactions supported by the metaverse.

5. Building Human Relationships: Measure the success of the metaverse in developing real human relationships.

Data were visualized using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Instrument Validity

To ensure the tool's validity, the questionnaire was presented to a panel of eight university professors specializing in educational technology, measurement and evaluation, and educational guidance. The panel evaluated the items' clarity and relevance to the study topics. Their qualitative comments were taken into account, focusing on the wording of some points and the reorganization of some areas. Based on these comments, the questionnaire was modified before its final administration.

Questionnaire on the Reliability of the Instrument

To ensure the tool's reliability, it was administered in an initial pilot phase to a sample of 20 professors outside the main study sample. The reliability coefficient was calculated using Cronbach's alpha, where the value reached 0.88, which is a high percentage and reflects a high degree of internal consistency of the tool's items, indicating its suitability for use in field studies. This result indicates that the tool is capable of measuring what it was designed to measure in a stable and repeatable manner.

III. STUDY RESULTS

To answer the study question: What is the role of the metaverse in shaping human relationships from the perspective of teachers in the Sharjah region?

The results were analyzed statistically using arithmetic means, standard deviations, ranges and degree of agreement for each field as follows:

TABLE I presents a review of the arithmetic means and standard deviations for the field of professional communication in construction, as shown below:

TABLE I ARITHMETIC MEANS AND STANDARD DEVIATIONS OF A RANGE PROFESSIONAL COMMUNICATION

Phrase	arithmetic mean	standard deviation	Approval grade
The metaverse contributes to strengthening professional relationships between teachers.	3.91	0.88	High
The metaverse helps develop communication networks between teachers.	4.31	0.74	too high
The metaverse offers opportunities to exchange professional experiences.	3.67	0.56	Half
The metaverse supports teamwork in a virtual environment.	3.56	0.85	Half
The metaverse improves collaboration between teachers inside and outside of school.	4.16	0.78	High

The results of the field analysis of the topic "Professional Communication" showed that the arithmetic mean of the five statements ranged between (3.56) and (4.31), indicating a high degree of agreement among the sample members that

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the metaverse is an effective tool for improving professional relationships between teachers. The highest response was for the statement "Metaverse helps develop communication networks among teachers" with numerical means (4.31) and standard deviation (0.74), indicating a strong belief in the effectiveness of this technology for building new professional networks. Metaverse increases collaboration between teachers inside and outside the university and "Metaverse contributes to strengthening professional relationships" also shows high responses, indicating that the metaverse environment contributes to the expansion of professional relationships. At the same time, statements such as "the metaverse supports teamwork in virtual environments" and "the metaverse facilitates professional development" fell into the middle category.

This may be due to participants' varying levels of familiarity with virtual collaboration tools or lack of practical application experience. Most obviously, metaverse technology has the professional communication ability of teachers, which can positively affect the learning work environment and the quality of educational work.

TABLE II presents a review of thearithmetic means and standard deviations for the field of psychological and social support, as shown below:

TABLE II ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE FIELD OF PSYCHOSOCIAL SUPPORT

phrase	arithmetic mean	standard deviation	Approval grade
The metaverse helps alleviate teachers' feelings of isolation.	3.52	0.89	Half
Helps build effective social support relationships.	4.42	0.58	too high
The metaverse makes the teacher feel part of a virtual community.	3.7	0.57	Half
The metaverse provides a space to express opinions and experiences.	3.83	0.71	High
The metaverse supports the building of human relationships based on understanding.	3.98	0.62	High

The results of the statistical analysis of the "psychological and social support" field showed that teachers' assessments of the use of the metaverse in this regard ranged from medium to very high, with the arithmetic means of the five statements ranging from 3.52 to 4.42. The phrase "helps build effective social support relationships" had the highest arithmetic mean (4.42) and a relatively low standard deviation (0.58), reflecting broad agreement among sample members regarding the metaverse's ability to create a psychologically and morally supportive environment that enables teachers to interact positively and exchange support in digital spaces. The phrases "The metaverse provides a space for expressing

opinions and experiences" and "The metaverse supports building human relationships based on understanding" also showed high means (3.83 and 3.98, respectively), indicating a relative belief that the metaverse enhances opportunities for understanding and dialogue and fosters a safe environment for personal and social expression. In contrast, the statements "The metaverse helps alleviate feelings of isolation among teachers" and "The metaverse makes teachers feel a sense of belonging to a virtual community" fell into the "medium" category, with scores of (3.52) and (3.70), respectively, indicating a discrepancy in teachers' actual experience with metaverse technologies.

This is likely due to limited emotional engagement or weak digital infrastructure for some users. Overall, the results reflect a growing awareness among teachers of the role of the metaverse in providing real-world psychosocial support, although this awareness varies among individuals depending on their personal experiences and interactions with the virtual environment .

TABLE III presents a review of the arithmetic means and standard deviations for the community affiliation field, as shown below:

TABLE III ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE COMMUNITY AFFILIATION DOMAIN

phrase	arithmetic mean	standard deviation	Approval grade
The metaverse enhances teachers' sense of belonging to the educational community.	4.17	0.56	High
The metaverse helps teachers interact with the community.	3.82	0.65	High
It contributes to the construction of a common educational identity.	4.0	0.81	High
The metaverse stimulates community initiatives within the educational environment.	3.72	0.71	Half
Promotes interaction between teachers and the local community through virtual reality.	4.15	0,52	Alto

The results of the statistical analysis of the "community belonging" domain indicate that the metaverse plays a positive role in enhancing teachers' sense of belonging to their educational community, as the arithmetic means of the items in this domain ranged from (3.72) to (4.17), and most of them fell into the "high" category, with the exception of one statement that fell into the "medium" category. The phrase "The metaverse enhances teachers' sense of belonging to the educational community" obtained the highest arithmetic mean of (4.17) with a low standard deviation of

(0.56), indicating a relative consensus among the sample members on the capacity of the metaverse to build cohesive social and professional ties within the virtual educational community. The statements "fosters interaction between teachers and the local community through virtual reality" and "contributes to building a shared educational identity" also showed high means (4.15 and 4.00, respectively), confirming that the virtual environment contributes to the crystallization of a collective vision and a shared professional identity that enhances group interaction and institutional belonging. In the same context, the statement "The Metaverse helps teachers engage in community participation" had an average score of 3.82, which is at the lower end of the "high" classification, indicating relative acceptance of this function. Meanwhile, the statement "The Metaverse stimulates community initiatives within the educational environment" had the lowest mean (3.72) and a "medium" score, reflecting the potential for a gap between individual interaction and organized collective initiatives within virtual reality. Overall, these findings confirm that the metaverse contributes to deepening teachers' sense of belonging, particularly by providing an interactive environment that fosters collaboration and the building of a professional community identity, while highlighting the need for greater activation of community roles within these digital environments .

TABLE IV presents a review of the arithmetic means and standard deviations for the field of educational interaction, as shown below:

TABLE IV ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE EDUCATIONAL INTERACTION DOMAIN

phrase	arithmetic mean	standard deviation	Approval grade
The metaverse provides an interactive environment that enables effective communication.	4.17	0.57	High
The metaverse helps deliver interactive collaborative activities.	3.57	0.88	Half
Promotes educational dialogue among teachers.	4.56	0.82	too high
Supports real-time interaction in educational discussions.	3.84	0.54	High
Promotes cultural and intellectual exchange among teachers.	4.25	0.68	too high

Educational Interaction" field showed that teachers recognize the importance of the metaverse as a tool to support educational communication and knowledge exchange, with arithmetic means ranging from (3.57) to (4.56), and most statements falling into the "high" or "very high" category, reflecting a general agreement on the effectiveness of this technology in improving interaction within the educational environment. The phrase "enhancing educational dialogue among teachers" reached the highest arithmetic mean (4.56) with a standard deviation (0.82), indicating that the metaverse

significantly contributes to opening new spaces for dialogue that enrich educational discussions and develop professional practices. The phrase "fosters cultural and intellectual exchange among teachers" also received a very high average score (4.25), highlighting the role of the metaverse in supporting intellectual and cultural pluralism through interactive tools that allow teachers from different backgrounds to come together. Regarding the phrase "the metaverse provides an interactive environment that enables effective communication," it had a mean of (4.17) and a low standard deviation of (0.57), reflecting a high degree of agreement on the role of the virtual environment in facilitating educational communication. In contrast, the phrase "the metaverse helps provide interactive collaborative activities" had a mean score of 3.57 and a "medium" approval rating, which may reflect the challenges of employing the metaverse to implement practical group educational activities, and this may be related to technical or planning aspects within educational institutions. The phrase "supports real-time interaction in educational discussions" received a good mean (3.84) in the "high" category, indicating that metaverse tools are being used relatively effectively to enable real-time communication. Overall, these findings indicate a growing awareness among educators of the importance of the metaverse as a vital educational platform that enriches educational interaction with its dialogic and cultural aspects, with a need to enhance collaborative learning practices within these virtual environments . Arithmetic averages is presented in TABLE V. The standard deviations for the field of human relations building are as follows:

TABLE V ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE FIELD OF HUMAN RELATIONS BUILDING

Phrase	arithmetic mean	standard deviation	Approval grade
The use of the metaverse helps build human relationships that transcend time and space.	3.63	0.7	Half
The metaverse fosters collaboration and engagement among educators in Oman.	3.54	0.86	Half
The metaverse makes it easier to understand other people's perspectives.	3.78	0.77	Half
The metaverse supports the values of tolerance and coexistence.	3.84	0.71	High
Promotes human relationships in a multicultural environment.	4.1	0.57	High

The results of the statistical analysis of the "Human 'Relationship Building" field showed that teachers perceptions of the role of the metaverse in improving human relationships ranged from medium to high, with arithmetic means ranging from (3.54) to (4.10). The statement improving human relationships in a multicultural"

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environment" reached the highest mean (4.10) with a low standard deviation (0.57), reflecting a strong belief on the part of teachers that the metaverse provides a multicultural learning environment that contributes to strengthening bonds of understanding and mutual respect, especially in educational contexts that bring together a diversity of cultural backgrounds. The phrase "The metaverse supports values of tolerance and coexistence" also showed a high response rate (3.84), indicating that metaverse-powered virtual environments can constitute an ideal platform for promoting universal human concepts through open interaction and mutual respect. In contrast, the phrases Using the metaverse helps build human relationships that" transcend time and space," "It fosters collaboration and participation among teachers in Oman," and "It facilitates understanding of others' perspectives" had means ranging ",from 3.54 to 3.78, which are classified as "medium indicating a discrepancy in teachers' opinions on the effectiveness of this technology in creating deep human connections that transcend the professional framework. This disparity may be attributed to factors related to the level of user interaction with the virtual environment, or to the limited activation of emotional and cultural dimensions in .the educational metaverse applications actually used However, these results generally reflect a positive initial perception of the metaverse's potential to support human ,relationships in a multidimensional learning environment with a need to develop deeper human interaction content that enhances the quality of personal and emotional interaction within these platforms.

This table summarizes the five areas studied in the analysis of the role of the metaverse in shaping human relationships among teachers in the Sultanate of Oman. It shows the overall arithmetic mean, standard deviation, range, and degree of agreement for each area (TABLE VI).

Table VI ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE AREAS OF ANALYSIS OF THE ROLE OF THE METAVERSE IN SHAPING HUMAN RELATIONSHIPS

Field	arithmetic mean	Overall standard deviation	Agreement	Approval grade
Professional communication	3.92 2	0.76	3	High
Psychosocial support	3.8 90	0.67	4	High
belonging to the community	3.972	0.65	2	High
Educational interaction	4.078	0.7	1	High
Building human relationships	3.778	0.72	5	Half
the total	3.928	0.70		

The table above reflects the aggregated results of the statistical analysis of the five study areas, which addressed teachers' assessment of the role of the metaverse in improving the dimensions of human relations in the educational environment in the Sultanate of Oman. The results showed slight variation in the arithmetic means between the domains, as the values ranged from (3.778) to (4.078), indicating the presence of overall positive agreement among sample members, albeit to varying degrees.

The educational interaction field ranked first with an arithmetic mean of (4.078) and a standard deviation of (0.70), indicating a strong belief among teachers that the metaverse clearly contributes to improving the quality of educational interaction, facilitating instant communication processes and constructive educational dialogue. Community belonging was next with a mean of 3.972, reflecting the awareness that the virtual environment allows teachers to feel part of a unified educational community and share a collective educational identity.

Professional communication was in third place, with a mean of 3.922 and a standard deviation of 0.76, indicating that the metaverse contributes to developing professional networks and enhancing cooperation among teachers. However, the relative variation in the standard deviation can be attributed to differences in teachers' level of interaction or technical expertise. Psychological and social support was in fourth place with a mean of 3.890, which is close to the overall average, reflecting a relatively positive perception of the role of the metaverse in alleviating isolation and providing moral support, although to a lesser extent than the previous domains. Finally, the human relationship building domain ranked fifth and last with an average score of 3.778 and a "medium" passing grade, indicating that the human interaction aspect still faces some challenges in the metaverse environment, and this may require the development of more in-depth digital tools that focus on building real human connections, not just functional or professional ones.

Overall, the overall mean for all domains was 3.928, which falls within the "high" category, while the overall standard deviation was 0.70, reflecting a good degree of homogeneity in the sample members' responses and indicating relative consistency in their assessments of the various dimensions of the study.

IV. FINDINGS AND DISCUSSIONS

1. The educational interaction domain ranked first in terms of average responses from teachers, indicating that metaverse technology is an effective means of improving the quality of educational interaction, particularly in promoting real-time dialogue and collaborative activities. This result is consistent with global trends toward digital interactive education.

2. Community belonging ranked second, demonstrating a growing awareness among educators of the importance of

the metaverse in deepening their sense of belonging to the educational environment by building a shared professional identity within virtual communities.

3. Professional communication ranked third, with educators indicating that the metaverse enhances their professional relationships and provides opportunities for collaboration and experience sharing. However, differences in technical expertise may be a reason for the differences in levels of interaction between individuals.

4. While the psychosocial support domain showed a high degree of approval, it ranked fourth, indicating that the metaverse provides relative emotional support but still lacks clear strategies to ensure a sustainable, supportive psychological environment.

5. The human relationship-building domain recorded the lowest average among the domains, ranking in the "average" category. This is attributed to the fact that the human dimension of relationships requires more realistic digital environments and designs that focus on deeper emotional and social interaction. 6. The overall mean for all domains was 3.928, reflecting a general consensus among sample members on the effectiveness of the metaverse in shaping human relationships, while the overall standard deviation was 0.70, indicating relative homogeneity in participants' responses.

The study's results demonstrate that metaverse technology significantly contributes to supporting educational, professional, and social aspects within the educational environment, which has become an important topic. This can be explained by the power of the metaverse, which makes real-time interaction more possible, fostering a sense of connection. This format aligns with the global shift toward collaborative digital learning, which emphasizes students and relies on lively interactions between teachers and students. The high levels of social engagement achieved demonstrate the important role of the metaverse in creating virtual learning communities that provide teachers with a sense of identity and belonging, supporting current theories that emphasize the importance of engagement in improving achievement and job satisfaction. These results are consistent with the findings of (Al Mazrouei et al., 2024), who demonstrated the effectiveness of the metaverse for social development and mental well-being among members of Generation Z in the UAE. They emphasized the role of the virtual environment in creating effective socialization and a cohesive digital community.

At the same time, the areas of psychological support and human relationship building, despite achieving positive scores, remained low, limiting deep human empathy and daily psychological needs. This can be explained by the less intuitive design of metaverse technology and the limitations of true nonverbal and emotional communication. The nature of interaction via avatar can also limit the perception of affective emotions, which can affect the quality of interpersonal relationships and genuine social support. This

is consistent with the study by (Li & Li, 2022), which confirmed that the metaverse, despite its potential to reduce isolation by improving self-efficacy, still lacks the mindset necessary to support deep and sustainable human relationships. True social support.

Recommendations

1. Incorporate the metaverse into the learning environment by focusing on curriculum design in authentic learning interactions to enhance teaching and learning value.

2. Creation of a virtual professional communication network organized using the Metaverse platform, thereby facilitating experiences and collaboration among teachers in various educational areas within the Sultanate of Oman.

3. Develop teacher training programs aimed at improving their competence in using virtual reality and technology.

4. Developing digital content that promotes the values of tolerance, inclusivity, and human dignity, promoting multicultural virtualization and deeper understanding.

5. Propose future studies to study the impact of the metaverse on the emotional and psychological aspects of students and teachers by measuring human relationships in virtual environments.

6. Establish digital community activities that can use the metaverse to facilitate communication between schools and local communities using metaverse tools.

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