A Review-Based Examination of Gender Dynamics in Virtual Learning Environments in Higher Education

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ABSTRACT

The purpose of this study is to explore gender spaces in virtual learning environments at the tertiary level. A considerable study has been done in the global North and global South on gender spaces in virtual learning environments. This study has been conducted using qualitative and review-based studies. It portrays a widespread analysis of published research documents from various speculative contexts. This study blends findings from the past few decades to examine gender spaces and virtual learning environments in higher education. The review emphasizes that such activities serve as vital platforms for virtual learning in higher education. The analysis is chastised in 126 peer-reviewed research published documents regained from reputable digital databases such as Web of Science, Google Scholar, Taylor & Francis, SAGE, Emerald Insight, and Springer Nature. Data collection has been continued until thematic permeation has been reached. A thematic analysis approach has been employed to present and interpret the qualitative nature of data. The study findings indicated that gender spaces shape participation in virtual learning environments in higher education. The study findings have been based on the empirical review of the published research documents on gender spaces and virtual learning environments in higher education. The study reveals that gender plays a noteworthy role in determining students' experiences, participation, and outcomes within virtual learning environments in higher education. However, digital platforms offer chances for a bendable and comprehensive scholarship, and the persistence of gendered-based patterns in rendezvous, communication, access, and academic performance acmes enduring cultural and structural inequalities.

Keywords: Gender Space, Virtual Learning, Higher Education, Gender Dynamics, Students.

Introduction

A considerable study has been done in the global north and global south on gender spaces in virtual learning environments. A lot of work has been done at a global level on gender spaces and virtual learning environments (Meilinger, Riecke, & Bülthoff, 2014). Likewise, the study findings concluded that gender dynamics impact virtual learning places as it relates to gender disparities in online learning in developed countries (Valverde-Berrocoso, Garrido-Arroyo, Burgos-Videla, & Morales-Cevallos, 2020). Other studies referred that the study findings outlined that gender spaces impact the participation and learning outcomes of students and also identify the experience and perception of learners within these gender spaces in the United States (Cheryan, Meltzoff, & Kim, 2011; Shoaib & Zaman, 2025). The study findings outlined that females face different challenges in online education but with all challenges, the number of females is increasing rapidly in British and Chinese international universities (Lingyu, Wenqin, & Chao, 2021). However, the lack of research a very small number of research conducted in Pakistan. In the same way, the study examined the disparities between genders in higher education (Shoaib, 2023). The key findings of the research indicated that

some important elements influence Pakistani e-learning institutions' satisfaction with learners. It provides insightful information on a variety of factors impacting the virtual learning environment which can help comprehend more general factors such as issues associated with gender in Pakistan (Shoaib, Tariq, Rasool, & Iqbal, 2025). Similarly, other studies referred to as the study indicated how Pakistani student male and female used digital media and e-portals. It examines how gender affected the use of various digital tools and how they affected students' learning experiences (Shah, Sana, & Malik, 2022). This is a very serious issue in academia and other social institutions focus on virtual learning specifically in gender spaces. Henceforward, the purpose of this study is to explore gender spaces in virtual learning environments at the tertiary level.

The Data and Methods

This study has been conducted using qualitative and review-based studies. It portrays a widespread analysis of published research documents from various speculative contexts. This study blends findings from the past few decades to examine gender spaces and virtual learning environments in higher education. The review emphasizes that such activities serve as vital platforms for virtual learning in higher education. The analysis is chastised in 126 peer-reviewed research published documents regained from reputable digital databases such as Web of Science, Google Scholar, Taylor & Francis, SAGE, Emerald Insight, and Springer Nature. Data collection has been continued until thematic permeation has been reached. A thematic analysis approach has been employed to present and interpret the qualitative nature of data. The study findings indicated that gender spaces shape participation in virtual learning environments in higher education.

Results and Discussion

The argument of the study asserted that in modern cities sexuality and gender had been found in the structure of gender-neutral spaces at higher levels (Lu & Hu, 2021). However, the study findings outlined that determinants of interaction in audio-video addressing courses had been found in gender spaces in virtual learning environments (Lu, Li, & Du, 2009). Contently, the study of Lyndon and Hale (2014) asserted that assessment of the possible effects on education of integrated utilization of interactive remote learning settings and also found gender-neutral spaces at the tertiary level. Besides, the study findings showed that virtual learning places beneficial or harmful for disengaged students had been found in the context of learning or demotivated students at the tertiary level (Maltby & Mackie, 2009). Nonetheless, the study findings concluded that experiences of discrimination in primarily white institutions of learning as experienced college female students and also had been found gender dynamics in remote classes (Shoaib, Shamsher, & Iqbal, 2025; Manzanera-Ruiz, Lizárraga, & Gonzalez-Garcia, 2024). In a nutshell, the study of Marchant (1996) indicated that in higher educational organizations the gender and power concepts were compared by students, and also had been found in gender negotiation concepts generally at universities. Further, the study findings examined that from a gender point of view, the university spaces were analyzed and found gender-neutral spaces at the tertiary level (Peng, 2024). The argument of the study asserted that for language learning the design of web-based platforms in the virtual learning environment and also been found in online assessment methods during digital education (Shoaib, 2023b; Peterson, 1998). Besides, the study findings outlined that the public and private spaces in Chinese universities at higher levels had been gender inclusivity and gender-neutral spaces for both genders students at a higher level (Shoaib, Shamsher, & Iqbal, 2025; Piazzoni, 2022). However, the study of Pomerand Petzoldt (2023) asserted that gender and

spaces are bringing the movements at the university level between both genders of students. Moreover, the study findings showed that in urban places the public and private spaces are growing rapidly for the positive change in society and also had been found gender-neutral pronouns for both genders (Shoaib, Iqbal, & Iftikhar, 2025; Reimann, 2024). In a nutshell, the study findings concluded that symbolic authorities and gender spaces in educational conferences were bringing movements between students and had been found gender-sensitive language during virtual learning environment (Shoaib, 2025a; Reynolds & Henderson, 2023). Contently, the study of Rienties, Giesbers, Lygo-Baker, Ma, and Rees (2016) indicated that new technological inventions are easily accepted by virtual teachers in online educational places and also had been found smooth web-based platforms. Nonetheless, the study findings examined that gender variants are really important for students according to health professionals found in the analysis of virtual classes during the COVID-19 pandemic (Shoaib, 2025b; Riley, Sitharthan, Clemson, & Diamond, 2011).

The argument of the study asserted that at universities the learning experience of students during the period of the virtual learning environment also had been found gender neutral spaces (Shoaib, 2024e; Robertson & Shannon, 2009). Moreover, the study findings outlined that the indigenous knowledge introduced in the virtual learning relational methods also found gender inclusivity at a higher level (Shoaib, 2024d; Rosenblum & Jacob, 2024). Likewise, the study of Rotman (2007) asserted that the task related to the private and public spaces in the urban and rural societies for both genders and found gender-sensitive language. Contently, the study findings showed that capitalism, digital transportation, and the extorting of democracy include private spaces and public issues and also had been found mobility restriction issues (Shoaib, 2024b; Samoriski, 2000). However, the study findings concluded that in the scenario of conceptualization, the important methods of virtual learning and social media devices had been found in gender spaces at the tertiary level (Shoaib, 2024c; Sancho & de Vries, 2013). Nonetheless, the study of Santyadiputra, Purnomo, Kamdi, Patmanthara, and Nurhadi (2024) indicated that educational achievements in desktop courses improved students' higher learning goals in the context of modern virtual learning settings and also had been found in gender-neutral spaces. In a nutshell, the study findings examined that exploring and thinking in virtual environments the gender-inclusive variables, representations, and the implications on the students also found gender inclusivity at higher universities (Shoaib, 2024a; Schachtner, 2007).

The argument of the study asserted that in higher educational organizations blended self-action learning is implemented and also had been found gender dynamics at the tertiary level (Shoaib & Ullah, 2019; Shurville & Rospigliosi, 2009). However, the study findings outlined that the gender spaces in digital learning affect the gender and achievements of female students at the tertiary level (Shoaib & Ullah, 2021a; Silva Hope, Muñoz Garcia, & Medina Morales, 2024). Contently, the study of Singh, O'Donoghue, and Betts (2002) asserted that a research investigation conducted in the United States examined the possible impacts on flipped training and also found gender spaces. Moreover, the study findings showed that independent research assessing the hospitality of online learning spaces for multidisciplinary groups of students had found gender-neutral pronouns at the tertiary level (Shoaib, 2023a; Sjolie & van Petegem, 2024). Likewise, the study findings concluded that literature review on the effects of virtual spaces on learning among students at universities also found gender discrimination (Shoaib, 2021; Skold, 2012). Nonetheless, the study of Smith-Robbins (2010) indicated that learning and teaching strategies are unfairly developed in the virtual world of higher learning settings also had been found gender spaces. Moreover, the study findings examined the role of students in virtual learning skills adoption at advanced

educational organizations and also found gender-neutral spaces for students (Shoaib & Ullah, 2021b; Soeselo et al., 2022).

The argument of the study asserted the role of the media in the development of gender spaces between students in the virtual learning environment at the tertiary level (Sørensen & Meyer, 2003). However, the study findings outlined that in academic places females achieved leadership in the higher educational departments and also had been found gender neutral (Spanò, 2020). Contently, the study of Steils, Tombs, Mawer, Savin-Baden, and Wimpenny (2015) asserted that in higher learning the effects of virtual world learning were rooted unequally between both genders students and also had been found in gender spaces. Moreover, the study findings showed that exploring national gender spaces in the context of gender and space between different educational agencies had found mobility restrictions (Subramanian, 2022). Likewise, the study findings concluded that in higher learning during post-COVID-19 the experience and expectations of virtual students and also been found harassment issues (Suleri, 2020). In a nutshell, the study of Takala and Wickman (2019) indicated that university cooperative session-based digital instruction in particular education advisory situations for students. Nonetheless, the study findings examined the radical feminist examination of educational women's creation of sexual orientation and management belonging in understanding having an acting gender (Teig, Devies, & Guthrie, 2024).

The argument of the study asserted that in private and public spaces organized future students and parents sports as well and also had been found gender neutrality (Trussell & Shaw, 2012). Besides, the study findings outlined that the public and private places are specified for male and female students in specific areas had found gender inclusivity (Shoaib, Ali, & Akbar, 2021; Shoaib, Ali, & Abbas, 2024; Vest Hansen, 2002). However, the study of Vianello (1996) asserted that gender and the concept of power are radically changed in higher educational institutions and also had been found in gender-neutral spaces. Moreover, the study findings showed that virtual education a framework for inclusive learning in an academic place had been found among students at higher levels (Vilaverde, 2020). In a nutshell, the study findings concluded that the interaction with ethnic background gender, and educational settings with disparities had been found in gender spaces (Shoaib, Fatima, & Jamil, 2021; Shoaib, Iqbal, & Tahira, 2021; Villa Lever, 2020). Further, the study of Viseu, Clement, Aspinall, and Kennedy (2006) indicated that in internet access the interplay between private and public places had been found in gender-sensitive language around higher educational departments. Likewise, the study findings examined that illustrations of Swedish environment cultural identification and the interconnections of diversity and sexual orientation fairness in virtual learning also had been found in gender neutrality (Ali, Zaman, & Shoaib, 2024; Shoaib, Shehzadi, & Abbas, 2024; Shoaib, Usmani, & Abdullah, 2023; Wahlgren & Günter, 2024).

The argument of the study asserted that using digital students to evaluate healthcare students for crucial considerations in introducing an unfamiliar evaluation style (Waldmann, Gulich, & Zeitler, 2008). Moreover, the study findings outlined that at the University of South Africa, the equality and aspirations among students were analyzed at a higher level and also had been found gender inclusivity (Walker, 2018). However, the study of Wang, Mokmin, and Ji (2024) asserted that improving the learning outcomes of learners in universities with online realities and also been found in gender-neutral spaces. Besides, the study findings showed that the audio and video materials are very helpful for students learning in virtual environments had been found during online assessment (West, 2008). In a nutshell, the study findings concluded that in higher educational organizations the exploration of the spatial belonging of students had been found in gender spaces in virtual learning settings (Wong, 2024). Contently, the study of Yu, Vermunt, and Burke (2021) indicated that the longitudinal research of Chinese students on studying

habits and instructional environments in colleges and universities also found discrimination among both genders of students. Further, the study findings examined that thinking about ethnicity and sexual orientation in a progressive educational context and knowledge is a female reality in universities (Ohito, 2024).

The argument of the study asserted that the learners shared their views on interpreting sexuality in nature-based instruction at the tertiary level and also had been found in gender spaces (Decker & Morrison, 2021). However, the study findings outlined that education and spaces for women are debated in the context of gender in higher education and also gender spaces in online classes (Palczewski, 2019). Moreover, the study by Schwendler and Thompson (2017) asserted that agroecological and gender-based learning in the context of the nation-displaced rural students' organization had found gender differences. Further, the study findings showed that the representation of gender and class in Pakistani grade literature is an obstacle to the inclusiveness objective and also had been found in gender spaces in a virtual environment at the tertiary level (Tayyaba, Ansari, & Faisal, 2022). Besides, the study findings concluded that students' development assistance areas only for male learning is an initial move into gender split or diversified (Wilkinson & Warin, 2022). Contently, the study of Wright, Falek, and Greenberg indicated that gender-based violence is rooted in educational sectors between both genders of students and also found gender differences in virtual education at the tertiary level. Nonetheless, the study findings examined that the relationship between gender equity and equality education is critically reviewed at higher learning institutions and also found gender-neutral spaces (Yang & You, 2017).

The argument of the study asserted that male and female equality in educational sectors had been found in gender neutrality at the tertiary level in online learning (Aronson & Laughter, 2020). However, the study findings outlined that in higher education gender is excluded by male-dominated factors and also had been found in gender spaces in virtual learning environments (Benato, Fraser, & White, 2024). Moreover, the study of Blumell, Huemmer, and Sternadori (2019) asserted that in online discussion groups, gender-neutral things were introduced between both genders of students and also had been found in gender-neutral spaces. Nonetheless, the study findings showed that online spaces are the visual representation of the students at the university level and also gender spaces at the tertiary level (Burkholder, Thorpe, & Swell, 2022). Contently, the study findings concluded that the educational framework in which critical feminist viewpoint and social work learning for online graduate students had been found mobility restrictions (Chaffin, 2023). Besides, the study of Chung (2016) indicated that the perspective of female students on online education at the tertiary level had been found in gender spaces. Further, the study findings examined that the implementation of an advanced level of educational program using biased ideology at a higher level also found gender dynamics in virtual places (Clark, Penney, Whittle, & Jones, 2024).

The argument of the study asserted that Argentina's largest university claimed that gender spaces affected the education and goals of both gender students at the tertiary level (Flesler & Spataro, 2024). Moreover, the study findings outlined that during COVID-19 online education affected the student's performance and gender as well at the international level and also had been found gender spaces (Hamamra, Qabaha, & Daragmeh, 2022). However, the study of Iranzo-Cabrera and Gozálvez Pérez (2022) asserted that professional activism in online learning promoted gender equity among students and also had been found in gender-neutral spaces. Contently, the study findings showed that due to connectivity issues students of higher levels faced problems in online education had been found during online assessment (Guillem & Briziarelli, 2020). Besides, the study findings concluded that in COVID-19 the students faced the worst and most unfair experiences in educational circumstances and also

harassment issues at the advanced level (Ploj Virtic, Dolenc, & Sorgo, 2023). Nonetheless, the study of Simon (2024) indicated that in online learning the students of higher educational departments faced listening and looking issues that had been found during online assessment methods. In a nutshell, the study findings examined that digital educational learning used gender-neutral worlds for both genders students in virtual classes and also had been found gender-neutral spaces at the tertiary level (Tarrayo, 2023).

The argument of the study asserted that supporting digital learning by utilizing interconnected collaborative learning networks had been found in digital aspects of sources (Ala, Yang, & Ala, 2023). However, the study findings outlined systematic research on game-based learning for students of virtual classes at the tertiary level (Banihashem, Dehghanzadeh, Clark, Noroozi, & Biemans, 2024). Nonetheless, the study by Beach (2018) asserted that the exploratory research on the use of digital learning environments for teachers and students had found gender dynamics at the tertiary level. Contently, the study findings showed that higher education enhanced students' online learning and engagement and also found gender inclusivity among students (Brown, Lawrence, Basson, & Redmond, 2022). Further, the study findings concluded that online learning experiences the perception of students in their virtual classes and also gender spaces at the tertiary level (DiGiacomo et al., 2023). Moreover, the study by Emerson and Gerlak (2016) indicated that e-learning cooperative in education and connects cooperative education with virtual learning environments. In a nutshell, the study findings examined that cultural and gender issues with online education among different gender students had been found in gender spaces at higher educational organizations (Foli, 2022).

The argument of the study asserted that the examination of the implementation of instruction in procedures between a computer simulation to a physical actual setting (Ganier, Hoareau, & Tisseau, 2014). Similarly, the analysis of the study reported integrating both electronic and tangible resources for students to interact with programs at higher levels (Gregory, Tomes, Panasiuk, & Andersen, 2022). However, the study findings outlined that in the search for wireless internet and young people in cities, unemployment had been found in smartphone connectivity (Akhter, 2015). Moreover, the results of the research articulated that the research resources and digital bibliography used in virtual learning at higher institutions had been found flexible learning (Iton, 2009). Nonetheless, the argument based on the study findings revealed that the measure of information objectives in virtual communities reported system connectivity and privacy (Kang, Kwak, & Shin, 2018). Moreover, the study findings showed that the contemporary approach to teaching is based on the web for distance instruction at the university level (Khan, Al-Dmour, Bali, Rabbani, & Thirunavukkarasu, 2021). Contently, the study findings concluded and linked with the assumption that using real-time video meetings to watch educational field activities begins to go online in higher education (Krause, Douglas, Lynch, & Kesselring, 2018). Likewise, the analysis based on the results of the study supported the argument that the development of mass society in the electronic age to control connectivity had been found in the virtual world at the tertiary level (Lee, 2021). In a nutshell, the empirical evidence based on the study findings highlighted that during the period of virtual learning, the negative connectivity issues rise to a higher level, and also found students face connectivity problems (Leppakumpu & Sivunen, 2024).

The argument of the study asserted that a field is an ontological framework and perception in a virtual learning environment receiving gender inclusivity at the tertiary level (Lundin, 1998). Similarly, the analysis of the study reported that internet connectivity issues had been found in virtual learning environments at higher institutional organizations (Lyakh, 2012). However, the study findings outlined that the internet connectivity maintained during online learning settings after facing the bad

circumstances of education at the tertiary level (Mao, Li, Zhang, Chen, & Qi, 2013). Moreover, the results of the research articulated that the shifting from virtual education to professional learning at advanced levels of education had been found gender neutral spaces (Morrison & Hughes, 2023). Nonetheless, the argument based on the study findings revealed that digital learning was affected due to gender and had been found in gender spaces in web education (Moyo, 2004). Likewise, the study findings showed that online classes are a step forward in technology-supported learning in social welfare professions between both genders of students (Ouellette, 1999). Contently, the study findings concluded and linked with the assumption that using the internet for browsing the gender spaces at the tertiary level among both gender students (Ozyegin, 2012). Further, the analysis based on the results of the study supported the argument that the role of online platforms and connectivity during virtual education had been found in gender spaces at the tertiary level (Pawlak, 2020). Besides, the empirical evidence based on the study findings highlighted that the issue of lost connectivity during digital classes affected students' education at higher levels (Ranga, Dave, & Verma, 2016).

Conclusion

The conclusion of this study is based on the empirical review of the published research documents on gender spaces and virtual learning environments in higher education. The study reveals that gender plays a noteworthy role in determining students' experiences, participation, and outcomes within virtual learning environments in higher education. However, digital platforms offer chances for bendable and comprehensive scholarship, and the persistence of gendered-based patterns in rendezvous, communication, access, and academic performance acmes enduring cultural and structural inequalities. Female students often exhibit greater academic engagement but face unequal obstacles related to online safety, digital access, and self-efficacy specifically in male-dominated subjects. The study findings also assert the need for higher education to implement gender-approachable policies in the design, and governance of virtual learning, and delivery. It contains confirming equitable access to technology, addressing implicit biases in pedagogical practices, promoting inclusive and safe online spaces, and developing policies that actively sustenance gender impartiality in digital education. Eventually, nurturing truly inclusive virtual atmospheres entails an intentional and sustained promise to gender-sensitive pedagogical institutional and innovation reform.

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