

The Impact of Teacher Phubbing on Elementary Students' Learning Motivation in the Digital Era

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Abstract: This study aimed to examine the relationship between perceived teacher phubbing and learning motivation among elementary school students in the digital era. Teacher phubbing refers to teachers' non-instructional attention to smartphones or digital devices during learning activities, which may reduce direct communication with students. This study used a quantitative correlational design involving 130 students from Grades IV, V, and VI, selected from a population of 180 students through purposive sampling. Data were collected using Likert-scale questionnaires measuring perceived teacher phubbing and learning motivation, supported by observation and documentation. Instrument testing showed that the questionnaire items were valid and reliable, with Cronbach's alpha of .88. Data were analyzed using descriptive statistics and Pearson Product Moment correlation. The results showed that perceived teacher phubbing was at a moderate level, while students' learning motivation was also moderate, with concentration and classroom participation identified as vulnerable aspects. Pearson correlation analysis revealed a negative and significant relationship between teacher phubbing and learning motivation, $r(128) = -.598$, $p < .001$, with a 95% confidence interval of $[-.698, -.475]$. The coefficient of determination indicated that 35.8% of the variance in learning motivation was statistically associated with perceived teacher phubbing. These findings indicate that teacher attention remains an important motivational resource in digital-era elementary classrooms. The study contributes to digital education research by positioning teacher phubbing as a professional and relational issue, not merely a technology-use problem.

Keywords: teacher phubbing, learning motivation, elementary students, digital transformation.

INTRODUCTION

Digital transformation has increasingly reconfigured the structure, rhythm, and relational ecology of elementary education. Contemporary classrooms are no longer defined only by direct oral explanation, printed materials, and conventional teacher-led routines, but also by digital boards, learning management systems, online resources, smartphones, tablets, and networked communication platforms that mediate instruction, feedback, assessment, and school-home communication. This transformation has expanded the repertoire of classroom interaction by enabling multimodal demonstrations, real-time feedback, collaborative problem solving, project-based learning, and more flexible access to learning materials (Bimantoro et al., 2026;

Mustari et al., 2026; Taufikin & Nurhayati, 2026). In elementary classrooms, these developments are particularly significant because children's academic engagement is still strongly shaped by the quality of teacher guidance, social interaction, and classroom routines (Lotfi et al., 2025). Digital tools may therefore enrich learning when they are aligned with pedagogical goals, but their value depends on whether they strengthen or weaken the interactional relationship between teacher and student.

Recent literature suggests that digital transformation can support learner-centered, dialogic, culturally responsive, and inclusive classroom practices when teachers use technology to amplify student voice, collaboration, and feedback (Nurhayati & Judijanto, 2026; Taufikin et al., 2026). Digital platforms can create new

opportunities for students to participate in discussion, construct meaning, engage in shared digital workspaces, and connect learning to their linguistic, cultural, and social experiences (Nkealah & Simango, 2023; Nurhayati, Sholihah, et al., 2025). In multilingual and diverse elementary classrooms, digital resources may validate students' home languages and funds of knowledge when teachers are prepared to design culturally sustaining and multilingual interaction (Ma'rifah et al., 2025; Nwachukwu et al., 2024). However, the same body of literature also indicates that successful digital integration is not determined by device availability alone. It requires teacher competence, purposeful design, classroom norms, and professional judgment so that technology supports discourse, collaboration, and equitable participation rather than fragmenting attention or reducing meaningful interaction (Musa & Nurhayati, 2024; Taufikin, Judijanto, et al., 2025; Taufikin, Nurhayati, Badawi, et al., 2025).

The major research problem addressed in this study emerges from the tension between productive digital integration and disruptive digital distraction. In digitally enriched classrooms, smartphones and other devices can support instruction, but they can also become sources of non-instructional attention that interfere with teacher-student interaction. One increasingly relevant phenomenon is phubbing, defined as the act of snubbing or ignoring another person in favor of a mobile device. In education, phubbing has been described as behavior that disrupts interpersonal communication, classroom interaction, and the quality of learning engagement (Ogodo, 2024). Teacher phubbing refers specifically to teachers' non-instructional attention to smartphones or digital devices during learning activities, such as checking messages, browsing social media, using non-educational applications, or repeatedly shifting attention away from students for purposes unrelated to instruction. This behavior differs from legitimate instructional device use because it competes with students for teacher attention and may weaken the relational cues through which children experience support, responsiveness, and care.

A general solution to this problem is not to reject educational technology, but to distinguish between purposeful instructional use and non-instructional digital distraction. Smartphones, tablets, and other digital tools can be pedagogically valuable when they are used to

access learning resources, support collaboration, document learning, facilitate assessment, or stimulate authentic communication (Nurhayati, Liana, et al., 2025; Suzer & Koç, 2021; Taufikin, Nurhayati, Muzakki, et al., 2025). However, when teachers use devices without clear instructional purpose, the device may disrupt turn-taking, feedback, clarification, eye contact, and spontaneous dialogue. Such disruption is especially important in elementary education because students rely heavily on teacher immediacy, warmth, and timely feedback to sustain motivation. Therefore, the general response should be a balanced digital pedagogy that promotes meaningful technology use while establishing norms that protect face-to-face interaction, dialogic talk, and instructional attention (Amirudin et al., 2026; Cherif et al., 2024).

Scientific literature identifies several specific strategies for addressing teacher digital distraction and preserving motivationally supportive interaction. First, schools need clear classroom norms and professional guidelines that define which forms of device use are instructional, administrative, emergency-related, or personal. Such norms reduce ambiguity and help students understand when technology serves learning and when it becomes off-task distraction (Addai & Adzahlie-Mensah, 2024). Second, professional development should support teachers in designing discourse-rich digital tasks that foreground student reasoning, collaboration, multilingual participation, and culturally responsive interaction (Nurhayati, Bimantoro, et al., 2025). Third, teachers need strategies for managing attention in technology-mediated classrooms, including silencing non-urgent notifications, explaining instructional device use transparently, maintaining eye contact, and returning quickly to student dialogue. These strategies can help ensure that digital tools amplify rather than erode the motivational benefits of teacher presence.

The literature most closely related to this study shows a consistent relationship among digital conduct, classroom interaction quality, and student engagement. Studies on digital transformation emphasize that technology can enhance interaction when embedded in purposeful, collaborative, and culturally responsive pedagogy (Archer et al., 2024). Studies on phubbing and teacher digital distraction indicate that non-instructional smartphone use can disrupt face-to-face

communication, weaken teacher-student responsiveness, reduce feedback opportunities, and diminish engagement (Lyken-Segosebe et al., 2022). Nevertheless, the evidence base on teacher phubbing in elementary classrooms remains limited. Much existing work focuses on higher education, peer interaction, student phone use, or general digital distraction, while fewer studies empirically examine how students' perceptions of teacher phubbing relate to learning motivation in elementary education. This gap is important because elementary students may be especially sensitive to teacher attention, relational warmth, and responsiveness.

Accordingly, this study aims to examine the relationship between perceived teacher phubbing and learning motivation among elementary school students in the digital era. The study is grounded in the assumption that teacher attention functions as a motivational resource: when teachers remain visibly responsive, students are more likely to participate, concentrate, persist, ask questions, and interpret learning as meaningful. Conversely, when teachers are perceived as repeatedly attending to smartphones for non-instructional purposes, students may experience reduced immediacy, weaker relational support, and lower motivation. The novelty of this study lies in shifting the analytical focus from students' gadget use to teachers' professional digital conduct and in positioning teacher phubbing as a relational mechanism that may weaken elementary students' motivation. Based on the reviewed literature, the study hypothesizes that perceived teacher phubbing is negatively and significantly associated with students' learning motivation. The scope of the study is limited to upper-elementary students and uses a quantitative correlational design to examine the direction and strength of the association between teacher phubbing and learning motivation. Through this focus, the study contributes to a more balanced understanding of digital education, in which technology is valued when it supports human interaction, but critically examined when it diverts teachers from the pedagogical relationship through which children feel guided, included, and motivated.

METHOD

This study employed a quantitative correlational research design to examine the relationship between perceived teacher phubbing

and students' learning motivation in elementary education. A correlational design was considered appropriate because it aimed to determine whether naturally occurring variation in students' perceptions of teacher phubbing was statistically associated with variation in their learning motivation (Nurhayati, Judijanto, et al., 2025). In this design, teacher phubbing was treated as the independent variable, while learning motivation was treated as the dependent variable.

The study was conducted in an elementary-school context during the second semester of the 2025/2026 academic year. The population of the study consisted of 180 students in Grades IV, V, and VI. These grade levels were selected because upper-elementary students are generally capable of understanding structured questionnaire items and reporting their perceptions of classroom interaction. At the same time, they remain developmentally dependent on teacher attention, guidance, and feedback to sustain motivation during learning activities. From this population, 130 students were selected as the research sample through purposive sampling. Purposive sampling was used because the study required participants who had direct experience with digital-era classroom interaction and were able to provide meaningful responses regarding teacher device use and their own learning motivation.

This study examined two main variables: perceived teacher phubbing and student learning motivation. The independent variable was perceived teacher phubbing. In this study, teacher phubbing refers to students' perception that teachers attend to smartphones or digital devices during instruction in ways that are not directly related to the learning process. This includes checking messages, using social media, browsing non-instructional applications, repeatedly looking at the phone, or shifting attention away from students during active teaching. The definition deliberately distinguishes teacher phubbing from legitimate instructional technology use. A teacher who uses a device to access learning materials, facilitate assessment, manage classroom timing, or support digital collaboration is not necessarily engaging in phubbing. Phubbing occurs when device use competes with students for teacher attention and reduces direct instructional interaction. The dependent variable was learning motivation. Learning motivation refers to the internal and external forces that encourage students to participate in lessons, persist in completing tasks, ask questions, maintain

concentration, and strive for academic achievement. In elementary education, motivation is not only an individual psychological condition but also a relational outcome shaped by teacher-student communication, feedback, classroom belonging, and perceived support. This operational understanding is consistent with educational psychology perspectives that view motivation as reflected in enthusiasm, engagement, persistence, and achievement orientation.

Data were collected primarily through Likert-scale questionnaires designed to measure perceived teacher phubbing and learning motivation. The teacher phubbing questionnaire included indicators related to the frequency of smartphone use while teaching, the intensity of teacher attention directed to the device, neglect of direct communication with students, and disruption of instructional interaction. These indicators were selected because they reflect the core dimensions of phubbing as a relational interruption: attention is diverted from students, communication becomes less responsive, and the flow of instruction is disturbed. The learning motivation questionnaire included indicators of enthusiasm in following lessons, active questioning, persistence in completing tasks, concentration during learning, and desire to achieve. These indicators represent affective, behavioral, and cognitive dimensions of motivation. Enthusiasm reflects students' positive orientation toward learning; active questioning indicates participatory engagement; persistence reflects effort and resilience; concentration reflects sustained attention; and achievement desire reflects students' aspiration to succeed academically. Both instruments used a five-point Likert scale ranging from Strongly Agree to Strongly Disagree. The use of a Likert scale was appropriate because the study measured perceptions, attitudes, and self-reported motivational tendencies. In addition to questionnaires, observation and documentation were used to strengthen contextual understanding of classroom conditions. These supporting techniques helped situate the questionnaire data within the broader classroom environment, although the primary statistical analysis was based on the questionnaire responses.

Instrument quality was assessed through validity and reliability testing before the main analysis. The manuscript reported that all questionnaire items were valid because the item-

total correlation values exceeded the relevant *r*-table value. This indicates that each item had an adequate statistical relationship with the overall construct it was intended to measure. Validity testing was important because both teacher phubbing and learning motivation are latent constructs that cannot be observed directly and must be inferred from measurable indicators. Reliability testing was conducted using Cronbach's alpha. The reported reliability coefficient was .88, indicating strong internal consistency. This coefficient suggests that the items used in the questionnaire measured the constructs consistently and were sufficiently reliable for correlational analysis. A reliable instrument is necessary in this study because weak measurement consistency would reduce confidence in the interpretation of the relationship between teacher phubbing and learning motivation.

The data collection process was carried out in several stages. First, the researcher identified the relevant population and selected participants from Grades IV to VI using purposive sampling. Second, the researcher administered the questionnaire to students who met the inclusion criteria. Before students completed the instrument, the purpose of the questionnaire was explained in accessible language so that participants could respond based on their classroom experiences. Third, observation and documentation were conducted to support the interpretation of the questionnaire findings. The procedure was designed to ensure that students' responses reflected their perception of teacher behavior and their own motivational experience.

Data analysis was conducted in two main stages: descriptive analysis and inferential analysis. Descriptive analysis was used to determine the general level of perceived teacher phubbing and the general level of learning motivation. The results were categorized to identify whether each variable appeared at a low, moderate, or high level. This stage was important because it provided an empirical profile of the classroom phenomenon before testing the relationship between variables. Inferential analysis was conducted using Pearson Product Moment correlation. Pearson correlation was selected because the study sought to examine the direction and strength of the linear relationship between perceived teacher phubbing and learning motivation.

RESULTS AND DISCUSSION

The descriptive analysis showed that perceived teacher phubbing was in the moderate category. This result was based on students’ responses to questionnaire items measuring

teacher smartphone or digital-device use during instruction. The indicators included frequency of smartphone use while teaching, the degree of attention directed to the device, neglect of direct communication, and disruption of instructional interaction.

Table 1. Descriptive Result of Teacher Phubbing

Variable	Indicators Measured	Empirical Category
Teacher phubbing	Smartphone use while teaching; attention to device; reduced direct communication; disruption of instructional interaction	Moderate

The empirical category for teacher phubbing was therefore recorded as moderate. The descriptive result indicates that the observed category for teacher phubbing was not low and not high, but moderate. The descriptive analysis showed that student learning motivation was also in the moderate category. The indicators used to

measure this variable were enthusiasm in following lessons, active questioning, persistence in completing tasks, concentration during learning, and desire to achieve. The manuscript reported that concentration and classroom participation appeared as vulnerable areas within the motivation variable.

Table 2. Descriptive Result of Learning Motivation

Variable	Indicators Measured	Empirical Category
Learning motivation	Enthusiasm; active questioning; task persistence; concentration; achievement desire	Moderate

The empirical category for learning motivation was therefore recorded as moderate.

Table 3. Specific Empirical Notes on Learning Motivation

Aspect	Empirical Finding
Overall learning motivation	Moderate
Concentration	Identified as a vulnerable aspect
Classroom participation	Identified as a vulnerable aspect

The descriptive result indicates that student learning motivation was categorized as moderate in the research sample. The descriptive findings show the empirical status of the two main variables. Teacher phubbing was categorized as

moderate. Learning motivation was also categorized as moderate. Within learning motivation, concentration and classroom participation were identified as vulnerable aspects.

Table 4. Summary of Descriptive Findings

Variable	Empirical Category	Additional Empirical Note
Teacher phubbing	Moderate	Measured through teacher device-use and interaction-disruption indicators
Learning motivation	Moderate	Concentration and classroom participation were reported as vulnerable aspects

Pearson Product Moment correlation was used to examine the relationship between perceived teacher phubbing and learning motivation. The analysis involved 130 students. The degrees of freedom were 128. The reported

correlation coefficient was -.598. The significance value was $p < .001$. The 95% confidence interval ranged from -.698 to -.475. The coefficient of determination was .358. The t statistic was -8.44.

Table 5. Pearson Correlation Between Teacher Phubbing and Learning Motivation

Statistical Component	Value
N	130
Degrees of freedom	128
Pearson correlation coefficient, r	-.598

Statistical Component	Value
Significance value	$p < .001$
95% confidence interval	[-.698, -.475]
Coefficient of determination, r^2	.358
t statistic	-8.44

The correlation coefficient was negative. The significance value was below .001. The confidence interval did not include zero. The coefficient of determination was .358. The

coefficient of determination was calculated as $r^2 = .358$. This value corresponds to 35.8%. The remaining percentage was 64.2%.

Table 6. Variance Summary Based on r^2

Component	Percentage
Variance statistically associated with teacher phubbing	35.8%
Remaining variance	64.2%
Total variance	100%

The 95% confidence interval for the correlation coefficient was reported as [-.698,

-.475]. The lower bound was -.698, and the upper bound was -.475.

Table 7. Confidence Interval for Pearson Correlation

Confidence Interval Component	Value
Lower bound	-.698
Upper bound	-.475
Confidence level	95%

The confidence interval range was fully below zero. The hypothesis tested in this study stated that perceived teacher phubbing is negatively and significantly associated with

student learning motivation. The statistical result showed $r(128) = -.598$, $p < .001$. The reported confidence interval was [-.698, -.475].

Table 8. Hypothesis Testing Summary

Hypothesis Statement	Statistical Result	Empirical Decision
Perceived teacher phubbing is negatively and significantly associated with student learning motivation	$r(128) = -.598$, $p < .001$, 95% CI [-.698, -.475]	Supported by the statistical result

The hypothesis testing result is presented based on the reported Pearson correlation output. The empirical findings of the study can be consolidated into four main results. First, the study involved 130 students from a population of 180 students. Second, the questionnaire instruments were reported as valid, and the

reliability coefficient was Cronbach's $\alpha = .88$. Third, teacher phubbing was categorized as moderate, and learning motivation was also categorized as moderate. Fourth, the Pearson Product Moment correlation showed a negative and statistically significant relationship between teacher phubbing and learning motivation.

Table 9. Consolidated Results of the Study

Component	Empirical Finding
Population	180 students
Sample	130 students
Grade levels	IV, V, and VI
Sampling technique	Purposive sampling
Instrument type	Likert-scale questionnaire
Supporting techniques	Observation and documentation
Instrument validity	All items valid
Reliability	Cronbach's $\alpha = .88$

Component	Empirical Finding
Teacher phubbing level	Moderate
Learning motivation level	Moderate
Vulnerable aspects of motivation	Concentration and classroom participation
Correlation coefficient	$r = -.598$
Degrees of freedom	128
Significance value	$p < .001$
Confidence interval	$[-.698, -.475]$
Coefficient of determination	$r^2 = .358$
Associated variance	35.8%
t statistic	-8.44

This chapter presented the empirical results of the study. The sample consisted of 130 upper-elementary students selected from a population of 180 students. The instruments used to measure teacher phubbing and learning motivation were reported as valid, with a reliability coefficient of Cronbach's $\alpha = .88$. The descriptive findings showed that teacher phubbing was in the moderate category. Student learning motivation was also in the moderate category, with concentration and classroom participation identified as vulnerable aspects. The Pearson Product Moment correlation analysis showed a negative correlation between perceived teacher phubbing and student learning motivation, with $r(128) = -.598$, $p < .001$, 95% CI $[-.698, -.475]$. The coefficient of determination was $r^2 = .358$, equivalent to 35.8%.

Discussion

The findings of this study show a statistically significant negative relationship between perceived teacher phubbing and learning motivation among elementary school students. The reported correlation, $r(128) = -.598$, $p < .001$, indicates that higher levels of perceived teacher phubbing are associated with lower levels of student learning motivation. This result is important because the descriptive findings also showed that teacher phubbing was not categorized as high, but moderate. In other words, even a moderate level of perceived teacher non-instructional device use was meaningfully related to students' motivational condition. Learning motivation was also found to be moderate, with particular vulnerabilities in concentration and classroom participation. These findings suggest that teacher phubbing should not be treated as a minor behavioral issue or a simple matter of digital etiquette. Rather, it should be understood as part of the broader interactional quality of digital-era classrooms.

The negative relationship found in this study is consistent with the conceptual argument

that elementary students' motivation is strongly shaped by teacher attention, responsiveness, and interpersonal communication. In elementary classrooms, motivation is not only determined by the attractiveness of learning materials or the availability of digital tools, but also by students' perception that the teacher is present, responsive, and emotionally available. Teacher attention is communicated through eye contact, timely feedback, listening, verbal encouragement, and immediate response to students' questions or difficulties. When teachers shift attention to smartphones for non-instructional purposes, these relational signals may be weakened. The present finding therefore aligns with prior literature indicating that teacher digital distraction can reduce immediacy, weaken feedback loops, fragment classroom discourse, and reduce the quality of teacher-student interaction(Ibiloye, 2021).

This study also supports the view that phubbing and technoference are relational phenomena rather than merely technological behaviors. Phubbing refers to ignoring or reducing attention to another person because of engagement with a smartphone, while technoference refers to interruptions in face-to-face interaction caused by technology use. Although much phubbing research has been conducted in family, peer, or higher education contexts, the mechanism is relevant to elementary classrooms because the classroom is also a relational environment in which communication, recognition, and responsiveness influence engagement. Prior studies indicate that device-related interruptions can weaken relationship quality and perceived connectedness (Aagaard, 2019; Arnaudeau et al., 2024; Pancani et al., 2020). In the classroom context, this relational disruption may appear as reduced student willingness to ask questions, lower concentration, weaker participation, and diminished persistence during learning activities.

The findings should not be interpreted as evidence against educational technology. The literature consistently distinguishes between productive instructional technology use and non-instructional digital distraction. Smartphones, tablets, digital boards, learning platforms, and collaborative applications can enhance motivation when they are integrated into clear pedagogical sequences that support feedback, collaboration, autonomy, competence, and relatedness (Annamalai et al., 2022). Mobile polling, gamified learning, language-learning applications, Google Classroom, Padlet, Jamboard, and other digital tools may enrich classroom interaction when they are used intentionally to guide student participation and strengthen learning goals (Candrawati et al., 2024; Komar et al., 2024). The problem identified in this study is therefore not the presence of technology, but the use of technology in ways that compete with students for teacher attention.

The result further confirms that digital transformation in elementary education must be examined through the quality of teacher–student interaction. Digital transformation has expanded opportunities for collaborative, multimodal, learner-centered, and culturally responsive pedagogy (Atmojo et al., 2022; Nurhayati, Irama, et al., 2025; Nurhayati & Judijanto, 2025). It can also support multilingual and inclusive interaction when teachers deliberately design opportunities for students to express ideas, use diverse linguistic resources, and participate in meaningful classroom discourse (Bisai & Singh, 2020). However, these benefits depend on teacher presence and intentional instructional design. If the teacher’s attention is absorbed by non-instructional smartphone use, the potential of digital tools to support dialogue, equity, and collaboration may be reduced.

The moderate level of student motivation found in this study, especially the vulnerabilities in concentration and classroom participation, can be understood in relation to classroom attention regimes. Elementary students are still developing self-regulation and often rely on teachers to maintain the rhythm, focus, and emotional tone of instruction. When teacher attention is inconsistent, students may receive weaker cues about the importance of the task, the value of their participation, and the availability of help. This aligns with literature suggesting that reduced teacher attention and weakened classroom communication are associated with lower

motivation, reduced concentration, and diminished participation, especially in online, blended, or technology-rich environments (Arrasyid, 2023). Conversely, dialogic questioning, timely feedback, and warm interpersonal communication can strengthen students’ sense of competence, autonomy, and relatedness (Cahyati & Nurhayati, 2024; Fadlyansyah & Nurhayati, 2020; Nkealah & Simango, 2023).

The study contributes to the existing literature by shifting attention from students’ smartphone use to teachers’ professional digital conduct. Many discussions of classroom technology focus on student distraction, student smartphone regulation, or the motivational benefits of digital learning media. This study highlights that teachers are also digital actors whose behavior shapes the classroom’s motivational climate. This contribution is relevant because the literature notes that direct empirical evidence on teacher phubbing in elementary settings remains limited, with much existing phubbing research concentrated in higher education, peer interaction, or non-school contexts (Lyken-Segosebe et al., 2022). By examining students’ perceptions of teacher phubbing in relation to motivation, the present study offers empirical support for treating teacher device use as a professional and relational issue.

The practical implication is that schools should not rely on informal expectations alone. Clear classroom norms and school-level guidelines are needed to distinguish instructional, administrative, emergency, and personal device use. Prior literature recommends explicit device-use policies, professional development, classroom management strategies, and task-centered integration of devices to reduce distraction and preserve interaction quality (Ahmad et al., 2024; Sharif & Zeeshan, 2023). Teachers should be supported to manage notifications, explain instructional device use transparently, avoid non-urgent personal use during lessons, and design technology-enhanced activities that sustain dialogue and feedback. Professional development should also include learner-centered, multilingual, and culturally sustaining digital pedagogy so that technology supports equitable participation rather than fragmented attention (Kurniawati et al., 2024; Musa et al., 2024; Susanto et al., 2025).

Nevertheless, the findings must be read with methodological caution. The correlational

design does not establish causality. The study shows that perceived teacher phubbing and learning motivation are negatively associated, but it cannot prove that teacher phubbing directly causes lower motivation. Other classroom variables, such as classroom management, teacher competence, peer climate, curriculum difficulty, or prior student engagement, may also influence motivation. The use of student self-report is valuable because students' perceptions are central to motivation, but future studies should combine questionnaires with classroom observation, teacher self-report, digital-use logs, and longitudinal designs. Future research should also examine mediating mechanisms such as relatedness, perceived teacher support, autonomy support, feedback availability, and classroom belonging. Overall, this study supports a balanced model of digital education: technology can enrich elementary learning when it strengthens pedagogical interaction, but it may weaken motivation when it diverts teacher attention from students.

CONCLUSION

This study examined the relationship between perceived teacher phubbing and learning motivation among elementary school students in the digital era. The findings showed that teacher phubbing was perceived at a moderate level, while students' learning motivation was also in the moderate category, with particular weaknesses in concentration and classroom participation. The main statistical result indicated a negative and significant relationship between perceived teacher phubbing and learning motivation, $r(128) = -.598$, $p < .001$. This result demonstrates that higher student perceptions of teacher non-instructional smartphone or digital-device use are associated with lower levels of learning motivation.

The discussion of the findings confirms that teacher attention remains a central motivational resource in elementary classrooms. In digital learning environments, technology can support instruction when it is used purposefully for feedback, collaboration, assessment, and student engagement. However, when teachers use smartphones or digital devices for non-instructional purposes during lessons, such behavior may reduce immediacy, weaken teacher-student communication, and disrupt the relational conditions that support motivation. The findings therefore suggest that teacher phubbing should

not be viewed merely as a personal habit or etiquette issue, but as a professional and pedagogical concern that can affect the motivational climate of the classroom.

This study contributes to existing knowledge by shifting attention from students' gadget use to teachers' digital conduct. While many discussions of digital distraction focus on learners, this study highlights that teachers are also important digital actors whose device-use behavior shapes classroom interaction. The study strengthens the argument that digital transformation in elementary education must be guided by relational pedagogy, not only by technological availability.

The practical implication is that schools should develop clear guidelines for teacher device use during instruction, protect learning time from non-urgent digital interruptions, and include digital attention management in teacher professional development. Future research should use longitudinal, observational, and multi-school designs to examine causal pathways, mediating variables such as teacher support and classroom belonging, and the effectiveness of interventions designed to reduce teacher phubbing.

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