



# Assessing the Effects of Gadget Exposure on Classroom Behavior and Social Competence of Learners

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## Abstract

This study determined the relationship between gadget exposure, classroom behavior, and social competence among Grade 6 learners at Bonifacio Central Elementary School during the School Year 2025–2026. Specifically, it described the extent of gadget exposure, assessed the levels of classroom behavior and social competence, and examined whether significant relationships existed between gadget exposure and the identified learner outcomes. A quantitative research approach employing a descriptive-correlational design was utilized. Universal sampling was applied, resulting in 200 Grade 6 learners as respondents. Data were collected using validated and reliable survey questionnaires and analyzed using frequencies, percentages, weighted means, and Pearson product-moment correlation coefficient at the 0.05 level of significance. The findings revealed that smartphones were universally used by the respondents, with most learners reporting prolonged daily gadget use while recognizing gadgets as valuable learning tools. Classroom behavior and social competence were both found to be at a high level across all measured dimensions. Correlation analysis further revealed no statistically significant relationship between gadget exposure and classroom behavior or between gadget exposure and social competence. The study concludes that gadget exposure alone does not significantly influence learners' behavioral and social outcomes. Instead, positive classroom behavior and social competence appear to be shaped by broader educational, familial, and social factors. The findings underscore the importance of promoting responsible technology use alongside supportive school and home environments to foster learners' holistic development.

## Keywords

gadget exposure, classroom behavior, social competence, Grade 6 learners, descriptive-correlational research

## How to Cite

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## Author Contributions

The authors contributed to conceptualization, methodology, investigation, writing—original draft preparation, writing—review and editing, and supervision. The authors approved the final manuscript.

## Ethics Statement

This study was conducted in accordance with ethical standards.

## INTRODUCTION

Gadget exposure has become an increasingly significant aspect of children's daily lives as smartphones, tablets, and other digital technologies continue to shape learning, communication, entertainment, and social interaction. In educational settings, digital devices provide learners with immediate access to instructional resources, online collaboration, and interactive learning opportunities that support classroom instruction. Mobile learning, in particular, has been recognized for improving learning accessibility, flexibility, and student engagement when integrated appropriately into educational practice

(Garzón et al., 2024). At the same time, increasing screen exposure has generated concerns regarding its potential influence on learners' behavioral adjustment, classroom participation, and social development. Recent evidence suggests that the developmental effects of digital technology depend not only on the duration of screen use but also on the quality, purpose, and context of digital engagement, including parental guidance, educational support, and family environments (Ferguson et al., 2024; Gomes et al., 2024; Odgers & Jensen, 2020; Orben & Przybylski, 2019; Qu et al., 2023). Children's classroom behavior and social competence are fundamental components of successful learning and healthy socio-emotional development. Positive classroom behavior promotes academic engagement, responsibility, and productive interactions with teachers and peers, while social competence enables learners to communicate effectively, cooperate in group activities, regulate emotions, and establish supportive interpersonal relationships. Educational research has consistently demonstrated that teacher-student relationships, classroom engagement, peer interaction, and socio-emotional learning contribute significantly to students' academic achievement and behavioral adjustment (Blewitt et al., 2019; Crone & Achterberg, 2022; Diamond, 2010; Dong et al., 2021; Howe et al., 2019; Roorda et al., 2017; Wang & Eccles, 2012; Wong & Liem, 2022). Likewise, classroom peer engagement and teacher self-efficacy have been shown to strengthen students' participation, behavioral regulation, and overall adjustment within the school environment (Yoder et al., 2019; Zee & Koomen, 2016).

In the Philippine educational context, the widespread availability of smartphones has accelerated the integration of digital technology into learners' academic and personal lives. Schools increasingly utilize digital resources to complement classroom instruction, while learners frequently access mobile devices for educational activities, communication, and recreation. Studies have emphasized that parental involvement, instructional leadership, and effective school resource management contribute to supportive learning environments that enhance educational quality (Cariaga et al., 2025; Cariaga et al., 2026; Cubero & Cariaga, 2026; El Halaissi & Cariaga, 2026). As schools increasingly integrate digital technologies into instruction, these organizational factors become essential in supporting responsible and effective technology use. These developments highlight the need to understand whether increasing gadget exposure is associated with learners' classroom behavior and social competence within local educational settings.

Although previous investigations have examined the effects of screen time on children's development, findings remain inconsistent. Some studies have reported associations between excessive screen exposure and behavioral, cognitive, and socio-emotional concerns, including alterations in brain development, communication skills, and emotional functioning (Gomes et al., 2024; Hutton et al., 2020; Kiing et al., 2024; Qu et al., 2023; Xu et al., 2025). Conversely, longitudinal and meta-analytic evidence has suggested that the direct influence of screen time on children's psychosocial well-being is generally small and that developmental outcomes are more strongly explained by family support, socioeconomic conditions, educational opportunities, and the nature of digital engagement than by screen exposure alone (Bohnert & Gracia, 2023; Cooper & Stewart, 2021; Ferguson et al., 2024; Hygen et al., 2020; Odgers & Jensen, 2020; Orben & Przybylski, 2019). These differing conclusions indicate that gadget exposure should be examined within broader developmental and educational contexts rather than as an isolated predictor of children's behavior.

Despite the growing body of international literature, relatively few quantitative studies have simultaneously investigated gadget exposure, classroom behavior, and social competence among elementary learners in Philippine public schools using a descriptive-correlational approach. Moreover, limited local evidence exists regarding whether prolonged gadget exposure is significantly associated with learners' behavioral and socio-emotional outcomes within contemporary technology-rich educational environments. Addressing this gap is important because understanding these relationships can assist schools, teachers, and parents in developing balanced strategies that encourage responsible technology use while promoting positive classroom behavior and healthy social development. Therefore, this study assessed the extent of gadget exposure and examined its relationship with classroom behavior and social competence among Grade 6 learners at Bonifacio Central Elementary School during the School Year 2025–2026. Specifically, the study determined the extent of gadget exposure, assessed learners' levels of classroom behavior and social competence, and examined whether significant relationships existed between gadget exposure and these learner outcomes. The findings are expected to provide empirical evidence that may guide schools, teachers, parents, and policymakers in designing interventions and digital citizenship initiatives that support learners' holistic academic, behavioral, and socio-emotional development.

## **METHODOLOGY**

### **Design**

This study employed a quantitative research approach using a descriptive-correlational research design. Quantitative research is appropriate for objectively measuring variables and examining statistical relationships among them through systematic empirical procedures. Specifically, the descriptive component was used to determine the extent of gadget exposure, classroom behavior, and social competence among Grade 6 learners, while the correlational component examined the relationships between gadget exposure and the identified learner outcomes without manipulating the study variables.

The study was anchored on Social Cognitive Theory (Bandura, 1986), which posits that human behavior develops through reciprocal interactions among personal characteristics, environmental influences, and behavioral experiences. Within this framework, gadget exposure was examined as an environmental factor potentially associated with learners' classroom behavior and social competence.

### **Locale and Respondents**

The study was conducted at Bonifacio Central Elementary School, Division of Agusan del Sur, Philippines, during the last quarter of School Year 2025–2026. The target population consisted of all officially enrolled Grade 6 learners. Because the target population was relatively small and manageable, universal sampling was employed. This sampling technique involved

the inclusion of all eligible Grade 6 learners, resulting in a total sample of 200 respondents. Participants were included if they were officially enrolled during the study period, regularly attended classes, and provided learner assent together with written informed consent from their parents or legal guardians. Learners who failed to complete the questionnaires or voluntarily withdrew from the study were excluded from the final analysis.

### **Instruments**

Data were collected using three adapted survey questionnaires that measured gadget exposure, classroom behavior, and social competence. The Gadget Exposure Questionnaire gathered information regarding gadget ownership, duration of mobile phone use, learning access, social media use, gaming activities, and learners' utilization of gadgets for educational purposes. The Classroom Behavior Questionnaire assessed learners' behavior toward classmates or schoolmates, work and classroom activities, and teachers or persons in authority using a four-point Likert-type scale. The Social Competence Questionnaire measured six dimensions of social competence: self-responsibility, social relationships, self-awareness, teamwork building, social networking, and communication skills, likewise using a four-point Likert-type scale. Prior to the conduct of the study, the research instruments underwent expert validation to establish content validity, clarity, and alignment with the research objectives. A pilot test was subsequently conducted among learners outside the actual study population to determine internal consistency. The reliability analysis yielded acceptable Cronbach's alpha coefficients, indicating that the instruments possessed satisfactory reliability for educational research. Only validated and reliable instruments were utilized during the actual data collection.

### **Collection**

Following the approval of the school authorities, permission to conduct the study was secured from the Office of the School Principal. Written informed consent was obtained from the parents or legal guardians of the participants, while learner assent was secured prior to data collection. The questionnaires were personally administered by the researcher during scheduled class hours under standardized testing conditions. Uniform instructions were provided to all respondents to ensure consistency in administration. Participants completed the questionnaires independently without external assistance. Upon completion, all questionnaires were immediately retrieved, checked for completeness, coded, and organized for statistical analysis.

### **Analysis**

The collected data were encoded and analyzed using IBM SPSS Statistics. Descriptive statistics were employed to summarize the respondents' gadget exposure, with frequencies and percentages used to describe categorical variables such as gadget type, duration of use, and patterns of gadget utilization. Weighted means were computed to determine the levels of classroom behavior and social competence across their respective dimensions. To examine the relationships between gadget exposure and the variables of classroom behavior and social competence, the Pearson product-moment correlation coefficient (Pearson's  $r$ ) was utilized. This statistical test was selected because it measures the strength and direction of the linear relationship between continuous variables. All statistical analyses were performed using a 0.05 level of significance to determine whether the observed relationships were statistically significant.

### **Ethical Considerations**

The study adhered to established ethical principles governing educational research involving human participants. Prior to data collection, approval to conduct the study was obtained from the appropriate school authorities. Participation was entirely voluntary. Because the respondents were minors, written informed consent was obtained from parents or legal guardians, while informed assent was secured from all participating learners. Participants were informed of the purpose of the study, the procedures involved, their right to decline or withdraw participation at any stage without penalty, and the confidentiality of their responses. To ensure privacy, no personal identifiers were recorded in the questionnaires. Numerical codes were assigned to all completed instruments, and all electronic and printed data were securely stored and accessed only by the researcher. The collected information was used exclusively for academic purposes and reported only in aggregate form.

### **Rigor and Study Limitations**

Several limitations should be considered when interpreting the findings. First, the study relied on self-reported data, which may be influenced by recall bias or socially desirable responses. Second, the investigation was limited to Grade 6 learners from a single public elementary school, thereby limiting the generalizability of the findings to other educational settings. Finally, the cross-sectional descriptive-correlational design permits the identification of statistical associations but does not establish causal relationships. Despite these limitations, methodological rigor was strengthened through the use of validated and reliable research instruments, clearly defined participant selection criteria, standardized data collection procedures, appropriate statistical analyses, and strict adherence to ethical research standards. The alignment of the research objectives, theoretical framework, research instruments, and statistical procedures further enhanced the validity, reliability, and overall credibility of the study findings.

## **RESULTS AND DISCUSSION**

Table 1 presents the summary of the extent of gadget exposure among Grade 6 learners. The findings revealed that all respondents (100%) use smartphones as their primary digital device, indicating the widespread accessibility and integration of mobile technology into learners' daily lives. Furthermore, most respondents (77.5%) reported using their mobile phones for five to ten hours daily, while educational activities generally occupied one to two hours of daily gadget use. Social media and digital gaming were likewise utilized for approximately two hours daily by the majority of learners. Notably, all respondents agreed that gadgets serve as useful learning tools, demonstrating universal acceptance of digital technology for educational purposes. The predominance of smartphones among the respondents indicates that mobile

devices have become essential tools for communication, information access, entertainment, and learning. This finding reflects the continuing digital transformation of education, where smartphones provide learners with immediate access to educational resources beyond the traditional classroom. Mobile learning has been recognized as an effective instructional approach because it increases accessibility, flexibility, and learner engagement when integrated appropriately into teaching and learning processes (Garzón et al., 2024). Similarly, the increasing use of digital technologies in schools highlights their growing role in supporting instruction and enhancing students' learning experiences (Cariaga et al., 2025). The findings also revealed prolonged daily smartphone use, with more than three-fourths of the respondents spending between five and ten hours using their devices. While extended screen exposure may raise concerns regarding children's behavioral and developmental outcomes, recent evidence suggests that the effects of technology use are influenced more by the quality and purpose of digital engagement than by duration alone. Studies have reported associations between excessive screen exposure and developmental or behavioral concerns (Gomes et al., 2024; Qu et al., 2023; Xu et al., 2025). However, large-scale reviews have likewise concluded that the relationship between screen time and children's psychosocial well-being is generally modest and highly dependent on contextual factors such as parental supervision, family environment, and the nature of digital activities (Ferguson et al., 2024; Odgers & Jensen, 2020; Orben & Przybylski, 2019). Consequently, prolonged gadget use should not automatically be interpreted as detrimental without considering how technology is being utilized.

Educational use of gadgets was generally limited to one to two hours daily, suggesting that learners employ digital devices as supplementary learning resources rather than replacing traditional classroom instruction. This finding supports the view that digital technologies enhance learning when integrated purposefully and balanced with face-to-face instructional experiences. Whole-child educational approaches emphasize that technology should complement classroom learning by fostering cognitive, behavioral, and socio-emotional development instead of serving as a substitute for meaningful teacher-student interaction (Diamond, 2010). The respondents' universal recognition of gadgets as learning tools further demonstrates their awareness of the educational benefits that digital technologies can provide. Moderate engagement in social media and digital gaming further suggests that learners balance educational and recreational technology use. Digital platforms offer opportunities for communication, collaboration, creativity, and entertainment; however, they also require appropriate guidance to ensure responsible participation. Research has emphasized that children's online experiences should be supported through digital literacy education, parental monitoring, and safe online practices that maximize educational opportunities while minimizing potential risks (Livingstone & Stoilova, 2021). Likewise, longitudinal evidence indicates that family support and socioeconomic conditions influence how children benefit from digital technologies and adapt to online environments (Bohnert & Gracia, 2023).

Table 1  
Summary of the Extent of Gadget Exposure among Grade 6 Learners

| Indicator                | Statistical Result                                              | Finding                                                      | Interpretation                                                   |
|--------------------------|-----------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|
| Gadget Type              | 100% Smartphone                                                 | All respondents use smartphones.                             | Smartphones are the primary gadget used by Grade 6 learners.     |
| Daily Mobile Phone Use   | 77.5% (5–10 hours); 22.5% (<5 hours)                            | Majority spend 5–10 hours using mobile phones daily.         | Learners experience prolonged gadget exposure.                   |
| Learning Access          | 50.0% (1 hour); 46.5% (2 hours); 3.5% (3 hours)                 | Most learners use gadgets for learning for 1–2 hours daily.  | Gadgets are regularly utilized for educational purposes.         |
| Social Media Access      | 51.0% (2 hours); 42.5% (1 hour); 6.5% (3 hours)                 | Learners commonly spend about 2 hours on social media daily. | Social media forms part of learners' routine digital engagement. |
| Game Access              | 60.5% (2 hours); 31.5% (1 hour); 7.5% (3 hours); 0.5% (4 hours) | Recreational gaming generally lasts about 2 hours daily.     | Gaming represents a moderate recreational activity.              |
| Gadgets as Learning Tool | 100% Agree                                                      | All respondents recognize gadgets as learning tools.         | Learners perceive gadgets as beneficial for academic purposes.   |

Table 2 presents the summary of classroom behavior among Grade 6 learners across three behavioral dimensions. The findings revealed that learners demonstrated a high level of classroom behavior in all dimensions. Among the three areas, behavior toward teachers and persons in authority obtained the highest mean ( $M = 3.28$ ), followed by behavior toward work and activities ( $M = 3.26$ ), while behavior toward classmates or schoolmates recorded the lowest mean ( $M = 2.98$ ). Although differences were observed among the dimensions, all were interpreted as High, indicating that the respondents generally exhibit desirable behaviors that support effective classroom participation and positive school experiences. The consistently high ratings suggest that the learners possess appropriate behavioral competencies necessary for productive participation in classroom instruction. Respect toward teachers, responsibility in accomplishing academic tasks, and positive interactions with classmates contribute to a classroom environment conducive to learning. Behavioral engagement has long been recognized as a critical factor influencing learners' academic achievement because students who demonstrate appropriate classroom conduct are more likely to participate actively, remain attentive during instruction, and complete learning tasks successfully (Diamond, 2010; Wong & Liem, 2022). These findings indicate that the respondents generally demonstrate behaviors that facilitate both academic learning and social adjustment.

The highest mean obtained by behavior toward teachers and persons in authority indicates that learners consistently demonstrate respect, obedience, and cooperation toward individuals responsible for maintaining classroom order and facilitating instruction. Positive teacher-student relationships play a vital role in promoting learners' behavioral adjustment by fostering trust, emotional security, and mutual respect. Research has consistently shown that supportive teacher-student relationships contribute significantly to students' classroom engagement, behavioral regulation, and academic achievement (Dong et al., 2021; Roorda et al., 2017). Moreover, meaningful classroom dialogue encourages learners to participate respectfully while strengthening their understanding of classroom expectations and behavioral standards (Howe et al.,

2019). These findings suggest that the respondents benefit from classroom environments where positive interactions with teachers reinforce appropriate behaviors. Similarly, the high rating for behavior toward work and activities demonstrates that learners generally fulfill their academic responsibilities and participate actively in classroom learning experiences. Such behaviors reflect learners' willingness to complete assigned tasks, follow classroom procedures, and contribute positively to instructional activities. Educational research emphasizes that behavioral engagement, including active participation and task completion, enhances learners' motivation, persistence, and academic success by promoting self-regulation and responsibility (Diamond, 2010; Wong & Liem, 2022). The respondents' favorable academic behaviors therefore indicate positive learning habits that support effective educational outcomes.

Although behavior toward classmates or schoolmates obtained the lowest mean among the three dimensions, it nevertheless remained within the High descriptive category, indicating that learners generally maintain respectful and cooperative relationships with their peers. Positive peer interactions provide valuable opportunities for learners to develop empathy, communication, cooperation, and conflict-resolution skills that contribute to social competence and emotional well-being. Previous studies have demonstrated that supportive peer relationships strengthen learners' engagement, promote prosocial behavior, and facilitate successful adjustment within the school environment (Blewitt et al., 2019; Crone & Achterberg, 2022; Wang & Eccles, 2012). The slightly lower mean may reflect the developmental challenges associated with peer interaction during late childhood rather than indicating problematic behavior. The findings are further explained by Social Cognitive Theory, which posits that children's behaviors develop through reciprocal interactions among personal characteristics, environmental influences, and observed experiences (Bandura, 1986). Learners acquire appropriate classroom behaviors by observing teachers, parents, and peers, while positive reinforcement strengthens desirable actions such as cooperation, responsibility, and respect for authority. Consequently, the respondents' favorable classroom behavior likely reflects the combined influence of supportive teachers, positive peer interactions, parental guidance, and consistent behavioral expectations within the school environment.

Table 2  
Summary of Classroom Behavior among Grade 6 Learners

| Dimension                                         | Mean | Interpretation | Finding                                                                           |
|---------------------------------------------------|------|----------------|-----------------------------------------------------------------------------------|
| Behavior toward Classmates or Schoolmates         | 2.98 | High           | Learners generally maintain positive peer relationships.                          |
| Behavior toward Work and Activities               | 3.26 | High           | Learners demonstrate responsible participation in classroom tasks.                |
| Behavior toward Teachers and Persons in Authority | 3.28 | High           | Learners consistently demonstrate respect toward teachers and school authorities. |

Table 3 presents the summary of the level of social competence among Grade 6 learners across six dimensions. The findings revealed that all dimensions were rated High, indicating that the respondents generally possess well-developed social competencies essential for effective interpersonal interaction and successful participation in school activities. Among the dimensions, self-awareness obtained the highest mean ( $M = 3.46$ ), followed by social relationship ( $M = 3.39$ ), self-responsibility ( $M = 3.32$ ), teamwork building ( $M = 3.30$ ), communication skills ( $M = 3.23$ ), and social networking ( $M = 3.06$ ). These findings suggest that the learners consistently demonstrate socially appropriate behaviors that contribute to their academic adjustment and personal development. The high level of social competence indicates that the respondents have acquired the interpersonal and socio-emotional skills necessary to establish positive relationships, communicate effectively, cooperate with others, and regulate their behaviors in various social situations. Social competence plays a crucial role in children's overall development because it enables learners to adapt successfully to classroom environments, build supportive peer relationships, and participate actively in collaborative learning experiences. Previous studies have emphasized that social competence contributes significantly to children's academic engagement, emotional well-being, and long-term developmental outcomes (Crone & Achterberg, 2022; Blewitt et al., 2019). Among the six dimensions, self-awareness obtained the highest mean, indicating that learners generally recognize their emotions, personal strengths, limitations, and responsibilities. Self-awareness serves as the foundation of social and emotional competence because it enables individuals to regulate their behaviors, make informed decisions, and respond appropriately to interpersonal situations. Supportive classroom environments that encourage reflection, constructive feedback, and learner participation strengthen children's confidence and emotional regulation, thereby promoting positive behavioral adjustment (Dong et al., 2021; Roorda et al., 2017). These findings suggest that the respondents possess sufficient self-understanding to support both academic and social functioning. The findings likewise demonstrate high levels of social relationships, self-responsibility, teamwork building, and communication skills, indicating that learners generally cooperate with peers, accept responsibility for their actions, and communicate respectfully during classroom interactions. These competencies are strengthened through collaborative learning activities, supportive teacher-student relationships, and positive parenting practices that reinforce empathy, cooperation, and mutual respect. Research has consistently shown that positive teacher-student dialogue enhances learners' communication abilities, classroom engagement, and interpersonal competence, while supportive parenting promotes prosocial behaviors and responsible decision-making (Howe et al., 2019; Wong et al., 2021; Wang & Eccles, 2012).

Although social networking obtained the lowest mean among the measured dimensions, it remained within the High descriptive category, indicating that learners generally demonstrate appropriate social interactions both in face-to-face and digital environments. As digital communication becomes increasingly integrated into children's daily lives, developing responsible online behaviors becomes an important aspect of social competence. Previous studies have emphasized that children's digital experiences are influenced not only by technology use but also by digital literacy, parental supervision, and supportive educational environments that encourage responsible online participation (Livingstone & Stoilova, 2021; Bohnert & Gracia, 2023). The relatively lower mean suggests that learners may still benefit from additional guidance in

developing safe, respectful, and responsible digital communication practices. The findings are consistent with Social Cognitive Theory, which explains that children's social behaviors develop through reciprocal interactions among cognitive processes, environmental influences, and observed behaviors (Bandura, 1986). Learners acquire empathy, cooperation, communication skills, and responsible social behaviors by observing teachers, parents, and peers who serve as significant role models. Positive reinforcement and repeated social experiences further strengthen these competencies, enabling learners to develop healthy interpersonal relationships and adaptive social behaviors.

Table 3  
Summary of Social Competence among Grade 6 Learners

| Dimension            | Mean | Interpretation | Finding                                                                 |
|----------------------|------|----------------|-------------------------------------------------------------------------|
| Self-Responsibility  | 3.32 | High           | Learners demonstrate responsibility and accountability.                 |
| Social Relationship  | 3.39 | High           | Learners establish positive interpersonal relationships.                |
| Self-Awareness       | 3.46 | High           | Learners demonstrate awareness of their emotions and actions.           |
| Teamwork Building    | 3.30 | High           | Learners cooperate effectively in group activities.                     |
| Social Networking    | 3.06 | High           | Learners generally demonstrate appropriate social networking behaviors. |
| Communication Skills | 3.23 | High           | Learners communicate effectively with others.                           |

Table 4 presents the relationship between gadget exposure and classroom behavior among Grade 6 learners. The results revealed a very weak negative correlation between gadget exposure and classroom behavior ( $r = -0.057$ ) with a p-value of 0.423, indicating that the relationship was not statistically significant at the 0.05 level. Consequently, the null hypothesis was not rejected, suggesting that gadget exposure does not significantly influence learners' classroom behavior. The absence of a statistically significant relationship indicates that differences in the extent of gadget exposure were not associated with corresponding differences in learners' classroom behavior. Regardless of the amount of time learners spent using gadgets, they generally maintained positive behaviors toward classmates, classroom activities, and teachers. This finding suggests that classroom behavior is shaped by a combination of developmental, familial, and school-related factors rather than by gadget exposure alone. While digital devices have become an integral part of children's daily routines, their presence does not necessarily translate into inappropriate classroom conduct. The findings support recent research indicating that the relationship between digital technology use and children's behavioral outcomes is more complex than previously assumed. Large-scale reviews and meta-analyses have concluded that screen time alone is not a reliable predictor of children's or adolescents' behavioral and mental health outcomes because the effects of technology depend on the quality of digital experiences, patterns of use, and contextual influences (Ferguson et al., 2024; Odgers & Jensen, 2020; Orben & Przybylski, 2019). Likewise, longitudinal evidence suggests that family socioeconomic conditions, parental monitoring, and educational environments play more substantial roles in children's socio-emotional adjustment than technology exposure by itself (Bohnert & Gracia, 2023).

The findings may also be explained by the respondents' generally positive classroom behavior, which remained consistently high across all behavioral dimensions. Learners demonstrated respect toward teachers, responsibility in completing classroom activities, and appropriate interactions with classmates regardless of their reported gadget exposure. Previous studies have emphasized that positive teacher-student relationships, effective classroom management, and supportive instructional practices significantly influence learners' classroom engagement and behavioral adjustment (Dong et al., 2021; Howe et al., 2019; Roorda et al., 2017). These educational factors may have contributed more strongly to learners' classroom behavior than the amount of time spent using digital devices. Furthermore, the findings are consistent with Social Cognitive Theory, which explains that behavior develops through reciprocal interactions among personal characteristics, environmental influences, and observed experiences rather than through a single environmental factor (Bandura, 1986). Children's classroom behaviors are continuously shaped by parents, teachers, peers, and the broader school environment through modeling, reinforcement, and social interaction. Consequently, gadget exposure alone is unlikely to determine classroom behavior in the absence of these broader developmental influences. The absence of a significant relationship should not be interpreted as evidence that all forms of gadget use are harmless. Rather, the findings suggest that the educational and behavioral effects of digital technology depend on how gadgets are used, the level of adult supervision provided, and the balance between digital activities and other developmental experiences. Appropriate parental guidance, teacher monitoring, and structured educational use of technology remain essential in promoting responsible digital habits while supporting learners' behavioral development (Livingstone & Stoilova, 2021; Garzón et al., 2024).

Table 4  
Summary of the Relationship between Gadget Exposure and Classroom Behavior

| Variables                              | r      | p-value | Decision             | Interpretation                                                                                     |
|----------------------------------------|--------|---------|----------------------|----------------------------------------------------------------------------------------------------|
| Gadget Exposure and Classroom Behavior | -0.057 | 0.423   | Fail to Reject $H_0$ | There is no statistically significant relationship between gadget exposure and classroom behavior. |

Table 5 presents the relationship between gadget exposure and social competence among Grade 6 learners. The findings revealed a very weak negative correlation between gadget exposure and social competence ( $r = -0.012$ ) with a p-value of 0.862, indicating that the relationship was not statistically significant at the 0.05 level. Consequently, the null hypothesis was not rejected, suggesting that gadget exposure does not significantly influence the social competence of Grade 6 learners. The absence of a statistically significant relationship indicates that variations in learners' gadget exposure were not associated with meaningful differences in their levels of social competence. Regardless of the amount of time spent using smartphones, learners consistently demonstrated high levels of self-responsibility, social relationships, self-awareness, teamwork building, social networking, and communication skills. These findings suggest that social competence develops through a

broad range of developmental experiences and social interactions rather than through technology use alone. The present findings are consistent with contemporary research demonstrating that children's social and emotional development is influenced more by the context and quality of technology use than by the amount of screen time itself. Recent meta-analytic and longitudinal studies have reported that digital technology use has limited direct effects on children's socio-emotional functioning when examined independently of family support, school experiences, and parental supervision (Ferguson et al., 2024; Odgers & Jensen, 2020; Orben & Przybylski, 2019). Similarly, Bohnert and Gracia (2023) emphasized that the developmental outcomes associated with digital technology vary according to socioeconomic conditions, educational opportunities, and family environments rather than technology exposure alone. The consistently high levels of social competence observed among the respondents may be attributed to the influence of supportive interpersonal relationships within the home and school. Positive teacher–student relationships provide learners with opportunities to develop empathy, cooperation, communication, and emotional regulation through daily classroom interactions (Dong et al., 2021; Roorda et al., 2017). Likewise, collaborative learning experiences strengthen teamwork, interpersonal communication, and social responsibility by encouraging learners to participate actively in group activities and meaningful classroom dialogue (Howe et al., 2019; Blewitt et al., 2019). These educational experiences likely contributed more substantially to learners' social competence than the amount of time they spent using digital devices.

Family influences may likewise explain the findings. Parenting practices that encourage responsibility, empathy, respectful communication, and positive social interaction contribute significantly to children's social development. Meta-analytic evidence has shown that supportive parenting promotes prosocial behaviors and strengthens children's interpersonal competence across various developmental contexts (Wong et al., 2021). Furthermore, active parental involvement in children's education reinforces positive behavioral expectations and supports healthy socio-emotional development both inside and outside the classroom (Cariaga et al., 2025). These influences may buffer potential negative effects of gadget use and help learners maintain positive social functioning despite varying levels of digital engagement. The findings are further supported by Social Cognitive Theory, which explains that children's social behaviors develop through reciprocal interactions among personal characteristics, behavioral experiences, and environmental influences (Bandura, 1986). Learners acquire communication skills, empathy, cooperation, and responsible social behaviors by observing parents, teachers, and peers, while repeated social interactions and positive reinforcement strengthen these competencies over time. Because social competence develops through multiple interacting influences, gadget exposure alone is insufficient to explain differences in learners' interpersonal functioning. The findings also highlight that digital technologies may serve both educational and social purposes when used responsibly. Learners in the present study universally recognized gadgets as learning tools and generally demonstrated positive classroom behavior and high social competence. This suggests that appropriate guidance, digital literacy, and balanced technology use may enable learners to benefit from digital resources without compromising their interpersonal development. Educational initiatives should therefore focus on promoting responsible digital citizenship, safe online communication, and balanced technology use rather than merely restricting screen time (Livingstone & Stoilova, 2021; Garzón et al., 2024).

Table 5  
Summary of the Relationship between Gadget Exposure and Social Competence

| Variables                             | r      | p-value | Decision             | Interpretation                                                                                    |
|---------------------------------------|--------|---------|----------------------|---------------------------------------------------------------------------------------------------|
| Gadget Exposure and Social Competence | -0.012 | 0.862   | Fail to Reject $H_0$ | There is no statistically significant relationship between gadget exposure and social competence. |

Table 6 summarizes the major findings of the study on the relationship between gadget exposure, classroom behavior, and social competence among Grade 6 learners. The findings revealed that smartphones were universally used by all respondents, with most learners reporting prolonged daily gadget use primarily for educational, social media, and recreational purposes. Despite extensive exposure to digital technology, the respondents demonstrated high levels of classroom behavior and high levels of social competence across all measured dimensions. Furthermore, the correlation analyses revealed no statistically significant relationship between gadget exposure and classroom behavior ( $r = -0.057$ ,  $p = .423$ ) and no statistically significant relationship between gadget exposure and social competence ( $r = -0.012$ ,  $p = .862$ ). The findings indicate that although digital technology has become an integral component of learners' daily experiences, its use alone does not determine behavioral or socio-emotional outcomes. Smartphones have become important educational and communication tools that provide learners with access to information, instructional resources, and collaborative learning opportunities. The universal use of smartphones among the respondents reflects the continuing integration of digital technologies into basic education and highlights their growing importance in supporting both formal and informal learning experiences (Garzón et al., 2024). At the same time, the respondents' recognition of gadgets as learning tools suggests that digital technologies are increasingly perceived as valuable educational resources rather than merely sources of entertainment. The consistently high levels of classroom behavior and social competence further demonstrate that the respondents generally possess positive behavioral and interpersonal characteristics despite prolonged gadget exposure. Learners maintained respectful relationships with teachers and classmates, participated responsibly in classroom activities, and demonstrated positive self-awareness, communication, teamwork, and interpersonal skills. These findings support previous research emphasizing that supportive school environments, effective teacher–student relationships, collaborative learning experiences, and active parental involvement play significant roles in promoting children's behavioral adjustment and socio-emotional development (Dong et al., 2021; Howe et al., 2019; Roorda et al., 2017; Wong et al., 2021).

The absence of significant relationships between gadget exposure and both classroom behavior and social competence further suggests that technology use should not be viewed as an isolated determinant of children's developmental outcomes. Contemporary evidence consistently indicates that the effects of digital technology depend largely on contextual factors,

including the quality of digital engagement, parental supervision, educational practices, and family support rather than on screen time alone (Ferguson et al., 2024; Odgers & Jensen, 2020; Orben & Przybylski, 2019). Likewise, children's opportunities to develop empathy, cooperation, communication, and responsible behavior continue to be shaped primarily through meaningful interactions with parents, teachers, and peers within supportive social environments (Blewitt et al., 2019; Crone & Achterberg, 2022). These findings are consistent with Social Cognitive Theory, which explains that children's behaviors develop through reciprocal interactions among personal factors, environmental influences, and behavioral experiences (Bandura, 1986). Learners acquire appropriate classroom behaviors and social competencies by observing significant role models, receiving positive reinforcement, and participating in supportive educational and family environments. Consequently, gadget exposure alone is insufficient to explain variations in learners' classroom behavior or social competence because these developmental outcomes are influenced by multiple interacting factors.

Table 6  
Summary of the Major Findings of the Study

| Research Objective                                                        | Major Finding                                                                                                                                                                                                                                | Conclusion                                                                                                       |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Determine the extent of gadget exposure among learners                    | All respondents used smartphones. Most spent 5–10 hours daily on mobile phones, while educational, social media, and gaming activities generally ranged from 1–2 hours daily. All respondents agreed that gadgets are useful learning tools. | Gadget use is widespread and integrated into both the academic and recreational activities of Grade 6 learners.  |
| Determine the level of classroom behavior                                 | Mean scores ranged from 2.98 to 3.28, all interpreted as High.                                                                                                                                                                               | Learners generally demonstrate positive classroom behavior toward classmates, academic activities, and teachers. |
| Determine the level of social competence                                  | Mean scores ranged from 3.06 to 3.46, all interpreted as High.                                                                                                                                                                               | Learners generally possess positive social competence across all measured dimensions.                            |
| Determine the relationship between gadget exposure and classroom behavior | $r = -0.057, p = .423$                                                                                                                                                                                                                       | Gadget exposure has no statistically significant relationship with classroom behavior.                           |
| Determine the relationship between gadget exposure and social competence  | $r = -0.012, p = .862$                                                                                                                                                                                                                       | Gadget exposure has no statistically significant relationship with social competence.                            |

## Conclusion and Recommendations

This study examined the relationship between gadget exposure, classroom behavior, and social competence among Grade 6 learners at Bonifacio Central Elementary School during the School Year 2025–2026. The findings established that smartphones have become an integral part of learners' daily lives and are widely used for educational, communication, and recreational purposes. Despite prolonged daily gadget exposure, the respondents consistently demonstrated high levels of classroom behavior and social competence, indicating their ability to maintain positive behavioral and interpersonal functioning within the school environment. Furthermore, the study found no statistically significant relationship between gadget exposure and classroom behavior or between gadget exposure and social competence. These findings indicate that gadget exposure alone does not explain variations in learners' behavioral and socio-emotional outcomes. Instead, classroom behavior and social competence appear to be influenced by a combination of educational, familial, and social factors that collectively shape children's development.

The findings support the premise of Social Cognitive Theory that children's behaviors develop through reciprocal interactions among personal characteristics, environmental influences, and behavioral experiences rather than through a single external factor. Consequently, the development of positive classroom behavior and social competence should be viewed as the product of supportive teacher–student relationships, active parental involvement, meaningful peer interactions, and positive school environments. Overall, the study concludes that responsible and balanced gadget use does not necessarily hinder learners' behavioral or social development. Rather than focusing solely on limiting gadget exposure, schools and families should emphasize responsible digital citizenship, purposeful educational use of technology, and the continued promotion of positive behavioral and socio-emotional learning experiences that contribute to learners' holistic development.

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