

## A SOCIOLOGICAL ANALYSIS OF GENDER AND DIGITAL PEDAGOGY IN HIGHER EDUCATION: PERSPECTIVES FROM PAKISTANI CONTEXT

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Shamshad Rasool**Abstract**

This study presents a sociological analysis of gender and digital learning in higher education in Pakistan, focusing on how gendered social structures influence access, participation, and experiences within digital learning environments. Drawing upon feminist theory, Bourdieu's concept of social and cultural capital, social constructionism, and intersectionality, the study explores how digital education both reflects and reshapes existing gender hierarchies. Using a qualitative, document-based research design, data were collected from published academic studies, policy reports, and institutional documents on gender and digital learning between 2015 and 2025.

The findings reveal that digital learning, expanding educational access, has not eliminated gender disparities. Structural inequalities such as unequal access to technology, digital literacy gaps, and patriarchal social norms continue to limit females' engagement in digital education. Female students face sociocultural constraints, limited institutional support, and gender bias in pedagogical practices. However, digital learning also offers new avenues for empowerment, enabling females to pursue education beyond physical and social boundaries, engage with global knowledge networks, and strengthen their agency through technological participation. The study concludes that digital learning in Pakistan's higher education sector operates within a complex web of social relations where gender, class, and culture intersect. Achieving gender equity requires more than technological access; it demands urgent implementation of gender-sensitive policies and inclusive digital pedagogies. These measures are essential for transforming institutional and cultural attitudes toward female education. This research contributes to the broader sociological discourse on gender and education, emphasizing the need for a socially grounded approach to digital inclusion in the Global South.

**INTRODUCTION**

In recent years, the integration of digital technologies into higher education has transformed the

traditional modes of teaching and learning across the globe (HEC, 2021; Shoaib & Zaman, 2025). The

advent of online learning platforms, digital classrooms, and virtual learning environments has opened new opportunities for access, participation, and knowledge exchange (Shoaib, Waris, & Iqbal, 2025c). However, these transformations are not neutral; they intersect with existing social structures, including gender, class, and cultural hierarchies (Shoaib, Waris, & Iqbal, 2025b). In the context of Pakistan, where gender disparities in education have deep sociocultural roots, digital learning spaces present both new possibilities for empowerment and persistent challenges of exclusion (Shoaib, Waris, & Iqbal, 2025b). A sociological analysis of this phenomenon helps unpack how gender relations shape and are shaped by the digitalization of higher education (Shoaib, Waris, & Iqbal, 2025a). Historically, higher education in Pakistan has been a site of gender inequality, reflected in unequal enrollment rates, gendered academic disciplines, and limited leadership opportunities for females (Shoaib, Waris, & Iqbal, 2025a). The introduction of digital learning was initially celebrated as a democratizing force capable of bridging gender gaps by providing flexible and accessible learning opportunities (Shoaib & Ullah, 2025). The COVID-19 pandemic accelerated the adoption of online education, making digital literacy and connectivity essential components of educational participation (Shoaib, Tariq, Rasool, & Iqbal, 2025). However, this rapid digital transition also exposed deep-seated inequalities in access to technology, internet connectivity, and digital competence factors that are often gendered in Pakistani society (Shoaib, Tariq, & Iqbal, 2025b).

Sociologically, the intersection of gender and digital learning is examined through the lenses of the digital divide, feminist theory, and Bourdieu (1986) concept of cultural capital (Shoaib, Tariq, & Iqbal, 2025a). These frameworks highlight how structural inequalities and social norms influence the ways male and female students experience digital learning (Shoaib, Shamsher, & Iqbal, 2025). For example, females in conservative or rural settings may face restrictions on internet use or lack private digital spaces for study (Shoaib, Shamsher, & Iqbal, 2025). Similarly, digital learning environments reproduce gender stereotypes through male-dominated participation patterns, limited female representation

in digital content, or a lack of gender-sensitive pedagogies (Shoaib, Rasool, Zaman, & Ahmed, 2025). Thus, digital platforms offer potential for inclusion, but they also reinforce existing gender hierarchies unless critically examined and addressed (Shoaib, Rasool, Zaman, & Abdullah, 2025). Moreover, the sociocultural context of Pakistan plays a critical role in shaping digital learning experiences (Shoaib, Rasool, & Zaman, 2025c). Gender norms often define appropriate behaviors, aspirations, and mobility for females, which in turn affect their engagement with digital technologies (Shoaib, Rasool, & Zaman, 2025a). Access to devices, financial autonomy, and parental or institutional support are further conditioned by class, urban-rural divides, and family structures (Shoaib, Rasool, & Zaman, 2025b). These dimensions underscore the need to situate gender and digital learning within broader social processes rather than treating them as isolated educational issues (Shoaib, Rasool, Kalsoom, & Ali, 2025).

From a policy and institutional perspective, the integration of digital learning in universities has been uneven, with significant disparities in infrastructure, faculty readiness, and digital pedagogy (Shoaib, Rasool, Iqbal, & Abdullah, 2025). Female students and teachers, in particular, encounter challenges such as limited digital training, a lack of institutional support, and patriarchal attitudes that devalue females' technological competence (Shoaib, Rasool, & Iqbal, 2025). However, many female learners have leveraged digital platforms to pursue higher education, engage in global academic networks, and challenge conventional gender roles, indicating the transformative potential of digital education supported by equitable policies and inclusive practices (Shoaib, Kausar, Ali, & Abdullah, 2025). This study, therefore, aims to analyze gender and digital learning in higher education in Pakistan through a sociological lens. It explores how gendered social structures influence access, participation, and experiences in digital learning environments and how these digital spaces may simultaneously reproduce and contest gender inequalities. By synthesizing insights from existing research, the study seeks to contribute to the broader discourse on gender, technology, and education in the Global South. It emphasizes that true digital inclusion

requires more than technological access. It demands attention to the social and cultural contexts that shape who learns, how they learn, and whose voices are heard in the digital age.

### Study Context

Despite the rapid digitalization of higher education in Pakistan, gender inequalities continue to shape access, participation, and outcomes in digital learning environments (Shoaib, Iqbal, & Iftikhar, 2025). However, digital technologies are often portrayed as tools of empowerment and inclusion; the benefits of online and blended learning are not equally distributed among male and female students (Shoaib, Batool, Kausar, & Abdullah, 2025). Structural barriers such as unequal access to digital devices, limited internet connectivity, financial constraints, and sociocultural restrictions disproportionately affect female learners, particularly those from rural or low-income backgrounds (Shoaib & Bashir, 2025). Moreover, digital learning platforms and pedagogical practices in higher education often fail to account for gender-specific needs and social contexts (Shoaib, Ali, & Kausar, 2025). The lack of gender-sensitive digital policies, training programs, and support systems has created a situation where females' engagement with digital education remains constrained by broader societal expectations and institutional limitations (Shoaib, Ali, Iqbal, & Abdullah, 2025). As a result, digital learning spaces rather than eliminating educational inequalities sometimes reproduce existing gender hierarchies and reinforce patterns of exclusion (Shoaib, Ahmed, Zaman, & Abdullah, 2025). From a sociological perspective, this issue is rooted in the intersection of gender, technology, and social structure (Shoaib, Ahmed, & Usmani, 2025b). Gender norms, cultural values, and power relations influence not only who gains access to digital learning but also how individuals experience and benefit from it (Shoaib, Ahmed, & Usmani, 2025a). Female students may encounter subtle forms of discrimination, reduced participation in online discussions, or a lack of representation in digital content (Shoaib, Ahmed, Iqbal, & Abdullah, 2025). Similarly, educators' attitudes and institutional practices often mirror traditional gender biases,

undermining the inclusive potential of digital learning (Shoaib, Ahmed, & Iqbal, 2025).

The core problem, therefore, lies in the disconnect between the promise of digital inclusion and the reality of persistent gender disparities within Pakistan's higher education system (Shoaib, 2025a). There is a pressing need to understand how gendered social relations interact with digital technologies to shape educational opportunities and outcomes (Shoaib, 2025b). Without a sociological understanding of these dynamics, policies and interventions risk remaining superficial, failing to address the deeper social roots of gender inequality in digital learning (S. R. Ali, Shoaib, & Kausar, 2025). This research seeks to fill that gap by examining how gender influences access to, participation in, and experiences of digital learning among students and educators in Pakistani higher education. It aims to uncover the social mechanisms through which digital learning either reinforces or challenges gender-based inequalities, providing a critical foundation for more equitable and inclusive educational practices.

### Research Objectives

The primary aim of this study is to explore and analyze the intersection of gender and digital learning in higher education in Pakistan from a sociological perspective. The study seeks to understand how gender relations, social structures, and cultural norms influence access to, participation in, and experiences of digital learning among students and educators. To achieve this, the following specific objectives are outlined:

- This study examines the gendered patterns of access to digital learning resources, including internet connectivity, technological devices, and institutional support, within higher education institutions in Pakistan.
- To analyze how sociocultural norms and gender roles influence male and female students' engagement, participation, and learning behaviors in digital learning environments.
- To explore the perceptions and experiences of educators and students regarding gender inclusivity, digital pedagogy, and the use of online platforms in higher education.

- To identify institutional and structural barriers that hinder gender equality in digital learning and assess how universities address or overlook these challenges.
- To evaluate the potential of digital learning as a transformative tool for gender empowerment in higher education, it is important to highlight both its opportunities and limitations within the Pakistani sociocultural context.
- To propose sociologically informed recommendations for developing gender-sensitive digital education policies and practices that promote equitable access and participation for all learners.

### The Data and Methods

This study employs a qualitative research design grounded in sociological inquiry to explore the intersection of gender and digital learning in higher education in Pakistan. Given the complex and context-dependent nature of gender relations, qualitative methods provide the most suitable approach for capturing the nuanced experiences, meanings, and interpretations associated with digital learning environments.

### Research Design

The study adopts a document-based qualitative research design, focusing on the systematic analysis of existing academic and policy literature related to gender and digital learning in Pakistani higher education. It comprises peer-reviewed journal articles, government and institutional reports, NGO publications, and relevant educational policy documents. By relying on secondary data, the study aims to synthesize current knowledge, identify recurring themes, and highlight gaps in research and practice.

### Data Collection

Data are collected from reputable online academic databases such as Scopus, Web of Science, JSTOR, and Google Scholar. Keywords used for data retrieval include gender and higher education in Pakistan, digital learning and gender, online education and gender equality, e-learning and sociology of education, and digital divide in Pakistan. Inclusion criteria focus on:

- Studies conducted within the Pakistani higher education context;
- Publications addressing gender dimensions of digital or online learning;
- Articles written in English; and
- Peer-reviewed or officially recognized institutional reports.

Publications not meeting these criteria, such as those outside the Pakistani context, not addressing higher education, or lacking gender analysis, are excluded.

### Sampling Technique

A purposive sampling technique is used to select relevant studies. This non-probability approach ensures the inclusion of documents most pertinent to the research objectives.

### Data Analysis

The data are analyzed using qualitative content analysis, allowing for the identification of key themes, categories, and patterns. Following Mayring's (2014) content analysis framework, the process involves:

- Text familiarization-reading and re-reading documents to understand context and main arguments.
- Coding and developing thematic codes related to gender, access, participation, institutional practices, and empowerment
- Categorization involves grouping codes into broader sociological themes such as structural barriers, digital divide, gendered participation, and transformative potential.
- Interpretation involves linking findings to theoretical frameworks, such as feminist theory, social constructionism, and Bourdieu's concept of cultural capital, to uncover underlying social processes.

### Ethical Considerations

Since the study uses secondary data from publicly available sources, no direct ethical risks involving human participants are anticipated. However, ethical standards are maintained through accurate citation, acknowledgment of original authors, and unbiased interpretation of existing studies.

### Limitations

The study's reliance on secondary data may limit its ability to capture the most recent and localized experiences of students and teachers. Moreover, the focus on published research may exclude informal or unpublished insights from practitioners and learners. Despite these limitations, the qualitative synthesis offers valuable sociological insights and establishes a foundation for future field-based research on gender and digital learning in Pakistan.

### Results and Discussion

The analysis of published research on gender and digital learning in higher education in Pakistan reveals a multifaceted and layered understanding of how gender relations shape digital participation, access, and experiences. The findings are organized thematically to highlight key patterns emerging from the literature, followed by a sociological interpretation rooted in feminist and critical social theories.

#### Gendered Access to Digital Resources

A dominant theme across the reviewed studies is the persistence of the gendered digital divide (Ahmed, Shoaib, & Zaman, 2025). However, higher education institutions have increasingly adopted digital technologies, but access to essential digital infrastructure, such as laptops, smartphones, and stable internet connections, remains uneven (Shoaib, Zaman, & Abbas, 2024). Female students, particularly those from rural or low-income backgrounds, face restricted access due to financial limitations, family control over technology use, and mobility constraints (Shoaib, Shehzadi, & Abbas, 2024b). Research conducted by the Higher Education Commission (HEC) and other academic studies reveal that many female students depend on shared or borrowed devices, reducing privacy and continuity in learning (Shoaib, Shehzadi, & Abbas, 2024a). In contrast, male students generally enjoy greater autonomy and support for technological use (Shoaib, Ali, & Abbas, 2024). This differential access reflects broader social patterns of gender inequality in Pakistan, where males are often prioritized in educational investment and technological literacy (Shoaib, 2024e; Shoaib, Abdullah, Naqvi, & Ditta, 2024). From a sociological standpoint, this disparity

aligns with Bourdieu's concept of economic, cultural, and social capital. Male students possess greater economic capital (resources to buy devices), cultural capital (digital literacy), and social capital (networks that facilitate access); female students remain disadvantaged across these dimensions.

#### Sociocultural Constraints and Gender Norms

The digital learning experience in Pakistan has not been understood without recognizing the influence of patriarchal cultural norms (Shoaib, 2024d). In many households, traditional gender roles confine women's mobility and autonomy, limiting their ability to attend on-campus digital sessions or engage freely in online learning spaces (Shoaib, 2024b). Some studies highlight instances where female students faced restrictions on camera use, participation in mixed-gender discussions, or late-night online sessions due to concerns about "honor" and social propriety (Shoaib, 2024c). These sociocultural barriers illustrate that digital learning is not simply a technological process (Shoaib, 2024a). It is deeply embedded within social and cultural power structures. The feminist sociological perspective emphasizes that even in virtual spaces, gender hierarchies persist, as patriarchal values regulate norms of visibility, speech, and participation (R. Ali, Zaman, & Shoaib, 2024). The notion that technology automatically democratizes learning is therefore overly simplistic in societies where gendered control over communication remains strong (Shoaib, Usmani, & Abdullah, 2023).

#### Institutional Challenges and Digital Pedagogy

At the institutional level, universities often lack gender-sensitive digital policies and pedagogical training for faculty (Shoaib, Naseer, & Naseer, 2023; Shoaib, Rasool, Anwar, & Ali, 2023; Shoaib, Shehzadi, & Abbas, 2023). The rapid shift to online education during the COVID-19 pandemic exposed institutional unpreparedness, both technological and pedagogical (Ahmad, Shoaib, & Abdullah, 2021; Shoaib & Abdullah, 2020, 2021; Shoaib, Mustafa, & Hussain, 2023). Female faculty members faced additional pressures in balancing domestic responsibilities with online teaching, as well as navigating limited institutional support and gender bias in technological competence (Shoaib, 2023a,

2023b). Moreover, many digital platforms used by universities were not designed with inclusivity in mind. Limited accessibility features, language barriers, and rigid attendance expectations created new challenges for female students juggling household duties (Shoaib, Mustafa, & Hussain, 2022; Shoaib, Tariq, Shahzadi, & Ali, 2022; Shoaib, Usmani, & Ali, 2022). These institutional gaps reflect what structural functionalists would identify as systemic dysfunctions where social institutions fail to adapt equitably to technological change (Shoaib, Ali, Anwar, & Abdullah, 2022; Shoaib & Ullah, 2021a, 2021b).

### **Gendered Participation and Engagement in Digital Spaces**

Empirical studies consistently show that male students tend to dominate digital discussions, group projects, and online forums, and female students often adopt passive roles or experience self-censorship (Shoaib, Fatima, & Jamil, 2021; Shoaib, Iqbal, & Tahira, 2021; Shoaib, Rasool, & Anwar, 2021). This trend is partly due to internalized gender norms discouraging assertiveness among females and partly due to subtle discrimination in classroom dynamics (Shoaib, Ahmad, Ali, & Abdullah, 2021; Shoaib, Ali, Anwar, Rasool, et al., 2021; Shoaib, Ali, Anwar, & Shaukat, 2021; Shoaib, Ali, & Akbar, 2021). The symbolic interactionist perspective helps explain these patterns by highlighting how everyday interactions in digital spaces construct and reinforce gendered identities (Shoaib, Abdullah, & Ali, 2020, 2021; Shoaib & Ullah, 2019). For example, communication styles, levels of confidence, and digital visibility become gendered performances shaped by broader social expectations. They contribute to an ongoing reproduction of inequality, even in seemingly egalitarian virtual environments.

### **Opportunities for Empowerment through Digital Learning**

Despite these challenges, digital learning has also opened new pathways for empowerment (Shoaib, Waris, & Iqbal, 2025b). Many female students report increased confidence, digital literacy, and academic independence through online education. Remote learning allows females, especially those in conservative areas, to pursue higher education

without the social constraints of physical attendance (Shoaib, Tariq, & Iqbal, 2025b). Online platforms have enabled females to connect with global academic communities, engage in virtual research collaborations, and access learning materials that were previously unavailable (Shoaib, Rasool, Iqbal, et al., 2025). From a sociological viewpoint, these developments align with feminist empowerment theories, which posit that access to knowledge and communication technologies challenge patriarchal control and foster agency (Shoaib, Ahmed, Iqbal, et al., 2025). Digital learning thus holds transformative potential, provided that structural inequalities are actively addressed through supportive policies and institutional interventions.

### **Theoretical Interpretation: Gender, Power, and the Digital Divide**

Synthesizing these findings through a sociological lens reveals that gendered experiences in digital learning are not merely technological issues but manifestations of deeper power relations within society. Drawing on Bourdieu and Passeron (1977) theory of social reproduction, digital learning spaces can be seen as arenas where existing social hierarchies are reproduced through differential access to capital, technological, educational, and social resources. Similarly, feminist theory underscores that technology is not gender-neutral; social relations of power and exclusion shape it. Therefore, policies promoting digital inclusion must go beyond infrastructure and focus on transforming social attitudes, institutional cultures, and pedagogical practices that perpetuate gender inequality (Bourdieu, 1986, 1989, 1990).

### **Policy and Practice Implications**

The findings suggest that achieving gender equality in digital learning requires a multi-level approach involving policy reform, institutional restructuring, and sociocultural change. Universities must integrate gender-sensitive digital policies, offer targeted digital literacy training for female students and staff, and encourage inclusive pedagogical practices. Governmental and donor agencies should prioritize gender-responsive ICT initiatives, particularly in rural regions where the digital divide is most pronounced. Furthermore, awareness programs

addressing gender biases in technology use, mentorship for female learners, and inclusive curriculum design foster a more equitable digital learning culture. The involvement of male allies in promoting digital gender equality is equally essential to dismantling patriarchal resistance within institutions. In sum, the analysis indicates that digital learning has redefined the educational landscape in Pakistan; however, it has not automatically bridged gender disparities. Instead, digital platforms often mirror existing social inequalities. However, supported by equitable access, institutional commitment, and gender-sensitive pedagogy, digital learning becomes a catalyst for female empowerment and social transformation in higher education.

### Theoretical Insights

The sociological analysis of gender and digital learning in higher education in Pakistan is anchored in a range of theoretical perspectives that help explain the complex interplay between technology, social structure, and gender relations. This section reviews key sociological and feminist theories that inform the understanding of how gendered inequalities are constructed, maintained, and potentially transformed within digital learning environments. It also highlights the potential of digital learning to challenge and transform existing power relations, fostering a sense of optimism and forward-thinking.

### Feminist Theory and Gendered Power Relations

Feminist theory provides the foundational framework for analyzing gender and digital learning. It emphasizes that gender inequality is not a natural outcome but a socially constructed phenomenon rooted in patriarchal power structures. Feminist scholars such as Simone de Beauvoir, Butler (1990), and Hooks (1994) have argued that gender roles are culturally produced and maintained through institutions like family, education, and media. Within the digital learning context, feminist theory illuminates how patriarchal values infiltrate online education systems, shaping access, participation, and representation. For instance, digital technologies are often celebrated as neutral tools of empowerment; feminist theorists argue that they reflect and reproduce existing social hierarchies. Online

classrooms, like traditional ones, may still privilege male voices, reproduce gender stereotypes, and marginalize female experiences. In Pakistan's sociocultural setting, where patriarchal norms dictate females' behavior and mobility, feminist theory helps explain why digital learning, though potentially liberating, remains constrained by gendered expectations. However, feminist perspectives also highlight agency and resistance: females use digital platforms to challenge dominant discourses, gain autonomy, and construct new identities as active learners and professionals.

### Bourdieu's Theory of Capital and Social Reproduction

Bourdieu (1983) theoretical constructs of economic, social, cultural, and symbolic capital are highly relevant in analyzing inequalities in digital learning. Bourdieu posits that education systems reproduce social hierarchies by privileging those who already possess advantageous forms of capital.

In the context of digital learning in Pakistan:

- Economic capital determines who can afford digital devices, stable internet connections, and learning materials.
- Cultural capital includes digital literacy, language proficiency, and familiarity with academic norms, all of which favor students from privileged backgrounds.
- Social capital refers to networks of support and mentorship that facilitate educational success.

These forms of capital are unevenly distributed along gender lines (Bourdieu, 1986). Male students, generally having greater access to financial resources and social freedom, accumulate more capital; female students, especially from rural or conservative backgrounds, often face cumulative disadvantages (Bourdieu, 1989). Thus, Bourdieu's framework explains how digital education, without structural reform, reproduces rather than eliminates social inequality. Moreover, the concept of habitus, which refers to the internalized set of dispositions shaped by one's social background, helps elucidate why female students may internalize self-doubt or hesitation in digital participation (Bourdieu, 1990). Their engagement is shaped not merely by external barriers but by ingrained social expectations about appropriate gendered behavior.

### Social Constructionism and Gendered Meanings in Digital Learning

Social constructionism argues that knowledge, identities, and social realities are constructed through human interaction and communication rather than existing independently of them (Dreher, 2016; Kwan, 2002). Applied to digital learning, this perspective suggests that online spaces are socially constructed environments where gendered meanings are continuously negotiated. For example, gendered communication styles in online classes, such as assertiveness, visibility, or participation patterns, reflect broader societal norms (McCall, 2005). Male students may be encouraged to speak up, while females might be socialized to remain reserved. Teachers' interpretations of "participation" and "competence" may also be influenced by gender stereotypes (Grenfell, 2014). Thus, digital learning environments become symbolic spaces where gender identities are performed, contested, and reinforced. From this standpoint, addressing gender inequality in digital education requires not only structural solutions (e.g., access to technology) but also cultural transformation in how gender and learning are socially constructed (Freire, 2018).

### Intersectionality and the Layered Nature of Inequality

Introduced by Crenshaw (1989), the concept of intersectionality offers a vital analytical lens to understand how gender interacts with other social categories such as class, ethnicity, region, and language to produce unique experiences of privilege or marginalization. In Pakistan, the gendered digital divide is not homogeneous. Urban, upper-middle-class females may have high access to digital tools but still face cultural barriers to full participation. Conversely, rural or lower-income females encounter compounded disadvantages: limited connectivity, lack of digital skills, and conservative social norms. Intersectionality helps reveal these overlapping structures of inequality, emphasizing that digital inclusion policies must address multiple dimensions of social identity simultaneously.

### Critical Theory and Digital Power Structures

Drawing from Critical Theory (Frankfurt School), this perspective critiques how power, ideology, and

technology intersect in educational systems. Critical theorists such as Habermas (1984) and Marcuse argue that modern technologies often serve to reinforce capitalist and patriarchal systems of control, rather than liberate individuals. In digital learning contexts, this perspective raises questions about who designs digital platforms, whose knowledge is valued, and who controls online discourse. In Pakistan, digital educational tools and curricula are often imported or modeled after Western systems, which may marginalize local knowledge and gender-sensitive pedagogies. Thus, critical theory calls for a decolonized and gender-conscious approach to digital learning that prioritizes local contexts, inclusivity, and equity.

### Feminist Pedagogy and Transformative Learning

Feminist pedagogy (Collins, 2004), with its emphasis on collaboration, dialogue, reflexivity, and empowerment, offers a beacon of hope in reimagining teaching and learning processes. In digital environments, it challenges hierarchical structures between teachers and learners, advocating for inclusive and participatory approaches that amplify the voices of women (Harding, 2008). Applying feminist pedagogy in Pakistan's higher education could involve designing online courses that encourage critical reflection on gender roles, use inclusive language, promote equitable participation, and integrate examples highlighting women's contributions in academia and technology (Lewis, 2011). Such approaches not only support learning outcomes but also contribute to social transformation through education (Kwan, 2002; Lewis, 2011; Steinberg, 1994).

### Synthesis of Theoretical Perspectives

These theoretical frameworks provide a comprehensive lens for analyzing gender and digital learning in higher education:

- Feminist theory exposes the structural and cultural roots of gender inequality.
- Bourdieu's theory explains how social capital and habitus perpetuate unequal educational outcomes.
- Social constructionism uncovers how gender identities are negotiated within digital spaces.

- Intersectionality highlights the compounded effects of gender with class, location, and other identities.
- Critical theory and feminist pedagogy offer transformative pathways to make digital learning more inclusive and equitable.

The study situates gender and digital learning not merely as educational issues but as reflections of broader sociocultural power relations in Pakistan. This theoretical synthesis underscores the urgent need for structural, cultural, and pedagogical change to achieve gender equity in digital education. It is a collective responsibility that demands immediate action.

### Conclusion

The sociological analysis of gender and digital learning in higher education in Pakistan reveals that digital technologies have expanded educational opportunities, but they have not automatically led to gender equality. Instead, digital learning environments often mirror and, in some cases, intensify existing social hierarchies shaped by patriarchy, class, and cultural norms. Access to digital tools, internet connectivity, and technological literacy remains unequally distributed, with female students, especially those from rural and low-income backgrounds, facing compounded disadvantages. Sociologically, these inequalities reflect the interplay of economic, cultural, and social capital (Bourdieu), where male students possess greater resources and networks to benefit from digital education. The feminist theoretical perspective further highlights that digital platforms, like traditional classrooms, are embedded within gendered power relations that regulate visibility, participation, and voice. Social constructionism explains how these gendered behaviors and expectations are continuously reinforced through online interactions. Intersectionality reveals how gender intersects with other axes of identity to create diverse educational experiences.

However, the study also identifies opportunities for empowerment. Supportive institutional policies and gender-sensitive pedagogy have accompanied digital learning, enhancing females' educational participation, agency, and self-confidence. For many females, particularly in restrictive sociocultural

settings, online learning provides access to higher education without the barriers of mobility and social scrutiny. The findings emphasize that technological inclusion alone is insufficient to achieve gender equality. Structural, institutional, and cultural reforms are essential to create equitable digital learning spaces. It requires the implementation of gender-responsive policies, the development of inclusive digital pedagogies, and active efforts to dismantle patriarchal norms within educational institutions.

In conclusion, digital learning holds transformative potential for advancing gender equity in Pakistan's higher education system. However, its success depends on how effectively educational institutions and policymakers address the underlying sociocultural structures that perpetuate inequality. A sociological lens reminds us that technology does not exist in a vacuum. It operates within and reproduces social realities. Therefore, meaningful gender inclusion in digital education must involve not just technological advancement but a broader commitment to social justice, equality, and empowerment.

### REFERENCES

- Ahmad, A., Shoaib, M., & Abdullah, F. (2021). COVID-19 black swan and personal protective equipment (PPE) in Pakistan. *Health Education, 122*(4), 365-373.
- Ahmed, R., Shoaib, M., & Zaman, M. A. (2025). Female Acceptability in STEM Higher Education in Pakistan: The Role of Gender Expression, Gender Sensitivity, and Supportiveness. *Annual Methodological Archive Research Review, 3*(7), 296-322.
- Ali, R., Zaman, M. A., & Shoaib, M. (2024). Trends of Research Visualization of Gender Inequality, Equality, and Equity: A Bibliometric Analysis from 1981 to 2020. *Pakistan Journal of Law, Analysis and Wisdom, 3*(8), 237-252.
- Ali, S. R., Shoaib, M., & Kausar, N. (2025). Gender Disparity in Enrolment, Classroom, Learning Environment, and Learning Achievements of the Students in Higher Education in Pakistan. *Journal of Media Horizons, 6*(3), 330-342.

- Bourdieu, P. (1983). The field of cultural production, or: The economic world reversed. *Poetics*, 12(4-5), 311-356.
- Bourdieu, P. (1986). The forms of capital. *Handbook of Theory and Research for the Sociology of Education*. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). New York: Greenwood Press.
- Bourdieu, P. (1986). *The forms of capital*. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Greenwood Press.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological theory*, 7(1), 14-25.
- Bourdieu, P. (1990). *The logic of practice*. California: Stanford University Press.
- Bourdieu, P., & Passeron, J.-C. (1977). *Reproduction in society, culture, and education*. London: Sage Publications Ltd.
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. Routledge.
- Collins, P. H. (2004). Feminist Standpoint Theory Revisited". *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies*, 247.
- Crenshaw, K. (1989). *Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics*. University of Chicago Legal Forum, 1989(1), 139-167.
- Dreher, J. (2016). The social construction of power: Reflections beyond Berger/Luckmann and Bourdieu. *Cultural Sociology*, 10(1), 53-68.
- Freire, P. (2018). The banking concept of education. In *Thinking about schools* (pp. 117-127): Routledge.
- Grenfell, M. (2014). *Pierre Bourdieu: key concepts*: Routledge.
- Habermas, J. (1984). *The theory of communicative action: Reason and the rationalization of society* (Vol. 1). Beacon Press.
- Harding, S. (2008). *Sciences from below: Feminisms, postcolonialities, and modernities*: Duke University Press.
- Higher Education Commission (HEC). (2021). *Digital learning policy and implementation framework for Pakistani universities*. Islamabad: HEC Publications.
- Hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge.
- Kwan, M.-P. (2002). Feminist visualization: Re-envisioning GIS as a method in feminist geographic research. *Annals of the Association of American Geographers*, 92(4), 645-661.
- Lewis, M. M. (2011). Body of Knowledge: Black Queer Feminist Pedagogy, Praxis, and Embodied Text. *Journal of Lesbian Studies*, 15(1), 49-57. doi:10.1080/10894160.2010.508411
- Mayring, P. (2014). *Qualitative content analysis: Theoretical foundation, basic procedures and software solution*. Klagenfurt, Austria: Social Science Open Access Repository.
- McCall, L. (2005). The complexity of intersectionality. *Signs: Journal of Women in Culture and Society*, 30(3), 1771-1800.
- Shoaib, M. (2023a, September 22). Galvanising Bourdieu's typology with Pakistani education and social class. *The Nation*, p. 4.
- Shoaib, M. (2023b, December 05). Gender Differences in Academic Performance. *The Nation*.
- Shoaib, M. (2024a, January 09). Gender Disparity in Education. *The Nation*.
- Shoaib, M. (2024b). Gender Diversity and Inclusion in Higher Education in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 3(1), 207-222.
- Shoaib, M. (2024c, April 30). Gendered Space in Higher Education. *Daily Parliament Times*, p. 3.
- Shoaib, M. (2024d). Gendering Bourdieu's Cultural Capital in Higher Education in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 3(2), 265-278.
- Shoaib, M. (2024e). Tailoring Theoretical Lens and Nudging Bourdieu's Cultural Capital on Gender and Academic Performance. *Journal of Social Sciences Review*, 4(4), 87-101.

- Shoaib, M. (2025a). Academic Achievement and Gender Inequality in Higher Education: A Systematic Review of Muslim Majority Nations. *Sociology & Cultural Research Review* 3(02), 373–380.
- Shoaib, M. (2025b). A Systematic Review of Gender Disparities in Academic Achievement in Higher Education Across Muslim Countries. *Advance Social Science Archive Journal*, 3(02), 1622–1639.
- Shoaib, M., & Abdullah, F. (2020). Risk Reduction of COVID-19 Pandemic in Pakistan. *Social Work in Public Health*, 35(7), 557-568. doi:10.1080/19371918.2020.1806172
- Shoaib, M., & Abdullah, F. (2021). COVID-19 backlash: psycho-social impacts of outbreak in Pakistan. *Health Education*, 121(3), 265-274.
- Shoaib, M., & Bashir, Z. (2025). *Virtual Classrooms and Academic Performance of the Students in Higher Education during the COVID-19 Outbreak*. Paper presented at the 5th International Conference of PNQAHE and AGM on Stakeholder Engagement in Quality Assurance – Shaping Higher Education with Inputs from All Relevant Voices, Forman Christian College University, Lahore.
- Shoaib, M., & Ullah, H. (2019). Female and Male Students' Educational Performance in Tertiary Education in the Punjab, Pakistan. *Pakistan Journal of Social Issues*, X(1), 83-100.
- Shoaib, M., & Ullah, H. (2021a). Classroom Environment, Teacher, and Girl Students' Learning Skills. *Education and Urban Society*, 53(9), 1039-1063. doi:10.1177/00131245211001908
- Shoaib, M., & Ullah, H. (2021b). Teachers' perspectives on factors of female students' outperformance and male students' underperformance in higher education. *International Journal of Educational Management*, 35(3), 684-699. doi:10.1108/IJEM-05-2020-0261
- Shoaib, M., & Ullah, H. (2025). Gender differentials in academic performance in Pakistani higher education\*. *Educational Research and Evaluation*, 1-21.
- Shoaib, M., & Zaman, M. A. (2025). Evaluating Academic Performance in Higher Education during COVID-19 A Study of Virtual Learning Environments. *Pakistan Journal of Law, Analysis and Wisdom*, 4(4), 64-78.
- Shoaib, M., Abdullah, F., & Ali, N. (2020). Library Resources and Research Environment in Higher Education Institutions: Students' Satisfaction. *Library Philosophy and Practice*, 1-18.
- Shoaib, M., Abdullah, F., & Ali, N. (2021). A Research Visualization of Academic Learning Skills among Students in Higher Education Institutions: A Bibliometric Evidence from 1981 to 2020. *Library Philosophy and Practice*, 5579, 1-34.
- Shoaib, M., Abdullah, F., Naqvi, S. A. A., & Ditta, A. (2024). Social Distancing, Social Isolation, and Fake News during COVID-19 Pandemics: A Case of Family Life in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 3(4), 105-120.
- Shoaib, M., Ahmad, A., Ali, N., & Abdullah, F. (2021). Trend of Research Visualization of Learning, Classroom, and Class Participation in Higher Education Institutions: A Bibliometric Analysis from 2001 to 2020. *Library Philosophy and Practice*, 5743, 1-26.
- Shoaib, M., Ahmed, R., & Iqbal, S. (2025). Female Acceptability in Stem Higher Education in Pakistan: The Interplay of Careerist Femininity, Job Oriented, and Family Orientation. *Journal for Current Sign*, 3(3), 181–202.
- Shoaib, M., Ahmed, R., & Usmani, F. (2025a). Empirical Study on Acceptability and Resistance to Feminization in STEM Fields at the Higher Education Level. *Physical Education, Health and Social Sciences*, 3(3), 135–143.

- Shoaib, M., Ahmed, R., & Usmani, F. (2025b). Feminization in STEM Fields in Higher Education in Pakistan: A Case of Female Acceptability and Resistance. *Social Science Review Archives*, 3(3), 646-660.
- Shoaib, M., Ahmed, R., Iqbal, S., & Abdullah, F. (2025). Feminization of STEM Education in Higher Education: Arrays of Acceptability and Resistance. *Research Consortium Archive*, 3(2), 1002-1021.
- Shoaib, M., Ahmed, R., Zaman, M. A., & Abdullah, F. (2025). Exploring Acceptability and Resistance to Feminization in STEM Fields: An Empirical Perspective from Higher Education. *Dialogue Social Science Review (DSSR)*, 3(7), 722-736.
- Shoaib, M., Ali, N., Anwar, B., & Abdullah, F. (2022). Library services and facilities in higher education institutions during coronavirus disease (COVID-19) in Pakistan. *Journal of Information Science*, 1-14.
- Shoaib, M., Ali, N., Anwar, B., & Shaukat, B. (2021). Plotting the Literature on Learning Outcomes and Academic Performance in Higher Education from 2001 to 2020: A Scientometric Analysis. *Library Philosophy and Practice*, 5919, 1-24.
- Shoaib, M., Ali, N., Anwar, B., Rasool, S., Mustafa, R.-e., & Zici, S. (2021). Research Visualization on Teaching, Language, Learning of English and Higher Education Institutions from 2011 to 2020: A Bibliometric Evidences *Library Philosophy and Practice*, 5677, 1-27.
- Shoaib, M., Ali, R., & Akbar, A. (2021). Library Services and Facilities in Higher Education Institutions in Pakistan: Satisfaction of Patrons. *Library Philosophy and Practice*, 1-19.
- Shoaib, M., Ali, S. R., & Abbas, Z. (2024). Self-Fulfilling Prophecy of Learning Skills Among Students in Higher Education. *Pakistan Journal of Law, Analysis and Wisdom*, 3(7), 164-177.
- Shoaib, M., Ali, S. R., & Kausar, N. (2025). Gender Disparity on Teaching Materials, Communication, Institutional Support, and Learning Achievements of the Students in Higher Education in Pakistan. *International Journal of Social Sciences Bulletin*, 3(7), 169-183.
- Shoaib, M., Ali, S. R., Iqbal, T., & Abdullah, F. (2025). Gender Disparity in Learning Achievements of the Students in Higher Education in Pakistan. *International Journal of Social Sciences Bulletin*, 3(6), 840-853.
- Shoaib, M., Batool, F., Kausar, N., & Abdullah, F. (2025). Research on Learning Modalities A Bibliometric Study of Global Scholarship (2001-2023). *International Journal of Social Sciences Bulletin*, 3(8), 1083-1101.
- Shoaib, M., Fatima, U., & Jamil, R. (2021). Academic Library and Students' Learning at University Level: Nothing is Pleasanter than Exploring a Library. *Library Philosophy and Practice*, 1-19.
- Shoaib, M., Iqbal, A., & Iftikhar, I. (2025). Engagement of Students in Learning in Higher Education: The Role of Academic Library Spaces. *The Regional Tribune*, 4(3), 311-328.
- Shoaib, M., Iqbal, S., & Tahira, G. (2021). Digitalization of Academic Libraries in Higher Education Institutions during COVID-19 Pandemic. *Library Philosophy and Practice*, 1-15.
- Shoaib, M., Kausar, N., Ali, S. R., & Abdullah, F. (2025). Gender Disparity in Learning Achievements in Higher Education: Insights from a Literature Review. *Policy Research Journal*, 3(6), 634-648.
- Shoaib, M., Mustafa, R.-E., & Hussain, K. G. (2022). Revisiting Classroom Environment and Academic Performance of the Students in Higher Education Institutions. *Pakistan Journal of Social Research*, 4(3), 969-986.

- Shoaib, M., Mustafa, R.-E., & Hussain, K. G. (2023). Citing the Empirical Shreds of Electronic Evidence on Pedagogical Skills Employing Bibliometric Analysis from 2001-2020. *Pakistan Journal of Social Research*, 5(2), 1050-1062.
- Shoaib, M., Naseer, A., & Naseer, N. (2023). Family Pressure, Social Media Influence, and COVID-19 Vaccination Hesitancy among Students at Higher Education in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 2(3), 295-307.
- Shoaib, M., Rasool, S., & Anwar, B. (2021). Evaluating Research Support Facilities to University Students during COVID-19. *Library Philosophy and Practice*, 4953(1), 1-18.
- Shoaib, M., Rasool, S., & Iqbal, S. (2025). Trends and Paradoxes of Gender in Higher Education in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 4(9), 37-51.
- Shoaib, M., Rasool, S., & Zaman, M. A. (2025a). Feminist Pedagogies and Gender Sensitive Teaching Practices in Pakistani Higher Education. *Social Science Review Archives*, 3(4), 179-190.
- Shoaib, M., Rasool, S., & Zaman, M. A. (2025b). Feminist Praxis and Pedagogical Approaches in Higher Education in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 4(8), 145-160.
- Shoaib, M., Rasool, S., & Zaman, M. A. (2025c). Gender and Cultural dynamics in Shaping Pedagogical Practices in Pakistani Higher Education. *Physical Education, Health and Social Sciences*, 3(4), 105-118.
- Shoaib, M., Rasool, S., Anwar, B., & Ali, R. (2023). Academic library resources and research support services to English teachers in higher education institutions. *Journal of Electronic Resources Librarianship*, 35(1), 17-27.
- Shoaib, M., Rasool, S., Iqbal, S., & Abdullah, F. (2025). Empowerment of Females Through Knowledge in Higher Education in Pakistan. *Journal of Media Horizons*, 6(5), 636-648.
- Shoaib, M., Rasool, S., Kalsoom, A., & Ali, S. R. (2025). Exploring Gender-Based Dissimilarities in Educational Outcomes at the Tertiary Level: A Review of Existing Literature. *Policy Research Journal*, 3(7), 287-302.
- Shoaib, M., Rasool, S., Zaman, M. A., & Abdullah, F. (2025). Gendered Pathways and Global Knowledge Flows in the Transformation of Pakistani Higher Education. *International Journal of Social Sciences Bulletin*, 3(10), 308-322.
- Shoaib, M., Rasool, S., Zaman, M. A., & Ahmed, R. (2025). An Empirical Insight into Acceptability and Resistance to Feminization in STEM Fields at the Higher Education Level. *Research Consortium Archive*, 3(3), 157-178.
- Shoaib, M., Shamsher, A., & Iqbal, S. (2025). A Systematic Review of Academic Library Spaces as Facilitators of Student Engagement in Higher Education Learning. *The Knowledge*, 4(1), 123-134.
- Shoaib, M., Shamsher, A., & Iqbal, S. (2025). Understanding Student Engagement in Higher Education: The Contribution of Academic Library Spaces. *ProScholar Insights*, 4(1), 245-257.
- Shoaib, M., Shehzadi, K., & Abbas, Z. (2023). Contemporary Research on Learning Spaces and Teacher Effectiveness in Higher Education. *Pakistan Journal of Law, Analysis and Wisdom*, 2(03), 352-369.
- Shoaib, M., Shehzadi, K., & Abbas, Z. (2024a). Inclusivity and Teachers' Aptitude in Higher Education in Pakistan. *Pakistan Journal of Law, Analysis and Wisdom*, 3(6), 219-237.
- Shoaib, M., Shehzadi, K., & Abbas, Z. (2024b). Inclusivity, Teacher Competency, and Learning Environment at Higher Education: Empirical Evidences. *Pakistan Journal of Law, Analysis and Wisdom*, 3(5), 244-261.
- Shoaib, M., Tariq, I., & Iqbal, S. (2025a). Extracurricular Activities in Higher Education: Diversity and Inclusion. *Regional Lens*, 4(1), 174-187.

- Shoaib, M., Tariq, I., & Iqbal, S. (2025b). Intersectionality and Student Inclusion in Higher Education: A Study of Class, Residence, Culture, and Extracurricular Participation. *Journal of Social Horizons*, 2(1), 1-14.
- Shoaib, M., Tariq, I., Rasool, S., & Iqbal, S. (2025). The Role of Extracurricular Activities in Fostering Diversity and Inclusion in Higher Education: A Systematic Review. *Advance Social Science Archive Journal*, 3(2), 1377-1392.
- Shoaib, M., Tariq, M., Shahzadi, S., & Ali, M. (2022). Role of Academic Libraries in Online Academic Activities during COVID-19 Outbreak at Tertiary Level: A Library is a Thought in Cold Storage. *Library Philosophy and Practice*, 1-19.
- Shoaib, M., Usmani, F., & Abdullah, F. (2023). Plotting The Literature On Social Work Education From 1971-2020: A Scientometric Analysis. *Pakistan Journal of Social Research*, 5(2), 1347-1360.
- Shoaib, M., Usmani, F., & Ali, N. (2022). Citing the Empirical Shreds on Social Welfare and Methods of Social Work Employing Bibliometric Analysis From 1971 to 2020. *Pakistan Journal of Social Research*, 4(3), 1113-1133.
- Shoaib, M., Waris, T., & Iqbal, S. (2025a). A Review-Based Examination of Gender Dynamics in Virtual Learning Environments in Higher Education. *Sociology & Cultural Research Review*, 3(02), 448-454.
- Shoaib, M., Waris, T., & Iqbal, S. (2025a). Assessing Gendered Participation Spaces in Online Learning Environments in Higher Education in Pakistan. *The Knowledge*, 4(2), 63-74.
- Shoaib, M., Waris, T., & Iqbal, S. (2025b). Gender Dynamics in Online Higher Education: Insights from Empirical Evidence. *The Regional Tribune*, 4(2), 89-102.
- Shoaib, M., Waris, T., & Iqbal, S. (2025b). Virtual Learning Environments and Gendered Spaces in Higher Education in Pakistan: A Quantitative Approach. *Regional Lens*, 4(2), 65-78.
- Shoaib, M., Waris, T., & Iqbal, S. (2025c). A Quantitative Study of Gendered Interactions and Spatial Perceptions in Online Higher Education in Pakistan. *ProScholar Insights*, 4(2), 96-108.
- Shoaib, M., Zaman, M. A., & Abbas, Z. (2024). Trends of Research Visualization of Gender Based Violence (GBV) from 1971-2020: A Bibliometric Analysis. *Pakistan Journal of Law, Analysis and Wisdom*, 3(7), 203-216.
- Steinberg, D. L. (1994). Power, positionality and epistemology: An anti-oppressive feminist standpoint approach. *Women: a cultural review*, 5(3), 295-307. doi:10.1080/09574049408578211