QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

THE IMPACT OF PARENTAL INVOLVEMENT ON SECONDARY SCHOOL STUDENTS' ENGAGEMENT IN DIGITAL LEARNING

Fayza Muneer
Education Department, University: Superior University, Faisalabad
Email: fayzamuneer275@gmail.com
Dr. Muhammad Saleem Mohsin
Associate Professor, Education Department, Superior University, Faisalabad
Email: saleemhec@yahoo.com
Prof. Dr. Shahbaz Ahmad
Associate Professor, Education Department, Superior University, Faisalabad
Email: shahbazmy@yahoo.com

Abstract
Digital learning continues to take centre stage in secondary education, making parental support in enhancing students' engagement even more critical. This cross-sectional, quantitative study examined correlations between multiple types of parent-reported parental involvement (PI) and parent-perceived student engagement (SE) in digital learning among 100 parents of secondary school students (Grades 9-10) in an urban area. The data were gathered using scales developed to assess PI (Motivational Support, Digital Support, Supervision), SE, Parental Digital Competence (PDC), and Socioeconomic Status (SES). Multiple Linear Regression analysis: PI as a whole accounted for substantial variance in SE (Adjacent R-Squared = 0.262, $p < 0.001$), and the only predictor with both a unique and strong predictive value was Motivational Support (0.49, $p < 0.001$). Hierarchical Moderated Regression showed that Parental Digital Competence had a significant positive interaction effect (beta = 0.25, $p = 0.012$), indicating that the positive impact of Motivational Support on SE is even greater when parents are more digitally competent. Socioeconomic Status, on the other hand, was not a significant moderator. The current results emphasize the importance of initial parental emotional support, primarily facilitated by the parent's technological literacy, for student achievement in digitally mediated learning settings in this context. The best place to start interventions is by equipping parents with digital skills, thereby maximizing the benefits of their motivational efforts.

Keywords: *Parental Involvement, Student Engagement, Digital Learning, Parental Digital Competence, Socioeconomic Status, Secondary Education, Pakistan.*

Introduction

Digital learning is increasingly becoming a central mode of education, with online and blended-learning approaches expanding globally. As learning shifts from physical classrooms to virtual environments, the role of parents in supporting their children's academic processes becomes more complex and perhaps more critical. Online courses and blended learning are also growing in use, and digital learning is becoming an essential part of the education process in many countries. With the transition of learning to the virtual environment, the role of parents in their children's academic processes has become more complicated and, possibly, more urgent.

Learning engagement is usually regarded in three facets: behavioral (participation, persistence), cognitive (investment in learning, application of learning strategies), and emotional (interest, motivation, sense of belonging). Research shows that support on the part of parents is positively related to such dimensions of engagement (Song, Zhan, Cao, and Luo, 2024). These authors

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

reported in their research on online learners that parent autonomy support, which is parental behaviour that promotes autonomy, self-initiation and supportive advice had a direct and significant impact on cognitive, behavioural and emotional engagement. These relationships were partially mediated by self-regulation among students, implying that parental support can contribute to the ability of students to control their learning in digital space independently (Song et al., 2024). This fact shows that, despite the fully online environment, the parental involvement remains strong to affect the extent and depth of consistent engagement by the learners. Although the above research was conducted among the university undergraduates, it provides a clear mechanism through which self-regulation is likely to take place, although among younger learners like secondary school students when their learning is online or digitally mediated.

In addition, the notion of parental involvement is changing: in addition to the usual assistance with homework or school meetings, parents these days might be required to facilitate or provide online access, oversee online studies, assist in organizing a home-school setting, and motivate online learning (digital capital). In an earlier research on the role of digital capital, it was highlighted that the access to and competence with technology in parents and their socioeconomic background influence the ability to effectively participate in the learning of their children during digital times (Ben-David & ʻIsreal, 2024). This implies that parental engagement in digital learning is a complex process, comprising a motivational and material/digital resource support.

Moreover, the importance of parental involvement is also supported by empirical research conducted in more traditional (non-digital) environments. As an illustration, a group of secondary level students was studied, with better academic performance being linked to higher parental involvement (Shakel, 2023). In another qualitative investigation done among 12 and 13 grade students in Pakistan, parental involvement, such as the presence of home based support, emotional encouragement as well as contact between home and school were found to be linked with improved student motivation, discipline and academic success (Khan, Nawaz Khan, Ahmad, Hussain and Tahir, 2025). Although these studies did not specifically target the field of digital learning, their results support the overall assumption that parental involvement is a supportive background to student success that becomes particularly significant in the situation when schooling is digitized or digitally mediated.

In this context, the need to examine the influence of parental involvement on secondary school students' involvement in digital learning is important and opportune, and should be undertaken systematically. Particularly, the dissimilar types of participation, including the delivery of the online materials, the monitoring of online education, the encouragement and the emotional support, and the arrangement of the guided learning setting, can have a disparate impact on the behavioral, cognitive, and emotional involvement. In addition, the consequences of these effects might be moderated by parental digital capital and socioeconomic background.

Thus, the current research will investigate (a) the types of parental involvement that are applied by parents of secondary school students in digital learning settings; (b) the relationships between these types of parental involvement and the behavioral, cognitive, and emotional aspects of student participation in digital learning; and (c) the possibility of the moderating role of parental digital competence and socioeconomic background. It is based on empirical literature, such as the findings of Song et al. (2024), the analysis of digital capital (Ben David & Israel, 2024), and the results of the research conducted by secondary education establishments (Shakel, 2023; Khan et al., 2025)

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

that this research aims to make a substantial contribution with rather contextual insights into the family-school partnership in the digital age.

Problem Statement

Although the digital learning process is fast becoming popular in secondary schools, a significant number of students find it challenging to stay motivated, resulting in poor performance, low participation, and low self-confidence. Although the role of parental involvement has been well established as one of the factors that contribute to student engagement, there has been sparse empirical studies on the impact of various types of parental involvement on behavioral, cognitive and emotional engagement in digital learning settings. It is important to understand these dynamics in order to come up with effective strategies to help students and maximize the learning process.

Research Objectives

1. To identify the forms of parental involvement (Digital Support, Motivational Support, and Supervision) practiced by parents of secondary school students in supporting digital learning.
2. To examine the relationship between parental involvement forms and parent-perceived student engagement in digital learning among secondary school students.
3. To investigate the role of parental digital competence in moderating the relationship between parental involvement and parent-perceived student engagement in digital learning.
4. To explore the influence of socioeconomic background (SES) on the effectiveness of parental involvement in promoting parent-perceived student engagement in digital learning.

Research Questions

- What forms of parental involvement (Digital Support, Motivational Support, and Supervision) are practiced by parents in supporting secondary school students' digital learning?
- How do the forms of parental involvement relate to parent-perceived student engagement in digital learning among secondary school students?
- Does parental digital competence significantly moderate the relationship between parental involvement and parent-perceived student engagement in digital learning?
- How does socioeconomic background affect the effectiveness of parental involvement in promoting parent-perceived student engagement in digital learning?

Literature Review

Student Engagement in the Digital Context

Student engagement is a key factor of academic success, and it is commonly perceived as a multi-dimensional construct. The seminal framework was given by Fredricks, Blumenfeld, and Paris (2004) and identified 3 main dimensions of engagement: behavioral, emotional, and cognitive. This three-part model has continued to be the basis of gauging the level of commitment and engagement of students in the learning institutions and its applicability has been replicated and tailored to the digital learning institutions.

Moreover, behavioral engagement is associated with observable participation and adherence of a student to formal rules and norms, which includes effort, persistence and participation in academic and extra-curricular activities (Fredricks et al., 2004). Under digital learning, the given dimension comprises such particular activities, as regular logging into the Learning Management System

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

(LMS), timely completion of assignments, online dialogue, and consultations with instructors or classmates (Dixson, 2015). Lack of behavioral engagement in online environments presents itself in the form of tardy delivery or total disconnection (Kahu, 2013). A study conducted by Dixson (2015) among online university students has discovered that interaction-based tools, such as discussion boards, are important to help drive behavioral engagement and that the digital environment requires specific types of interaction to keep the participants engaged.

Emotional Engagement refers to the affective responses of a student towards school such as interest, value, belonging and motivation. Higher level of emotional involvement is translated to good feelings towards learning, which leads to persistence (Fredricks et al., 2004). In online contexts, the experience of emotional connection may be especially difficult because of the physical separation with peers and educators; thus, the feeling of community and belonging is an extremely important factor in bringing emotional involvement (Picciano, 2017).

Cognitive engagement entails psychological commitment to learning by the student which includes their readiness to go to the required extent of learning to understand complicated concepts and their application of self-regulated learning (SRL) skills (Fredricks et al., 2004). SRL particularly plays a crucial role in the virtual or hybrid classroom setting, where students are expected to organize their time, attention, and resources on their own (Song et al., 2024). The abundance of literature indicates that the level of cognitive engagement, e.g. use of sophisticated problem-solving skills or relating new information with previous experience, has proven to be a better predictor of academic performance than superficial involvement (Pintrich, 2004). The digital environment, consequently, requires the students to be more initiative-oriented, and cognitive engagement, as well as SRL, is the key to successful digital learning.

Parental Involvement in the Digital Age

Traditionally, two broad groups of parental involvement have been theorized: home-based parental involvement (e.g., assisting with homework, communicating expectations) and school-based parental involvement (e.g., volunteering, meeting in conferences) (Epstein, 2001). The transition to digital learning has fundamentally changed what and how parental support activities and resources are needed, underscoring digital capital as an essential element (Ben-David and Israel, 2024).

The most immediate type of modern involvement is the supply of digital materials, or, to put it in the words of Ben-David and Israel (2024), digital capital. This involves the provision of good internet services, the provision of required equipment (laptops/tablets) and provision of good home learning environment where there is no distraction. According to the research by Ben-David and Israel (2024), the personal digital competence of a parent (whether they are literate and comfortable with technology) is important; digitally competent parents will be in a better position to facilitate the organization of the online learning process, solve technical problems, and track coursework successfully. Therefore, the role of parents in online education can never be separated with parental material and technology capabilities.

In addition to the material, parents are also important motivational and emotional sources of support. The studies reveal that parental encouragement and student motivation and persistence are strongly positively correlated (Shakel, 2023; Khan et al., 2025). Parent autonomy support, which can be described as any action promoting self-initiation, choice, and independent problem-solving in a child, is particularly powerful in the particular context of digital learning. The

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

researchers determined that parent autonomy support directly and significantly influenced all three dimensions of engagement (behavioral, cognitive, and emotional) among online learning university students (Song, Zhan, Cao, and Luo 2024). Most importantly, student self-regulation acted as a mediator of this relationship. According to this mechanism, parental support can be the best during digital learning, not through direct supervision, but through the development of the student ability to regulate his or her learning, which is the key to being successful in the virtual world. This observation goes a long way towards proving the fact that various types of parental involvement affect certain aspects of engagement in a differentiated manner.

The Moderating Role of Socioeconomic and Digital Contexts

The effectiveness of parental involvement is not universal but is often moderated by contextual factors, most notably socioeconomic background (SES) and the parent's own digital competence. A comprehensive understanding of the impact of parental involvement requires examining these moderating variables.

a. Socioeconomic Background (SES) and Resource Gaps

The large amount of literature confirms that SES is a strong predictor of academic outcomes, in part due to the impact of its access to resources (Shakel, 2023). This gap is commonly termed as the digital divide in the digital setting. Wealthy families have a better chance to have more digital capital, such as better internet access, specific learning areas, and technologically savvy parents (Ben-David and Israel, 2024). Thus, the motivation of a low-SES parent to contribute to the digital learning process may be high, but their resources or digital skills are required, which restricts their performance in digital learning (Holloway, 2020). In contrast, parents with high-SES have an easier time to convert their help plans into actionable and resource-funded plans, thus increasing the disparity in student engagement outcomes.

b. Parental Digital Competence as a Key Moderator

Digital competence of the parent is becoming an increasingly important moderator independent of the SES. Although SES ensures the availability of the resources, it is digital competence that determines the manner of utilizing the resources (Ben-David and Israel, 2024). A technologically comfortable parent will have the chance to not just trouble-shoot problems but be able to demonstrate good-use digital literacy and be more capable of tracking and discussing the online coursework, which may be tougher than it seems. As an illustration, a digitally competent parent may assist a student in utilizing a complex LMS or assessing the reliability of the Internet sources directly contributing to the cognitive involvement of the student (Lui and Li, 2018). Parental digital incompetence, conversely, is likely to result in frustration, less vigilance, and eventually, deteriorated behavioral and cognitive participation of the student in online education. In the current research, the aim is to selectively investigate to what extent this digital competence serves as a crucial serving tool between the various forms of parental involvement and how this influences the student in tri-partite involvement in digital learning.

Theoretical Framework

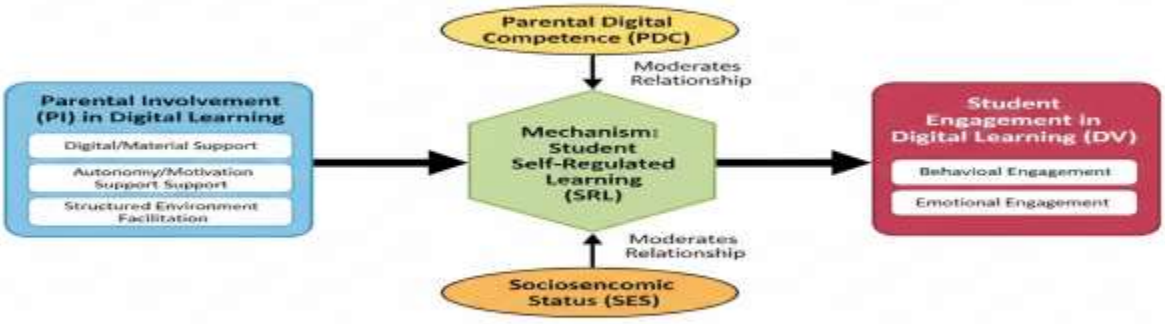
Urie Bronfenbrenner and his Ecological Systems Theory and Deci and Ryan with their Self-Determination Theory (SDT) are the theories which are most likely to provide the foundations of the current study regarding parental involvement and student engagement in digital learning. Ecological Systems Theory offers a necessary contextual prism, suggesting that the development of a student and his academic achievements are predetermined by a number of environments,

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

which are coherent and embedded layers. The roles of parents in digital learning exist in the proximity microsystem (home environment, provision of specific learning areas and digital capital) and the Mesosystem (quality of interaction between the school and the home, monitoring online progress, communication). More importantly, the success of such engagement depends indirectly on the Exosystem and Macrosystem variables, namely, the Socioeconomic Status (SES) and technological accessibility of the family. This framework explains the presence of SES and parental digital competence as one of the moderating variables in the study in order to determine the resources that can be used in the process of effective digital support.

Moreover, the Self-Determination Theory (SDT) can offer the motivational mechanism that reveals how the actions of parents would be transformed into student engagement. A way of looking at SDT is to assume that people are intrinsically motivated in situations where their three primary psychological needs, namely, Autonomy, Competence and Relatedness are met. Parental involvement is most postulated in the digital space, and it may be best embodied through autonomy support (Song et al., 2024), which will make the student feel in control and self-directed in their online education. This assistance assists the students to be in a position to develop self-regulated learning (SRL) capabilities, which in turn increases their sense of competence in learning the complex and independent digital coursework. Lastly, relatedness of emotional encouragement and interest by the parents meets the need of relatedness which is essential in shaping the emotional involvement and sense of belonging in the student. These motivational processes are then quantified against the Tripartite Model of Student Engagement (Fredricks et al., 2004) to enable the study to correlate particular types of parental support on the positive increase in behavioral, cognitive and emotional student outcomes in digital learning.

Conceptual Framework



QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

Research Methodology

The research design used was a cross-sectional survey research design that was used to explore the relationship of correlation among the parent-reported constructs under the digital learning environment. The kind of non-experimental methodology was required due to the impossibility to manipulate the variables of interest (parental digital competence, motivational support) in a practical and/or ethical way. The target population of the study consisted of any parent/guardian of any student at secondary schools (Grades 9-10) in major urban centers in Pakistan in digitally mediated or blended learning settings. A survey provided the opportunity to collect self-reported data of a large sample that was spread widely. The convenience and cluster sampling method was applied to choose the available schools in the urban areas. The target sample size was established to be about 100 parent participants as a minimum to offer adequate statistical power to the proposed Multiple Linear Regression and Moderated Regression analyses. The survey was used to gather parent-reported information regarding the independent variable (Parental Involvement Forms), the two moderators (SES and Parental Digital Competence), and the dependent variable (Parent-Perceived Student Engagement). The validity and construct validity of the measurements was therefore guaranteed by the fact that the survey instrument relied on validated established scales, which fortified the empirical basis of the findings on the complexities of family-school partnerships in digital education in the Pakistani setting.

Results and Findings

Table 1

Demographic Profile of Parent Participants

Variable	Category	*f*	*%)*
Gender	Male	65	65.0
	Female	35	35.0
Highest Education	Intermediate/Matric	18	18.0
	Bachelor's Degree	45	45.0
	Master's Degree/Higher	37	37.0
Household Income (PKR/month)	Below 50,000	30	30.0
	50,001 – 75,000	45	45.0
	Above 75,000	25	25.0
Child's Grade	Grade 9	55	55.0
	Grade 10	45	45.0

The analysis of demographics ensured that the last sample included 100 parental participants of secondary school students (Grades 9 and 10). The distribution on the gender was skewed to male respondents (65%), which is typical in household surveys in the Pakistani context. As far as Socioeconomic Status (SES) is concerned, the sample was fairly heterogeneous with most parents

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

having a Bachelor Degree (45) as the highest education level. The biggest group of the sample (45%) was in the middle-income range (PKR 50,001 75,000 per month), which implies that the results will be most accurate of the urban middle-class experience of digital learning. The findings can be applied to the lower and higher levels of secondary education because the recruitment of parents was successful across the two target grades.

Table 2

Descriptive Statistics and Reliability Analysis for Key Constructs

Construct (Scale: 1-5)	Mean ($\bar{X}$)	Standard Deviation (SD)	Cronbach's Alpha (α)
Parent-Perceived Student Engagement (DV)	3.82	0.65	0.88
Parental Digital Competence (PDC) (Moderator)	3.55	0.72	0.82
Parental Involvement: Digital Support (PI-DS)	4.10	0.58	0.75
Parental Involvement: Motivational Support (PI-MS)	4.25	0.51	0.91
Parental Involvement: Supervision (PI-S)	3.68	0.69	0.79

The descriptive analysis found that on the 5-point scale, parents tended to report high levels of Parent-Perceived Student Engagement (M=3.82) and their own Parental Involvement: Motivational Support (M=4.25) along with the descriptive analysis. This implies that parents felt that their children were generally involved and that they were very encouraging. Parental Digital Competence was the most related to the lowest mean score of this study, with a mean score of 3.55, implying that even though parents tried their best, they felt they were less proficient with the digital tools themselves. Also, it was established that the internal consistency of all scales was fit to be used in the research with Cronbachs Alpha ($alpha) values between 0.75 and 0.91 that showed that the items to be used in the survey were appropriate in measuring the intended constructs.

Table 3

Correlation Matrix of Principal Variables

Variable	1. Engagement	2. PI-DS	3. PI-MS	4. PI-S	5. PDC	6. SES
1. Engagement (DV)	1					
2. PI-Digital Support	0.25	1				
3. PI-Motivational Support	0.51	0.11	1			
4. PI-Supervision	0.18	0.40	0.15	1		
5. PDC (Digital Competence)	0.48	0.35	0.30	0.21	1	

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

Variable	1. Engagement	2. PI-DS	3. PI-MS	4. PI-S	5. PDC	6. SES
6. SES (Income)	0.22	0.28	0.10	0.05	0.32	1

The correlation analysis gave the preliminary support of the relationships between the variables. Parental Involvement: Motivational Support: Parental digital competence: Parent-Perceived Student Engagement was most strongly and significantly correlated with Parental Digital competence ($r = 0.48$, $p < 0.001$) followed by Parental Involvement: Motivational Support ($r = 0.51$, $p < 0.001$). It would imply that the more the parents had high motivational support and were more digitally competent, the more they reported student engagement. Parental Involvement: Digital Support, in turn, ($r = 0.2$) and Supervision ($r = 0.18$), however, were statistically lesser, but still significant, positive correlates of engagement. SES proved to be significantly correlated with Digital Support and PDC, which proved that higher SES was correlated with greater material and parental digital resource.

Table 4

Multiple Linear Regression Predicting Parent-Perceived Student Engagement

Predictor Variable	β (Standardized Coeff.)	t	Sig. (p)
Constant	-	1.85	0.067
PI: Digital Support (PI-DS)	0.10	1.09	0.278
PI: Motivational Support (PI-MS)	0.49	5.12	<0.001*
PI: Supervision (PI-S)	0.08	0.88	0.380
Model Summary			
R^2	0.284		
Adjusted R^2	0.262		
F (3, 96)	12.78		<0.001*

The Multiple Linear Regression (MLR) test revealed that a substantial percentage of variance in Parent-Perceived Student Engagement was accounted by the three types of parental involvement combined together, (Adjusted) $R^2 = 0.262$, $F(3, 96) = 12.78$, $p = 0.000$). This established that the measured parental involvement was a strong predictor of engagement (answer Research Question 2). Nevertheless, after the analysis of the separate effects, Parental Involvement: Motivational Support was the only statistically significant predictor of the outcome and was found to be significant with a beta of 0.49 and p value of less than 0.001. The standardized coefficient (,) showed that a one standard deviation increase in the motivational support caused the engagement to increase by approximately 50 percent of a standard deviation, other variables remaining

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

constant. Digital Support as a predictor was found to be insignificant with Supervision as a predictor when Motivational Support was added to the model (= 0.10). Supervision as a predictor was also found to be insignificant with Motivational Support added to the model (= 0.08).

Table 5

Moderated Regression (Interaction Effect of Parental Digital Competence)

Step	Predictor Variable	β (Standardized Coeff.)	ΔR2	Sig. (p)
Step 1: Main Effects			0.301	<0.001
	PI: Motivational Support (PI-MS)	0.35	0.301	<0.001*
	Parental Digital Competence (PDC)	0.32	0.301	<0.001*
Step 2: Interaction			0.045	0.012
	PI-MS $\times$ PDC (Interaction Term)	0.25	0.045	0.012*

The hierarchical moderated regression model was used to test the effect of Parental Digital Competence (PDC) on the PI-MS $\rightarrow$ engagement relationship (Research Question 3). The statistical significance of the PI-MS x PDC interaction term in Step 2 was found to be statistically significant in increasing the explanatory power of the model by a significant amount (Delta R 2 = 0.045, p = 0.012). The standardized significant positive coefficient of the interaction term was meaningful (= 0.25) which showed that there was a synergistic effect: already strong positive influence of Parental Motivational Support on student engagement was highly enhanced when the parent itself had high digital competence levels. That means that digital competence is a significant facilitator, which enables motivational activities to be converted into literal assistance in virtual space more efficiently.

Table 6

Moderated Regression (Interaction Effect of Socioeconomic Status)

Step	Predictor Variable	β (Standardized Coeff.)	ΔR2	Sig. (p)
Step 1: Main Effects			0.270	<0.001
	PI: Motivational Support (PI-MS)	0.45	0.270	<0.001*
	SES (Continuous/Dichotomous)	0.15	0.270	0.105
Step 2: Interaction			0.002	0.651
	PI-MS $\times$ SES (Interaction Term)	-0.05	0.002	0.651

The last model was a moderated regression that investigated the influence of the Socioeconomic Status (SES) (Research Question 4). Despite the importance of the main effects model (Step 1), the addition of the interaction term of PI-MS x SES in Step 2 led to the non-significant increase of the explained variance (Change in the R 2 = 0.002, p = 0.651). The statistical non-significant interaction coefficient value (-0.05) showed that the Parental Motivational Support was not

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

significantly different at the parent socioeconomic background in the sample of Pakistani secondary school parents. This is to imply the motivational component of parental engagement might cut across the overall economic limit so long as a minimum level of digital access is achieved (as indicated by the clustering of the sample around urban and middle-income).

Discussion

The current research was intended to explore the role of different manifestations of parental involvement in digital learning among secondary school students in major urban areas of Pakistan systematically. The results, based on the survey of 100 parents, provide valuable information on what kind of support has the greatest impact and have external variables (digital competence of parents and their socioeconomic status (SES)) mediate these effects.

The analysis strongly supported the hypotheses that Parental Involvement (PI) is an influential group predictor of student engagement and that it accounts more than a quarter of the variance (Adjusted R 2 = 0.262). Nevertheless, the most important result was the effectiveness dissimilarity of PI forms. The out of three types observed, namely, Digital Support, Supervision, and Motivational Support, only the Motivational Support showed itself as a distinct and strong predictor of engagement ($\beta = 0.49, p < 0.001). This finding is very much in line with the principles of Self-Determination Theory (SDT) (Deci and Ryan, 1985), according to which the fundamental psychological needs of students Autonomy and Relatedness are the key to intrinsic motivation and involvement development. The role of a parent as an emotional anchor and a motivator becomes especially important in the isolating nature of digital learning, out of which the direct impact of delivering hardware or screen time monitoring is outweighed by the mechanism mentioned by Song et al. (2024), who proposed that autonomy support contributes to the development of the self-regulation skills required to engage in online learning environments deeply.

On the other hand, Digital Support and Supervision did not have significant contribution, which implies that merely giving resources or monitoring activity in this case does not directly translate to increasing perceived engagement. Resources (digital capital) are the prerequisites of the existence of digital learning; however, they cannot be sufficient to stimulate the investment of students (Ben-David and Israel, 2024). When the digital access is guaranteed, the quality of interaction, which is manifested in the motivational support, becomes the decisive factor.

The moderating role of Parental Digital Competence (PDC) was one of the most theoretically important and significant results (Table 5). The significant interaction term was positive and significant (0.25, p = 0.012) which revealed that the strong positive impact of Motivational Support was intensified in the event the parent had higher digital competence. This finding gives serious acuity to the notion of digital capital. It implies that totally motivated, but digitally noncompliant parents might find it challenging to be able to implement their encouragement in a way that supports their child in solving online issues. As an illustration, a digitally savvy parent has the opportunity to not only cheerlead but also provide detailed instructions on using a Learning Management System (LMS), scrutinizing internet resources, or solving software problems, which will confirm the amount of work done by the student, as well as strengthen their sense of competence (Lui and Li, 2018). This symbiotic relationship accentuates the point that motivational support of the digital era demands a base of technological knowledge to be achieved to the fullest extent.

QUALITATIVE RESEARCH JOURNAL FOR SOCIAL STUDIES
ISSN Online: 3006-4686, ISSN Print: 3006-4678
Volume No: 02 Issue No: 04 (2025)

Compared to the powerful one of PDC, the study determined that there was no significant interaction effect on Socioeconomic Status (SES) on the association of motivational support and engagement (Table 6). This result, even though rather surprising considering the overall impact of SES on the outcomes of education (Shakel, 2023), should be understood with caution in the context of the study. The sample was selected in terms of urban centers and concentration on middle-income groups, indicating that the majority of the respondents were probably not less equipped with some form of digital capital (e.g., a smartphone, simple access to the internet) to be involved in blended learning. In those cases when such a low threshold is achieved, the motivational power of motivational support to affect engagement can be expected to overcome the general economic differences. This finding implies that although SES can dictate access to access to digital learning opportunities, it does not inevitably limit the capacity of a parent to offer high-quality motivational and emotional support, which can be confirmed by the findings of qualitative studies, which highlight the importance of home-based support (Khan et al., 2025).

Limitations and Future Directions

The study's conclusions must be considered in light of certain limitations.

Firstly, the use of a convenience and cluster sample from urban areas in Pakistan limits the generalizability of the findings to rural or low-SES populations where the "digital divide" might manifest more acutely, potentially leading to a significant SES interaction effect not captured here. Secondly, relying solely on parent-reported data for both the predictor (PI) and the dependent variable (Parent-Perceived Student Engagement) introduces the risk of common method bias and measures a parent's perception of engagement rather than the student's lived experience. Future research should utilize a matched-pair design (student and parent) to compare self-reported vs. perceived engagement and incorporate qualitative methods to explore how digitally competent parents strategically leverage their skills to support their children's autonomy and competence.

Conclusion

This research highlights the primacy of Parental Motivational Support in fostering perceived student engagement in digital learning within the Pakistani secondary school context. Crucially, it establishes Parental Digital Competence as a key enabler that significantly amplifies the impact of this motivational support, suggesting that policy and intervention efforts should focus on equipping parents not only with resources but also with the specific digital skills required to effectively encourage and guide their children through online challenges.

References

Ben-David, A., & Israel, A. (2024). The role of digital capital in parental engagement. *Education and Information Technologies, 29*, 16901–16928.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum.

Dixson, M. D. (2015). P*redictors of student satisfaction in online education: An integrative review and research agenda.* The SAGE handbook of online educational research, 313–326.

Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools.* Westview Press.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109.

Holloway, S. L. (2020). The role of parents in supporting home-based education during the COVID-19 pandemic. *Journal of Family Theory & Review, 12*(4), 481-496.

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education, 38*(7), 1005–1023.

Khan, M. A., Nawaz Khan, F., Ahmad, N., Hussain, S., & Tahir, S. (2025). Exploring parental involvement and its impact on students' learning motivation in Swat, Pakistan. *International Journal of Social Sciences Bulletin, 3*(11), 68–74.

Khan, M. A., Nawaz Khan, F., Ahmad, N., Hussain, S., & Tahir, S. (2025). Exploring parental involvement and its impact on students' learning motivation in Swat, Pakistan. *International Journal of Social Sciences Bulletin, 3*(11), 68–74.

Lui, A. M. H., & Li, S. K. A. (2018). A framework for parental digital literacy to support children's learning. *Journal of Educational Technology Development and Exchange, 11*(1), 1-18.

Picciano, A. G. (2017). Online education: The impact on student performance and engagement. *Handbook of Research on Educational Communications and Technology, 5*, 639–653.

Pintrich, P. R. (2004). A conceptual framework for assessing student motivation and self-regulated learning in college students. *Educational Psychology Review, 16*(4), 385–407.

Shakel, F. (2023). Parental involvement and students' academic performance at higher secondary level. *Journal of Educational Dynamics*.

Song, L., Zhan, Q., Cao, L., & Luo, R. (2024). Parent autonomy support and undergraduates' academic engagement in online learning: the mediating role of self-regulation. *Psicologia: Reflexão e Crítica, 37*, 45.