## **Parenting Under Pressure:**

# The Influence of Parental Stress and Parenting Styles on Screen Time and Internalized Behaviors in Children Aged 5-11

Hailey Cantwell

Department of Psychology, Southern New Hampshire University

PSY 480

Dr Allyson Phillips

April 24, 2025

#### **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)**

Elementary-age children fall between the ages of 5 and 11 years old, in which they in a vital developmental window where cognitive skills, emotional regulation, and social interactions begin to deepen. As screen access continues to increase within households, concerns regarding how excessive screen use may influence the developmental milestones. The American Academy of Child and Adolescent Psychiatry (2024) place recommendations that parents of children 6 or older should promote healthy screen habits and limit screen time, yet due to the lack of official time limits, this could play into the lack of adherence.

Research has suggested that it is not solely the quantity of screen time, but also the quality and purpose of the use that impacts how the child is affected. A study by Altun (2022), uncovered the relationship between differing screen use and executive functioning skills during early childhood. In which it was revealed that passive screen time, such as watching TV or other

non-interactive content, is negatively associated with executive functioning development. Which can potentially hinder working memory and self-regulation skills. However, active screen use, such as educational or other interactive media how been found to show a positive relationship with executive functioning. This further emphasizes that content and engagement type, which is critical when assessing the screen usage patterns during middle childhood.

Additionally, a study conducted by Kerai et al. (2022), in which investigated how exceeding screen time guidelines relates to children's developmental health. This study linked parental reports of screen time at the beginning of kindergarten with teacher response outcomes in the middle of the school year. Results displayed that children with higher screen times are significantly more likely to exhibit developmental vulnerabilities across physical wellbeing, social competence, emotional maturity, cognitive development, and are 81% more likely to have vulnerabilities in language and cognitive development, and 60% more likely to be vulnerable in communication skill. These findings further highlight the broad risks associated with excessive screen use. The context, quality, and type of screen use shape the child's development in academics, social situations, and emotional regulation during elementary years.

#### **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

Numerous studies have examined the effects of screen time on children's development, yet the bulk of the literature focuses on early childhood or adolescence, neglecting to further explore middle childhood, specifically ages 5-11. Additionally, many studies isolate variables

such as screen use, parenting style, or internalized behaviors without considering the potential interactions that may occur within a family or socioeconomic context.

The ever-growing presence of technology in the home and schools, paired with rising parental stress levels and varying parenting styles, calls for a more in-depth approach to better understand the potential impacts. There is also limited research regarding the role of parental screen guilt (PSG) and how it may influence parenting practices and screen time habits. Which leads PSG to be overlooked in screen time studies, despite the emerging significance. This study seeks to address these gaps by examining how parenting styles, parental stress levels, socioeconomic status, and PSG relate to impact the screen time and development of internalized behaviors in elementary-aged children.

#### **Rationale for Current Study**

Given the continued increase in children's screen exposure and parental stress levels, there is an urgent need to better understand the dynamics that may influence these behaviors whilst the child is experiences key developmental stages. Middle childhood typically marks a significant transitional period where the child tends to become more independent, form peer relationships, and develop emotional regulation skills. When disruptions occur, there is the potential for long-term impacts on the child's emotional and behavioral outcomes.

By focusing on the roles of parenting styles, parental stress levels, and socioeconomic background characteristics, this study aims to uncover how these variables have the potential to not only shape the child's screen time habits, yet also assist in the emergence of internalized behaviors such as: anxiety, depression, and attentional difficulties. Additionally, integrating the concept of parental screen guilt may offer a new lens to better understand the complex decisions

parents make regarding managing screen usage. The findings from this study can potentially offer valuable insights that can assist in forming more targeted interventions for both parents and children and shaping public policies aimed to improve child mental health outcomes.

## **Hypotheses**

The following hypotheses aim to explore the relationships between parental stress levels, parenting styles, children's screen time, and internalized behaviors amongst children 5 to 11 years old.

H1: Parental stress levels will present a relationship with parental style

Research has suggested that parental stress may shape the ways in which parents engage with the children. For example, higher stress levels are frequently associated with harsher or less consistent parenting, like that of authoritarian and permissive styles. Barreto et al. (2024) observes that parents who report higher stress levels typically display more negative parenting behaviors and less involvement with their children. This aligns with the prior findings that parental stress correlates with harsher punishments or more permissive styles, whereas lower stress has been associates with more structured parenting.

H2: Children's screen time will increase as parental stress levels increase

Studies have shown a positive correlation between parenting stress levels and increased child screen time. Brauchli et al. (2024), found that parents who reported higher levels of stress were found to have children with significantly higher screen times. The above findings display a clear relationship that exists between parental stress levels and children's screen time usage.

H3: As screen time increases children's internalized behavior scores will increase

There have been multiple studies that have documented that as screen time increases, internalized behaviors problems, such as anxiety, depression, and withdrawal, also increase. Specifically found by Niiranen et al. (2024) high screen time is associated with increased internalized behavioral symptoms. In fact, children who exceeded over two hours of screen time per day exhibited higher scores for anxiety and depression when compared to those with less exposure.

H4: As parental education increases, parental stress will decrease

A study conducted by Okelo et al. (2024) found that educational level has a significant relationship with parental stress. Meaning that as education level increases, stress levels on average decrease. This may be due to the variation of socioeconomic status, as not all can afford further education.

H5: Single parents will have higher stress levels

Research conducted by Sartor et al. (2023), found that single parents are at a much higher risk of experiences higher stress levels than married parents. This may reflect the increased financial strain and lack of support.

H6: Single parent's children will have an increased usage in screen time

Research on family dynamics has suggested that children of single parents tend to have higher screen time usage when compared to those in married homes (Jové et al., 2023). This may again reflect the lack of support and increased need for the digital babysitter. Further reinforcing the concept that whilst circumstances vary, on average, the children of single parents have increased screen time usage.

#### **Proposed Methods Section**

## **Participants**

Participants within this study will include parents or caregivers of children between the ages 5 and 11 years old. This study will include any children including those with neurodevelopmental disorders or disabilities; this information will be recorded as part of the demographics. Participants must have access to the internet and be proficient in English to complete the Qualtrics survey.

## **Recruitment Strategy**

The majority of recruitment will be conducted through word of mouth and targeted outreach on social media platforms. In which we will be aiming promotion towards parents and caregivers of elementary-aged children. Potential participants will then be screened based on inclusion and exclusion criteria. In which caregivers under 18 or those who are not the primary caregiver will be excluded. Eligible participants will then be provided the informed consent and continue with completion of the Qualtrics survey. No in person visits are necessary for this study.

#### Measures

## **Demographics**

A demographics questionnaire will be administered to collected relevant background information regarding both the parent/caregiver and the child. This will provide contextual insights or moderating factors that can potentially influence parental stress, parenting style, screen time usage, and internalized behaviors. This will allow for descriptive statistics and subgroup analyses to be conducted on family structure, socioeconomic status, and the child's characteristics.

## Parent/Caregiver Demographics

Participants will report their age, gender identity, race, ethnicity, education level, employment status, and the approximate household income. Additionally, questions will assess the social aspects such as relationship status, languages spoken at home, and amount of time spent with the child each week. Questions regarding parental screen use, personal belief of screen exposure, and if they feel levels of screen guilt will also be included.

## Child Demographics

Information regarding the child's age, gender, grade, siblings, and any diagnoses. This may assist in further exploring group differences and identify if neurodevelopmental status impacts the outcome of screen usage.

#### Parenting Styles and Dimensions Questionnaire (PSDQ)

This will be utilized to assess the participants parenting approaches across authoritarian, authoritative, and permissive realms. THE PSDQ was developed by Robinson, et al. (2001) and is a 62-item self-report measure designed for parents of children between 4 to 12 years old. Each item is ranked on the Likert scale ranging from 1 ("never") to 5 ("always"). The PSDQ has demonstrated strong consistency with reliabilities landing around .91 for authoritative, .85 for authoritarian, and .75 for permissive. This allows for classification of each participant into the predominant parenting styles.

#### Parenting Stress Index (PSI-4-SF)

Parental stress will be measured through the Parenting Stress Index – Fourth Edition, Short Form (PSI-4-SF), developed by Abidin (1995). A 36-item instrument that evaluates the level of stress a parent experiences in their role, it is best suited for parents of children between 0 and 12 years old. Participants will rate statements on a 5 level Likert scale based on if their response falls between "strongly agree" to "strongly disagree". In which they will respond to subscales that assess parental distress, difficult child characteristics, parent-child dysfunctional interactions, as well as the total stress score. The PSI-4-SF has been reported to have a test reliability of .84. The higher scores reflect higher levels of parental stress, which will then be analyzed in relation to parenting style, screen time patterns, and internalized behaviors within children.

### Child Behavior Checklist (CBCL)

Developed by Achenbach and Rescorla (2001), the CBCL is a widely used parent-report measure, which assesses emotional and behavioral problems in children ranging between 6 and 18 years old. For this study, we will be utilized the school-age children version of the measure. This measure included 113 items, which are ranked on a 3-point scale ("not true", "somewhat true", "often true") and yields scores that display a broad range of behavioral dimensions. This study is particularly focused on the internalizing problem composite, which includes subscales for anxiety, somatic complaints, and depressed/withdrawn behaviors. We will also be looking at attentional problems and social problems as exploratory variables. This measure has been consistently reliable, with a .92 ranking. It is frequently utilized in clinical and developmental research to easier identify behavioral concerns from the parent's perspective.

The Problematic Media Use Measure – Short Form (PMUM-SF) is a validated 9-item parent-report measure designed to assess potential signs of problematic media usage in children between 4 though 11 years old. This was initially developed by Domoff et al. (2019) and aligns with the DSM-5 criteria that for internet gaming disorder and looks at compulsive and excessive media use and the potential it must interfere with a child's functioning. In which parents are asked to rate each statement based on how true they are on a 5-point Likert scale (1 "never" to 5 "always"). Higher ranking scores of the PMUM-SF reflect more severe media use.

The PMUM-SF will be utilized alongside parental reports of screen time from the child's personal devices settings and in relation to parental stress levels, parenting style, screen time, and internalized behaviors.

Average Daily Screen Time (Estimate via Device Settings)

To obtain the most accurate representation of children's screen time, parents will be provided instructions on how to report their child's average daily screen time. This is tracked by the device and can be found under "screen time" on IOS or "digital wellbeing" on android.

Parents will be instructed to access this and report the total screen time usage and the specific apps over the past 7 days. This will enhance reliability, as there are no official screen time measures in place. If more than one device is utilized parents will be asked to report the cumulative amount across all devices. This will allow us to directly compare parental perceptions of problematic media use and offer a better understanding of media exposure patterns when related to parenting styles, stress levels, and internalized behaviors displayed by the child.

#### **Procedure**

## Screening Process

Screening process will be conducted following participants interest, in which they will be provided a preliminary survey that is based on inclusion and exclusion criteria on Qualtrics. If they are selected, they will then be pushed through the continue to the informed consent and the rest of the survey. If they are not, the survey will end, and a message will thank them for their time and consideration.

## Informed Consent

Participants will be provided, read, acknowledge, and sign the informed consent online.

This will be done following the screening process, but prior to completion of the survey.

## Survey Completion

This survey will be conducted through Qualtrics and will take approximately 40 minutes to complete in total. Demographic questions will be asked first, followed by a randomization of the survey questions, and finally input the average screen time as the final step. Following completion, parents will be sent a thank you message for their time and can reach out to the investigators for any follow up questions.

#### Debrief

We will provide the participants will both investigators contact information to allow them to reach out with any questions or concerns.

#### References

- Abidin, R. R. (1995). *Parenting Stress Index: Professional manual* (3rd ed.). Psychological Assessment Resources.
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms* & *Profiles*. University of Vermont, Research Center for Children, Youth, & Families.
- Akbayin, M., Mulliez, A., Fortin, F. *et al.* Screen exposure time of children under 6 years old: a French cross-sectional survey in general practices in the Auvergne-Rhône-Alpes region. *BMC Prim. Care* **24**, 58 (2023). https://doi.org/10.1186/s12875-023-02009-5
- Altun, A. (2022). Family ecology as a context for children's executive function development. *Psychology in the Schools*, *59*(10), 1931–1944. https://doi.org/10.1002/pits.22799
- American Academy of Child and Adolescent Psychiatry. (2020, February). *Children and watching* 
  - TV. <a href="https://www.aacap.org/AACAP/Families\_and\_Youth/Facts\_for\_Families/FFF-Guide/Children-And-Watching-TV-054.aspx">https://www.aacap.org/AACAP/Families\_and\_Youth/Facts\_for\_Families/FFF-Guide/Children-And-Watching-TV-054.aspx</a>
- American Psychological Association. (2024, July 12). *Parental burnout and stress*. <a href="https://www.apa.org/topics/stress/parental-burnout">https://www.apa.org/topics/stress/parental-burnout</a>
- Barreto, S., Wang, S., Guarnaccia, U., Fogelman, N., Sinha, R., & Chaplin, T. M. (2024). Parent Stress and Observed Parenting in a Parent-Child Interaction Task in a Predominantly Minority and Low-Income Sample. *Archives of pediatrics (Lisle, IL)*, *9*(1), 308. <a href="https://doi.org/10.29011/2575-825x.100308">https://doi.org/10.29011/2575-825x.100308</a>

- Brauchli, V., Sticca, F., Edelsbrunner, P., von Wyl, A., & Lannen, P. (2024). Are screen media the new pacifiers? the role of parenting stress and parental attitudes for children's screen time in early childhood. *Computers in Human Behavior, 152*, 108057. https://doi.org/10.1016/j.chb.2023.108057
- Domoff, S. E., Harrison, K., Gearhardt, A. N., Gentile, D. A., Lumeng, J. C., & Miller, A. L. (2019). Development and validation of the Problematic Media Use Measure: A parent report measure of screen media "addiction" in children. *Psychology of Popular Media Culture*, 8(1), 2–11. https://doi.org/10.1037/ppm0000163
- Hosokawa, R., & Katsura, T. (2019). Role of parenting style in children's behavioral problems through the transition from preschool to elementary school according to gender in Japan. *International Journal of Environmental Research and Public Health*, 16(1), 21. https://doi.org/10.3390/ijerph16010021
- Jourdren, M., Bucaille, A., & Ropars, J. (2023). The impact of screen exposure on attention abilities in young children: A systematic review. *Pediatric Neurology, 142*, 76–88. https://doi.org/10.1016/j.pediatrneurol.2023.03.007
- Kerai, S. M., Maguire, J. L., Birken, C. S., Parkin, P. C., Cost, K. T., Charach, A., Jenkins, J. M., & Gonzalez, A. (2022). Screen time and developmental health: Results from an early childhood study in Canada. *BMC Public Health*, 22, 310. <a href="https://doi.org/10.1186/s12889-022-12701-3">https://doi.org/10.1186/s12889-022-12701-3</a>
- Mann, S., Calvin, A., Lenhart, A., & Robb, M. B. (2025). *The Common Sense Census: Media use by kids zero to eight, 2025*. Common Sense

- Media. <a href="https://www.commonsensemedia.org/sites/default/files/research/report/2025-common-sense-census-web-2.pdf">https://www.commonsensemedia.org/sites/default/files/research/report/2025-common-sense-census-web-2.pdf</a>
- Marcone, R., Affuso, G., & Borrone, A. (2020). Parenting styles and children's internalizing-externalizing behavior: The mediating role of behavioral regulation. *Current Psychology*, 39(1), 13–24. https://doi.org/10.1007/s12144-017-9653-7
- Neville, R. D., McArthur, B. A., Eirich, R., Lakes, K. D., & Madigan, S. (2021). Bidirectional associations between screen time and children's externalizing and internalizing behaviors. *Journal of Child Psychology and Psychiatry*, 62(12), 1475–1484. https://doi.org/10.1111/jcpp.13448
- Niiranen, J., Kiviruusu, O., Vornanen, R. *et al.* Children's screen time and psychosocial symptoms at 5 years of age the role of parental factors. *BMC Pediatr* **24**, 500 (2024). <a href="https://doi.org/10.1186/s12887-024-04915-8">https://doi.org/10.1186/s12887-024-04915-8</a>
- Okelo, K.O., Kitsao-Wekulo, P., Onyango, S. *et al.* Sociodemographic predictors of parenting stress among mothers in socio-economically deprived settings in rural and urban Kenya and Zambia. *Sci Rep* 14, 13055 (2024). https://doi.org/10.1038/s41598-024-63980-2
- Paulich, K. N., Ross, J. M., Lessem, J. M., & Hewitt, J. K. (2021). Screen time and early adolescent mental health, academic, and social outcomes in 9-and 10-year old children: Utilizing the Adolescent Brain Cognitive Development<sup>SM</sup> (ABCD) Study. *PLoS ONE*, *16*(9), e0256591. https://doi.org/10.1371/journal.pone.0256591
- Pinquart, M., & Gerke, D. C. (2019). Associations of parenting styles with self-esteem in children and adolescents: A meta-analysis. *Journal of Child and Family Studies*, 28, 2017–2035. https://doi.org/10.1007/s10826-019-01433-5

- Richter, A., Adkins, V., & Selkie, E. (2022). Youth perspectives on the recommended age of mobile phone adoption: Survey study. *JMIR Pediatrics and Parenting*, *5*(4), e40704. https://doi.org/10.2196/40704
- Sanvictores, T., & Mendez, M. D. (2022, September 18). Types of parenting styles and effects on children. In *StatPearls [Internet]*. StatPearls

  Publishing. https://www.ncbi.nlm.nih.gov/books/NBK568743/
- Sartor, T., Lange, S., & Heinrich Tröster. (2023). Cumulative stress of single mothers an exploration of potential risk factors. *The Family Journal*, 31(1), 88–94. <a href="https://doi.org/10.1177/10664807221104134">https://doi.org/10.1177/10664807221104134</a>
- Wang, X., & Zheng, Y. (2024). Parental education and child development: Investigating parenting style as a mediating factor. *Journal of Family Psychology*, 38(2), 194–210. <a href="https://doi.org/10.1037/fam0001023">https://doi.org/10.1037/fam0001023</a>
- Wolfers, L. N., Nabi, R. L., & Walter, N. (2025). Too much screen time or too much guilt? How child screen time and parental screen guilt affect parental stress and relationship satisfaction. *Media Psychology*, 28(1), 102–133. https://doi.org/10.1080/15213269.2024.2310839