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# Abstract

# Literature Review

## Introduction

The aim of this study is to explore the potential relationships that may occur between parental stress levels, parenting styles, children’s screen time, and internalized behaviors such as anxiety, depression, attention difficulties, and social withdrawal. We are looking to contribute new research that may assist in better understanding how rising technology use and parental dynamics influences children’s development.

Access to technology has risen dramatically within the last decade. Simultaneously, parental stress levels have been rising as well. Influenced by socioeconomic status, work-life imbalances, and mental health concerns, we are looking to provide a new perspective on the topic. Specifically in the realm of parental styles and stress levels and how it may impact children’s screen time usage and development of internalized behaviors.

This study focuses on middle childhood, specifically ages five through eleven—a key time for development of emotional regulation, academic performance, and social identity begin to form and solidify. Grasping a better understanding of how family-level variables such as parenting style and stress may relate to screen time and internalized behaviors during this period is key to forming and implementing necessary interventions, public policies, and overall parental education.

## Overview of Screen Time and Child Development

Screen time encompasses a variety of technological activities such as: video gaming, television, video streaming, and mobile phone usage. As access to technology expands and media formats diversify, exposure to screen time continues to rise. It has been recommended by the American Academy of Child & Adolescent Psychiatry (2024) that children 2-5 years old are limited to 1-3 hours of screen time daily and for children 6 and older, it is recommended that the parents encourage healthy habits and limit access. Research indicates around 40% of children own a tablet by the age of 2, which increases steadily to 68% by the time the child reaches the age of 8. The bulk of time spent on these devices is primarily (60%) spent on TV, followed by gaming (26%), and homework (1%). Prolonged early screen time has been associated with attentional problems, which may contribute to issues with sustained attention as found by Jourdren, et. Al., (2023). It was also found that children from a lower socioeconomic status, spend twice as much time on screens as those of a higher socioeconomic status (Mann, et. Al., 2025). Which raises questions regarding if parenting stress levels are higher of those in lower SES; as well as the parenting styles utilized.

Access to their own cellphone has become more prevalent as well, which increased concerns for safety. It has been found that 1:4 children have their own cellphone by age 8 (Mann, et. Al., 2025) with the average age being around 12 years old (Richter, et. Al., 2022). It looks to be as research progresses, the average ages continue to lower. Which leads to some concerns regarding the media in which they are consuming when unsupervised with their own cellphone. 80% of surveyed parents stated that they feel their child uses too much screen time, with 79% concerned about the impact on their child’s attention span, and 75% have concerns regarding their child’s mental health (Mann, et. Al., 2025). Yet, there has been a steady increase of children’s usage of screen media, potentially due to parental stress levels increasing.

Research indicates that for children between ages of 9 to 10 years old that increased screen time is associated with greater problem behaviors (Guerrero, et, al., 2019). As well as it has been found that screen time is a predictor for some internalized symptoms, behavioral issues, and peer relationship quality.

Screen time types are first split by whether they are passive or active use, which may lead to varying results in the child’s experience whilst utilizing technology. Passive screen time is described as those who are less likely to engage in online discussions and maintain a stance as an onlooker or lurker. Whilst those who are active users are the opposite, in which they frequently share ideas, experiences, and form closer connections with peers. In which, it has been found that active use may lead to improved well-being, whilst passive users may experience more anxiety and decreased well-being (Escobar-Viera et al., 2018)

## Screen Time in Elementary-Aged Children (5-11)

## Parenting Stress & Parental Screen Guilt

Parental stress levels have steadily increased over 2019 to 2023, with the American Psychological Association (2024) reporting an annual rise of 2.25%. These growing levels, which often stem from financial strain, single parenting, employment instability, and an overall lack of community resources, can have immense effects on parental behaviors and the overall household dynamic.

Within high-stress households, screens may be utilized as a digital babysitter for overwhelmed caregivers. A 2014 study uncovered that 48% of parents reported to utilizing television as a mean to distract the child whilst they complete other tasks (Beyens & Eggermont, 2014). With worldwide internet access doubling between 2014 and 2024, as reported by the International Telecommunication Union (2024). With the surge, it can be reasonably predicted that parents are turning even more frequently to digital devices as a mean of temporary relief. Temporary is the key point, as it can assist with short-term regulation of the child’s behaviors. Yet may also lead to longer-term emotional consequences for both the child and the parent.

As screen usage continues to increase, as does the emergence of parental screen guilt (PSG). PSG refers to the guilt that a parent feels when their child’s screen usage does not align with their belief of good parenting. This guilt can potentially stem from the length of use, content type, and reasons for use. For instance, extended use whilst managing work or household cleaning may feel necessary, but not align with the internalized standards of the parent. PSG is common within itself but is a predictor of higher parental stress levels and correlates with lower parent-child relationship satisfaction (Wolfers et al., 2025).

Recent findings from Brauchli et al. (2024) highlighted how parenting stress is often associated with parenting screen time. Furthermore, this relationship is even stronger when parents hold a more positive attitude towards screen use. In which, there is a higher chance of the child utilizing screens as a coping mechanism if their parents view screen use more favorably. This suggests that the parent’s attitude towards technology may play attribute to the relationship between parental stress and screen usage. These findings emphasize the complexity of parenting style surrounding screens, especially whilst under psychological strain.

Notably, parents may not experience or react to stress in the same way. Parenting style may serve as an amplifier or buffer though. For example, authoritative parents are more likely to implement structured screen use, whilst permissive or neglectful parents may struggle to establish boundaries, leading to a worsening guilt and potentially higher stress levels.

All together, these can assist us in better understanding the interactions that may exist between parenting stress, screen guilt, and screen time attitudes. Leading to further insights surrounding how digital habits are formed and sustained and how they potentially influence the child’s development over time.

## Parenting Styles and Developmental Outcomes

There is a slew of ways that parents choose to raise their children, each having their own benefits and drawbacks. The primary four parenting styles and their effects that we will focus on are: authoritative, authoritarian, permissive, and neglectful/uninvolved. We are looking to better understand if and how varying parenting styles may impact the child’s developmental outcomes regarding screen time and internalized behaviors.

### Authoritarian

Authoritarian style of parenting is characterized by high expectations and strict rules, paired with limited emotional warmth. Parents practicing this style frequently impose rigid expectations without offering adequate support or explanations for rules in place. They tend to rely heavily on punishment, even for minor transgressions, rather than guidance and education (Sanvictores, 2022). Children may experience anxiety or fear surrounding their parents’ reactions, which may lead to externalized behaviors. Research conducted by Hosokawa and Katsura (2019) suggest that children raised by authoritarian parents who employ power-assertive discipline methods, often experience lower emotional security and contentment. These children are also more likely to be prone to hostility and externalizing behaviors, such as aggression and defiance. Pinquart & Gerke (2019) uncovered that authoritarian parenting is associated with lower levels of self-esteem. This approach may hinder children’s ability to effectively cope with psychological challenges, especially under conditions of heightened stress.

### Authoritative

Authoritative parenting style is characterized by its supportive yet structed approach and has been widely regarded as the most developmentally supportive of the four primary parenting styles. Authoritative parents establish clear expectations and firm boundaries whilst actively engaging in open communication with their children. Differing from authoritarian parents who enforce rigid rules and expectations, without explanation, authoritative parents provide reasoning behind guidelines, invite discussion, and foster independence within clearly defined limits Disciplinary measures utilized by authoritative parents emphasize guidance and educating, rather than punitive methods. In turn, making discipline into opportunities for learning and growth (Sanvictores, 2022; Sumargi et. Al., 2020; Marcone, et. Al., 2020).

Research consistently links authoritative parenting with positive child outcomes across emotional, social, and cognitive domains. Children raised within authoritative homes tend to exhibit strong self-regulation skills, emotional resilience, and high self-esteem. They are more likely to internalize social norms and values, engage in prosocial behaviors, and build and maintain positive peer relationships (Marcone et. Al., 2020).

### Permissive

Parents within the permissive style are generally characterized by their warmth, but also a low level of expectations and behavioral demands. Parents who adopt this style are typically more nurturing, affectionate, and overall, more accepting of their children’s emotions and behaviors. However, rarely impose and enforce consistent discipline and rules. Unlike the prior two styles, permissive parents take on more of a friend-like role, which may blur boundaries and reduce parental influence. Leading to a lack of oversight regarding children’s activities, peer associates, and decision-making. This lack of structure may in effect hinder the development of problem-solving skills, maturity, and independence.

Due to the nonjudgemental, supportive environment, children of permissive parents typically have high levels of self-esteem and relatively strong social skills. However, they are in turn more likely to display behavioral challenges such as impulsivity, lower frustration tolerance, and difficulties with self-regulation. The freedom children are provided may contribute to unhealthy habits, including poor dietary habits, excessive screen time, and inconsistent homework completion. Without clear and defined expectations and boundaries in place, children may struggle to develop the discipline necessary for academic, emotional, and behavioral successes later in life (Sanvictores, 2022). All of which may raise parental stress levels and increase the likelihood of the child utilizing screens as a coping mechanism.

### Neglectful / Uninvolved

Neglectful or uninvolved parents that utilize this approach typically take a hand-off approach with their children, allowing them a high level of freedom. They may ensure that the child’s basic needs are met but are emotionally detached and are not active participants in their children’s life. In these cases, there are very few, if any expectations and disciplinary actions in place.

Children with parents that utilize this approach often are very self-sufficient due to necessity. They may also be more resilient than children of those of other styles, however, they may struggle with emotional regulation, academic challenges, and have difficulty in maintaining healthy, social relationships. In a meta-analysis regarding parenting styles, it was found that neglectful parenting is associated with lower levels of self-esteem (Sanvictores, 2022; Pinquart & Gerke, 2019).

## Internalized Behaviors in Children

Internalized Behaviors are directed inwards and reflect a child’s psychological and emotional state. Due to the nature of the behaviors being less disruptive there may be a delay in intervention and lead to more severe diagnoses later in life. The most frequently reported internalized behaviors are anxiety, depressive, attention difficulties, and social withdrawal (APA, 2013). Anxiety is defined by excessive worry or fear, while depression involves persistent sadness and lack of interest in activities. Attention problems refer to difficulties in maintaining focus, and social withdrawal reflects the tendency to avoid peer interactions—often comorbid with anxiety or depression. We are looking to better understand how parental stress and style may influence the development of internalized behaviors.

A meta-analysis conducted by Lijster, et. Al. (2016) found that the average age of onset of all anxiety disorders is twenty-one years old. However, some form may appear earlier: separation anxiety disorder has a mean onset age of ten, followed by social anxiety disorder at eleven. Highlighting how symptoms may begin and intensify if not addressed within key developmental windows.

Middle childhood ranges typically from five to eleven years old, which is a particularly critical period of development. During this time children are adapting to new academic environments, navigating social dynamics, and beginning to form their own sense of identity. In which emotional challenges arise and may interfere with peer relationships, school performance, and the development of self-esteem.

Parental stress and parenting style may intensify the relationship between screen time and internalizing behaviors. For example, a parent experiencing high levels of stress may be less emotionally available, inadvertently reinforcing a child’s withdrawal or anxiety. Screens may then be utilized as a coping mechanism, leading to increased screen exposure, whilst reducing opportunities for social engagement and emotional validation. This may be seen more from parents who follow the permissive or neglectful styles, which may allow for unregulated screen time. Whilst authoritative may have a varying effect due to the structure, open conversation, and emotional support provided.

Recent studies have found a bidirectional relationship between screen time and internalizing behaviors across early and middle childhood. It was found that children with higher levels of internalizing behaviors—such as anxiety and withdrawals—at age three tend to engage in more screen time by age five. Additionally, greater screen time at age three predicted an increase in internalizing behaviors by age five. This bidirectional pattern was observed again between ages five to seven, with screen time being associated to increased internalized behaviors by age seven (Neville, et. Al., 2021). Interestingly, this trend seems to reverse between ages seven and nine, with higher screen times at seven linking to a small decrease in internalized behaviors at age nine, potentially suggesting a developmental shift. The findings suggested that contextual factors may shape how screen time exposure and internalizing behaviors may interact across development. This highlights the importance of considering the individual differences when examining screen time as an outcome and contributing factor to a child’s emotional well-being.

## Intersections of Socioeconomic Status (SES), Parenting, and Screen Time

Socioeconomic status (SES) has been shown in a multitude of studies to be a significant contextual factor that may influence a screen time, parenting styles and behaviors, and emotional development. Recent studies show a consistent trend of children from lower SES backgrounds tend to utilize higher rates of screen time consumption when compared to their peers from higher SES families. Even households that are of a higher-income status, a parent with a high school education or less are associated with 1 more hour of screen time when compared to their counterparts. (Nagata, et. Al., 2022). A potential explanation being parents’ education regarding overuse, access to afterschool programs, less work-related stress and financial stressors, which can in turn influence parenting style.

Parents of higher education levels may be more likely to adopt authoritative structures, rather than authoritarian (Wang & Zheng, 2024). In which they are more likely to take on parenting approaches that emphasize structure and consistent boundaries—including screen time usage and what they have access to. They may also have better access to resources, time, and knowledge regarding developmental risks associated with excessive screen time, leading them to more effectively regulate their child’s media habits.

In contrast, parents from a lower-SES status often face higher levels of stress due to economic instability, irregular work schedules, and limited access to resources. Which may begin to negatively impact parental mental health and contribute to more permissive or neglectful parenting approaches. In these environments, there is a potential for screens to be utilized as a coping mechanism, resulting in more unregulated and prolonged usage. A meta-analysis found that children of parents with higher education levels report lower levels of internalizing behaviors such as depression and anxiety. Suggesting that SES not only affects daily routines such as screen exposure but plays a critical role in shaping the child’s emotional and psychological outcomes (Xiang, et. Al., 2024). Parental education level may also influence the degree of emotional support and behavioral monitor children receive, which in effect are proactive in protecting against internalized behaviors.

The above findings assist in underlining the importance of considering SES as a mediating factor when examining the interactions between parenting style, parental stress, screen time usage, and internalized behaviors. By better understanding the situational factors that may influence parental behavior and child development, researchers and practitioners can design more beneficial interventions that are responsive to the diverse needs and experiences of families.

## Gaps in the Existing Literature

# Rationale for Current Study

# Hypotheses

# Proposed Methods Section

## Participants

### Target Population

### Estimated Sample Size

### Recruitment Strategy

### Inclusion Criteria

### Exclusion Criteria

## Measures

### Parenting Styles and Dimensions Questionnaire (PSDQ)

### Parenting Stress Index (PSI)

### Child Behavior Checklist (CBCL)

## Procedure

### Screening Process

### Informed Consent

### Survey Completion

### Data Storage and Security

### Anonymity and Confidentiality

### Recruitment Process

### Duration and Timeline

### Data Collection and Recording

# References