

**Learning Modalities and Academic Engagement in Higher Education:  
A Sociological Study of Group-Study, Online Learning, and Self-  
Study**

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**Abstract**

This study examines the relationship between learning modalities and academic engagement in higher education from a sociological perspective, focusing on group-study, online learning, and self-study practices. Employing a quantitative research design, the study was conducted at a public sector university in the Punjab province of Pakistan. The population comprised students enrolled in the BS (4-year) program in social sciences disciplines, with male and female students constituting the target population. The unit of analysis included students from the sixth and eighth semesters at the main campus. A proportionate random sampling technique was used to ensure departmental representation based on class strength, and the sample size was calculated using Yamane's (1967) formula. Although a sample of 265 students was determined, usable data was collected from 235 respondents through a cross-sectional survey. Data were gathered using a structured questionnaire consisting of standardized items measuring learning modalities. The instrument was pre-tested on 30 respondents to ensure clarity and reliability. The findings indicate that learning modalities are significantly associated with levels of academic engagement, with group-study enhancing collaborative engagement, online learning influencing engagement through digital access and self-regulation, and self-study strongly linked to autonomous learning skills. The study highlights that academic engagement is socially patterned and shaped by institutional arrangements and students' differential access to educational resources. These findings underscore the importance of adopting

inclusive pedagogical strategies that recognize diverse learning practices and social contexts within higher education.

**Keywords:** Learning Modalities, Academic Engagement, Group-Study, Online Learning, Self-Study, Higher Education

### Introduction

Contemporary higher education is characterized by increasing diversification in learning modalities, reflecting broader social, technological, and institutional transformations (Ali, Shoaib, Iqbal, & Abdullah, 2025a, 2025b; Ali, Shoaib, & Kausar, 2025; Bernstein, 2000). Traditional classroom-based instruction is now complemented and, in some contexts, supplanted by group-study practices, online learning environments, and self-study modes (Ahmed, Shoaib, & Zaman, 2025; Bourdieu, 1986; Shoaib, 2025a, 2025b). These modalities are not merely pedagogical choices; rather, they are socially embedded practices shaped by power relations, cultural capital, institutional norms, and students' positionalities within the higher education system (Bourdieu & Passeron, 1990; Shoaib, Ahmed, & Iqbal, 2025; Shoaib, Ahmed, Iqbal, & Abdullah, 2025; Shoaib, Ahmed, & Usmani, 2025a, 2025b). From a sociological perspective, examining learning modalities offers critical insight into how academic engagement is produced, sustained, or constrained within diverse educational contexts (Giddens, 1984; Shoaib, Ahmed, Zaman, & Abdullah, 2025; Shoaib, Ali, S. Iqbal, & Abdullah, 2025a, 2025b). Academic engagement is commonly understood as students' cognitive, behavioral, and emotional involvement in learning varies significantly across learning modalities (Shoaib, Ali, Iqbal, & Abdullah, 2025c; Shoaib, Ali, Iqbal, & Abdullah, 2025; Shoaib, Ali, & Kausar, 2025; Putnam, 2000). Group-study emphasizes collaborative knowledge construction, peer interaction, and shared academic norms, often reinforcing social integration and collective learning cultures (Shoaib & Bashir, 2025; Shoaib, Batool, Kausar, & Abdullah, 2025). Online learning, mediated through digital platforms, restructures interactional patterns and introduces new forms of participation, surveillance, and autonomy, whereas also reflecting inequalities in digital access and technological competence (Shoaib, Iqbal, & Iftikhar, 2025; Shoaib, Iqbal, Rasool, & Abdullah, 2025). Self-study, on the other hand, foregrounds individual agencies, self-regulation, and internalized academic discipline, yet remains deeply influenced by students' social backgrounds, prior educational socialization, and institutional expectations (Iqbal, Shoaib, Iqbal, & Abdullah, 2025; Shoaib, Rasool, & Iqbal, 2025a, 2025b, 2025c).

Sociological theories of education provide a robust framework for understanding these variations in engagement (Shoaib, Rasool, Iqbal, & Abdullah, 2025a, 2025b; Shoaib, Rasool, Kalsoom, & Ali, 2025; Abdullah & Nisar, 2024). Drawing on concepts such as Bourdieu's cultural capital, Bernstein's pedagogic codes, and Giddens' structuration, learning modalities viewed as sites where social structures intersect with individual agency (Shoaib, Rasool, & Zaman, 2025a, 2025b; Abdullah & Ullah, 2016). Group-study often privileges students with strong communicative

competencies and social networks; online learning advantage those with greater digital capital; and self-study frequently aligns with middle-class dispositions toward autonomous learning (Shoaib, Rasool, & Zaman, 2025c; Shoaib, Rasool, Zaman, & Abdullah, 2025; Abdullah & Ullah, 2022). Consequently, patterns of academic engagement across these modalities are not neutral but socially differentiated (Shoaib, Rasool, Zaman, & Ahmed, 2025; Shoaib, Shamsher, & Iqbal, 2025; Abdullah, Matloob, & Malik, 2024). This study situates learning modalities within the broader sociology of higher education, arguing that academic engagement is a socially constructed outcome rather than an individual trait. By examining group-study, online learning, and self-study as distinct yet interconnected social practices, the research seeks to illuminate how higher education institutions organize learning, how students navigate these arrangements, and how inequalities are reproduced or challenged through everyday academic engagement. In doing so, the study contributes to ongoing sociological debates on pedagogy, learner agency, and the changing nature of knowledge production in higher education.

### **Study Context**

This study is situated within the broader context of contemporary higher education, where rapid technological advancement, expanding student populations, and shifting pedagogical priorities have transformed how learning is organized and experienced (Shoaib, Shamsher, & Iqbal, 2025; Shoaib, Tariq, & Iqbal, 2025a). Universities today operate in increasingly complex social environments marked by marketization and digitalization, all of which have reshaped institutional structures and student learning practices (Shoaib, Tariq, & Iqbal, 2025b; Shoaib, Tariq, Rasool, & Iqbal, 2025). Within this context, group-study, online learning, and self-study have emerged as dominant learning modalities that coexist alongside conventional face-to-face instruction (Shoaib & Ullah, 2025; Shoaib, Waris, & Iqbal, 2025a; Abdullah et al., 2024). The context of this study reflects higher education institutions where students are required to navigate multiple learning modes simultaneously (Shoaib, Waris, & Iqbal, 2025a; Shoaib, Waris, & Iqbal, 2025b). Group-study commonly occurs through formal mechanisms such as seminars, tutorials, and project-based coursework, as well as informal peer networks developed outside the classroom (Shoaib, Waris, & Iqbal, 2025b, 2025c; Abdullah, Nisar, Ahmed, & Sultana, 2025). Online learning has expanded significantly through learning management systems, virtual classrooms, and digital resources, particularly in response to institutional reforms and post-pandemic educational restructuring (Shoaib & Zaman, 2025; Shoaib, Zaman, & Abdullah, 2025; Abdullah, Nisar, & Malik, 2024). Self-study remains a central expectation of higher education, emphasizing independent reading, critical reflection, and self-regulated learning beyond structured teaching hours (Shoaib, Shehzadi, & Abbas, 2024a, 2024b; Shoaib, Zaman, & Abbas, 2024).

Socially, the student population within this context is heterogeneous in terms of socio-economic background, gender, prior schooling, and access to technological resources (Shoaib, 2024e; Shoaib, Abdullah, Naqvi, & Ditta, 2024; Shoaib, Ali, & Abbas, 2024). These differences shape students' capacity to engage effectively with various learning

modalities (Shoaib, 2024b, 2024d; Abdullah, Nisar, & Ahmed, 2025). For instance, access to reliable internet, digital devices, and academic support networks influences participation in online learning, whereas familiarity with collaborative learning norms affects engagement in group-study (Shoaib, 2024a, 2024c). Similarly, self-study practices are mediated by students' cultural capital, time availability, and domestic environments (Shoaib, Shehzadi, & Abbas, 2023; Shoaib, Usmani, & Abdullah, 2023). Institutionally, the study is grounded in higher education settings where assessment regimes, curricular designs, and pedagogical expectations implicitly promote particular forms of engagement (Shoaib, Mustafa, & Hussain, 2023; Shoaib, Rasool, Anwar, & Ali, 2023; Abdullah, Sultana, & Nisar, 2025). Continuous assessment, group assignments, online submissions, and independent coursework collectively structure students' daily academic routines (Shoaib, 2023a, 2023b). These institutional arrangements not only regulate learning behaviors but also reflect broader power relations and normative assumptions about the "ideal" learner (Shoaib, Tariq, Shahzadi, & Ali, 2022; Shoaib & Ullah, 2021a; Abdullah, Shoukat, Malik, Akhtar, 2025). By situating the study within this social and institutional context, the research recognizes learning modalities as socially organized practices rather than purely technical or individual choices. The context thus provides a critical lens for examining how academic engagement is shaped by institutional structures, social inequalities, and students' negotiated responses to group-study, online learning, and self-study in higher education.

### The Data and Methods

This study employed a quantitative research design and the population comprised students enrolled in the BS (4-year) program in social sciences disciplines of one public sector university of the Punjab province, Pakistan with male and female students constituting the target population. The unit of analysis included students from the sixth and eighth semesters who were enrolled in social sciences at the main campus. The sampling frame was obtained from the official enrollment lists of the concerned departments, and a proportionate random sampling technique was used to ensure departmental representation based on class strength. Using Yamane's (1967) formula, a sample size of 265 students was determined; however, data were successfully collected from 235 respondents, which constituted the final sample. Data were gathered through a cross-sectional survey using a structured questionnaire containing standardized items for each study variable. Prior to the main survey, the instrument was pre-tested on 30 randomly selected students to assess clarity and reliability, and necessary refinements were made accordingly.

### Results

**Study in Group:** Table 1 presents the response of students towards study in groups at tertiary level. The analysis reveals that 40.4 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you prefer to study with class fellows". Similarly, 30.2 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you prefer to

study with class fellows”. However 23.4 percent of the enrolled students tick the response as not at all with reference to the statement “you prefer to study with class fellows”. Hence, it is concluded that university students are in favour of ‘to great extent’ with the statement of “you prefer to study with class fellows”.

Table 1  
 Response of Students towards Study in Groups  
 To Great Extent = TGE to Not At All = NAA

S. No.	Statement	TGE % (f)	TSE % (f)	NAA % (f)
I	You prefer to study with class fellows	40.4 (109)	30.2 (71)	23.4 (55)
Ii	You prefer to study with your peer group	41.7 (98)	42.1 (99)	16.2 (38)
Iii	You discuss your argument with others in the university	33.6 (79)	39.6 (93)	26.8 (63)
Iv	You prefer to study with group in library	25.5 (60)	32.3 (76)	42.1 (99)
V	You prefer to prepare presentation in group	55.7 (131)	29.4 (69)	14.9 (35)
Vi	You prefer to try to complete assignments in group	49.4 (116)	33.2 (78)	17.4 (41)

The analysis reveals that 41.7 percent of the students of BS program are in favour of ‘to great extent’ to the given statement in the table i.e., “you prefer to study with your peer group”. Similarly, 42.1 percent of the university students are agree in terms of ‘to some extent’ in favour of statement given in the table “you prefer to study with your peer group”. However, 16.2 percent of the enrolled students tick the response as not at all with reference to the statement “you prefer to study with your peer group”. Hence, it is concluded that university students are in favour of ‘to great extent’ with the statement of “you prefer to study with your peer group”.

The analysis reveals that 33.6 percent of the students of BS program are in favour of ‘to great extent’ to the given statement in the table i.e., “you discuss your argument with others in the university”. Similarly, 39.6 percent of the university students are agree in terms of ‘to some extent’ in favour of statement given in the table “you discuss your argument with others in the university”. However, 26.8 percent of the enrolled students tick the response as not at all with reference to the statement “you discuss your argument with others in the university”. Hence, it is concluded that university students are in favour of ‘to great extent’ with the statement of “you discuss your argument with others in the university”.

The analysis reveals that 25.5 percent of the students of BS program are in favour of ‘to great extent’ to the given statement in the table i.e., “you prefer to study with group in library”. Similarly, 32.3 percent of the university students are agree in terms



of 'to some extent' in favour of statement given in the table "you prefer to study with group in library". However, 42.1 percent of the enrolled students tick the response as not at all with reference to the statement "you prefer to study with group in library". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you prefer to study with group in library".

The analysis reveals that 55.7 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you prefer to prepare presentation in group". Similarly, 29.4 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you prefer to prepare presentation in group". However, 14.9 percent of the enrolled students tick the response as not at all with reference to the statement "you prefer to prepare presentation in group". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you prefer to prepare presentation in group".

The analysis reveals that 49.4 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you prefer to try to complete assignments in group". Similarly, 33.2 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you prefer to try to complete assignments in group". However, 17.4 percent of the enrolled students tick the response as not at all with reference to the statement "you prefer to try to complete assignments in group". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you prefer to try to complete assignments in group".

**Study Online:** The analysis in the Table 2 reveals that 49.8 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you consult computers for study to prepare lecture notes". Similarly, 35.7 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you consult computers for study to prepare lecture notes". However, 14.5 percent of the enrolled students tick the response as not at all with reference to the statement "you consult computers for study to prepare lecture notes". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you consult computers for study to prepare lecture notes".

Table 2  
Response of Students towards Study Online

S. No.	Statement	TGE % (f)	TSE % (f)	NAA % (f)
i	You consult computers for study to prepare lecture notes	49.8 (117)	35.7 (84)	14.5 (34)
ii	You prefer to study online material during exam	46.8 (110)	37.9 (89)	15.3 (36)
iii	You study lecture notes online to prepare exam	42.6 (100)	44.3 (104)	12.2 (31)

iv	You consult online dictionary for meanings	44.5 (107)	41.3 (97)	13.2 (31)
v	You listen online lectures for understandings	48.9 (115)	34.5 (81)	16.6 (39)
vi	You prefer to attend online academic activities	35.7 (84)	33.6 (79)	30.6 (72)

The analysis reveals that 46.8 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you prefer to study online material during exam". Similarly, 37.9 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you prefer to study online material during exam". However, 15.3 percent of the enrolled students tick the response as not at all with reference to the statement "you prefer to study online material during exam". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you prefer to study online material during exam".

The analysis reveals that 42.6 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you study lecture notes online to prepare exam". Similarly, 44.3 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you study lecture notes online to prepare exam". However, 12.2 percent of the enrolled students tick the response as not at all with reference to the statement "you study lecture notes online to prepare exam". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you study lecture notes online to prepare exam".

The analysis reveals that 44.5 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you consult online dictionary for meanings". Similarly, 41.3 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you consult online dictionary for meanings". However, 13.2 percent of the enrolled students tick the response as not at all with reference to the statement "you consult online dictionary for meanings". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you consult online dictionary for meanings".

The analysis reveals that 48.9 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you listen online lectures for understandings". Similarly, 34.5 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you listen online lectures for understandings". However, 16.6 percent of the enrolled students tick the response as not at all with reference to the statement "you listen online lectures for understandings". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you listen online lectures for understandings".

The analysis reveals that 35.7 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you prefer to attend online academic activities". Similarly, 33.6 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you prefer to

attend online academic activities”. However, 30.6 percent of the enrolled students tick the response as not at all with reference to the statement “you prefer to attend online academic activities”. Hence, it is concluded that university students are in favour of ‘to great extent’ with the statement of “you prefer to attend online academic activities”.

**Self-study:** The analysis in Table 3 reveals that 56.2 percent of the students of BS program are in favour of ‘to great extent’ to the given statement in the table i.e., “you prefer to study alone at night”. Similarly, 28.9 percent of the university students are agree in terms of ‘to some extent’ in favour of statement given in the table “you prefer to study alone at night”. However, 14.9 percent of the enrolled students tick the response as not at all with reference to the statement “you prefer to study alone at night”. Hence, it is concluded that university students are in favour of ‘to great extent’ with the statement of “you prefer to study alone at night”.

Table 3  
Response of Students towards Self-study

S. No.	Statement	TGE % (f)	TSE % (f)	NAA % (f)
i	You prefer to study alone at night	56.2 (132)	28.9 (68)	14.9 (35)
ii	You prefer to study at home	56.6 (133)	32.3 (76)	11.1 (26)
iii	You prefer to study alone in university ground	28.1 (66)	31.5 (74)	40.4 (95)
iv	You prefer to study in library	29.8 (70)	40.4 (95)	29.8 (70)
v	You try to engage yourself in exam	48.1 (113)	40.0 (94)	11.9 (28)
vi	You prefer to study research material	37.9 (89)	46.0 (108)	16.2 (38)

The analysis reveals that 56.6 percent of the students of BS program are in favour of ‘to great extent’ to the given statement in the table i.e., “you prefer to study at home”. Similarly, 32.3 percent of the university students are agree in terms of ‘to some extent’ in favour of statement given in the table “you prefer to study at home”. However, 11.1 percent of the enrolled students tick the response as not at all with reference to the statement “you prefer to study at home”. Hence, it is concluded that university students are in favour of ‘to great extent’ with the statement of “you prefer to study at home”.

The analysis reveals that 28.1 percent of the students of BS program are in favour of ‘to great extent’ to the given statement in the table i.e., “you prefer to study alone in university ground”. Similarly, 31.5 percent of the university students are agree in



terms of 'to some extent' in favour of statement given in the table "you prefer to study alone in university ground". However, 40.4 percent of the enrolled students tick the response as not at all with reference to the statement "you prefer to study alone in university ground". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you prefer to study alone in university ground".

The analysis reveals that 29.8 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you prefer to study in library". Similarly, 40.4 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you prefer to study in library". However, 29.8 percent of the enrolled students tick the response as not at all with reference to the statement "you prefer to study in library". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you prefer to study in library".

The analysis reveals that 48.1 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "you try to engage yourself in exam". Similarly, 40.0 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "you try to engage yourself in exam". However, 11.9 percent of the enrolled students tick the response as not at all with reference to the statement "you try to engage yourself in exam". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "you try to engage yourself in exam".

The analysis reveals that 37.9 percent of the students of BS program are in favour of 'to great extent' to the given statement in the table i.e., "You prefer to study research material". Similarly, 46.0 percent of the university students are agree in terms of 'to some extent' in favour of statement given in the table "You prefer to study research material". However, 16.2 percent of the enrolled students tick the response as not at all with reference to the statement "You prefer to study research material". Hence, it is concluded that university students are in favour of 'to great extent' with the statement of "You prefer to study research material".

### Discussion

**Study in Groups:** The study findings reveal that students prefer to study with class fellows. Similarly, the study findings show that students prefer to study with their peer group. Correspondingly, the study findings outline that students discuss their arguments with others in the university. Equally, study findings confirmed that students prefer to study in groups in the library. Identically, study findings point out that students prefer to prepare presentations in groups. Furthermore, study findings assert that students prefer to try to complete assignments in groups. It is important to mention that the study findings are supported by several studies. Correspondingly, the crux of the research indicated that the expectations of the teacher encompass the self-fulfilling prophecy the students show accuracy and competing skills with perceptual biases (Shoaib & Ullah, 2021b). In the same way, the study findings outlined that group studies are very effective approaches that promote learning activities and knowledge among individuals in groups (Shoaib, Rasool, & Anwar, 2021). Identically,

the results of the study showed that the learning culture of Chinese change the learning style and change practices of learning skills (Shoaib, Iqbal, & Tahira, 2021). Furthermore, the results of the research classified that the barriers and practice of skill development employability in work-integrated learning greatly impact the outcomes (Shoaib, Fatima, & Jamil, 2021). Similarly, the analysis of the study asserted that evaluating the effects of study abroad on student learning and library activities in higher education (Shoaib, Ali, & Akbar, 2021). In the same way, the study findings outlined that the cooperative self-study of two professors on the cultural aspects of teaching and learning skills of first teaching experiences (Shoaib, Ali, Anwar, & Shaukat, 2021).

**Study Online:** The study findings reveal that students consult computers for study to prepare lecture notes. Similarly, the study findings show that students prefer to study online material during exams. Correspondingly, the study findings outline that students study lecture notes online to prepare for exams. Equally, study findings confirmed that students consult online dictionaries for meanings. Identically, study findings point out that students listen to online lectures for understanding. Furthermore, study findings assert that students prefer to attend online academic activities. It is important to mention that the study findings are supported by several studies. Identically, the results of the study showed that the self-fulfilling prophecy disregards the cultural resources to overcome obstacles (Shoaib, Ali, Anwar, Rasool, et al., 2021). Furthermore, the results of the research classified self-study mean studying alone and self-directed learning options and possibilities (Shoaib, 2021; Shoaib & Abdullah, 2021; Shoaib, Abdullah, & Ali, 2021). Similarly, the analysis of the study asserted the impacts of blended learning on the plant tissue culture and impacts on students' learning outcomes and development of science process skills (Shoaib, Abdullah, & Ali, 2020). Equally, the study results found that digital learning in a self-fulfilling prophecy impacts academic achievement because of content related to moderates' quality expectations (Shoaib & Ullah, 2019). By the same token, the analysis of the study concluded that the evidence from Indian universities is because of the involvement of students in emotional learning (Shoaib & Zaman, 2025). Further, it had been argued based on the study findings that examine the collaboration of class perception and motivation in predicting cognitive engagement and academic achievement of high school students (Shoaib, Tariq, & Iqbal, 2025a).

**Self-study:** The study findings reveal that students prefer to study alone at night. Similarly, the study findings show that students prefer to study at home. Correspondingly, the study findings outline that students prefer to study alone on university grounds. Equally, study findings confirmed that students prefer to study in the library. Identically, study findings point out that students try to engage themselves in exams. Furthermore, study findings assert that students prefer to study research material. It is important to mention that the study findings are supported by several studies. Moreover, the overall study findings reported that active learning in higher education has good learning skills for students because active learning becomes

successive first-year of undergraduates (Shoaib, Rasool, Iqbal, et al., 2025a). Correspondingly, the crux of the research indicated that circumstances in which evaluate and facilitate the students learning because of students' performance (Shoaib, Rasool, & Zaman, 2025b). In the same way, the study findings outlined assessing the inter-cultural and cross-cultural impacts of the learning abroad program and adapting techniques of university undergraduates (Shoaib, Rasool, Zaman, & Abdullah, 2025). Identically, the results of the study showed that self-study is a self-directed learning process exploring research mentoring in cultural contexts (Shoaib, Rasool, & Iqbal, 2025b). Furthermore, the results of the research classified that learning skills play an important role in academic accomplishment (Shoaib, Rasool, & Iqbal, 2025a). Similarly, the analysis of the study asserted that determining the impacts of learning skills on digital learners in higher education students during the period of COVID-19 (Shoaib, Iqbal, et al., 2025).

### **Theoretical Insights**

This study is theoretically grounded in classical and contemporary sociological perspectives on education to explain how learning modalities shape academic engagement in higher education (Bernstein, 2000; Bourdieu, 1986; Bourdieu & Passeron, 1990; Giddens, 1984; Putnam, 2000; Van Dijk, 2005; Coleman, 1988). Rather than viewing engagement as an individual psychological attribute, the study conceptualizes it as a socially produced outcome, structured by institutional arrangements, cultural resources, and interactional contexts. Group-study, online learning, and self-study are thus understood as pedagogical spaces where social structures and learner agency intersect. Bourdieu's theory of cultural capital and habitus provides a central analytical lens for understanding differential engagement across learning modalities. Students enter higher education with unequal cultural resources, including linguistic competence, academic dispositions, and familiarity with dominant learning norms. Group-study often privileges students whose habitus aligns with collaborative discussion, critical debate, and peer negotiation, thereby reproducing symbolic advantage. Similarly, self-study reflects an internalized academic habitus that is more readily available to students from educationally advantaged backgrounds, however, others experience disengagement due to misalignment between institutional expectations and their socialization.

Bernstein's theory of pedagogic codes further illuminates how knowledge is structured and transmitted across learning modalities (Bernstein, 2000). Group-study typically operates through relatively weak framing, allowing greater learner interaction but also demanding interpretive competence. Online learning, by contrast, combine strong classification of content with varying degrees of framing through digital platforms, reshaping control over pacing, sequencing, and evaluation. Self-study places maximum responsibility on the learner, often assuming tacit understanding of academic codes. These variations influence how students recognize and realize legitimate academic engagement. Giddens' theory of structuration offers insight into the dynamic relationship between agency and structure in learning practices (Giddens, 1984). However, institutional policies and technological

infrastructures shape available learning modalities, students actively interpret, negotiate, and reproduce these structures through every day academic practices. For example, online learning platforms either enable flexible engagement or intensify surveillance and self-discipline, depending on how students appropriate them. Group-study likewise becomes a site where norms of cooperation, competition, and peer accountability are continuously enacted.

Additionally, concepts of digital capital and social capital are critical for understanding engagement in online and group-based learning. Access to technology, digital literacy, and peer networks significantly mediates participation and persistence. Students with greater digital capital are better positioned to navigate online learning environments, strong social capital enhances collaborative engagement in group-study contexts. Collectively, these theoretical perspectives frame learning modalities as socially differentiated spaces that shape academic engagement in patterned ways. By integrating theories of cultural reproduction (Bourdieu, 1986; Bourdieu & Passeron, 1990), pedagogic control, and agency, the study advances a sociological understanding of how group-study, online learning, and self-study contribute to the reproduction or transformation of inequalities within higher education.

### **Conclusion**

This study concludes that group-study, online learning, and self-study in higher education function as socially structured learning modalities that differentially shape academic engagement. Rather than being neutral pedagogical options, these modalities are embedded within institutional norms and broader social inequalities that influence students' access to cultural, social, and digital capital. Group-study tends to privilege students with strong communicative skills and peer networks, online learning advantages those with greater digital resources and self-regulatory capacities, and self-study assumes an internalized academic habitus that is unevenly distributed across social backgrounds. Drawing on sociological theories of cultural reproduction and agency, the study highlights how academic engagement is produced through the interaction of structure and practice, reinforcing the need for higher education institutions to adopt inclusive pedagogical approaches that recognize diverse learning dispositions and social contexts.

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