Article

# Teachers' and Parents' Perceptions on the Impact of Mobile Dependency on Early Learners' Language Development

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Abstract: This study examines the perceptions and strategies of parents and teachers regarding the impact of mobile device usage on early learners' language development in selected private schools in Cebu. Utilizing a quantitative research design, data were collected through a validated questionnaire distributed to kindergarten teachers and parents. The findings reveal that both parents and teachers perceive a very high negative impact of mobile device usage on various aspects of language development, including vocabulary acquisition, sentence construction, pronunciation, and overall communication skills. Despite high utilization of strategies to regulate mobile device usage, the relationship between these strategies and the perceived impact was found to be negligible and not statistically significant among parents. However, a moderate negative correlation was observed between the perceived impact of mobile device usage and parents' beliefs in the effectiveness of their strategies, indicating decreased confidence as negative impacts increase. These results highlight the necessity for more effective, evidence-based strategies and enhanced collaboration between parents and educators to mitigate the adverse effects of mobile dependency on early learners' language development.

## Introduction

In today's digital age, the prevalence of mobile devices in daily life has become a significant phenomenon, influencing various aspects of development and learning, particularly among young children (Isikoglu et al., 2023). As mobile technology continues to advance and become more accessible, it is increasingly common to see children as young as toddlers engaging with smartphones and tablets (Nansen.

2020). According to Monteiro et al. (2022) this shifts towards early and frequent exposure to mobile devices has sparked a growing concern among educators and parents regarding its potential impact on early learners' language development.

Mobile dependency among early learners has become a growing concern, particularly regarding its impact on language development (Merma-Molina et al., 2021). As young children increasingly engage with smartphones and tablets, the nature of their interactions with the environment and caregivers shifts, potentially altering traditional pathways of language acquisition (Turco, 2022). Research indicates that while mobile devices can introduce new vocabulary and interactive learning opportunities, they may also limit the depth and quality of linguistic interactions crucial for developing robust language skills (Neumann, 2020). The passive consumption of content, reduced face-to-face communication, and overreliance on digital tools can hinder the development of vocabulary, sentence construction, and pronunciation (Radesky et al., 2020). Understanding the balance between the benefits of educational technology and the potential drawbacks of mobile dependency is essential for ensuring early learners receive the comprehensive language experiences necessary for their cognitive and communicative growth (Kucirkova & Zuckerman, 2021).

Language development during early childhood is a critical phase that lays the foundation for future academic success and effective communication skills (Elias & Brodsky, 2020). It is during these formative years that children rapidly acquire vocabulary, syntax, and pragmatic language skills through interactions with their environment and significant adults in their lives (Robb, 2019). However, the rise in mobile device usage has introduced a new dynamic to these interactions, raising questions about how this technological engagement might affect traditional language learning processes (Kucirkova & Zuckerman, 2021).

Teachers and parents, as primary facilitators of children's early learning experiences, play a pivotal role in shaping and responding to these developmental influences. Their perceptions and attitudes towards mobile dependency are crucial in understanding the broader implications of this trend (Livingstone & Blum-Ross, 2020). Teachers, with their educational expertise and firsthand classroom observations, offer valuable insights into how mobile devices are integrated into learning activities and their potential effects on language acquisition (Marsh et al., 2021). Parents, on the other hand, provide a perspective rooted in daily routines and home environments, reflecting the more personal and direct impact of mobile device usage on their children's development (Neumann, 2020).

Despite the increasing integration of mobile devices into daily life and early childhood education, significant research gaps remain in understanding the extent to which teachers and parents believe that

mobile device usage affects early learners' language development, particularly in areas such as vocabulary acquisition, sentence construction, and pronunciation. While some studies have explored general perceptions of mobile device use, few have delved into specific language development aspects and how they are impacted. Furthermore, there is limited research on the extent to which respondents implement strategies to regulate mobile device usage among early learners in their care and the effectiveness of these strategies. Additionally, the level of teachers' and parents' attitudes and beliefs regarding various mitigation strategies' effectiveness remains underexplored. Addressing these gaps is crucial for developing a comprehensive understanding of how mobile dependency influences early language development and identifying best practices for mitigating potential negative impacts.

This study will focus on gathering insights from parents and teachers from three private schools to comprehensively understand their perceptions and strategies regarding mobile device usage and its impact on early learners' language development. By targeting these specific groups, the research aims to explore the extent to which they believe mobile device usage affects vocabulary acquisition, sentence construction, and pronunciation. Additionally, the study will examine the strategies implemented by these respondents to regulate mobile device usage among early learners and evaluate their attitudes and beliefs about the effectiveness of these strategies. Through surveys, this research will provide valuable data to fill existing gaps, offering a nuanced perspective on how mobile dependency influences early language development and identifying best practices for teachers and parents to support optimal language growth in young children.

**Methodology**

This study will employ a quantitative research design to investigate the perceptions of teachers and parents regarding the impact of mobile dependency on early learners' language development in selected private schools in Cebu. A purposive sampling technique will be used to specifically target Kindergarten teachers and parents from three private schools. A researcher-made questionnaire, developed and validated for reliability and validity, will be the primary data collection instrument. This questionnaire will capture detailed information on the respondents' experiences, beliefs, strategies, and attitudes towards mobile device usage and its effects on language development. The frequency of responses will be measured on a 4-point Likert scale (strongly agree, agree, disagree, and strongly disagree). Data analysis will involve both descriptive and inferential statistics to examine the relationships between various perceptions, challenges, and attitudes. Based on the findings, the researcher will propose an intervention plan aimed at addressing the identified challenges related to mobile

dependency. Ethical guidelines will be strictly followed, ensuring informed consent and confidentiality for all participants. The research will be conducted within the environment of private schools, focusing on a comprehensive understanding of the issue from the perspectives of both educators and parents.

### Results and Discussion

Table 1. Extent of the Impact of Mobile Device Usage on the Early Learners' Language Development as perceived by the Parents

| S/N | Indicators | WM | Verbal Description |
|---|---|---|---|
| 1 | Mobile device usage negatively affects vocabulary acquisition among early learners. | 2.82 | High |
| 2 | Mobile device usage negatively impacts early learners' ability to construct sentences. | 3.32 | Very High |
| 3 | Mobile device usage negatively affects early learners' pronunciation skills. | 3.23 | High |
| 4 | Mobile devices contribute to a lack of focus on language development tasks among early learners. | 3.09 | High |
| 5 | Mobile device usage hinders early learners' ability to comprehend complex language structures. | 3.45 | Very High |
| 6 | Mobile devices can inhibit early learners' ability to express themselves effectively. | 3.27 | Very High |
| 7 | Mobile device usage can lead to poor listening and comprehension skills in early learners. | 3.50 | Very High |
| 8 | Mobile devices can negatively affect early learners' abilities to communicate with their peers. | 3.32 | Very High |
| 9 | Mobile device usage can diminish early learners' interest in traditional language learning activities. | 3.41 | Very High |
| 10 | Mobile devices can contribute to the development of language-related learning difficulties in early learners. | 3.41 | Very High |
| Aggregate Weighted Mean | | 3.28 | Very High |

The data in Table 1 provides a comprehensive overview of parents' perceptions regarding the extent of the impact of mobile device usage on early learners' language development. The indicators reveal significant concerns, with most aspects of language development being rated as highly or very highly affected. Specifically, parents perceive that mobile device usage has a very high negative impact on early learners' ability to construct sentences (WM = 3.32), comprehend complex language structures (WM = 3.45), express themselves effectively (WM = 3.27), and communicate with peers (WM = 3.32). The highest concern is related to poor listening and comprehension skills, with a weighted mean of 3.50, indicating a very high perceived negative impact. Additionally, mobile devices are seen as contributing significantly to a lack of focus on language development tasks (WM = 3.09) and diminishing interest in traditional language learning activities (WM = 3.41). Overall, the aggregate weighted mean of 3.28 reflects a very high level of concern among parents regarding the negative implications of mobile device usage on their children's language

development, highlighting the critical need for strategies to mitigate these effects.

Table 2. Extent of the Impact of Mobile Device Usage on the Early Learners' Language Development as perceived by the Teachers

| S/N | Indicators | WM | Verbal Description |
|---|---|---|---|
| 1 | Mobile device usage negatively affects vocabulary acquisition among early learners. | 3.25 | Very High |
| 2 | Mobile device usage negatively impacts early learners' ability to construct sentences. | 3.33 | Very High |
| 3 | Mobile device usage negatively affects early learners' pronunciation skills. | 3.42 | Very High |
| 4 | Mobile devices contribute to a lack of focus on language development tasks among early learners. | 3.50 | Very High |
| 5 | Mobile device usage hinders early learners' ability to comprehend complex language structures. | 3.08 | High |
| 6 | Mobile devices can inhibit early learners' ability to express themselves effectively. | 3.33 | Very High |
| 7 | Mobile device usage can lead to poor listening and comprehension skills in early learners. | 3.58 | Very High |
| 8 | Mobile devices can negatively affect early learners' abilities to communicate with their peers. | 3.50 | Very High |
| 9 | Mobile device usage can diminish early learners' interest in traditional language learning activities. | 3.42 | Very High |
| 10 | Mobile devices can contribute to the development of language-related learning difficulties in early learners. | 3.50 | Very High |
| | Aggregate Weighted Mean | 3.39 | Very High |

The data in Table 2 highlights teachers' perceptions of the impact of mobile device usage on early learners' language development, with the results indicating a very high level of concern across multiple dimensions. Teachers rated the negative effects on vocabulary acquisition (WM = 3.25), sentence construction (WM = 3.33), and pronunciation skills (WM = 3.42) as very high. Moreover, the use of mobile devices is perceived to significantly contribute to a lack of focus on language development tasks (WM = 3.50) and hinder effective communication with peers (WM = 3.50). Teachers also identified poor listening and comprehension skills as a major issue, with the highest weighted mean of 3.58. Although the impact on the ability to comprehend complex language structures received a slightly lower rating (WM = 3.08), it is still considered high. Overall, the aggregate weighted mean of 3.39 underscores the teachers' substantial concerns about mobile device usage, indicating that it is seen as a major impediment to various aspects of language development in early learners. This emphasizes the need for targeted interventions and strategies to address these negative impacts effectively.

The data in Table 3 illustrates the extent to which parents utilize strategies to regulate the mobile device usage of early learners, with all indicators showing a high level of utilization

Table 3. Extent to which the Parents Utilize Strategies in Regulating the Mobile Device Usage of the Early Learners

| S/N | Indicators | WM | Verbal Description |
|---|---|---|---|
| 1 | I regularly monitor and limit the time spent by early learners using mobile devices. | 3.36 | Highly Utilized |
| 2 | I actively engage early learners in alternative activities that promote language development, such as reading books or playing educational games. | 3.27 | Highly Utilized |
| 3 | I encourage early learners to engage in face-to- face conversations to improve their language skills. | 3.55 | Highly Utilized |
| 4 | I set specific rules and guidelines for mobile device usage to minimize its impact on language development. | 3.41 | Highly Utilized |
| 5 | I provide opportunities for early learners to use mobile devices for educational purposes only. | 3.41 | Highly Utilized |
| 6 | I collaborate with other teachers and parents to establish a consistent approach to managing mobile device usage. | 3.32 | Highly Utilized |
| 7 | I ensure that mobile device usage is integrated with language development activities in a balanced manner. | 3.55 | Highly Utilized |
| 8 | I actively promote digital literacy and responsible mobile device usage among early learners. | 3.41 | Highly Utilized |
| 9 | I provide guidance and support to parents on how to manage mobile device usage at home. | 3.45 | Highly Utilized |
| 10 | I use mobile devices to enhance language development by incorporating educational apps and resources into the curriculum. | 3.50 | Highly Utilized |
| | Aggregate Weighted Mean | 3.42 | Highly Utilized |

Parents report regularly monitoring and limiting the time their children spend on mobile devices (WM = 3.36) and actively engaging them in alternative activities that promote language development, such as reading books and playing educational games (WM = 3.27). They also encourage face-to-face conversations to enhance language skills (WM = 3.55) and set specific rules and guidelines for mobile device usage (WM = 3.41). Additionally, parents ensure that mobile devices are used for educational purposes only (WM = 3.41) and collaborate with teachers and other parents to maintain a consistent approach to managing device usage (WM = 3.32). Efforts to integrate mobile device usage with balanced language development activities (WM = 3.55), promote digital literacy and responsible usage (WM = 3.41), and provide guidance to other parents (WM = 3.45) are also highly utilized. The use of educational apps and resources to enhance language development (WM = 3.50) further reflects a proactive approach. The aggregate weighted mean of 3.42 indicates that parents are highly committed to implementing strategies that mitigate the negative impacts of mobile device dependency on language development, underscoring their active role in fostering a healthy balance between technology use and language growth in early learners
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The data in Table 4 presents the extent to which teachers employ strategies to regulate mobile device usage among early learners, with all indicators showing a high level of utilization. Teachers consistently monitor and limit the time children spend on mobile devices (WM = 3.83) and actively engage them in alternative activities that support language development, such as reading books and playing educational games (WM = 3.75).

Table 4. Extent to which the Teachers Utilize Strategies in Regulating the Mobile Device Usage of the Early Learners

| S/N | Indicators | WM | Verbal Description |
|---|---|---|---|
| 1 | I regularly monitor and limit the time spent by early learners using mobile devices. | 3.83 | Highly Utilized |
| 2 | I actively engage early learners in alternative activities that promote language development, such as reading books or playing educational games. | 3.75 | Highly Utilized |
| 3 | I encourage early learners to engage in face-to- face conversations to improve their language skills. | 3.92 | Highly Utilized |
| 4 | I set specific rules and guidelines for mobile device usage to minimize its impact on language development. | 3.83 | Highly Utilized |
| 5 | I provide opportunities for early learners to use mobile devices for educational purposes only. | 3.67 | Highly Utilized |
| 6 | I collaborate with other teachers and parents to establish a consistent approach to managing mobile device usage. | 3.83 | Highly Utilized |
| 7 | I ensure that mobile device usage is integrated with language development activities in a balanced manner. | 3.67 | Highly Utilized |
| 8 | I actively promote digital literacy and responsible mobile device usage among early learners. | 3.58 | Highly Utilized |
| 9 | I provide guidance and support to parents on how to manage mobile device usage at home. | 3.58 | Highly Utilized |
| 10 | I use mobile devices to enhance language development by incorporating educational apps and resources into the curriculum. | 3.50 | Highly Utilized |
| | Aggregate Weighted Mean | 3.72 | Highly Utilized |

They place a strong emphasis on encouraging face-to-face conversations to improve language skills (WM = 3.92) and establish specific rules and guidelines to minimize the negative impact of mobile devices on language development (WM = 3.83). Opportunities for using mobile devices for educational purposes are provided (WM = 3.67), and teachers collaborate with colleagues and parents to ensure a consistent approach to managing device usage (WM = 3.83). Additionally, teachers integrate mobile device usage with language development activities in a balanced manner (WM = 3.67) and promote digital literacy and responsible usage among early learners (WM = 3.58). They also offer guidance and support to parents on managing mobile device usage at home (WM = 3.58) and incorporate educational apps and resources into the curriculum to enhance language development (WM = 3.50). The aggregate weighted mean of 3.72 indicates that teachers are highly proactive in employing various strategies to regulate mobile device usage, demonstrating their commitment to mitigating its

potential negative effects and promoting effective language development in early learners.

Table 5. Level of Beliefs of the Parents on the Effectiveness of the Strategies they Utilized to Mitigate the Impact of Mobile Device Usage to the
Early Learners' Language Development

| S/N | Indicators | WM | Verbal Description |
|---|---|---|---|
| 1 | I believe limiting mobile device use helps early learners develop language. | 3.14 | Positive |
| 2 | I believe encouraging early learners to read books or play educational games can reduce the impact of mobile dependency on language development. | 3.59 | Very Positive |
| 3 | I believe that promoting face-to-face interactions can help counteract the negative effects of mobile device usage on language development. | 3.64 | Very Positive |
| 4 | I believe mobile devices can aid language learning if used properly. | 3.23 | Positive |
| 5 | I believe that collaboration between teachers and parents is essential in regulating mobile device usage for early learners. | 3.45 | Very Positive |
| 6 | I believe that a well-structured, balanced approach to using mobile devices can help language development in young learners. | 3.32 | Very Positive |
| 7 | I believe that fostering digital literacy and responsible mobile device usage is crucial for early learners in the digital age. | 3.32 | Very Positive |
| 8 | I believe that providing guidance and support to parents on managing mobile device usage can lead to better language development outcomes for early learners. | 3.45 | Very Positive |
| 9 | I believe that integrating educational apps and resources into the curriculum can enhance language development in early learners. | 3.32 | Very Positive |
| 10 | I believe that consistent and coordinated efforts between teachers and parents are necessary to mitigate the impact of mobile dependency on early learners' language development. | 3.50 | Very Positive |
| Aggregate Weighted Mean | | 3.40 | Very Positive |

The data in Table 5 outlines the level of beliefs held by parents regarding the effectiveness of the strategies they employ to mitigate the impact of mobile device usage on early learners' language development. The findings reveal that parents generally hold a very positive view of the strategies' effectiveness, as reflected in the aggregate weighted mean of 3.40. Specifically, parents believe strongly that encouraging face-to-face interactions (WM = 3.64) and promoting reading or educational games (WM = 3.59) can effectively counteract the negative effects of mobile device usage. They also view collaboration between teachers and parents (WM = 3.45), and providing guidance and support to parents (WM = 3.45), as crucial strategies. The belief that a balanced and structured approach to mobile device usage aids language development (WM = 3.32) and that fostering digital literacy is essential (WM = 3.32) also received very positive ratings. Parents additionally believe that integrating educational apps into the curriculum (WM = 3.32) and ensuring consistent efforts between

teachers and parents (WM = 3.50) are necessary for mitigating the negative impact of mobile dependency. While the belief in limiting mobile device use (WM = 3.14) and the potential benefits of mobile devices when used properly (WM = 3.23) were rated positively, they did not score as high as the other indicators. Overall, these results underscore parents' strong confidence in the various strategies they employ, highlighting the importance they place on active and collaborative approaches to support their children's language development amidst the challenges posed by mobile dependency.

Table 6. Level of Beliefs of the Teachers on the Effectiveness of the Strategies they Utilized to Mitigate the Impact of Mobile Device Usage to the Early Learners' Language Development

| S/N | Indicators | WM | Verbal Description |
|---|---|---|---|
| 1 | I believe that setting time limits on mobile device usage effectively promotes better language development in early learners. | 3.83 | Very Positive |
| 2 | I believe that encouraging early learners to engage in other activities, such as reading books or playing educational games, can effectively mitigate the impact of mobile dependency on language development. | 3.83 | Very Positive |
| 3 | I believe that promoting face-to-face interactions can help counteract the negative effects of mobile device usage on language development. | 3.83 | Very Positive |
| 4 | I believe that mobile devices can be used as a tool for language development if used appropriately. | 3.67 | Very Positive |
| 5 | I believe that collaboration between teachers and parents is essential in regulating mobile device usage for early learners. | 3.75 | Very Positive |
| 6 | I believe that a well-structured, balanced approach to mobile device usage can support language development in early learners. | 3.75 | Very Positive |
| 7 | I believe that fostering digital literacy and responsible mobile device usage is crucial for early learners in the digital age. | 3.75 | Very Positive |
| 8 | I believe that providing guidance and support to parents on managing mobile device usage can lead to better language development outcomes for early learners. | 3.83 | Very Positive |
| 9 | I believe that integrating educational apps and resources into the curriculum can enhance language development in early learners. | 3.75 | Very Positive |
| 10 | I believe that consistent and coordinated efforts between teachers and parents are necessary to mitigate the impact of mobile dependency on early learners' language development. | 3.92 | Very Positive |
| | Aggregate Weighted Mean | 3.79 | Very Positive |

The data in Table 6 highlights the level of beliefs held by teachers regarding the effectiveness of strategies they utilize to mitigate the impact of mobile device usage on early learners' language development. The results demonstrate a very positive perception across all indicators, with an aggregate weighted mean of 3.79. Teachers believe strongly in setting time limits on mobile device usage (WM =

3.83), encouraging alternative activities such as reading and educational games (WM = 3.83), and promoting face-to-face interactions (WM = 3.83) as effective strategies. They also hold very positive views on the appropriate use of mobile devices as tools for language development (WM = 3.67) and the necessity of collaboration between teachers and parents (WM = 3.75). Teachers emphasize the importance of a well-structured, balanced approach to mobile device usage (WM = 3.75) and fostering digital literacy and responsible use (WM = 3.75). Providing guidance and support to parents (WM = 3.83) and integrating educational apps and resources into the curriculum (WM = 3.75) are also seen as crucial strategies. The highest level of belief is in the need for consistent and coordinated efforts between teachers and parents (WM = 3.92). Overall, these findings underscore teachers' strong confidence in the various strategies they employ, reflecting their commitment to mitigating the negative impacts of mobile dependency and supporting optimal language development in early learners.

Table 7. Test of relationship between the impact of mobile device usage and the strategies utilized by the Parent-respondents

| Variables | r-value | Strength of Correlation | p - value | Decision | Result |
|---|---|---|---|---|---|
| Mobile Device Usage and Strategies Utilized | 0.007 | Negligible Positive | 0.977 | Do not reject Ho | Not Significant |

*Significant at p < 0.05

Table 7 presents the results of the test of the relationship between the impact of mobile device usage and the strategies utilized by parent-respondents. The correlation analysis reveals an r-value of 0.007, indicating a negligible positive correlation between mobile device usage and the strategies employed by parents. The p-value of 0.977 is significantly higher than the alpha level of 0.05, leading to the decision to not reject the null hypothesis (Ho). This result suggests that there is no statistically significant relationship between the impact of mobile device usage on early learners' language development and the strategies utilized by parents to mitigate these effects. Despite parents' high utilization of various strategies, these findings indicate that these efforts might not be significantly influencing the outcomes related to mobile device usage and language development in early learners. This highlights the need for further investigation into the effectiveness of these strategies.

Table 8 presents the results of the test of the relationship between the impact of mobile device usage and the beliefs of the parent-respondents. The correlation analysis reveals an r-value of -0.508, indicating a moderate negative correlation between mobile device usage and the beliefs held by parents about the effectiveness of the strategies they use.

Table 8. Test of relationship between the impact of mobile device usage and the beliefs of the Parent-respondents

| Variables | r-value | Strength of Correlation | p - value | Decision | Result |
|---|---|---|---|---|---|
| Mobile Device Usage and Strategies Utilized | -0.508* | Moderate Negative | 0.016 | Reject Ho | Significant |

*Significant at $p < 0.05$

The p-value of 0.016 is less than the alpha level of 0.05, leading to the rejection of the null hypothesis (Ho). This result is statistically significant, suggesting that as the perceived negative impact of mobile device usage on language development increases, parents' beliefs in the effectiveness of their mitigation strategies decrease. This moderate negative correlation indicates that despite the high utilization of various strategies, parents may feel that these strategies are not sufficiently effective in counteracting the negative impacts of mobile device usage on early learners' language development. This finding highlights a potential gap between the implementation of strategies and their perceived effectiveness, suggesting a need for further exploration into more effective approaches and better support for parents in managing mobile device usage.

**Conclusion**

The study reveals significant insights into the perceptions and beliefs of parents and teachers regarding the impact of mobile device usage on early learners' language development. Both groups perceive a very high negative impact on various aspects of language skills, including vocabulary acquisition, sentence construction, pronunciation, and overall communication abilities. Despite high utilization of strategies to regulate mobile device usage, parents' strategies do not show a significant relationship with mitigating the negative impacts, as indicated by the negligible positive correlation and non-significant result. However, there is a moderate negative correlation between the impact of mobile device usage and parents' beliefs in the effectiveness of their strategies, suggesting that as negative impacts increase, confidence in the effectiveness of strategies decreases. This underscores the need for more effective and evidence-based strategies and greater collaboration between parents and educators.

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