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Influence of Teacher-Student Interaction on Learning Behavior at Secondary Level in Karachi Pakistan

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ABSTRACT

This study investigates secondary school teachers' perceptions regarding students' learning behaviour in Karachi, Pakistan. Utilizing data from 150 teachers, this study explored four randomly selected key factors: student motivation, student interest, teacher behavior, and student learning behavior. A self-developed questionnaire was used to collect data from the teachers. The findings revealed high average scores across all variables, indicating a positive perception of students' engagement and behavioural patterns in the learning process. Motivation and interest emerged as significant influencers, with mean scores of 4.297 and 4.396, respectively. Teacher behaviour also received strong ratings (mean 4.379), emphasizing the critical role of supportive and interactive teaching practices. Students' learning behaviour (mean = 4.336) reflected the cumulative influence of these factors. Minor variations among individual item scores highlight areas for instructional improvement. The study contributes to understanding how pedagogical strategies and classroom environments shape students' academic behaviour. It also provides foundational insights for policy development and professional training to enhance student engagement in public secondary schools in the future.

Keywords : Student Motivation, Students Interest, Teacher Behavior, Learning Behavior

INTRODUCTION

Students learning behaviors are long-term practices to increase their knowledge while creating beneficial relationships with peers. The development of these habits occurs both when students are inside the classroom and when they are outside of it. Learning behaviors help students gain important life skills (Ahmad et al., 2025) through which they master decision-making, build relationships, and develop emotional intelligence (AlQaheri & Panda, 2022). Learning behaviors play a central role in self-exploration during interpersonal activities because they expand on primary education curriculum content. Behaviors undergo multiple redefinitions through the feedback process, which stems from curriculum professionals, teachers, school administrators, and parent advisory committees (Basu et al., 2022; Ahmad et al., 2021).

Success requires effective learners to develop appropriate social and personal processes that lead to achievement. Learning assessment methods, alongside technique evaluation, depend on the development of specific learning tactics (He & Gao, 2022). Metacognition presents itself as "learning how to learn" for effective learners. Learners play an essential role in enhancing the effectiveness of learning through metacognitive process planning and reflection with monitoring functions (Shu et al., 2022; Ahmad & Hamid, 2021). Multiple factors, such as action, contemplation, sense-making, and cooperative learning, as well as personal educational responsibility, motivate effective classroom learning (Vorwerk & Engenhart-Cabillic, 2022; Ahmad, Bibi, & Imran, 2023).

Various hazards affect educational systems. The educational delivery and learning process impacts students and faculty members (Anwar et al., 2022). Multiple critical problems have substantial impacts on the educational system, primarily targeting the secondary education stage. The educational system is negatively affected by several factors, including poverty, insufficient parental participation, transportation problems, insufficient basic utilities, inadequate infrastructure, and insufficient educational funding (Samar & Ahmed, 2021; Ahmad et al., 2024).

Research Objectives

- To analyze the perceptions of secondary school teachers about the learning behavior of secondary school students in Karachi, Pakistan.
- To evaluate the opinions of secondary school teachers about the learning behavior of students based on their demographic characteristics at the secondary level in Karachi, Pakistan.

Research Questions:

- What are the perceptions of secondary school teachers about the learning behavior of secondary school students in Karachi, Pakistan?
- What are the opinions of secondary school teachers about the learning behavior of students based on their demographic characteristics at the secondary level in Karachi, Pakistan?

LITERATURE REVIEW

The manner in which children and adolescents learn their conduct is directly related to their understanding of societal norms. The main goal of this process is to

build positive relationships with oneself and the curriculum alongside others (Priyambada et al., 2021; Ali et al., 2023). Learning behavior principles affect understanding among a diverse group of people, including students, educators, parents, and other professionals. The concepts can be employed by children of all ages beyond the category of students deemed "difficult to manage" (Haider et al., 2024).

Academies observe both their educational programs and faculty interactions with learners as they focus on student development (Zaheer, et al., 2021). A mainstream student who believes learning failure is inevitable and feels insecure about their academic abilities would develop a greater risk of improper behavior during learning efforts (Dilshad, Shah, & Ahmad, 2023). The concept of categorization serves educational data mining for student sorting purposes, as it categorizes students based on their behavioral patterns. AlQaheri and Panda (2022) explained that this system successfully distinguishes active students from inactive students based on their activity participation levels. Online learning efficiency improvement is a top priority for the education system although teachers and students need to combine this approach with traditional classrooms and recognize what methods work best for them to achieve personal learning success (Noor et al., 2022; Thomas, et al., 2022).

Students learning behaviour

The learning behaviors of students include every action they perform to interact with new knowledge, demonstrating personal accountability. Educational motivation drives students to engage in learning activities. Each child follows their own knowledge path and personal process founded on constructivist philosophy and develops unique aspects linked to their learning methodology (Kayani, et al., 2021; Ali & Haq 2017). According to Constructivism, each person develops their understanding of the world by exploring and learning from their actual life experiences (Omodan, 2022; Ali et al., 2023). The constructivist learning theory lacks elements such as flashcards and standardized assessments as part of its approach. Students must depend on instinct while developing knowledge strategies and learning approaches to increase their interest (Alkhabra, 2022; Naeem et al., 2022).

Alismaiel et al. (2022) showed that students who follow instructions and listen attentively demonstrate problem-solving abilities and continue trying through difficulties to achieve better academic success than other students. The common classroom behaviors of daydreaming, lateness, and dozing off negatively impact student progress, leading to feelings of being overwhelmed and dropping their efforts (Mohammed & Kinyó, 2022; Aslam et al., 2022). Social constructivism identifies how students acquire knowledge through social connections with peers and participation in outside-classroom activities (Shah, et al., 2024; Rasheed & Kiani, 2024). The learning approach of cognitive constructivism is based on understanding child developmental phases alongside the way students prefer to learn. Every student has distinct characteristics but identifying personal learning styles gives each individual a better learning opportunity by teaching methods that align with those specific styles (Jabeen et al., 2023).

Teacher's behaviour

Educators in classrooms employ multiple cognitive concepts for instruction.

Constructivism, together with behaviorism, remains the leading educational philosophy used by educators today (Ibañez & Penang, 2021). According to constructivism, students understand content by processing selected learning events, yet behaviorism maintains that learning occurs by watching personal actions together with others' actions (Azhar, 2024; Azhar, et al., 2022). Educational researchers and teachers adopt constructivist philosophy because they believe that students develop their understanding through personal intellectual construction. According to Barak and Green (2021), teachers assume the position of facilitators by helping students experience knowledge development while supporting their assignments. Shaukat, Rehman, and ul Haq (2021) the teacher displayed a willingness for participatory behavior through negotiating actions, which became evident by this notion. Teachers participate in students' dialogue as a method to help them generate knowledge during educational processes (Shah, et al., 2023; Bilal, et al., 2020). Such evaluation procedures consist of student work evaluations, observations, student viewpoints, and examinations. Learning activities are equally important to the final product (Shank & Santiague, 2022; Imran et al., 2023). An educational process is convergent because it connects new information to the existing knowledge base of each student through effective leadership style (; Akram et al., 2022; Jamil et al., (2024); Khoso et al., 2023).

The behavior of teachers serves as an essential element in providing high-quality educational opportunities to every student (Omodan, 2022). Teacher behavior creates impacts that further influence their communication with pupils and their interactions with parents and coworkers, as well as their responsibilities in staff management (Aurangzeb & Haq, 2012). The manner in which teachers conduct classes with their organizational setup determines student school attendance rates and learning outcomes (Ibañez & Pentang, 2021). Multiple undesirable teaching behaviors stem from instructors viewing education as work, excessive absence from class, and negligence of racial and cultural student differences, along with discriminatory remarks and excessive task administration in classrooms instead of their teaching responsibilities (Barak & Green, 2021).

Students' interest

Student interest in education describes when a student interactively participates in their studies in knowledge areas that directly connect to them while avoiding complex difficulties. Knowledge acquisition from a particular subject that follows a structured instructional sequence defines interest as a concept (Naeem et al., 2022). A personality trait called learning interest impacts students' academic performance (Alismaiel et al., 2022). According to Navio-Marco et al. (2022), customary variations exist in the levels of student interest in educational settings. There are numerous reasons for students' disinterest in social course education. High quality instruction from teachers constitutes a key component of schools, as it directly affects student progression. The constructivist method shows awareness of social learning because it allows students to learn alongside their instructor as both participants and colleagues (Shah, et al., 2025; Imran, et al., 2023).

The learning community develops interest in using personal and collective reflection practices through this process and reading strategy (Wu, Hsieh, & Wu,

2022; Shah et al., 2024). Through the formal reflection process, students develop professional leadership abilities because they gain knowledge from their mistakes. According to the Azhar, Iqbal and Imran (2025) students using the constructivist approach achieve better educational experiences by using self-reflection to explain their learning interests to peers and instructors. People who follow constructivist methods have different personal interests compared to individuals who do not follow constructivist practices. Shahzad et al. (2022) students who learned constructivist techniques had to work in groups, while those following non-constructivist instruction completed tasks alone (Holbrook et al., 2022).

Students' motivation

Students obtain their motivation from internal or external sources. ul Haq, A. (2017) stated that when people finish their work or attain expertise, they experience natural pleasure because this feeling stems from intrinsic motivation, which emphasizes personal experiences inside the individual. Students derive extrinsic motivation from external factors, including rewards and punishments (Guay, 2022; Imran et al., 2023). Intrinsic motivation consists of internal self-driven motivation of both people and tasks based on this principle (ul Haq, 2017). Within a social constructivist learning framework, effort creates performance improvement, which is measured through personal development against previous positions (Bureau et al., 2022; Akram et al., 2024). A constructivist learning environment delivers intrinsic motivational benefits to students through effective professional development (Abbas et al., 2021; Ahmad et al., 2023). Several studies on learning achievements and student motivation reveal that students who show high levels of engagement in their studies develop better abilities to receive new knowledge and adapt their learned material usage. The practice of intrinsic motivation leads to better student task involvement and learning performance (Akram et al., 2024; Parveen, et al., 2020).

Multiple researchers have indicated that success depends directly on motivation (Bureau et al., 2022). The motivational force known as intrinsic motivation exists independently from the external motivational approach referred to as extrinsic motivation. Learning goals peak when students experience moderate motivational intensity. Recent classroom motivation research has examined intra-psychological individual characteristics, affective aspects, and cognitive processes (Asvio, 2022; Akram et al., 2024). Social constructivism provides students with a framework to understand that classroom participation leads to motivation, which develops through communal student negotiations. Teaching methods and learning environments establish an essential connection to student motivation. The development of motivational behaviors combined with internal interest results from culturally defined and socially constructed learning activities between students and their social environments. These motivated behaviors, along with internal interests, are examples of cultural norms and effective assessments of motivation (Ahmad et al., 2025).

Students' motivation is a critical determinant of their academic engagement and success. Among the various influencing factors, the quality of teacher-student interaction significantly shapes learners' motivational levels and learning behavior. Positive interactions between teachers and students enhance students' intrinsic

motivation by fostering a sense of belonging, competence, and autonomy (Dewaele et al., 2021). Research consistently highlights that emotionally supportive teacher behaviors such as empathy, responsiveness, and encouragement promote students' willingness to participate, persist in tasks, and take ownership of learning through guidance and counseling (Ahmad et al., 2024). Instructional clarity, frequent feedback, and mutual respect in teacher-student relationships contribute to creating a motivational climate that nurtures engagement and deep learning (Xie & Derakhshan, 2021). Students who perceive their teachers as approachable and invested in their growth demonstrate higher academic self-efficacy and a stronger drive to achieve learning goals. Furthermore, constructive teacher-student interactions and self-concept foster self-regulated learning behaviors and improve teaching and learning, which are essential for academic success (Ahmad et al., 2023).

In contrast, poor teacher-student interactions, such as negative reinforcement or lack of communication, can lead to decreased motivation, disengagement, and even behavioral problems. In culturally diverse classrooms, culturally responsive teacher behaviors further strengthen student motivation by affirming their identities and backgrounds (García-Moya, Brooks, & Moreno, 2020). Therefore, enhancing the quality of teacher-student interactions is a powerful strategy for improving students' motivation and optimizing their learning behavior. It not only impacts academic outcomes but also contributes to students' emotional and psychological wellbeing.

METHODOLOGY

A quantitative research approach was used to determine teachers' perspectives on student learning conduct in public secondary institutions throughout Korangi Karachi. The research instruments used structured surveys containing items designed for descriptive research purposes. School teachers of all genders belong to the target population of teachers in the Korangi district. Two hundred questionnaires were distributed to 150 teachers selected randomly from the total population for participation in the study. The survey required a response rate of 200 questionnaires.

The participants underwent a five-point Likert scale measurement that required both attentive reading of statements and responses that ranged from one to five. One represented "strongly disagree" and five indicated "strongly agree." The research instrument contained two sections: Part one gathered information about demographic characteristics including teacher gender, teaching length, and educational level, and part two measured educators' assessment of student learning activities. The research achieved 150 valid responses from the 200 distributed questionnaires, yielding a response rate of 75%. Participation was declined by several research participants. An initial evaluation of the instrument's reliability was conducted before collecting all data points. This survey demonstrated acceptable internal consistency, with Cronbach's alpha set at 0.718. The reliability assessment confirmed that the measurement tool could accurately measure the research constructs.

Table 1 Cronbach's Alpha:

Cronbach's Alpha	N of Items
0.784	16

DATA ANALYSIS

All data collection outputs were transferred to the SPSS version 22 software to determine the frequency distribution. Multiple data analysis methods, such as frequency and descriptive statistics and percentage distributions, were employed during the analysis phase.

Demographics

The research participants shared their demographic information, as shown in Table 2, which included various groups of participants. The survey involved 46.7% of female lecturers alongside 53.3% of male instructors according to the data results. Most educators had graduated as their highest level of educational attainment while approximately thirty-six percent worked for one to ten years.

Table 2 Demographic Information

Demographics		Frequency.	Percent.
Gender	Male	80	53.3%
	Female	70	46.7%
	Total	150	100%
Experience	1_10 yrs	54	36%
	11_20 yrs	45	30%
	More than 21 yrs	51	34%
	Total	150	100%
Qualification	Graduation	96	64%
	Masters	48	32%
	M Phil.	06	04%
	Total	150	100%

Table 3 Student Motivation (SM)

S. No	Items	N	Mean	Std. Deviation
1.	SM1	150	4.246	0.921
2.	SM2	150	4.620	0.947
3.	SM3	150	4.154	0.862
4.	SM4	150	4.120	0.906
5.	SM5	150	4.346	0.947
Student Motivation Overall		150	4.297	0.929

The educators in Table 3 explain that specific factors within public secondary schools stimulate students while shaping their academic behavior. The participants answered "SM2" under the question, which received the highest score of 4.620. Table

results demonstrate that participants scored SM5 at 4.346, while SM1 received 4.246, SM3 got 4.154, and SM4 recorded a score of 4.120. SM4 was the lowest-rated choice. The students' learning motivation was measured by the respondents as having an overall mean score of 4.297.

Table 4 Student Interest (SIT)

S. No	Items	N	Mean	Std. Deviation
1.	SIT1	150	4.346	0.878
2.	SIT2	150	4.324	0.867
3.	SIT3	150	4.542	0.892
4.	SIT4	150	4.334	0.883
5.	SIT5	150	4.436	0.897
Overall Student Interest (SIT)		150	4.396	0.886

The research data on secondary school students' interest in learning behavior in Karachi, Pakistan, is presented in Table 4. According to the highest-level participants, the rate for "SIT3" was 4.542, with SIT5 (4.436) scoring slightly lower than SIT1 (4.346), which was lower than SIT4 (4.334), which was again less than SIT2 at 4.324. Secondary school instructors in Karachi, Pakistan, assigned an average score of 4.396 to their students' educational conduct.

Table 5 Teacher Behavior (TB)

S. No	Items	N	Mean	Std. Deviation
1.	TB1	150	4.342	0.879
2.	TB2	150	4.427	0.880
3.	TB3	150	4.438	0.892
4.	TB4	150	4.442	0.913
5.	TB5	150	4.246	0.863
Teacher Behavior Overall		150	4.379	0.888

Table 5 demonstrates that secondary school teachers consider that the behavior of teachers plays an important role in the learning process. The response was most favorable towards item "TB4," which received an average score of 4.442. This was followed by the items "TB3" (4.438), TB2 (4.427), TB1 (4.342), and TB5, with a mean score of 4.246. The overall mean score of 4.379 obtained from participants regarding their perception of the teacher's behavior in the learning process at the secondary level in Karachi, Pakistan, shows that the teacher's behavior is an important element.

Table 6 Students learning behavior (SLB)

S. No	Items	N	Mean	Std. Deviation
1.	SLB1	150	4.312	0.884
2.	SLB2	150	4.352	0.876
3.	SLB3	150	4.434	0.862
4.	SLB4	150	4.322	0.875
5.	SLB5	150	4.264	0.887
Students learning behavior Overall		150	4.336	0.864

A survey of teaching professionals in Karachi, Pakistan, showed their assessments regarding the educational behaviors of secondary school students, as

presented in Table 6. SLB3 earned the highest ranking among all learning behaviors with an average score of 4.434 according to educators, while SLB2 received a score of 4.352, followed by SLB4 at 4.322, SLB1 with 4.312, and SLB5, which had the lowest score at 4.264. The teachers evaluated student learning behaviors in secondary classrooms positively in Karachi, Pakistan, with an average rating of 4.336.

DISCUSSION

The research data demonstrate that most male teachers from secondary education (53.3%) held graduate degrees and taught between 1-10 years (36% of respondents) as their primary demographic characteristics. The main investigation of this research evaluated "What are the perceptions of secondary school teachers regarding the learning behavior of students at the secondary level in Karachi, Pakistan?" The data in Tables 3–6 provide valuable insights into the various factors influencing student learning behavior in secondary schools in Karachi, Pakistan. These include student motivation, interest, teacher behavior, and overall learning behavior.

The results revealed that student motivation (SM) is highly rated by teachers, with an overall mean score of 4.297. The highest mean score among the items (4.620 for SM2) indicates that certain motivational strategies are especially effective (Azhar, 2024; Azhar, et al., 2022). Motivation is critical to student achievement with the effective use of technology, as supported by the work of Schunk et al. (2014) and Ali et al. (2023), who argue that motivated students engage more actively and persistently in learning tasks. High scores across all items suggest a generally positive perception of students' motivational levels, which is vital for sustained academic performance. The findings illustrate that student interest (SIT) also plays a crucial role, with a slightly higher overall mean score of 4.396. SIT3 received the highest rating (4.542), implying that specific aspects of the curriculum or classroom activities were particularly engaging for students. As Ryan and Deci (2000) note, intrinsic interest is a powerful driver of learning, often linked to autonomy and content relevance. This finding supports the view that aligning instructional practices, professional development and with students' interests foster deeper engagement and better learning outcomes (Ali et al., 2022).

The study's outcomes showed that teacher behavior (TB) scored an overall mean of 4.379. TB4 (mean = 4.442) had the highest score, reflecting the importance of positive teacher-student interactions. Teachers' attitudes and behaviors significantly impact students' emotional and cognitive engagement (Hattie, 2009). The close range of mean scores across items indicates consistency in how teacher behavior is perceived, confirming the established view that respectful and supportive conduct enhances the learning environment (Hafeez et al., 2003; Hafeez et al., 2021). Students' learning behavior (SLB) received an overall mean of 4.336, with SLB3 rated the highest at 4.434. This indicates that students exhibit effective learning behaviors, possibly due to the positive influence of motivation, interest, and teacher support. Bandura's (1997) social cognitive theory highlights that behavioral patterns in learning are shaped by environmental factors, such as teacher influence and classroom climate.

While all four dimensions showed high mean scores, slight inconsistencies were noteworthy. For example, TB5 (mean = 4.246) was rated the lowest among teacher behavior items, and similarly, SLB5 was the lowest among learning behavior items. These lower scores, while still above average, suggest room for improvement in specific behavioral and instructional strategies. This aligns with Brophy's (2004) findings, who emphasized that consistent teacher support and structured environments are essential for fostering effective learning habits.

RECOMMENDATIONS

The following recommendations are made based on the study results:

- Secondary school administrators should implement motivational strategies that enhance student engagement by focusing on goal setting and constructive feedback.
- Curriculum and instruction should be aligned with students' interests through real-life applications and interactive learning.
- Professional development should train teachers in emotional intelligence, classroom management, and positive reinforcement to strengthen the teacher-student relationship.
- School leaders should conduct regular evaluations to identify areas for improvement and introduce targeted interventions, such as mentoring and peer learning.

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