Parental Mediation Advice: An Application of the Extended Parallel Process Model to American Parent's Parental Mediation Behaviors

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ABSTRACT

The benefits of parental mediation have been studied for decades with researchers concluding that parental mediation effectively decreases negative outcomes, such as fear, from children's media use (e.g., Cantor & Wilson 1984), and increases positive outcomes from media use, such as increased academic learning (e.g., Corder-Bolz, 1980). While the benefits of parental mediation have been well researched, a current examination into American parents' parental mediation use has not been documented. Additionally, limited interventions have been conducted to increase parental mediation. Thus, the current project collected exploratory data examining current parental mediation patterns in America (study 1A) and collected experimental data examining the most effective advice messages to increase parental mediation (Study 1B). Measuring predictors to three subtypes of parental mediation (restrictive, negative active, positive active), study 1A found that parental mediation response efficacy, parental engagement, and parental concerns about negative media effects all positively predicted the frequency of negative active mediation, positive active mediation, and restrictive mediation. These results are consistent with previous research on parental mediation patterns.

The extended parallel process model (EPPM) was applied in study 1B with parents either reading a newsletter with details about the response efficacy of parental mediation, self-efficacy of parental mediation, a combination of response efficacy and self-efficacy, or an advice message with no efficacy language. The intervention failed, and none of the conditions reported more implementation intentions than another. However, an indirect effect of parental response efficacy and self-efficacy on implementation intention through perceived threat was found, supporting propositions posed in the EPPM. Theoretical and practical implications of these results will be discussed.

CHAPTER 1: LITERATURE REVIEW

Parental Mediation Advice: An Application of the Extended Parallel Process Model to American Parent's Current Parental Mediation Behaviors

While children are inundated with seemingly endless media options, parents are faced with the difficult task of deciding how and when to mediate their child's media consumption. Parental mediation refers to any type of parental intervention in a child's media use (e.g., Valkenburg et al., 1999). Parental mediation can take many forms, ranging from watching content alongside a child to restricting what and how much media a child can consume. Research has shown that parental mediation helps reduce unwanted negative media effects in children, such as fear reactions (e.g., Buijzen et al., 2007; Cantor & Wilson, 1984) and helps increase wanted positive media effects, such as increased academic learning (e.g., Corder-Bolz, 1980; Strouse & Troseth, 2014). Although the benefits of parental mediation have been well documented, since the start of the COVID-19 pandemic, parents and children have been engaging with more screen time due to the frequency of work-from-home and virtual schooling and stay at home mandates (e.g., Cross, 2020; Joyce, 2020; ParentsTogether, 2020). Research has shown that screen time for adolescents increased from 3.8 hours per day pre-pandemic to 7.7 hours per day during the pandemic (Nagata et al., 2021). Although it is documented that children are spending more time on media, there is limited data examining parental mediation practices during the pandemic, with some research suggesting that about half of Irish parents are mediating content at the same frequency as pre-pandemic, and slightly less than half are mediating content more than they were pre-pandemic despite the increase in screen time (Sciacca et al., 2022). However, no research published at this time has examined the extent to which American parents are mediating their children's media use after the pandemic lockdowns.

Therefore, the current project will utilize an exploratory survey to examine current parental mediation practices, efficacy levels, and concerns surrounding media (study 1A). Additionally, the current project will investigate what actions can be taken to increase parental mediation intentions through an experiment that will apply the Extended Parallel Process Model (EPPM) to parental mediation (study 1B).

Study 1A – Parent Reactions to Media and Current Parental Mediation Patterns

Parental mediation refers to the types of interactions parents or guardians have with their children to "control, supervise, or interpret media content" (Warren, 2001, p. 212). There are many different forms of parental mediation, but the three main types are as follows:

Restrictive Mediation

Restrictive mediation refers to parents or guardians limiting the amount or type of media a child can consume (Valkenburg et al., 1999). Restrictive mediation is often enforced through technical limitations placed on media (e.g., screentime limits) or through verbal rules about what media a child can or cannot use.

Active Mediation

Active mediation is when a parent or guardian engages in an active discussion surrounding the media content (Nathanson et al., 2002). Active mediation is often considered the most beneficial type of mediation regarding children's learning from media and prevention of negative effects from media. It is important to note that active mediation can take the form of positive active mediation (i.e., a parent commenting on what they like about the media content) or negative active mediation (i.e., a parent commenting on what they do not like about the media content; Austin et al., 1999; Beyens et al., 2019; Martins et al., 2017). The following study collected data on both positive and negative active mediation. This distinction between these two

active mediation strategies will provide more insight into previous research that examined active mediation as one entity (e.g., Valkenburg et al., 1999; Warren, 2001) and did not examine a potential difference in the type of comments being made during different types of active mediation, as current research has called for (e.g., Beyens et al., 2019; Martins et al., 2017).

Coviewing

Coviewing refers to parents or guardians who consume content alongside their child, but do not take an active role in the media use. Coviewing is a shared media experience without any additional commentary about the media (Valkenburg et al., 1999). Coviewing will not be included in the current study following the precedence of recent research (e.g., Rasmussen et al., 2016; Valkenburg et al., 2013) citing that coviewing is limited in its ability to prevent undesirable media effects. In fact, a recent meta-analysis found that coviewing was related to an increase in child aggression and overall media use (Collier et al., 2016). Thus, positive active mediation, negative active mediation, and restrictive mediation will be examined in the current study.

Fisch's Capacity Model & the Importance of Mediation

The importance of parental mediation can be seen in Fisch's (2000) Capacity Model, a model that postulates under what conditions preschoolers learn best from screen media. The model begins by noting that preschoolers have a limited working memory capacity, and the visual and auditory nature of screen media draws on that limited capacity. Preschoolers' working memory is split between processing the narrative and processing the educational lesson, and the distance between these two directly impacts learning from the educational screen narrative. Fisch's capacity model is focused on identifying characteristics of the screen media and viewing

context that can work to reduce the distance between the content and lesson. This is where the importance of parental mediation can be seen.

Fisch's (2000) capacity model suggests that preschoolers' can choose when and where to direct their attention during the viewing process. This allocation of working memory resources can be influenced by a variety of different factors such as: prior knowledge of content, prior knowledge of the lesson, understanding of story schemas, verbal reasoning, short-term memory, interest in subject, and parental commentary. It has been found that parental commentary (mediation) during viewing leads to better comprehension of an educational narrative's content (Collins et al., 1981). It is suggested that parental comments help direct children's focus on relevant elements of an educational narrative, easing the burden on working memory (Fisch, 2000). Although Fisch's Capacity Model was created to examine young children's learning from media, research has noted that the same principles should apply to older children and adults (Bilandzic & Busselle, 2013).

Benefits of Parental Mediation

A bulk of research has found that parental mediation helps young children learn from media (e.g., Corder-Bolz, 1980; Strouse & Troseth, 2014), as well as feel less fearful of scary, unrealistic content (Cantor & Wilson, 1984), and can reduce unwanted behaviors (Collier et al., 2016).

First, the benefits of active parental mediation will be examined. One of the earliest studies examining parental mediation found that 5- and 6-year-olds who watched an educational program (i.e., *The Electric Company*) with a teacher who verbally explained lessons in the show (i.e., active mediation; Nathanson et al., 2002) scored better on vocabulary tests at immediate and delayed follow-ups than students who watched the program with a teacher who did not make

any comments about the concepts in the show (Corder-Bolz, 1980). These results indicate that adult explanation of media content can increase a child's learning from the content. The impact of parental mediation on the development of academic skills has been replicated many times over the years. For example, a 2014 study demonstrated that parental mediation benefits the word learning of toddlers (Strouse & Troseth, 2014). In this study, researchers showed 24-month-olds a video in which two novel objects were named and then were asked which photo and which physical object matched the word that was taught in the video. Researchers found that the toddlers were able to correctly identify which physical object matched the novel object named in the video when their parent commented that the object was the same as the one in the video. This result demonstrates that active mediation can benefit young children's academic learning from screens.

Academic skills are not the only benefit that can arise from parental mediation. Corder-Bolz (1980) reported another study in which parental mediation was found to aid in children's development of attitudes and beliefs about socially acceptable behavior, specifically gender roles. Corder-Bolz (1980) detailed a study that was conducted with 500 5- to 11-year-olds who watched episodes of *All in the Family* in small groups with either (1) a male mediator, with a female present, but silent, (2) a female mediator, with a male present, but silent, (3) both a male and female mediator, or (4) a male and female both present, but both silent. *All in the Family* was chosen due to its portrayal of nontraditional gender roles, namely a man who cooks and a woman who fixes appliances. The research found that mediation by an adult male, an adult female, or both an adult male and female lead to children of all ages scoring higher on social acceptance of nontraditional gender roles than children who did not receive any mediation. It is important to note that the mediation in this study can be classified as active mediation due to the adult

expressing commentary on the program (Nathanson et al., 2002). These results indicate that parental mediation can not only aid in child learning (Corder-Bolz, 1980), but also in acceptance of social norms and beliefs when adults engage in active mediation with children (Nathanson et al., 2002).

A third benefit of parental mediation can be seen in the reduction of unwanted behaviors often considered effects of viewing. Beginning with early research, Corder-Bolz (1980) reported research on the role parental mediation may have on reducing unwanted, negative reactions from media content. The reported study examined the impact that adult comments have on the endorsement of harmful violence present in an episode of *Batman* (negative active mediation; Austin et al. 1999). Results indicated that elementary schoolers (5- to 11-year-olds) who watched the program with a teacher who made comments judging and explaining the violence were more likely to say that violence is bad than children who received neutral comments during viewing (Corder-Bolz, 1980).

In addition to reducing the endorsement of violence, research has shown that active mediation can reduce other unwanted media effects on children, namely, fear. Cantor and Wilson (1984) instructed 3- to 5-year-olds and 9- to 11-year-olds to think of a scary scene from the *Wizard of Oz* as "just a story." The comments made in this study can be categorized as negative active mediation, because the adults were making active comments on a negative (scary) element of the media. When the older children were prompted to remember that the scene was not real, they reported less fear. The intervention did not reduce fear in the 3- to 5-year-old children, indicating that fear reduction aspects of parental mediation may be dependent on age.

More recently, a meta-analysis examined the impact that active parental mediation has on negative outcomes (e.g., substance use, aggression, sexual behaviors). The results of this meta-

analysis indicated that active mediation was related to a reduction in substance use, aggression, and sexual behaviors, although the impact of negative active and positive active mediation were examined together, with no comparison between the two (Collier et al., 2016). When taken together, these results show that positive active parental mediation can increase positive, wanted outcomes from media (e.g., reducing gendered ideals and academic skills), and negative active mediation can reduce unwanted outcomes from media (e.g., violence and aggression). Thus, there is a clear case to be made on the benefits of active mediation, however, it is not clear how much active mediation parents are utilizing.

The benefits of restrictive mediation have also been documented. A recent meta-analysis found that restrictive mediation was negatively associated with child and adolescent sexual behaviors, and overall media time (Collier et al., 2016).

While it is well documented that parental mediation can benefit children in a multitude of ways, it is unknown how much parents are currently engaging with parental mediation and how a variety of potential predictors are impacting parental mediation behaviors.

Predictors of Parental Mediation

Previous research has found that a variety of different individual factors influence the frequency of parental mediation, which can impact the strength of the relationship between child age and parental mediation behaviors. However, two major limitations exist: (1) no study to date has examined more than a few predictors at a time, leading to a piecemeal understanding of the variables that influence parental mediation behaviors, and (2) the majority of previous research that has examined potential predictors of parental mediation behaviors have not examined whether a different effect exists between positive active and negative active mediation. The current exploratory study will fill both gaps by examining a wide range of possible predictors.

Child Age

In the examination of parental mediation behaviors, previous research has suggested that child age is the main predictor for parental mediation (Beyens et al., 2019). Developmental parental mediation theory predicts that parental use of restriction, and positive and negative active mediation will follow a curvilinear trend, such that parents increasingly engage in parental mediation as children age through early and middle childhood, before leveling off before adolescence (Beyens et al., 2019). Supporting this, previous research has found that child age is related to types of parental mediation, specifically that parents engage in more active mediation (Valkenburg et al., 1999; Warren et al., 2002; Warren, 2003) and restrictive mediation (Nathanson, 2001; Valkenburg et al., 1999; Warren, 2003) with younger children than with older children, although the number of parents engaging in restrictive mediation is somewhat limited (Beyens et al., 2019). Researchers have found that restrictive mediation, and both positive and negative active mediation follow a curvilinear trend as predicted by the developmental parental mediation theory, suggesting that mediation increases as children age, but levels off before the pre-adolescent years (Beyens et al., 2019). Research has also found that active mediation decreases as children age into their adolescent years (Warren et al., 2002). In short, parents' mediation behaviors steadily increase over a child's early years (3-6 years old), hitting a peak in middle childhood (7-9 years old), but then decrease over early adolescence.

This trend can be explained by the role a parent takes in children's media use. For preschool and early childhood aged children, parents are typically the main gatekeeper of media content, meaning that parents decide what media their child can watch and when (Beyens et al., 2019). Because of this gatekeeping, young children have less autonomy over their media than older children, reducing the need for explicit mediation in the early childhood years (Beyens et

al., 2019). Additionally, parents of younger children report more concerns about television viewing's effects on their children than parents of adolescents (Warren et al., 2002), which is likely because parents become increasingly confident in their child's ability to critique media content as they enter adolescence (Beyens et al., 2019). In middle childhood, children have more freedom to access media content without constant parental oversight, but parents may not be confident in their child's ability to critique media and mitigate harmful effects, which may explain parents' active mediation behaviors. All in all, the following hypothesis is predicted for study 1:

> *H1: Parental reports of restrictive mediation, positive active mediation, and negative active mediation behaviors, and a composite of all three, will following a curvilinear trend by child age, such that mediation will increase over the preschool years (3-6 years old), peak in early childhood (7-12 years old), and decrease in adolescence (13-18 years old).*

Parental Attitudes About TV

Parental attitudes surrounding TV have been shown to predict parental mediation (Dorr, 1989; Valkenburg et al., 1999; Warren, 2001; Warren et al. 2002). Specifically, that parents who are concerned about negative effects from media are more likely to engage in mediation behaviors. Valkenburg and colleagues (1999) found that parents who were concerned about negative effects of media (i.e., aggression, fright, sexual explicitness) were more likely to engage in active and restrictive parental mediation, which was confirmed with Nathanson et al.'s (2002) finding that parent's perception of the threat that violent and sexual content had on their children predicted active and restrictive mediation. It is worth noting that, using the same scale as Valkenburg et al. (1999), Warren (2003) found that parents' overall concern about negative

effects only predicted restrictive mediation, not active mediation. Overall, it does appear that parental concern over negative media effects serves as a predictor for parental mediation behaviors, which has been noted in more recent research as well (Nikken & Schols, 2015). The following hypothesis and research question are posed for the current study:

H2: Parents who are highly concerned about negative media effects will report more positive active mediation, negative active mediation, restrictive mediation frequency. The average of all three mediation types will also be predicted by parental concern.

RQ1: Will parental concern interact with child age in predicting parental mediation?

One limitation of the previous research examining parental concerns surrounding negative media effects (e.g., Nikken & Schols, 2015; Valkenburg et al., 1999; Warren 2003) is that it does not examine perceptions of the severity of the threats and the susceptibility of the threats independently, both of which have been noted to influence danger control measures according to the Extended Parallel Process Model (Witte, 1992). To address this gap and answer previous research's call for the examination of how severity and susceptibility independently influence parental mediation (Riddle & Di, 2020) the current study will examine how parents' perceptions of the severity and susceptibility of five negative media effects (desensitization, fear, hostility, aggression, cultivation) may differ in their impacts on parental mediation behaviors. To address this gap in current research, the following research questions are posed:

RQ2: Will parental perceptions of the severity of cultivation, desensitization, fright, hostility, and aggression predict positive active mediation, negative active mediation, restrictive mediation, and a composite measure of mediation behaviors?

RQ3: Will parental perceptions of severity interact with child age in predicting mediation frequency?

RQ4: Will parental perceptions of the susceptibility of cultivation, desensitization, fright, hostility, and aggression impact positive active mediation, negative active mediation, restrictive mediation, and a composite measure of mediation behaviors the same?

RQ5: Will parental perceptions of susceptibility interact with child age in predicting mediation frequency?

Parental Involvement

Researchers (e.g., Demo, 1994; Warren, 2001; Warren et al., 2002) previously identified two elements of parental involvement that could possibly relate to parental mediation of children's media use: accessibility and engagement. Parental accessibility is the amount of time parents have available to be present with their children; parental engagement is the amount of time parents participate in shared activities with their children (Warren 2001; Warren et al., 2002). Previous research has found that parents who are accessible and engaged with their children are likely to provide some parental mediation of televised content (Warren, 2001; Warren et al., 2002). Specifically, it has been found that both parental engagement and parental accessibility are positively related to active and restrictive mediation (Warren, 2001; Warren et al., 2002), though it is worth noting that this research did not distinguish between positive active and negative active mediation, which the current study will examine. All in all, the prior research suggests that parental involvement will predict both parental mediation, leading to the following hypothesis and research question:

H3: Parental engagement and accessibility will positively predict positive active mediation, negative active mediation, restrictive mediation frequency. The average of all three mediation types will also be predicted by parental engagement and accessibility.

RQ6: Will parental engagement and accessibility interact with child age to predict parental mediation frequency?

Parental Response Efficacy and Self-Efficacy of Mediation

An important element of parental mediation is how effective parents perceive mediation to be at preventing negative media effects and how effective parents perceive mediation is at increasing positive effects. This is referred to as response efficacy (Nathanson et al., 2002). In a measure of parental mediation of violent and sexual content, Nathanson et al. (2002) found that response efficacy was positively related to active mediation and restrictive mediation of violent and sexual content. Thus, the following hypothesis and research question is posed:

H4: Response efficacy will positively predict restrictive mediation, positive active mediation, and negative active mediation frequency. The average of all three mediation types will also be predicted by parental mediation response efficacy.

RQ7: Will response efficacy interact with child age in predicting parental mediation?

Additionally, a second measure of efficacy that is related parental mediation is self-efficacy, which is a parent's belief that they possess the skills necessary to enact mediation behaviors (Nathanson et al., 2002). Nathanson and colleagues (2002) found that parental self-efficacy was related to active mediation of violent and sexual content, and restrictive mediation of sexual content. The following hypothesis and research question is posed:

H5: Self-efficacy will positively restrictive mediation, positive active mediation, and negative active mediation frequency. The average of all three mediation types will also be predicted by parental mediation self-efficacy.

RQ8: Will self-efficacy interact with child age in predicting parental mediation?

Study 1B – Application of the Extended Parallel Process Model to Parental Mediation

Despite the research indicating the benefits of parental mediation, it is still unclear how often American parents mediate their children's media use and why. Research has shown that parental concern about negative media effects is positively related to parental mediation behaviors (Nikken & Schols, 2015; Valkenburg et al., 1999; Warren, 2003). In addition to these findings that parental attitudes and concerns over TV can lead to an increase in parental mediation, a recent study examined the mechanisms surrounding parental concerns over media's effects on their children. Specifically, Riddle and Di (2020) examined the first half of the extended parallel processing model (EPPM; Witte, 1992), studying how parental anxiety about negative media effects is related to the perception of threat severity and susceptibility. Riddle and Di (2020) found that parents are concerned about media's potentially negative effects when they perceive their children as being vulnerable to violent outcomes from media which predicted parental anxiety. It is important to note that Riddle and Di's (2020) findings can shed some light into why and how parents are concerned over negative media effects on their children, which adds more context to previous findings that parental concerns over media predict parental mediation behaviors (Nikken & Schols, 2015; Valkenburg et al., 1999; Warren, 2003), but Riddle and Di (2020) did not examine how these concerns impact parental mitigation efforts (namely, parental mediation). In other words, Riddle and Di (2020) did not test the full EPPM to examine how parents enact danger control strategies. Study 1B fills this gap in the research.

Based on the EPPM, it is known that anxiety over negative effects can increase danger control behaviors, but that the danger control measures are based upon response and self-efficacy. This is the gap that exists in the current research on parental mediation; no work has applied all elements of the EPPM to parental mediation behaviors despite a call for it (Riddle & Di, 2020). Thus, the current study will work to fill this gap by examining how parental response

and self-efficacy influence parental mediation intention, and by examining the most effective advice-giving strategies to increase parental mediation intention. What past research has found is that parents are afraid that their children are susceptible to fear and cultivation effects from violent content, but parents believe aggression and hostility are the most severe outcomes from violent content (Riddle & Di, 2020). It is known that parents are likely to increase mediation when they report fear of negative outcomes (Nathanson, 2001; Valkenburg et al., 1999). What is not known is how parents are currently mediating content with their children, which will be answered in study 1A. The next step is to examine ways in which we can increase parental mediation intentions by increasing response efficacy and self-efficacy through manipulations of advice giving (study 1B).

Extended Parallel Process Model

The Extended Parallel Process Model, or EPPM (Witte, 1992), details a possible process through which fear appeals can persuade one into behavioral changes. The EPPM (Witte, 1992; Witte, 1994) is designed as follows: following a fear-based appeal, the recipient of the message must evaluate the threat in two ways. First, they must reflect upon their personal susceptibility to the threat, as well as the potential severity of the threat. If the recipient feels that they are 1) susceptible to the threat, and 2) that the threat is severe, they will either move into a fear control or danger control process. The first process that can occur from threat perception is fear control, which is characterized as coping mechanisms that reduce fear (Witte, 1996). Fear control may involve message avoidance and ignoring of the threat (Witte, 1996). The second possible outcome that can stem from threat perception is a danger control process, which is a cognitive evaluation of the threat reduction process that can lead to enacting the proposed behavior (Witte, 1992). A danger control process includes the evaluation of the efficacy of the proposed response

to the threat, as well as an evaluation of self-efficacy. The efficacy evaluation process involves the examination of how personally capable of enacting the danger control process the recipient is (perceived self-efficacy), as well as an examination of how effective at preventing the threat the proposed danger control measure is (perceived response efficacy). If the message recipient feels that they can engage in the danger control process (self-efficacy) and that the danger control process is likely to be effective at preventing the threat (response efficacy) they are likely to engage in the danger control process (Witte, 1992; Witte, 1994; Witte, 1996). In short, the EPPM predicts that if a message recipient perceives themselves to be susceptible to a severe threat, and they feel that they can effectively enact an effective danger control process, they will (Witte, 1992; Witte, 1994; Witte, 1996).

The EPPM has been used to examine the motivating forces that lead to behavioral change in response to a health threat (e.g., Lewis et al., 2013). Because there are potential harmful outcomes from children's media use, researchers have applied the EPPM to children's media use to examine the extent to which parents perceive their child's susceptibility to negative outcomes, as well as the severity of that threat (Riddle & Di, 2020).

As noted above, previous research has tested the first half of the EPPM by measuring the extent to which parents perceive how susceptible their young children are to five major negative outcomes of media use (i.e., cultivation, aggression, fright, desensitization, hostility), as well as how severe these threats are (Riddle & Di, 2020). This research found that parents perceive their children as being most susceptible to fear and cultivation effects, but they felt that aggression and hostility were the most severe outcomes, and their anxiety levels surrounding negative media effects were predicted by their perceptions of severity and susceptibility (Riddle & Di, 2020). Thus, research has concluded that parents are indeed perceiving the potential threats of media

use on their children, but the research stops here; there has been no examination of the second half of the EPPM, which would examine the impact of parents' levels of perceived self- and response efficacy in engaging in a danger control method. The current study fills this gap.

Before examining how the entire EPPM maps on to the potential negative outcomes of children's media use, one must first consider what a possible danger control process would be. As the introduction to study 1A details, parental mediation has been shown to be an effective strategy at reducing negative outcomes from media (e.g., Cantor & Wilson, 1984; Collier et al., 2016; Corder-Bolz, 1980). As such, to respond to a call by previous research to test the full EPPM (Riddle & Di, 2020), study 1B will examine parents' levels of self-efficacy and response efficacy, as well as how these levels could be increased depending on the content of advice given. Previous research on the EPPM has found that the most effective message type to influence danger control measures are efficacious messages (e.g., Hatchell et al., 2013; Lewis et al., 2013; Muthusamy et al., 2009; Witte, 1992; Witte, 1993; Witte, 1994; Wong & Cappella, 2009). The current study will utilize a between-subjects design to examine the effect that various elements of efficacy have on parental mediation implementation intention, attitudes towards parental mediation, and perceptions of response efficacy and self-efficacy of parental mediation.

Fear in the EPPM

It is important to note that a main pillar of the EPPM is fear; a message respondent must fear that they are susceptible to a threat and that the threat is severe for them to react. Based on previous Riddle and Di's (2020) work, we know that parents do perceive their children as being susceptible to the threat of negative media effects and perceive the effects as being severe (Riddle & Di, 2020), but not all parents fear negative media outcomes. In an attempt to control for individual differences in fear, the current study presented all participants with a description of

two worst case scenario violent media effects before then presenting a danger control message (mediation behaviors).

Witte (1993) detailed that fearful messages must manipulate the 1) the severity of the threat and 2) the susceptibility to the threat. When fearful messages include clear language that detail the severity and susceptibility of a threat, participants report an increase in perceived threat, which then can lead to an increase in fear (Witte, 1993). Strong fearful messages must include language that is vivid, personalistic, specific, and intense in order to scare respondents into action (Witte, 1993; Witte, 1995). The current study utilized the staples of fearful messaging (vivid, personalistic, specific, and intense) in the fear induction element of the advice messages.

Research has presented limitations on the effectiveness of only fear-based messaging (e.g., Gore & Campanella Bracken, 2005; Muthusamy et al., 2009; Witte & Allen, 2000). A meta-analysis of 100 articles that reported on fear-based messaging found that fear-based messages can increase message avoidance or reactance. One such study of fear-based appeals presented Namibian participants with messages that either detailed a high threat of HIV/AIDS or a low threat of HIV/AIDS, while noting that the majority of the participants had personal experience with the threat of HIV/AIDS. The results indicated that for participants that reported high baseline levels of fear of HIV/AIDS, a high threat message did not impact participant's post-message fear, or attitudes, danger control implementation intention, or behavior. Thus, for participants who report a high baseline level of fear and thereat perception, fearful messaging alone does not appear effective (Muthusamy et al., 2009).

The limitation of fear-only messaging was also demonstrated by Gore and Campanella Bracken (2005). In an examination of meningitis prevention messages, Gore and Campanella (2005) examined the impact of high-efficacy messaging or high-fear messaging on intentions to

be vaccinated for meningitis. The high-fear message included vivid and threatening language that reinforced the danger of meningitis. Gore and Campanella (2005) found that for participants who received a message with only fear elements reported high fear control response measures, such as message rejection and minimization. The summarized results indicate that fear-only messaging that do not include elements of efficacy likely lead to fear control behaviors, and not any danger control behavior. Many times, fear appeals are used to scare people into action, but the research has shown that fear only messaging is more likely to lead to message rejection (Witte & Allen, 2000). When examining previous research, it is clear that fear only messaging is not effective. The current study combined fear messaging and efficacious messaging to avoid the limitations of fear only messaging.

One study that demonstrated the interaction between message fear and message efficacy was conducted by Wong and Cappella (2009) on smoking cessation. Wong and Cappella (2009) found that messages that included both fear and efficacy was most effective at increasing implementation intentions for participants who reported low readiness to quit smoking.

Furthering the finding that fearful messaging is most effective when it is combined with high efficacy, Witte and Allen's (2000) meta-analysis found that messages that combine fear and efficacy produced the greatest danger control behaviors, which the current study will utilize. This interaction between fear and efficacy has been reported in more recent studies. One such example found that men who received a message indicating that the risk of negative health outcomes was high, but that the proposed danger control activity (i.e., physical activity) was low in efficacy, engaged in limited behavior change (Hatchell et al., 2013). This result was explained by either 1) the impact of risk alone was greater than the impact of efficacy, such that the risk was not enough to incite behavioral change alone without including information indicating the

proposed action was effective, or 2) that the impact of risk outweighed the impact of efficacy, leading the participants to engage in a fear control method of avoidance (Hatchell et al., 2013). The latter explanation is one that was proposed by Witte (1994) as well; it is possible that when participants are faced with fear alone, they engage in fear control, which often presents itself in message avoidance or message rejection. However, as noted above, Hatchell et al. (2013) only examined the influence of response efficacy and did not examine the role of self-efficacy. The current study will expand upon this limitation by presenting all parents with a detailed fearful message, and then an advice message that is either high in response efficacy, self-efficacy, both, or no efficacy.

Previous research on the EPPM has found that efficacious messages incite the most danger control implementation intention, but it is important to note that most of this past research has examined the role of response efficacy, not self-efficacy. The current study will fill this gap by examining both response efficacy and self-efficacy messages independently, as well as combined.

Efficacy in the EPPM

When examining response efficacy, previous research has noted that response efficacy exists in two spaces: as an individual factor and as a message factor (Lewis et al., 2010). Examining response efficacy as a message factor, Witte (1992) detailed an efficacious message as one that includes elements that focus on the effectiveness of a proposed action (response efficacy) and on the message recipient's ability to enact such behavior (self-efficacy), but research has focused more on manipulating elements of response efficacy. In an examination of the impact high or low efficacious messages on AIDs prevention, Witte (1994) found that the high response efficacy message had a significant main effect on participant's perceptions of

response efficacy, indicating that participants believed that the danger control action (condom use) was effective at preventing the negative outcome (AIDs) when the message clearly stated as such. This result has been replicated in more recent work that found that health messages with high response efficacy led to more message acceptance than messages low in efficacy (e.g., Lewis et al., 2013; Roskos-Ewoldsen et al., 2004). Examining the impact of message efficacy on attitudes towards the danger control behavior, Roskos-Ewoldsen et al. (2004) found that a message that emphasized the efficacy of self-exams on lowering breast cancer risk led to more positive attitudes towards self-exams than a message that had low efficacy elements.

In terms of implementation intention, Hatchell et al. (2013) found that men who received a high efficacy health message reported higher implementation intentions that men who received a low efficacy health message.

The impact of highly efficacious messages has also been demonstrated in work outside of health messaging. Feng and Burleson (2008) found that (hypothetical) advice from friends that clearly outlined the efficacy of the advised action (response efficacy) was related to higher implementation intentions than advice that did not outline the efficacy of the advised action. This prior research suggests that there will be a main effect of message response efficacy on intention to implement mediation behaviors, such that:

> *H6: Parents who receive the combination efficacy message will report higher levels of implementation intention and positive attitudes towards mediation than the parents who receive the response efficacy message; the parents who receive the response efficacy message will report higher levels of implementation intentions and positive attitudes towards parental mediation than parents who receive the no efficacy message.*

RQ9: Will there be a difference in implementation intention levels and attitudes towards parental mediation between the self-efficacy message condition and the response efficacy message condition?

Additionally, an indirect effect between response efficacy and implementation intention through an increase in perceived threat is possible. Witte (1994) examined the impact of fear on implementation intention and behavior change in relation to AIDs prevention. Witte (1994) found that a highly threatening message influenced fear arousal, and that fear arousal was associated with implementation intentions, but this effect was indirect. In fact, perceived threat mediated the relationship between fear and implementation intention, but only for participants who reported high response efficacy. This result suggests that parents who enter the study with high response efficacy levels might report higher levels of implementation intention, but only if they report high levels of perceived threat after reading the advice. It is important to note that Witte (1994) did not measure self-efficacy.

The current study will measure participant's baseline response and self-efficacy, as well as their post-advice response and self-efficacy levels allowing for an examination of the mediating role perceived threat has on implementation outcomes for parents who report high baseline response efficacy. Based on the previous work examining the role of efficacy and fear messages in the EPPM, it is proposed:

H7: Parents who report high baseline response efficacy will report higher implementation intention, through an increase in perceived threat.

RQ10: Will the indirect effect on implementation intention through perceived threat also be present for parents who report high baseline self-efficacy?

Additional message outcomes. Expanding upon the propositions of the EPPM, the advice response theory's propositions about the impact of message factors on advice outcomes will be examined. The advice response theory (ART), developed by MacGeorge et al. (2004) proposes a variety of message and source characteristics that can influence a recipient's response to the given advice, including implementation intention. Although the ART and the EPPM may not traditionally be studied in tandem, both the EPPM and the ART are persuasive models examining message responses. In fact, when examining the EPPM, one is measuring advice giving in the context of how likely it is someone will implement a danger control process. Thus, study 1B will examine additional message factors and outcomes proposed by the ART that are not included in the EPPM.

The ART postulates that there are a variety of message and source factors that can influence an advice recipient's response to advice, but when applying the ART to the EPPM, message factors are the most relevant to examine considering the EPPM's emphasis on efficacious and fearful messages (Feng & MacGeorge, 2010; Witte, 1992). Based upon ART, message factors that have been found to impact advice outcomes are politeness (how much the advice met the positive and negative face needs of the recipient), response efficacy (the extent to which the advised solution would solve the problem), feasibility (how easy the advice is to implement), absence of limitations (perceptions of any drawbacks of the given advice), and confirmation (the extent to which the advice was something the recipient already planned to do; Feng & MacGeorge, 2010; MacGeorge et al. 2016a). These different message factors work in a variety of ways to impact three major advice outcomes: message quality (how helpful the advice is perceived to be), facilitation of coping (recipient's levels of emotion management and problem solving), and implementation intention (how likely the recipient is to act upon the advice).

Although there are similarities between the ART and the EPPM, specifically the role of response efficacy and implementation intention (Feng & Burleson, 2008; Witte, 1994), the ART provides more detailed advice outcomes than the examination of implementation intention and behavioral change typically examined with the EPPM (e.g., Hatchell et al., 2013; Lewis et al., 2013; Witte, 1994) making the application of the ART to the EPPM a useful framework to consider.

The current study will examine the ART's proposed advice outcome of implementation intention (*H6 and H7),* while also examining the impact on message quality to gain a more detailed picture of how parents respond in a variety of ways to different mediation messages. The current study will not examine the advice's impact on facilitation of coping because facilitation of coping assumes that a caregiver views the media viewing environment as inherently harmful and emotionally distressing, which is not always the case (Feng & MacGeorge, 2010).

Merging the EPPM with the ART, participants will be exposed to either a message with clear response efficacy elements, a message with clear elements of self-efficacy, a message with both self-efficacy and response efficacy, or a message with no efficacy. The message factors of absence of limitations and feasibility will be included in the response efficacy message to explicitly detail how effective mediation is but will also be measured as a manipulation check in terms of participant perceptions. It is important to note that message politeness will not be measured in the current study because message politeness does not overlap with the message factors proposed by the EPPM and is more applicable to interpersonal advice. Feng and MacGeorge (2010) found that perceived response efficacy, feasibility, confirmation, and absence of limitations all positively and significant predicted message quality and implementation intention. The impact of response efficacy on implementation intention has already been predicted (*H6 and H7),* but based on the ART, it is predicted that:

H8: There will be a main effect of condition on advice response measures, such that participants who received the combination message will report higher levels of message quality, message feasibility, absence of limitations, confirmation, and efficacy than participants who received the response efficacy, who will report higher levels of message outcomes than those who receive the no efficacy message.

Previous research examining the ART has found that the most effective advice explicitly outlines response efficacy (Feng & Burleson, 2008). However, previous research did not explicitly examine the role of self-efficacy, thus, the following research question is raised:

RQ11: Will there be a difference in message outcome measures (message quality, message feasibility, absence of limitations, confirmation, and efficacy) between parents who received the self-efficacy message and the other three conditions?

Although ART is an interpersonal advice model that usually examines advice given in close relationships (Feng & Burleson, 2008), it has recently been applied to the examination of hypothetical advice given by a hypothetical physician (MacGeorge et al., 2016b; MacGeorge et al., 2017). When applying the ART to parental mediation, it is important to consider who parents are currently getting screen time advice from to improve external validity of this study. According to the Pew Research Center, parents get information on screen time from a variety of sources, the top four being (1) doctors, (2) other parents, (3) teachers, and (4) parenting blogs, in order of most consulted to least (Auxier et al., 2020). Because doctors are the most consulted screen time advisors, the current study will present advice in the form of a newsletter from a doctor, while manipulating the message factors. The current study will not manipulate source factors and solely focus on message factors as the EPPM suggests (Witte, 1992).

CHAPTER 2: METHODS

Data for study 1A and study 1B were collected from the same Qualtrics panel because the information in study 1A was also examined in study 1B, serving as baseline measures for various variables. Study 1A measures were presented to participants, and then the advice manipulation for study 1B was presented, followed by post-advice measures. All questions for study 1A and 1B are presented in Appendix A.

Study 1A

Study 1A collected exploratory data to understand the present state of parental mediation in America. Parents completed a variety of questionnaires surrounding parental mediation practices, attitudes towards parental mediation, self- and response-efficacy for parental mediation, as well as perceptions of media effects (see Appendix A).

Measures

Demographic Information

Participants completed a demographic information section providing data on a variety of personal and family factors that may influence parental mediation behaviors.

Child Age & Gender. Participants were asked to consider which child in their household had the next birthday and respond to the survey with that child in mind. Participants provided the age of this child in years, as well as the child's gender identity.

Parent Demographics. Parents then provided information on a variety of personal and familial demographic information.

Parent Age, Gender, and Race. Participants reported their age range and their gender identity. Parents also reported their racial or ethnic identity, choosing all options that applied to them.

Parent Education Level and Employment Status. Parents then reported their highest level of education, along with their current employment status (*currently employed full-time, part-time, or unemployed).*

Parent Political Affiliation. Parents self-reported their political affiliation (*1 = extremely liberal, 5 = extremely conservative*).

Parent Religiosity. Parents then reported if they actively practice religion (*1 = yes, 0 = no*), creating the *parent religiosity* variable. If parents reported that they do actively practice religion, they were then asked how often they practice religion, resulting in the *parent devoutness* variable.

Family Structure. In addition to demographic information, parents provided information on the current structure of their family.

Household Size. Parents reported how many people live in their home, ranging from 2 through 10+ people.

Annual Household Income. Finally, parents reported their gross annual household income.

Parental Involvement

The current study used Warren et al.'s (2002) measure of parental involvement, comprised of two subscales measuring parental engagement and parental accessibility.

Parental engagement. Parental engagement was measured by asking parents how often they participate in certain tasks with their child (e.g., *How often do you help your child with reading or homework?;* Warren et al., 2002*).* All parental engagement responses were measured on a 4-point Likert scale (*1 = never, 4 = always; M* = 2.63, *SD* = 0.61, α = .80).

Parental accessibility. Parental accessibility was measured by asking parents how many hours they spend with their child on a typical weekday and how many hours they spend with their child on a typical weekend day (Warren et al., 2002). The weekday response was multiplied by 5, and the weekend day response was multiplied by 2, resulting in a range of 0 hours – 168 hours parents spend with their children per week (M = 90.35, SD = 48.55, α = .82).

Child Media Use

Parents responded to a variety of questions adapted from Piotrowski (2017) to provide information on their child's screen use habits.

Time Spent on Screens. Adapted from Piotrowski (2017), parents were asked to report how many hours their child spends on a screen for non-school activities (*0 – 10+*) on a typical weekday and weekend day (*0 – 10+*). The weekday screentime response was multiplied by 5 and the weekend screentime response was multiplied by 2. These were then added together to create a *total weekly screentime* variable (M = 31.68, SD = 15.47, α = .81).

Screentime Change. Parents then reported if their child's screen use changed since the start of the COVID-19 pandemic (*1 = decreased, 2 = stayed the same, 3 = increased;* Piotrowski, 2017).

Medium Frequency. Parents then ranked how often their children used TV, tablets, e-readers, video game consoles, and cell phones (*1 = most frequently used medium, 5 = least frequently used medium;* Piotrowski, 2017*).*

Screentime Activities. Parents also ranked how often their children engaged with the following activities during their screentime: watching TV shows or movies, watching short videos (ex. YouTube), playing games, using social media, texting/calling with friends, and browsing the web (*1 = most frequent activity, 6 = least frequently activity;* Piotrowski, 2017*).*

Parental Mediation Behaviors

A variety of scales adapted from previous research (Beyens et al., 2019; Bryne & Lee, 2011; Nathanson et al., 2002; Rasmussen et al., 2016; Valkenburg et al., 1999) were used to examine parents' baseline parental mediation behaviors and attitudes.

Parental Mediation. The frequency of parental mediation was measured using an adapted version of the scale developed and validated by Beyens et al. (2019). Beyens et al. (2019) adapted a scale of television parental mediation (Valkenburg et al., 1999) to include language for computer game play. The scale utilized in the present study was edited to include language for all types of mobile games, not only computer games, as Beyens et al.'s (2019). For example, Beyens et al. (2019) asked "how often do you tell your child that s/he is not allowed to play violent computer games?" whereas the present scale asked "how often do you tell your child that s/he is not allowed to play violent computer or video games?" All questions were measured on a 4-point Likert scale (*1= never, 4= always*).

Restrictive Mediation. Measuring the frequency that parents used restrictive mediation, parents responded to four questions about how often they limit their child's media use (Beyens et al., 2019). For example, parents responded to a question asking " *how often do you forbid your child to watch certain TV programs or movies*?,(M = 2.51, SD = 0.80, α = .86).

Negative Active Mediation. Measuring the frequency of negative active mediation, parents responded to four questions about how often they comment on negative things in their child's media (Beyens et al., 2019). Parents responded to questions including, "*how often do you tell your child that certain things in a television program or movie are wrong?"* (M = 2.81, SD = 0.77, α = .82).

Positive Active Mediation. To measure the frequency of positive active mediation, parents responded to four questions about how often they comment on the positive elements of their child's media (Beyens et al., 2019). A sample item from this scale includes, "*how often do you encourage your child to play a certain computer or video game because it is good for his/her cognitive development?*" (*M* = 2.82, *SD* = 0.78, α = .86).

Average Parental Mediation. To calculate an average frequency of parental mediation, the frequency of the three subtypes were averaged together (*M* = 2.66, *SD* = 0.65, α = 89).

Baseline Attitudes Towards Parental Mediation. To measure parents' attitudes towards parental mediation, a scale adapted from Byrne and Lee (2011) by Rasmussen et al. (2016) was used (e.g., parents should sit down and talk with their kids about all of the bad and good things about TV and movies). Responses were measured on a 5-point Likert scale (*1= strongly disagree, 5= strongly agree),* and three variables were created, *attitudes towards active mediation* (*M* = 4.13, *SD* = 0.80, α = .87), *attitudes towards restrictive mediation (M* = 4.10, *SD* = 0.77, α = .84), *average attitude towards mediation (M* = 4.12, *SD* = 0.73, α = .91).

Baseline Response and Self-efficacy. Based upon Nathanson et al.'s (2002) measures of parent's level of mediation self- and response-efficacy, parents were asked how capable they feel in engaging in each mediation activity (measuring self-efficacy) well as how effective they believe each mediation activity is (measuring response efficacy) on a scale of 1 to 7 (*1 = not at all, 7 = extremely*), creating eight total baseline efficacy variables: *baseline restrictive mediation self-efficacy (M* = 5.41, *SD* = 1.03, α = .91), *baseline negative active mediation self-efficacy* (*M* = 5.64, *SD* = 1.03, α = .89), *baseline positive active mediation self-efficacy* (*M* = 5.56, *SD* = 1.02, α = .91), *total baseline self-efficacy* (*M* = 5.53, *SD* = 1.08, α = .95), *baseline restrictive mediation response efficacy* (*M* = 4.96, *SD* = 1.02, α = .91), *baseline negative active mediation*

response efficacy (*M* = 5.39, *SD* = 1.04, α = .88), *baseline positive active mediation response efficacy* (*M* = 5.56, *SD* = 1.02, α = .91), *total baseline response efficacy* (*M* = 5.25, *SD* = 1.03, α = .88), and *total baseline response efficacy* (*M* = 5.20, *SD* = 1.11, α = .93).

Baseline Parental Anxiety and Threat Perception

To measure parental perceptions and anxiety surrounding five negative outcomes of media content, a measure used recently by Riddle and Di (2020) was presented to participants. The five negative outcomes were: cultivation, desensitization, fright, hostility, and aggression. Replicating prior research conducted by Riddle and Di (2020), parents were asked to consider if these outcomes were possible after viewing violent media.

Baseline Parental Anxiety. To examine parental anxiety about negative media outcomes, parents were asked to rate on a 5-point scale (*1= not at all, 3 = a moderate amount, 5 = a great deal*) utilized by Riddle and Di (2020) "How (nervous, anxious, worried, concerned) are you that this effect could occur?" Parents responded to the four adjectives for five possible negative outcomes of children's media use (desensitization, fright, cultivation, hostility, and aggression). To obtain a measure of parental anxiety for each effect, responses for each of the adjectives were averaged creating five baseline variables: *baseline anxiety about desensitization* (*M* = 2.93, *SD* = 1.04, α = .93), *baseline anxiety about fright* (*M* = 2.86, *SD* = 1.24, α = .93), *baseline anxiety about cultivation* (*M* = 2.93, *SD* = 1.23, α = .92), *baseline anxiety about hostility* (*M* = 2.94, *SD* = 1.29, α = .93), *baseline anxiety about aggression* (*M* = 2.94, *SD* = 1.25, α = .93).

Baseline Parental Perceptions of Susceptibility. Adapted from Witte (1992) and used by Riddle and Di (2020) parents were asked a series of ten questions measured on a 5-point Likert scale. The first series of five questions asked parents "do you think it is possible your

child could become (desensitized/frightened/hostile/aggressive/cultivate) due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?" (*1 = definitely impossible, 3 = neither possible nor impossible, 5 = definitely possible).* Immediately following each question, parents were asked "how likely is it your child would become (desensitized/frightened/hostile/aggressive/cultivate) in this scenario?" (*1 = extremely unlikely, 3 = neither likely nor unlikely, 5 = extremely likely).* Following with the methods of Riddle and Di (2020), parent's responses to these two questions were averaged together, creating five variables: *baseline overall susceptibility to fright* (*M* = 3.37, *SD* = 1.09, α = .88), *baseline susceptibility to cultivation* (*M* = 3.27, *SD* = 1.03, α = .74), *baseline susceptibility to desensitization* (*M* = 3.29, *SD* = 1.11, α = .71), *baseline susceptibility to hostility* (*M* = 3.20, *SD* = 1.09, α = .67), *baseline susceptibility to aggression* (*M* = 3.19, *SD* = 1.11, α = .70).

Baseline Parental Perceptions of Severity. To measure parental perceptions of the severity of potential outcomes from violent media content, parents were asked to "imagine if your child did experience (desensitization/cultivation/fright/hostility/aggression)" followed by four questions (Witte, 1994, as used by Riddle & Di, 2020) rated on a 5-point Likert scale (*1 = strongly disagree, 3 = neither agree nor disagree, 5 = strongly agree*). The four measures were: 1) "this would be a serious problem," 2) "The consequences for society would be severe," 3) "The consequences for our family would be severe," and 4) "It would be a significant threat to my child's well-being." Five variables were created by averaging parental responses to each of the four questions: *baseline severity of fright* (*M* = 3.33, *SD* = 1.06, α = .88), *baseline severity of cultivation* (*M* = 3.53, *SD* = 0.95, α = .86), *baseline severity of desensitization* (*M* = 3.57, *SD* = 1.04, α = .86), *baseline severity of hostility* (*M* = 3.65, *SD* = 1.09, α = .86), *baseline severity of aggression* (*M* = 3.61, *SD* = 1.00, α = .88).

Baseline Total Parental Perceptions of Threat. Following the methodology utilized by Riddle and Di (2020), baseline perceived susceptibility scores and baseline perceived severity scores were averaged together to create five perceived threat variables: *baseline desensitization perceived threat* (*M* = 3.43, *SD* = 0.96, α = .84), *baseline fright perceived threat* (*M* = 3.35, *SD* = 0.92, α = .86), *baseline hostility perceived threat* (*M* = 3.43, *SD* = 0.87, α = .88), *baseline aggression perceived threat* (*M* = 3.40, *SD* = 0.94, α = .87), *and baseline cultivation perceived threat* (*M* = 3.40, *SD* = 0.86, α = .85). Those five variables were averaged together to create a composite *baseline total threat perception* variable (*M* = 3.40, *SD* = 0.78, α = .96).

Baseline Total Parental Concern. Based upon So's (2013) research that risk perception is composed of cognitive components (perceived susceptibility and perceived severity) and affective components (fear and anxiety), we calculated a complete measure of parental concern for the current study by averaging parent's responses for baseline perceived severity, perceived susceptibility, and anxiety for each of the five media outcomes: *baseline desensitization concern* (*M* = 3.18, *SD* = 0.93, α = .90), *baseline fright concern* (*M* = 3.10, *SD* = 0.97, α = .91), *baseline hostility concern* (*M* = 3.18, *SD* = 0.97, α = .89), *baseline aggression concern* (*M* = 3.17, *SD* = 0.98, α = .91), *baseline cultivation concern* (*M* = 3.16, *SD* = 0.93, α = .90), as well as totally averaged to create a *total parental concern* (*M* = 3.16, *SD* = 0.87, α = .97) measure.

Study 1B

Study 1B utilized a 4x2 mixed experimental design to examine how message factors influence participants' self and response efficacy of parental mediation. The between-subjects factor manipulated the efficacy content of a newsletter about parental mediation (response efficacy message, self-efficacy message, combination message, and no efficacy message) and the within-subjects factor was the type of parental mediation (negative active, positive active).

Having parental mediation as the within-subject factor allowed for the EPPM factor of efficacy to be reinforced through the repetition of language in each parental mediation type. Negative active mediation and positive active mediation were chosen as the two mediation types for two reasons. First, we wanted to limit the length of the survey by only presenting a 3-page "newsletter" (page 1: introduction/fear exposure, pages 2 & 3: mediation advice). Secondly, restrictive mediation is a relatively quick mediation type to utilize, and parents likely use restrictive mediation frequently.

Each participant completed a series of questionnaires to gather information about their already in place mediation strategies, as well as their perceptions of media effects (collected for study 1A; see Appendix A). After the initial set of questions, participants were asked to read a newsletter purportedly from the American Academy of Pediatrics. The newsletter consisted of three pages: page 1 was a detailed description of violent media effects, and pages 2 and 3 detailed positive active and negative active mediation. The language on pages 2 and 3 differed based on what experimental condition participants were assigned to, and the order of the pages was counterbalanced.

All participants read the same first page of the newsletter that detailed violent media outcomes for children. This first page of the newsletter intended to make parents feel fearful that their child is susceptible to severe violent media effects.

After reading the first page of the newsletter, participants were randomly assigned to one of four experimental conditions that manipulated the language used to describe positive active and negative active mediation. The first condition was the "no efficacy" or control condition (see Appendix B). This condition did not include elements of response efficacy or self-efficacy; it instead simply defined positive and negative active mediation. The second condition was the

"combination efficacy" condition (see Appendix C). The combination efficacy condition detailed that researchers have found that parental mediation is effective at preventing harmful media effects (response efficacy) and that parental mediation is easy to implement (self-efficacy). The third condition was the "self-efficacy" condition (see Appendix D), which detailed how easy implementing parental mediation was, which was meant to signal to parents that they are capable of engaging in parental mediation. The fourth condition was the "response efficacy" condition (see Appendix E), that detailed the research-based benefits of parental mediation, meant to show parents that mediation is a research-based measure that can reduce harmful media effects and increase positive media effects.

Participants were exposed to the mediation pages one at a time, and then responded to the response and self-efficacy questions for that mediation type before being exposed to the next mediation strategies. That is, participants read the newsletter page for positive active mediation, responded to the efficacy questions for positive active mediation, and then read the newsletter page for negative active mediation and responded to the efficacy questions for negative active mediation. After reading the entire newsletter, participants completed questionnaires about their perceptions of the advice, parental mediation attitudes, and severity and susceptibility of the threats.

Measures

As mentioned above, the data for study 1A was collected, and then the participants were exposed to the newsletter, and then responded to a variety of post-manipulation questions (see Appendix A).

Perceptions of Advice

Immediately after reading all three advice pages, participants indicated their perceptions and responses to the advice on scales developed and validated by Feng and MacGeorge (2010) and MacGeorge et al. (2004).

Advice Comprehensibility. A 3-item, 5-point Likert scale (*1 = strongly disagree, 5 = strongly agree)* developed by MacGeorge and colleagues (2004) was used to measure participant's understanding of the advice (M = 3.89, SD = 0.70, α = .07).

Advice Efficacy. A 3-item, 5-point (*1 = strongly disagree, 5 = strongly agree)* Likert scale developed by Feng and MacGeorge (2010) was used to measure participant's perceptions of advice efficacy (M = 3.96, SD = 0.82, α = .82).

Advice Feasibility. Adapted from MacGeorge et al. (2004), participants responded to a 4-item (e.g., The advised action is something I could do) 5-point (*1 = strongly disagree, 5 = strongly agree)* Likert scale to measure the feasibility of the advice (M = 3.59, SD = 0.75, α = .41).

Advice Limitations. A 3-item (e.g., I can see that the advised action has significant disadvantages), 5-point (*1 = strongly disagree, 5 = strongly agree)* Likert scale (Feng & MacGeorge, 2010) was used to measure participant's perceptions of advice limitations (M = 3.22, SD = 0.83, α = .39).

Advice Confirmation. A 3-item (e.g., The advised action is something I had already planned to do), 5-point (*1 = strongly disagree, 5 = strongly agree)* Likert scale (Feng & MacGeorge, 2010) was used to measure how similar the advice given is to participant's planned course of action (M = 3.87, SD = 0.83, α = .82).

Advice Quality. A 3-item, 5-point (*1 = strongly disagree, 5 = strongly agree)* Likert scale (MacGeorge et al., 2004) was used to measure participant's perceptions of overall advice quality (e.g., The advice given was helpful; $M = 4.02$, $SD = 0.79$, $\alpha = .78$).

Advice Implementation Intention. A previously developed (MacGeorge et al., 2004) 3-item, 5-point (*1 = strongly disagree, 5= strongly agree)* was used to measure participant's intention to implement the advice (e.g., I intend to do what I was advised; $M = 3.95$, $SD = 0.81$, $\alpha = .80$).

Post-Advice Parental Mediation Measures

Following the advice messages, participants responded to the same questions presented to them in study 1A to allow us to examine whether participant responses changed post-advice exposure.

Post-advice Response and Self-Efficacy. Measures of parental self- and response-efficacy were presented after each sub-section of advice, so that the efficacy questions that were presented measured the type of parental mediation discussed in the advice. Parental self- and response-efficacy were measured using the items from study 1A, adapted from Nathanson et al. (2002). Six post-advice efficacy variables were created: *post-advice positive active mediation self-efficacy* ($M = 5.60$, $SD = 1.22$, $\alpha = .91$), *post-advice positive active mediation response efficacy* ($M = 5.45$, $SD = 1.22$, $\alpha = .90$), *post-advice negative active mediation self-efficacy* ($M = 5.68$, $SD = 1.14$, $\alpha = .90$), *post-advice negative active mediation response efficacy* ($M = 5.55$, $SD = 1.12$, $\alpha = .90$), *average post advice self-efficacy* ($M = 5.59$, $SD = 1.15$, $\alpha = .84$), *and average post-advice response efficacy* ($M = 5.45$, $SD = 1.11$, $\alpha = .96$).

Post-Advice Attitudes Towards Parental Mediation. As with perceptions of the advice, the post-advice attitudes towards parental mediation were measured after participants

were exposed to both advice messages. The same scale that was used in study 1A was used (Rasmussen et al., 2016). Responses were measured on a 5-point Likert scale (*1= strongly disagree, 5= strongly agree).* Parents responded to questions measuring their *attitudes towards active mediation* (*M* = 4.08, *SD* = 0.81, α = .87), *attitudes towards restrictive mediation* (*M* = 4.06, *SD* = 0.81, α = .88), and responses were averaged to create one *post-advice attitudes* (*M* = 4.12, *SD* = 0.73, α = .92) variable.

Post-Advice Parental Anxiety and Threat Perception

Measured after both advice messages, participants were asked to complete the same severity, susceptibility, and anxiety scales from study 1A (Riddle & Di, 2020). The five negative outcomes are: cultivation, desensitization, fright, hostility, and aggression.

Post-Advice Parental Anxiety. After reading the advice, parents responded to the same parental anxiety scale they responded to in study 1A (Riddle & Di, 2020). Five post-advice variables were created: *post-advice anxiety about desensitization* (*M* = 2.77, *SD* = 1.24, α = .92), *post-advice anxiety about fright* (*M* = 2.75, *SD* = 1.29, α = .93), *post-advice anxiety about cultivation* (*M* = 2.80, *SD* = 1.28, α = .93) *post-advice anxiety about hostility* (*M* = 2.79, *SD* = 1.28, α = .93), *post-advice anxiety about aggression* (*M* = 2.85, *SD* = 1.31, α = .94).

Post-Advice Parental Perceptions of Susceptibility. Using the same questions from study 1A that were adapted from Witte (1992) and recently used by Riddle and Di (2020), parents responded to a series of 10 questions to measure how susceptible parents believed their child was to five negative media effects after reading the newsletter. Five variables were created from these questions: *post-advice susceptibility to fright* (*M* = 3.29, *SD* = 1.16, α = .83), *post-advice susceptibility to cultivation* (*M* = 3.26, *SD* = 1.12, α = .74), *post-advice susceptibility to*

desensitization (*M* = 3.32, *SD* = 1.08, α = .75), *post-advice susceptibility to hostility* (*M* = 3.23, *SD* = 1.12, α = .70), *post-advice susceptibility to aggression* (*M* = 3.25, *SD* = 1.08, α = .73).

Post-Advice Parental Perceptions of Severity. Similarly, parents were asked the same questions that were utilized in study 1A to examine any possible change in perceptions of severity (Riddle & Di, 2020). Five variables were created: *post-advice severity of fright* (*M* = 3.40, *SD* = 1.10, α = .90), *post-advice severity of cultivation* (*M* = 3.26, *SD* = 1.12, α = .88), *post-advice severity of desensitization* (*M* = 3.47, *SD* = 1.04, α = .88), *post-advice severity of hostility* (*M* = 3.50, *SD* = 1.05, α = .88), *post-advice severity of aggression* (*M* = 3.25, *SD* = 1.08, α = .88).

Post-Advice Total Parental Perceptions of Threat. Following the procedure from study 1A, we averaged parents' post-advice perceptions of severity and threat to create a composite *post-advice total threat perception* (*M* = 3.38, *SD* = 0.86, α = .94) variable and for each of the five outcomes: *post-advice desensitization threat* (*M* = 3.39, *SD* = 0.92, α = .87), *post-advice fright threat* (*M* = 3.34, *SD* = 1.00, α = .89), *post-advice hostility threat* (*M* = 3.36, *SD* = 0.96, α = .87), *post-advice aggression threat* (*M* = 3.42, *SD* = 0.92, α = .86), *post-advice cultivation threat* (*M* = 3.37, *SD* = 0.96, α = .87).

Post-Advice Total Parental Concern. The same procedures from study 1A were used in study 1B to measure total parental concern, based upon So's (2013) research that noted that risk perception is composed of cognitive and affective components. Parent's responses for post-advice perceived severity, perceived susceptibility, and anxiety were averaged for each of the five media outcomes: *post-advice desensitization concern* (*M* = 3.19 , *SD* = 0.90, α = .90), *post-advice fright concern* (*M* = 3.14, *SD* = 0.98 , α = .92), *post-advice hostility concern* (*M* = 3.17, *SD* = 0.95 , α = .90), *post-advice aggression concern* (*M* = 3.32 , *SD* = 0.94, α = .91), *post-*

advice cultivation concern (*M* = 3.18 , *SD* = 0.95 , α = .91), as well as totally averaged to create a *post-advice total parental concern measure* (*M* = 3.18 , *SD* = 0.88 , α = .98).

CHAPTER 3: STUDY 1A RESULTS

Participants

Participant Recruitment and Procedure

To gather a large sample of parents, this study was conducted using Qualtrics. Participants were recruited via Qualtrics panel in August 2022.

A power analysis was run using the software G*Power 3.1 to determine the necessary sample size for a linear regression model measuring the change in R^2. The power analysis with 8 total predictors (Model 1: child age, parental concern, self-efficacy, response efficacy, parental engagement, parental accessibility, Model 2: adding in perceived severity and perceived susceptibility), with a small effect size (f^2=.02), standard significance (α=.05), and a power level of 0.8 yields a sample size of 311. To ensure an appropriate completion rate, we aimed to recruit 350 through Qualtrics.

A total of 530 parents were recruited through a Qualtrics panel. Qualtrics conducted quality checks on all 530 responses and removed participants who straight-lined the survey, had poor 24-hour completion rate, had poor overall completion rate, responded abnormally fast, had a pattern of unanswered questions, or were a possible bot. This led to a final sample 353 parents who completed the survey sufficiently and are whose responses are included in analyses. Due to the sensitive nature of some questions (e.g., parental fears about violent media), parents were allowed to skip any question they wished, per the institutional review board's request. Any missing values were removed list-wise in all analyses.

Parents were asked to complete the survey about their child whose birthday was next (M_{age} = 9.30, SD = 4.54). Approximately one-third (n = 126) of the participants were parents to a child between the age of 3- and 6-years-old, one-third (n = 122) were parents to a child between

the ages of 7- and 12-years-old, and one-third (*n* = 103) were parents to a child between the ages of 13- and 18-years-old. Two parents did not report their child's age. Most children were reported as identifying as male (*n* = 187, 53.0%), 164 children were reported as identifying as female (46.5%), and two were reported as identifying as non-binary (0.6%).

The majority of parent participants were currently unemployed (68.3%), politically moderate (50.4%), and identified as female (65.7%). Two parent participants identified as non-binary (0.6%), and 119 participants identified as male (33.7%). The majority of the parents identified as Caucasian (68.6%), with 20.4% of the sample identifying as Black, 13% identifying as Hispanic/Latinx/Spanish, 4.5% identifying as Asian, 1.7% identifying as American Indian/Alaskan Native, 0.8% identifying as Native Hawaiian/ Pacific Islander, and 0.8% identifying as "other." The median household income level was $35,000 – $49,999. The majority of participants had a high school (26.1%) or Associate/Bachelor's degree (32.6%). Full descriptive statistics can be found in Table 1.

Results

Checking Normality and Randomization

The normality of all variables was assessed before analyses began. The only variables that had a skewness value above 1 were the time spent on the advice pages, parent employment, and household size. The skewness of the time spent on the introduction advice page was 3.51, the skewness of the time spent on the positive active mediation page was 3.34, and the skewness of the time spent on the negative active mediation page was 5.16. The skewness of household size was 1.12, indicating that all four variables are right skewed. Time spent on the introduction page, positive active mediation page, and negative active mediation page were transformed using a logarithmic 10 method because the data was substantially skewed right and included no zero

values. Household size was square root transformed because it was only moderately positively skewed. Parent employment is the only left-skewed variable, with a skewness level of -1.05 (Howell, 2007; Tabachnick & Fidell, 2007). Descriptive statistics, including the transformed statistics, can be found in Table 1.

Correlations Between Variables

To begin data analysis, a series of correlations between variables of interest were examined. Because study 1A is focused on exploring patterns in parental mediation, we examined variables that are included in the regression models. The first set of variables that was examined were all parental mediation variables (see Table 2). When examining the correlations between the restrictive mediation, negative active mediation, positive active mediation, and the average frequency of parental mediation (measured by averaging the frequency of each of the three subtypes of parental mediation), as well as parent levels of response efficacy and self-efficacy for all four mediation types, it was found that all variables are significantly positively correlated. This result indicates that although the three measures of parental mediation measured distinct behaviors in parental mediation, parents engaging in one type of mediation often engage in others and that engaging in any of the mediation behaviors was related to both types of efficacies.

Moreover, the correlations between all parental concern variables were examined (see Table 3). It was found that all of the parental concern variables were significantly and positively correlated with each other, indicating that there is a relationship between each subtype of parental concern.

The next set of correlations examined looked at the relationships between these two sets of variables: parental mediation and parental concern. In short, all parental concern variables are

significantly and positively correlated with the frequency of utilizing all four mediation variables (see Table 4). These significant positive correlations help answer research questions 2 and 3 that postulated about the relationship of parental concerns with mediation frequency. We can see from these correlations that the frequency of all four types of mediation increases as parental concern increases.

Correlations with Demographic Variables

Correlations between child and parent demographics and all outcome variables (mediation frequency) and predictor variables (parental concern) were examined to determine if any variables needed to be treated as control variables in regressions (see Tables 5 and 6). Because many variables were measured, only variables that were significantly correlated with the four outcome variables (frequency of restrictive mediation, frequency of negative active mediation, frequency of positive active mediation, average mediation frequency) were included as control variables in regression analyses.

One interesting correlation to highlight is between parent religiosity and average mediation, restrictive mediation, and negative active mediation. These correlations indicate that the more religious a parent is, the more they comment on the negative aspects of media. Moreover, the more religious a parent is, the more they restrict media, as seen in the significant positive correlation with between restrictive mediation and parental religiosity.

Next, the correlations between child age and parental mediation patterns were examined to offer insights into hypothesis 1, which predicted that parental mediation would increase throughout a child's preschool-aged years (3- to 6-year-olds), peaking in school-age (7- to 12-year-olds) before decreasing over adolescence (13- to -18-years-old). However, child age is negatively correlated with all four mediation frequency outcomes (see Table 5). These negative

correlations signal that parental mediation does not follow a curvilinear trend as predicted, but rather follows a negative trend. This was confirmed by plotting parental mediation behaviors by child age and examining the fit line (see Figures 1, 2, 3, and 4). Parental mediation follows a negative linear trend, and thus, hypothesis 1 was rejected, and a potential curvilinear trend will not be considered in regression analyses for study 1A.

Correlations with Media Use Variables

In addition to demographic variables, we considered child media use variables as potential control variables. Media use variables that were correlated with the outcome variables (average mediation, restrictive mediation, negative active mediation, positive active mediation) were included in the regression models (see Tables 7 and 8).

In summary, the following control variables were included in each regression model. In regression models examining average mediation frequency as the outcome, the control variables included were parent religiosity, parent devoutness, parent employment, frequency of TV viewing, frequency of tablet use, frequency of e-reader use, and frequency of cell phone. For regression models examining the frequency of restrictive mediation, the control variables included were parent religiosity, parent devoutness, parent employment, frequency of tablet use and e-reader use. Models examining the frequency of positive active mediation included parent political views, frequency of TV viewing, tablet use, e-reader use, and cell phone use as controls. Finally, regression models examining negative active mediation included parent religiosity, devoutness, frequency of tablet use, and frequency of e-reader use as controls.

Parental Mediation Patterns

The main purpose of study 1A was to identify the current patterns in American parental mediation, while examining which variables, if any, would moderate the likelihood of parental

mediation. Hypothesis 1 predicted that the frequency of parental mediation would follow a curvilinear trend, such that parental mediation would increase through early childhood, peaking during school age, before decreasing in adolescence, and as noted above, this was not supported for any of the subtypes of parental mediation, and thus no curvilinear patterns will be considered in regression analyses.

Analytic Plan

To examine predictors of parental mediation frequency, two hierarchical regressions were run for each mediation outcome, resulting in eight total regressions. For each outcome, the first regression run examined the impact of total parental concern, parental engagement, parental accessibility, and parental perceptions of the response efficacy and self-efficacy of parental mediation, and the second examined the impact of severity and susceptibility perceptions. Parental severity and susceptibility perceptions were used to create the measure of total parental concern, so they were examined in separate regressions. Thus, two regressions were run examining average parental mediation (average of the three subtypes of mediation), two regressions were run examining restrictive mediation (parents limiting children's media use), two regressions were run examining negative active mediation (parents commenting their disproval of media), and two regressions were run examining positive active mediation (parents commenting their endorsement of media).

Predictors of Average Parental Mediation Frequency

The first linear regression run entered average parental mediation frequency as the outcome variable, allowing for an examination of potential predictors of average parental mediation. Control variables, determined by whether the potential control variable was significant with the outcome of total mediation frequency, were entered on the first step of the

regression. Control variables included for average mediation frequency were parent employment, parent religiosity, parent devoutness, and the frequency of child TV, tablet, e-reader, and cell phone use. Step two of the regression entered child age, total parental concern, parental engagement, parental accessibility, and parental perceptions of response efficacy and self-efficacy of mediation. Finally, step three entered interactions between child age and the potential predictors entered in step two. All three regression models explained a significant portion of the variance in parental mediation, with each model increasing in its explanation (see Table 9). Model one, which only examined the impact of the control variables on overall parental mediation frequency explained 14% of the variance in total parental mediation frequency, whereas model two explained 42% of the variance in total mediation frequency, and model three explained 45% of the variance in total parental mediation frequency. Because model three explained significantly more variance in total parental mediation frequency than model two (p = *.006)*, we will focus on this model (see Table 9).

When examining the predictors of parents' average mediation frequency, we can see that a child's cell phone use negatively predicts average parental mediation (β = -.13, *SE* = .02, p = .007), possibly because cell phone use is private to the user and parents would not have ample opportunity to engage with their child's cell phone use. Additionally, it is apparent from model three that child age does not significantly predict average parental mediation frequency (β = .08, *SE* = .01, p = .094), but that parental concern does, such that as parental concern over negative media effects increases, parents engage in more parental mediation, β = .24, *SE* = .03, p <.001. In addition to the main effect of parental concern, the interaction between child age and parental concerns is significant (β = .12, *SE* = .01, p = .011, see Figure 5). Parents who are most concerned about negative media effects are most likely to engage in parental mediation as their

child ages, supporting hypothesis 2 and adding nuance to hypothesis 1, such that parental concern reverses the negative relationship between child age and average mediation.

Another significant predictor of average parental mediation is parental engagement, β = .25, *SE* = .01, *p* <.001, indicating that the more engaged a parent is with their child, the more average mediation they engage in, supporting hypothesis 3, which predicted that parental engagement and accessibility would predict parental mediation. Interestingly, the interaction between child age and parental engagement is significantly negative, β = -.13, *SE* = .02, *p* = .007, which indicates that the positive relationship between parental engagement and average mediation weakens when child age is considered (see Figure 6). As children grow older, parents who are less engaged with their child (engagement score one standard deviation below the mean) increase in their average mediation, which is contrary to expectations. This result offers insights into research question 6 that questioned if a significant interaction would exist between parental engagement and age. More research is needed to replicate this result and offer insights into why this negative interaction occurs.

Although parental engagement was shown to be a significant predictor of parental mediation frequency, parental accessibility was not, β = .02, *SE* = .00, *p* = .668. Parental accessibility refers to the number of hours a parent is physically accessible to their child in an average day (e.g., at home together), whereas parental engagement refers to how involved a parent is in their child's life (e.g., participating in activities together). Based on this result, we can conclude that parents being in the physical space of their child's media use does not predict parental mediation frequency. These results lend partial support to hypothesis 3; parental engagement is a significant predictor of overall mediation frequency, but parental accessibility is not. The lack of significant prediction value of parental accessibility is contrary to hypothesis 3.

Finally, the results of the regression indicate that parent perceptions of mediation response efficacy are a significant predictor of total mediation frequency, β = .34, *SE* = .04, *p* <.001, such that the more a parent thinks mediation is effective at preventing negative outcomes, the more mediation the parent will engage in. The interaction between response efficacy and child age was also significant, β = .13, *SE* = .01, *p* = .031, indicating that parents who report the highest levels of mediation response efficacy engage in the most mediation with older children (see Figure 7). These results respond to research question 7, which asked if parental response efficacy would interact with child age in predicting parental mediation frequency. In short, parents who believe parental mediation is effective at preventing negative media effects engage in the most frequent mediation with older children. Self-efficacy did not predict average mediation frequency, and the interaction between self-efficacy and child age was not significant, rejecting hypothesis 5, which predicted that parental self-efficacy levels would predict average mediation frequency.

The next regression model examined the individual impacts of parental perceptions of the severity and susceptibility of five media effects (desensitization, fear, hostility, aggression, cultivation) on average mediation frequency. Control variables were entered on the first step of the model (parent employment, parent religiosity, parent devoutness, child TV viewing, child tablet use, child e-reader use, and child cell phone use). Step two of the regression model included all ten severity and susceptibility variables, while step three included interactions between child age and each severity and susceptibility variable. Models one and two explained a significant amount of variance in overall mediation frequency, but model three did not. Model one explained 14% of the variance, while model two explained 27% and added significantly more explanation than model one ($p < .001$), thus model two will be examined (see Table 10).

The only variables that were of significance in model two were child e-reader use, β = .16, *SE* = .03, *p* = .003, and child cell phone use, β = -.12, *SE* = .03, *p* = .026. None of the susceptibility variables significantly predicted average parental mediation frequency, answering research question 4, which asked if parental perceptions of susceptibility would predict mediation. None of the severity variables significantly predicted parental mediation frequency, answering research question 2, which asked if parental perceptions of severity would predict parental mediation.

In summary, the frequency of average parental mediation is predicted by a child's cell phone use, e-reader use, a parent's total concern about negative media effects, parent engagement, and mediation response efficacy. Two positive interactions with child age offer insights into parental mediation patterns. First, the positive interaction between child age and parental concern indicates that parents who are most concerned about negative media effects engage in more frequent parental mediation as their child ages. The negative correlation between child age and parental mediation frequency is reversed when parental concern is considered. The same pattern arises with the interaction between child age and parent response efficacy levels. Parents who have high levels of mediation response efficacy engage in more frequent parental mediation as their child ages than parents with average and below average response efficacy levels. Additionally, there is one negative interaction with child age. Parental engagement negatively interacts with child age, such that parents who report engagement levels one standard deviation below the mean increase in their mediation behaviors with older children.

Predictors of Restrictive Mediation

Next, the predictors of restrictive mediation were examined. Step one of the linear regression entered control variables into the model (parental employment, parent religiosity,

parent devoutness, child tablet use, and child e-reader use), step two entered main effect predictors (child age, parent concern, parent engagement, parent accessibility, response efficacy, and self-efficacy), and step three entered interaction terms between child age and the other predictor variables. Models one, R^2 = .11, and two, R^2 = .33, ΔF = 18.11, p <.001, explained a significant portion of variance in restrictive mediation frequency, but model three did not significantly add to the explanatory value, R^2 = .34, ΔF = 1.30, p = .262. Thus, we will examine model two (see Table 11).

In model two, the only control variable that significantly predicted parental mediation was e-reader use, β = .11 *SE* = .03, p = .036, signaling that as a child's e-reader use increases, restrictive mediation also increases. Examining specific predictors, total parental concern significantly predicted restrictive mediation, β = .25, *SE* = .05, p <.001, such that the more concerned a parent is about negative media effects, the more restrictive mediation they will engage in. This offers support for hypothesis 2, that predicted that parental concern would predict mediation frequency. We can conclude that parental concern predicts restrictive mediation frequency.

Additionally, parental engagement significantly predicted restrictive mediation, β = .16, *SE* = .07, p = .003, answering research question 6, which sought to examine the impact of parental involvement (engagement and accessibility) on restrictive mediation, negative active mediation, and positive active mediation. Importantly, parental accessibility was not a significant predictor of restrictive mediation, β = -.03, *SE* = .00, p = .597. We can conclude that parental engagement predicts restrictive mediation, but parental accessibility does not.

The final significant predictor of restrictive mediation frequency was response efficacy, β = .33, *SE* = .03, p <.001, signaling that the more a parent believes mediation is effective at

preventing negative media outcomes, the more restrictive mediation they will engage in. This supports hypothesis 4, which predicted that a parent's level of response efficacy would predict mediation frequency. However, there was no significant effect found of self-efficacy on restrictive mediation frequency, which rejects hypothesis 5, which predicted that a parent's level of self-efficacy would predict mediation frequency.

Examining the impact of severity and susceptibility on restrictive mediation frequency, a three-step linear regression was run, entering control variables on step one, predictor variables on step two (severity of the five media effects and susceptibility of the five media effects), and interaction terms between child age and each of the five severity variables and five susceptibility variables were entered on step three. Model two added a significant portion of variance explanation, $R^2 = .33$, $\Delta F = 18.11$, $p < .001$, over model one, $R^2 = .11$, but model three did not significantly explain more variance in restrictive mediation frequency, $R^2 = .34$, $\Delta F = 1.30$, $p = .262$, thus model two will be examined (see Table 12).

Model two shows that a child's e-reader use significantly predicted restrictive mediation, $\beta = .17$, $SE = .03$, $p = .001$, as did parental perceptions of the severity of fear outcomes, $\beta = .16$, $SE = .06$, $p = .035$. The significant prediction value of fear severity lends insights into research question 2, which sought to examine the impact of severity perceptions on parental mediation. This result signals that the more a parent views fear as being a severe outcome, the more restrictive mediation they will engage in.

Overall, the frequency of restrictive mediation is positively predicted by a child's e-reader use, a parent's overall concern about negative media effects, parental engagement, parent's level of restrictive mediation response efficacy, and parent's perceptions of the severity of fear.

Predictors of Negative Active Mediation

Examining the predictors of negative active mediation, a three-step linear regression was run, entering control variables on level one (parent religiosity, parental devoutness, child tablet use), predictors on step two (child age, parental concern, parental engagement, parental accessibility, negative active mediation response efficacy, negative active mediation self-efficacy), and interactions between child age and the aforementioned predictors on the third step (see Table 13). All three regression models explained a significant portion of the variance in frequency of negative active mediation, with model three explaining significantly more variance than model two, $R^2 = .30$, $\Delta F = 3.22$, $p = .007$, thus model three will be discussed.

When examining the main effects of the predictors, three are significant, total parental concern, $\beta = .22$, $SE = .04$, $p < .001$, parent engagement, $\beta = .19$, $SE = .07$, $p < .001$, and negative active mediation response efficacy, $\beta = .27$, $SE = .04$, $p < .001$. The significant main effect of parental concern indicates that the more concerned a parent is of negative media effects, the more negative active mediation they will engage in, which lends support to hypothesis 1. Parental engagement also significantly predicts parental mediation, such that the more engaged a parent is with their child, the more negative active mediation they will engage in, which offers support for hypothesis 3, however, the lack of significant prediction value of parental accessibility suggests that parental engagement is the only parent involvement variable that predicts mediation. Finally, the significant main effect of response efficacy supports hypothesis 4.

Examining the interactions that predict the frequency of negative active parental mediation, it is apparent that parental concern significantly interacts with child age, such that the parents who are most concerned about the negative effects of media use engage in the most

mediation as their child ages, β = .16, *SE* = .01, *p* = .002 (see Figure 8). This result answers research question 1, which questioned if parental concern would interact with child age in predicting negative active mediation.

Additionally, child age interacted with parental engagement negatively, β = -.13, *SE* = .01, *p* = .010, which mimics the pattern that was found with interaction between child age and parental engagement on average mediation. Parents who report the lowest levels of engagement (one standard deviation below the mean) engage in more negative active mediation with older children (see Figure 9). It is possible that this negative interaction between parental engagement and child age on negative active mediation is influencing the presentation of the negative interaction between child age and parental engagement on average mediation because average mediation is calculated by averaging the three subtypes of mediation (restrictive, negative active, positive active). Thinking specifically about negative active mediation, it is possible that the older a child gets, parents are more likely to express disapproval of their child's media, especially if they are not intently aware of their child's media use, which would be the case for lower engaged parents. We can imagine a parent who is lowly engaged with their teenager verbally expressing disapproval of the teen's media use simply because they are not keenly aware of what media their child is consuming. Additionally, it is possible that parents have a preconceived notion of the negative aspects of social media, and they verbally express this to their children. This result offers insights into research question 6 that asked whether parental engagement would interact with child age to impact mediation frequency, but this result needs to be replicated by future research to examine if the negative interaction between child age and parental engagement is unique to the current study.

The final significant interaction predicting negative active mediation is between child age and parent's levels of negative active mediation response efficacy, β = .14, *SE* = .01, *p* = .048, suggesting that parents who believe negative active mediation is effective at preventing negative media outcomes are more likely to utilize negative active mediation as their child ages (see Figure 10). This result offers insights into research question 7, such that the more effective a parent perceives negative active mediation to be, the more they will utilize it with older children. This interaction reverses the negative correlation with child age and negative active mediation frequency, explaining why some parents engage in frequent negative active mediation with older children. However, the interaction with self-efficacy was not significant, which answers research question 8.

To examine the role of parental concerns on negative active mediation frequency, a three-step linear regression was run. Control variables were entered on step one (parent religiosity, parent devoutness, child table use), predictors were entered on step two (severity of the five media effects and susceptibility of the five media effects), and interaction terms between child age and each of the five severity variables and five susceptibility variables were entered on step three. Model three explained the most variance in negative active mediation frequency, and significantly more than model 2, R^2 = .21, ΔF = 1.91, *p* = .043, and will be discussed below.

Offering insights into research question 2 which asked about the differences in severity perceptions on the mediation frequency, aggression severity predicted frequency of negative active mediation, β = .20, *SE* = .06, *p* = .017. The main effect of aggression severity indicates that the more a parent believes that aggression is a severe media effect, the more negative active mediation they will engage in. Responding to research question 3, which asked whether child age would interact with severity perceptions, the interaction between child age and fear severity was

significantly negative, β = -.16, *SE* = .01, *p* = .049. This negative interaction suggests that the impact of fear severity on negative active mediation decreases with older children, meaning that as a child ages, and fear severity perceptions decrease, the parents use of negative active mediation also decreases. In other words, parents who report below average perceptions of the severity of fear outcomes use less negative active mediation with their older children (see Figure 11).

Overall, negative active mediation is predicted by parental concern, parental engagement, and parental levels of response efficacy, all three of which interact with child age. Additionally, there is a main effect of aggression severity on negative active mediation frequency, and fear severity interacts with child age to negatively predict negative active mediation.

Predictors of Positive Active Mediation

To examine the predictors of positive active mediation, a three-step linear regression was run, entering control variables on level one (parent political views, child TV viewing, child tablet, e-reader, and cell phone use), predictors on step two (child age, parental concern, parental engagement, parental accessibility, positive active mediation response efficacy, positive active mediation self-efficacy), and interactions between child age and the predictors on the third step. Model one explained 9% of the variance in positive active mediation frequency, model two explained 36%, $\Delta F = 24.73$, $p < .001$, of the variance in positive active mediation frequency, and model three explained the significant more variance than model two, explaining 39%, $\Delta F = 4.36$, $p < .001$. Thus, model three will be used to examine the predictors of positive active mediation (see Table 15).

First, two control variables significantly predicted positive active mediation: parental political views, β = -.09, *SE* = .013, *p* = .040, and child cell phone use, β = -.10, *SE* = .03, *p* =

.029. For parent political views, it appears that positive active mediation decreases as a parent's political views grow more conservative (*1= extremely liberal, 5 = extremely conservative*). Additionally, the more a child uses a cell phone, the less positive active mediation a parent engages in. This result mirrors the result found with average mediation; it is possible that cell phone use is private and thus parents do not engage much with their child's cell phone use.

Examining predictors of positive active mediation, the same pattern that was found with average mediation, restrictive mediation, and negative active mediation was found with positive active mediation; parental concern, $\beta = .09$, $SE = .04$, $p = .043$, parental engagement, $\beta = .21$, $SE = .06$, $p < .001$, and mediation response efficacy, $\beta = .36$, $SE = .04$, $p < .001$, significantly predicted positive active mediation. These results add explanation to hypothesis 2, which predicted that parental mediation would be predicted by parental concern, hypothesis 3, which predicted parental involvement (engagement and accessibility) would predict parental mediation frequency, as well as hypothesis 4, which anticipated that response efficacy would predict parental mediation.

Additionally, there was a significant interaction between child age and parental concern, $\beta = .14$, $SE = .04$, $p = .004$, such that the more concerned parents engaged in more positive active mediation as their child ages (see Figure 12). The interaction between child age and parental engagement was negative, $\beta = -.16$, $SE = .01$, $p < .001$, indicating that the positive predictive value of parental engagement on positive active mediation frequency decreases as a child ages (see Figure 13). Finally, the interaction between child age and response efficacy was positive, $\beta = .14$, $SE = .01$, $p = .022$, indicating that parents with the highest levels of response efficacy (one standard deviation above the mean) engage in the most positive active mediation with older children (see Figure 14).

Finally, examining the impact of specific parental concern variables on positive active mediation, a three-step linear regression was run. Control variables were entered on step one (parent political views, child TV viewing, child tablet, e-reader, and cell phone use), predictors were entered on step two (severity of the five media effects and susceptibility of the five media effects), and interaction terms between child age and each of the five severity variables and five susceptibility variables were entered on step three. Model two significantly explained the most variance in positive active mediation frequency, $R^2 = .20$, $\Delta F = 3.63$, $p < .001$, and thus will be discussed below (see Table 16).

Examining the concern variables, only parental perceptions of cultivation severity significantly predicted positive active mediation frequency, $\beta = .15$, $SE = .06$, $p = .036$, indicating that the more parents believed cultivation is a serious media effect, the more positive active mediation they engaged in. This result offers insights into research question 4 that asked if parental perceptions of susceptibility would predict parental mediation.

To summarize, the frequency of positive active mediation is predicted by parent political views, child cell phone use, parental concern, parental engagement, positive active mediation response efficacy, and cultivation severity. Additionally, interactions between child age and parental concern and positive active mediation response efficacy were positive and significant, indicating that the effects of parental concern and response efficacy increased parental positive active mediation frequency over a child's age span. However, the interaction between parental engagement and child age on positive active mediation frequency was negative, indicating that the predictive value of parental engagement on positive active mediation decreases when child age is considered.

Conclusion

Overall, study 1A found that overall parental concern, parental engagement, and parental mediation response efficacy all positively predicted average mediation frequency, restrictive mediation frequency, negative active mediation frequency, and positive active mediation frequency. These results confirm hypothesis 2 and hypothesis 4, while offering partial support to hypothesis 3. The response to hypothesis 3 was mixed: parental engagement predicted average mediation, restrictive mediation, negative active mediation, and positive active mediation, but parental accessibility did not. Hypothesis 5 was rejected by the lack of significant prediction value of mediation self-efficacy on any mediation type.

Moreover, these results provide insights into research question 1, indicating that parental concern does significantly impact restrictive mediation, negative active mediation, and positive active mediation. However, in response to research question 2, it was found that parental perceptions of the severity of fear predicted restrictive mediation, parental perceptions of aggression severity predicted negative active mediation, and parental perceptions of cultivation severity predicted positive active mediation. Answering research questions 4 and 5, none of the susceptibility variables predicted any type of mediation frequency.

There were also significant interactions between predictors of mediation and child age that helped explain why parents choose to mediate content with older children. First, child age negatively interacted with parental engagement to predict average mediation, negative active mediation, and positive active mediation. The results indicated a pattern of parents who reported less than average engagement levels reporting more mediation with older children. Parents who are low on engagement ever so slightly decrease in positive active mediation and increase in negative active mediation and average mediation with older children. Although somewhat

confounding, this offers insights into research question 6 which asked if child age would interact with parental accessibility and engagement.

Child age positively interacted with parental concern about negative media effects to predict average mediation, negative active mediation, and positive active mediation, such that parents who are highly concerned about negative media effects utilize these mediation methods more with older children, responding to research question 1. Answering research question 3, which asked if child age would interact with severity perceptions, there was a significant negative interaction between parent's perceptions of fear severity and child age. Finally, parental response efficacy interacted with child age to predict average mediation, negative active mediation, and positive active mediation, such that parents with high response efficacy levels utilized mediation more frequently with their adolescent child. This result offers insights into research question 7, which asked if response efficacy would interact with child age.

CHAPTER 4: STUDY 1B RESULTS

After parents completed the questions for study 1A, they were randomly assigned to one of four experimental conditions. In each condition, participants were asked to read a newsletter from the American Academy of Pediatrics. All four advice newsletters contained information about positive and negative active mediation, but the elements of efficacy in the message were manipulated. Condition 1, referred to as the "no efficacy condition," presented an advice newsletter that contained no elements of efficacy and only contained information about what positive and negative active mediation are. It is important to note that because condition 1 did not manipulate efficacy, it serves as the control condition (see Appendix B). Condition 2, referred to as the "combination condition," presented parents an advice newsletter that contained elements of both response and self-efficacy, which detailed the effectiveness and ease of engaging in positive and negative active mediation (see Appendix C). Parents in condition 3, referred to as the self-efficacy condition," read an advice newsletter that contained elements of self-efficacy, detailing how easy mediation is and how capable parents are at engaging in positive and negative active mediation (see Appendix D). Finally, condition 4, referred to as the "response efficacy condition," presented an advice newsletter that contained elements of response efficacy, detailing the effectiveness of positive and negative active mediation on preventing harmful media effects in children (see Appendix E).

We pilot tested the advice messages with a group of four experts with advanced degrees in the field of communication. The experts identified which advice message corresponded to which condition, and then offered suggested edits to strengthen the manipulation.

Analytic Plan

To examine between group differences, seven one-way ANOVAs were run. The first one-way ANOVA examined implementation intention, the second examined positive attitudes towards parental mediation, the third examined message quality, the fourth examined message confirmation, the fifth examined message absence of limitations, the sixth examined message feasibility, and the seventh examined message efficacy. Additionally, two mediation analyses were run using PROCESS (Hayes, 2022) to examine the indirect effect of response efficacy and self-efficacy on parental mediation implementation intentions through perceived threat.

Initial Analyses of Variance (ANOVAs) assessed if there were differences between advice conditions in child's age group, child's gender, parent's age, parent's gender, parent's employment status, household income, baseline frequency of mediation, baseline attitudes towards mediation, baseline response efficacy of mediation, baseline self-efficacy of mediation, parent accessibility, and parent engagement. There were no significant differences. Full descriptive statistics for study 1B can be found in Table 17. Correlations between variables can be found in Table 18.

Main Effect of Condition

Based on the extended parallel process model, elements of response efficacy and self-efficacy were manipulated in the four conditions to attempt to increase parent's levels of response efficacy regarding mediation and/or to increase their levels of mediation self-efficacy. Although not hypothesized, potential changes in parents' levels of response efficacy and self-efficacy are examined below.

Pre-Advice vs. Post-Advice Positive Active Mediation Outcomes. Two repeated measures ANOVAs were run entering condition as the between-subjects factor and pre- and post-advice positive active mediation self-efficacy (i.e., how capable a parent thinks they are at

utilizing positive active mediation) as the repeated measure in the first ANOVA, and pre- and post-advice response efficacy (i.e., how effective parents believe positive active mediation is at increasing positive media outcomes) as the repeated measure in the second ANOVA (see Table 19).

The repeated measures ANOVA examining pre-advice positive active mediation self-efficacy (M = 5.56, SD = 1.24) and post-advice positive active mediation self-efficacy (M = 5.60, SD = 1.24) was not significant for either the main effect of pre- and post-advice positive active mediation self-efficacy, $F(1, 348) = .01$, $p = .909$, nor for the interaction between pre- and post-advice self-efficacy and condition, $F(3, 348) = .35$, $p = .788$. This lack of significance signals that the advice message did not significantly increase parents' beliefs that they are capable of utilizing positive active mediation. Moreover, the lack of significant interaction between self-efficacy levels and condition signals that parents who received the advice message that explicitly detailed the ease of using positive active mediation (i.e., the self-efficacy advice condition) did not report higher changes in post-advice positive active mediation self-efficacy levels than any other condition (see Table 19).

The repeated measures ANOVA examining pre-advice positive active mediation response efficacy (M = 5.25, SD = 1.15) and post-advice active mediation response efficacy (M = 5.45, SD = 1.22) produced a significant main effect of pre- and post-advice response efficacy scores, $F(1, 348) = 9.04$, $p = .003$, signaling that there was a significant change in all participants positive active mediation response efficacy after reading the advice newsletter. However, this difference was not significant based on condition, $F(3, 348)$, .98, $p = .400$, which signals that the parents who received the advice message that presented high levels of response efficacy did not

produce a larger change in response efficacy than parents in any other condition, as one would expect based upon the EPPM (see Table 19).

Pre-Advice vs. Post-Advice Negative Active Mediation Outcomes. Two additional repeated measures ANOVAs were run to examine potential changes in parents reported negative active mediation self-efficacy (i.e., how capable a parent believes they are at engaging in negative active mediation), and negative active mediation response efficacy (i.e., how effective a parent believes negative active mediation is at preventing negative media outcomes for their child).

The first repeated measures ANOVA which examined the change in parents' pre-advice negative active mediation self-efficacy levels (M = 5.64, SD = 1.21) and post-advice levels of negative active mediation self-efficacy (M = 5.68, SD = 1.14) produced a non-significant main effect, $F(1, 349) = .05$, $p = .831$, and a non-significant interaction between negative active mediation self-efficacy and condition, $F(3, 349) = .77$, $p = .512$, signaling that there was not a significant change in parents' pre-advice and post-advice levels of negative active mediation, and this was not dependent on condition (see Table 19).

The second repeated measures ANOVA examining pre-advice negative active mediation response efficacy (M = 5.39, SD = 1.18) and post-advice negative active mediation response efficacy (M = 5.55, SD = 1.12) found a significant change in participant's negative active mediation response efficacy, $F(3, 349) = 3.98$, $p = .047$, but the interaction between response efficacy change and condition was not significant, $F(3, 349) = .71$, $p = .545$ (see Table 19). These results signal that, across conditions, parents' beliefs that negative active mediation is effective at reducing negative media effects increased post-newsletter reading, but that one condition did not lead to a higher change in response efficacy levels over the others.

Taken together, these results suggest that the newsletters, on average, increased parents' levels of positive and negative active mediation response efficacy, but that our manipulation of efficacy was not effective, for there was no conditional difference in response efficacy scores for either positive active mediation or negative active mediation.

Main Effect of Condition on Message Response Variables

To examine the main effect of condition on a variety of message response variables, seven one-way ANOVAs were run entering condition as the between-subjects factor and the response variable of interest as the outcome (implementation intention, attitudes towards parental mediation, message quality, feasibility, absence of limitation, confirmation, efficacy) and are detailed in Table 20.

Implementation Intention

Hypothesis 6 predicted that the parents who received the combination message would report the highest levels of implementation intention and most positive attitudes towards parental mediation, followed by parents who received the response efficacy message, and both would be higher than the parents who received the no efficacy message. Research question 9 asked whether there would be a difference in implementation intention levels between the self-efficacy and response efficacy condition. Two one-way ANOVAs were run to test this.

The results of the one-way ANOVA examining implementation intention by condition was not significant, $F(3, 349) = 1.20$, $\eta_p^2 = .01$, $p = .309$, which indicates that the mean response levels of implementation intention do not differ depending on which message condition the parents were exposed to. The first part of hypothesis 6 is rejected based on these results. Additionally, no significant difference between the response efficacy and self-efficacy conditions were detected, answering research question 9.

Examining the second half of hypothesis 6, a one-way ANOVA was run entering attitudes towards parental mediation as the dependent variable. The results were not significant, $F(3, 349) = 1.24$, $\eta_p^2 = .01$, $p = .296$, leading to a rejection of the second half of hypothesis 6. Taken together, the lack of significance found in these one-way ANOVAs leads to a full rejection of hypothesis 6, and signals that there is no significant difference between implementation intention and attitudes towards mediation between the self-efficacy condition and the response efficacy condition, as postulated in research question 9.

Indirect Effect of Baseline Response Efficacy. In addition to examining the impact of condition on parents' implementation intentions, we hypothesized that there would be an indirect effect of parents' response efficacy on implementation intention through perceived threat (hypothesis 7). In other words, we predicted that parents who reported high levels of mediation response efficacy before receiving the advice intervention will report higher implementation intention post-advice, explained by high levels of perceived threat. Hypothesis 7 predicted that, separate from condition, there would be an indirect effect of baseline response efficacy on post-advice implementation intention through an increased perception of threat. Using Hayes' (2022) PROCESS macro model 4, the total effect model was significant, supporting hypothesis 7, $R^2 = .20$, $F(2, 346) = 44.19$, $p < .001$, $B = .19$, $SE = .05$, [.10, .29], $p < .001$.The direct effect of this regression model as also significant, $B = .22$, $SE = .04$, [.17, .31], $p < .001$, indicating that the mediation is partial (see Table 21).

Similarly, research question 10 questioned if, like response efficacy, there would be an indirect effect of baseline self-efficacy on post-advice implementation intention through an increased perception of threat. Using Hayes' (2022) PROCESS macro model 4, the total effect model was significant, confirming research question 8, $R^2 = .29$, $F(2, 347) = 71.88$, $p < .001$, B

= .22, *SE* = .04, [.14, .31], $p < .001$.The direct effect of this regression model as also significant, *B* = .31, *SE* = .03, [.25, .37], $p < .001$, indicating that the mediation is partial (see Table 21).

Overall, the results of these mediation analyses suggest that parents who, (1) entered the study with high levels of mediation response efficacy and self-efficacy, and (2) reported high level of perceived threat after reading the advice newsletter were the ones who were most likely to report high levels implementation intention post-advice intervention. These results support the overall EPPM model; advice recipients who feel that the proposed intervention is effective and is easy to implement, and who perceive themselves as susceptible to a severe threat are likely to engage in the target intervention. This mediation shows that the EPPM predictions fit within the confines of parental mediation; parents who entered the study thinking that mediation is effective, and that they can engage in mediation are more likely to implement the target intervention (parental mediation), so long as they perceive their child as being susceptible to severe negative media effects.

Message Quality, Feasibility, Absence of Limitations, Confirmation, Efficacy

Additional message outcomes were measured based upon the Advice Response Theory (ART; Feng & MacGeorge, 2010). Based upon the ART, hypothesis 8 predicted that the parents who received the advice message that combined self-efficacy and response efficacy would report the highest levels of message quality, feasibility, absence of limitations, confirmation, and efficacy. Each of these outcomes were examined in separate one-way ANOVAs (see Table 20).

The first message outcome to be examined was message quality. The results of the one-way ANOVA found significant differences in message quality levels by condition, $F(3, 348) = 2.77$, $\eta_p^2 = .02$, $p = .042$. To examine which conditions were significantly different from one another, pair-wise comparisons of message quality levels were examined (see Table 22). The

only significant difference that arose was between parents who received the no-efficacy message and parents who received the combination efficacy message, *MD* = -.033, *SE* = .12, *p* = .031, indicating that parents who received the combination efficacy message reported higher levels of message quality than parents who received the no-efficacy condition. However, there was no significant difference between the combination efficacy condition and the response efficacy condition, as was predicted in hypothesis 8. Additionally, there was no significant difference between the response efficacy condition and the self-efficacy condition, which responds to research question 11.

Additionally, the one-way ANOVAs examining message feasibility, $F(3, 348) = .35$, $\eta_p^2 = .00$, $p = .789$, absence of limitations, $F(3, 349) = .367$, $\eta_p^2 = .00$, $p = .777$, message confirmation, $F(3, 348) = 1.17$, $\eta_p^2 = .01$, $p = .230$, and message efficacy, $F(3, 349) = 0.95$, $\eta_p^2 = .01$, $p = .415$, were not significant (see Table 20). Because message quality was the only message outcome that was significantly different between conditions, hypothesis 8 received marginal support. As noted above, the lack of conditional difference responds to research question 11, suggesting that there is no difference in advice response variables between the self-efficacy and response efficacy conditions.

Taken together, the results of study 1B indicate that our intervention did not succeed – there was only one significant difference in advice outcomes based on condition, message quality. Moreover, our manipulations of efficacy in the advice did not lead to any significant differences in mediation intentions or attitudes towards mediation, nor did the conditions produce differences in pre- and post-advice self-efficacy and response efficacy levels. Nevertheless, our results did show that parental mediation fits into the confines of the extended parallel process model through the significant mediation models. Parents who entered the study

with high baseline response efficacy, and perceived their child as being susceptible to severe media effects reported high implantation intention levels.

CHAPTER 5: DISCUSSION

Parental mediation, or the interactions guardians have with a child to "control, supervise, or interpret media content," (Warren, 2001, p. 212) has been touted as an effective method to decrease harmful media effects in child viewers, as well as increase positive outcomes from media use (e.g., Buijzen et al., 2007; Cantor & Wilson, 1984; Collier et al., 2016; Corder-Bolz, 1980). Parental mediation has been shown to help children focus on the important educational lessons in media (Collins et al., 1981), which, based upon Fisch's Capacity Model (2000), is an important precursor for children learning from media. Despite the research indicating that parental mediation is a useful tool at preventing harmful media effects and increasing positive media effects in children, there is limited work examining how often American parents utilize mediation. Study 1A collected data about American parents' mediation behaviors to fill this gap.

An additional limitation of previous research on parental mediation is that there is a limited examination of various methods of parental mediation, namely positive active mediation (i.e., parents commenting on the positive elements of media to increase their child's positive media outcomes) and negative active mediation (i.e., parents commenting on the negative elements of media to decrease negative media outcomes; Beyens et al., 2019). The current study sought to fill this gap by collecting data on parents' negative and positive active mediation strategies, as well as restrictive mediation.

Additionally, Study 1B sought to examine the most effective advice-giving methods to increase parental mediation frequency based upon the extended parallel process model (EPPM). Study 1B manipulated efficacy levels in advice messaging to examine the most effective elements of efficacy to include in future advice attempting to increase parental mediation.

As a whole, the current project sought to uncover current patterns in American parents' parental mediation (study 1A) and examine the most effective messages to increase parental mediation intentions (study 1B). Study 1A found that parents' concern over negative media effects, parental engagement, and parents' beliefs that mediation is effective (response efficacy) predicted the frequency of restrictive mediation, positive active mediation, negative active mediation, and an average of all three. Study 1B failed to find an effect of efficacy manipulation on implementation intentions.

Study 1A – Current Patterns in American Parental Mediation

The main goal of study 1A was to understand current patterns in American parents' parental mediation behaviors based upon a variety of parent and child factors, including child age, parental concern over negative media outcomes, parental involvement, and mediation efficacy. To fully understand parental mediation behaviors, study 1A collected data on parents' restrictive mediation (limiting media use), positive active mediation (commenting on positive aspects of media), and negative active mediation (commenting on negative aspects of media), as well as examining the mean of all three mediation types (referred to as average mediation). The measurement of positive and negative active mediation offered a novel contribution to the understanding of American parents' mediation behaviors, for previous research has called for a more precise understanding of parental positive and negative active mediation (Beyens et al., 2019; Martins et al., 2017).

Correlations Between Mediation and Demographic Variables

The current study collected a variety of potential control variables to allow for a complete understanding of parental mediation patterns. Control variables collected were child age,

frequency of child media use, child media activities, parent age, parent gender, parent political views, parent employment, parent religiosity, household size, and household income.

Parent demographics. Examining the significant correlations between overall mediation and parent demographic variables, a few are worthy of discussion. Firstly, parental religiosity and parental devoutness were positively correlated with average parental mediation frequency, restrictive mediation frequency, and negative active mediation frequency, indicating that parents who practice religion are more likely to engage in mediation, specifically mediation that limits media use or highlights the negative aspects of media. However, the lack of a significant correlation between parent religiosity and positive active mediation suggests that parents who are religious are less inclined to comment on the positive aspects of media. Moreover, there was a negative correlation between parent political views and positive active mediation; as parents' political views grow increasingly conservative, they engage in less positive active mediation. It is possible that parents with conservative political beliefs perceive less positive value of media, which results in less commenting on positive aspects of media. It is important that future research probes the connection between religiosity, political views, and positive active mediation behaviors to gain a more complete understanding of the relationship.

The only other parent demographic variable correlated with mediation frequency is parental employment. Parental employment was positively correlated with total mediation and restrictive mediation frequency, indicating that parents who work more engage in more average mediation and more restrictive mediation. The positive correlation with restrictive mediation makes intuitive sense when we consider the circumstances of a working parent household. If a parent is busy working, they might rely on restricting a child's media rather than actively engaging in mediation.

Media Use. Examining the correlations between mediation frequency and child media use variables, one of the most interesting results is the positive correlation between e-reader frequency and total mediation, restrictive mediation, and positive active mediation. The more a child uses an e-reader, the frequency of restrictive mediation, positive active mediation, and overall mediation increases. However, these positive correlations do not offer insights into why this occurs. Three possibilities can explain this relationship. First, it is possible that children who frequently use e-readers also use a lot of other media. Second, it is possible that parents might have conflated e-readers with tablets because some e-readers (e.g., Kindles) also function as tablets, allowing for children to play games, watch content, and browse the web. However, this explanation does not offer insights into why there is not a significant negative correlation between e-reader use and negative active mediation. Child tablet use was correlated with all four measures of parental mediation, so if parents were conflating e-readers with tablets, we would expect that all four mediation measures would be correlated with e-reader use. Third, it is possible that parents read to their child from an e-reader, making e-reader use a shared media activity between a parent and child. If a parent is actively reading to their child off an e-reader, they might make comments on the e-reader content. More research is needed to disentangle this relationship between e-readers and mediation. Qualitative work would be especially helpful for this, for it would allow parents to explain why and how they mediate their child's e-reader use.

Child Age. The final correlation that will be discussed is the negative correlation between child age and all mediation variables. In short, as a child grows older, parents engage in less mediation. Based upon previous research, it was hypothesized that parental mediation would follow a curvilinear trend, with mediation increasing throughout a child's preschool years (3-6 years old), peaking in early childhood (7-12 years old), before decreasing in adolescence (13-18

years old), however, the consistent negative correlations between child age and parental mediation signaled that hypothesis 1 was not supported. This result is in direct contrast to the developmental parental mediation theory, which predicts that parental mediation frequency will follow a curvilinear trend over early and middle childhood, with parents varying their parental mediation behaviors based on their child's developmental stage (Beyens et al., 2019). A major difference between Beyens et al.'s (2019) study and the current project is that Beyens et al. only examined parental mediation behaviors up to age 10 and the current project examined parental mediation behaviors up to age 18. Thus, the current study suggests that the curvilinear trend predicted by the developmental parental mediation theory does not extend into adolescence. Additionally, Beyens and colleagues (2019) collected longitudinal data over four years, and thus it is possible that the current study's cross-sectional data was not sensitive enough to capture a curvilinear trend in parental mediation. Finally, Beyens et al. (2019) collected data with Dutch parents, and it is possible that American parental mediation patterns differ from Dutch parental mediation patterns. Longitudinal studies examining American parental mediation should be conducted to further analyze the developmental patterns of parental mediation in America.

Conclusions. Examining each measure of parental mediation behavior, we can see that parent religiosity, employment, and child's e-reader and tablet use are all positively correlated with overall mediation. Parent religiosity, parent employment, and child's e-reader and tablet use are positively correlated with restrictive mediation, parent religiosity is positively correlated with negative active mediation, and parent political views, child's e-reader and tablet use were positively correlated with positive active mediation. However, child age was negatively correlated with all four mediation measures. Future research should examine the discrepancies in these correlations, specifically examining why parent religiosity is not correlated to positive

active mediation, but parent political views is, as well as examining the lack of correlation between negative active mediation and e-reader use.

The Impact of Parental Concern

Moving beyond the relationship between demographic variables and parental mediation, the current study sought to examine a wide range of attitudinal and behavioral variables that could impact mediation. The first of these variables examined was parental concern. Previous research collected data on which media effects parents were most concerned about (Riddle & Di, 2020), which informed our examination of parents' concern about desensitization, fear, hostility, aggression, and cultivation, but this previous research did not collect data about the relationship between parental concern and parental mediation (Riddle & Di, 2020). To fill this gap, study 1A collected data on parents' overall concern about negative media effects. The results of this study indicate that parental concern did positively predict the frequency of all types of mediation measured, supporting hypothesis 2. Moreover, there was a significant, positive interaction between child age and parental concern on the frequency of average parental mediation, negative active mediation, and positive active mediation, such that parents who were most concerned about negative media effects engaged in the most mediation with older children, but parents who reported mean levels of concern or below engaged in less mediation, offering insights into research question 1, which asked about a potential interaction between child age and parental concern. In short, the parental concerns reversed the negative relationship between child age and parental mediation. Knowing that parental concern does predict parental mediation adds insights into parents' potential use of parental mediation as a danger control method. Noting that parents who are the most concerned about negative media effects engage in the most parental mediation

as their child ages signals that parents might be using mediation as a method of protecting their child from harmful media effects.

Knowing that parents are potentially utilizing parental mediation as a danger control method provides validity in the examination of parental mediation in the context of the EPPM (study 1B). The foundation of the EPPM is that a danger control measure is implemented when a message recipient fears that they are susceptible to a severe outcome (Witte, 1992). The interaction found between parental concern and child age indicates that the parents who are most concerned about negative media effects engage in the most mediation with older children, using parental mediation as a danger control measure.

Impact of Specific Media Effect Concerns. Responding to previous research's call for a more detailed examination of the impact of parental concerns on mediation behaviors (Riddle & Di, 2020), the current study collected data on parents' perceptions of the severity of five media effects, as well as their child's susceptibility to five media effects (desensitization, fear, hostility, aggression, cultivation). We questioned if parental concerns about the severity (research question 2) and susceptibility (research question 4) of these five media effects would positively predict mediation frequency, but the data overwhelmingly did not support this. None of the susceptibility variables predicted mediation frequency, rejecting research question 4, and average mediation frequency was not predicted by any severity perception variable. Restrictive mediation, negative active mediation, and positive active mediation were sporadically predicted by severity measures, answering research question 2.

These results suggest that severity is a driving motivator in parental mediation behaviors, more so than susceptibility. Although parental perceptions of susceptibility and severity were correlated, susceptibility perceptions did not predict parental mediation like severity did. It is

possible that parents believe that their child is inevitably going to experience negative media effects, but that intervention (i.e., mediation) is warranted when the effect is severe.

***Restrictive Mediation*.** Restrictive mediation frequency was predicted by parental perceptions of the severity of fear. In other words, the more a parent thinks that media has the potential to scare their child, the more they will limit a child's media consumption. For example, a parent who thinks fear is a severe media outcome could restrict their child from watching a horror film. However, there is no evidence that the severity of any other media effect predicts restrictive mediation. It is possible that parents believe restrictive mediation is not effective at mitigating the severity of desensitization, hostility, aggression, or cultivation.

Negative Active Mediation. Negative active mediation was predicted by parental perceptions of aggression severity, suggesting that if a parent thinks that a child's aggressive behaviors after media viewing would be severe, the more negative comments about media the parent makes. Thinking about this realistically, it makes sense that a parent would comment that they do not endorse aggressive behaviors in media if they believe that aggressive outcomes are a severe media effect. For example, a parent could comment that they don't like the fighting in a superhero movie if they fear aggression is a severe media outcome. Additionally, there was one significant interaction between parental perceptions of fear severity and child age on negative active mediation frequency, such that as parents' perceptions of the severity of fear outcomes decreased as their child grew older, they engaged in less negative active mediation. This offers only partial insights into research question 3. As with restrictive mediation, no other parental perceptions of severity predicted negative active mediation. The results from study 1A suggest that parents believe that negative active mediation is the most effective as preventing severe

aggressive outcomes, but more research is needed to explain why there no other severity variables predicted negative active mediation.

Positive Active Mediation. Positive active mediation was predicted by a parent's perception of the severity of cultivation. In other words, the more a parent feared that media use could influence their child to perceive the world as a violent and dangerous place, the more positive comments parents would make while their child consumed media. It is possible that parents try to prevent the severe impacts of "mean-world syndrome" on their child by instead highlighting the positive elements of media. Because parental perceptions of the severity of desensitization, aggression, hostility, or fear do not predict positive active mediation, it appears that parents might not believe positive active mediation is an effective mitigating factor against those four media effects. However, more research needs to be conducted to offer insights into why this is the case.

Conclusions. Overall, these results suggest that parents believe that different forms of mediation are effective at mitigating the severity of different media effects. This indicates that parents do alter their mediation behaviors based upon what media effects they believe to be the most severe, and likely to not perceive parental mediation as a "one-size-fits-all" intervention. Future research should consider utilizing qualitative methods to examine parents' reasoning behind these behaviors.

Influence of Parental Involvement

Previous research had suggested that parents who were highly involved in their child's life engaged in more parental mediation of televised content (Warren, 2001; Warren et al., 2002). Previous research utilized two measures of parental involvement: parental engagement (i.e., parents and children participating in shared activities) and parental accessibility (i.e., the number

of hours a parent is in the same physical space as their child), and both were found to predict restrictive and active mediation behaviors (Warren, 2001; Warren et al., 2002). However, this research had two major limitations. First, it was conducted over 20 years ago when television was the most used medium amongst children. When television was the most used medium, children were likely to view television in a common household area where a parent was present (i.e., accessible) and was more likely to comment on the media. Today, children are using private forms of media on handheld devices, where a parent is likely not privy to the media their child is consuming. With the private nature of media today, parental accessibility is less relevant. Second, it did not distinguish between positive and negative active mediation. The current study addressed these limitations by collecting data including questions about parental mediation over a range of media, as well as examined positive active and negative active mediation. The results of study 1A found that parental engagement predicted the frequency of average mediation, restrictive mediation, negative active mediation, and positive active mediation, but parental accessibility did not predict any mediation behaviors, thus hypothesis 3 was partially supported. These results indicate that parents being in the same physical space as their child is not enough to predict mediation behaviors in present times, but rather, the more engaged a parent is with their child, the more mediation they will utilize. The lack of significance found with parental accessibility speaks to the private nature of today's media environment. Simply being the same physical space as a child does not make a parent more aware of their child's media use because children are using personal devices (e.g., cellphones and tablets) more than shared family devices (e.g., televisions). It is important to note that parent accessibility and engagement are not the same; a parent might only be with their child for a few hours, but they could be highly engaged with their child in those hours. However, because this research is in contrast with previous

findings, replication in future studies is needed to confidently say that parental accessibility does not predict mediation.

Influence of Efficacy

Finally, study 1A confirmed previous research results examining the role of response efficacy in parental mediation behaviors by finding that parents' levels of mediation response efficacy positively predicted the frequency of average mediation and restrictive mediation (Nathanson et al., 2002). Moreover, the results add more context to previous findings by examining the influence of response efficacy on positive and negative active mediation, where previous research only examined the impact on active mediation as a whole. The results of study 1A found that parents' response efficacy does positively predict the frequency of both positive and negative active mediation, as well as restrictive mediation, and average mediation, supporting hypothesis 4. Parental mediation response efficacy also interacted with child age to positively predict the frequency of negative active mediation, positive active mediation, and average mediation, offering insights into research question 7. Study 1A also examined the impact of an additional efficacy measure, self-efficacy, on mediation frequency, but no significant results were found, which is in contrast to previous research (Nathanson et al., 2002). It is important to note that Nathanson et al. (2002) found that parents' self-efficacy levels predicted restrictive mediation of sexual content and active mediation of violent content, and the current study did not examine what content parents were mediating, which might explain the lack of confirmatory result, but more research is needed.

Study 1A Conclusions

As a whole, study 1A offered significant insights into current American mediation behaviors. It is clear that American parents' use of overall mediation, restrictive mediation,

negative and positive active mediation are all predicted by a parents' level of response efficacy, engagement, and general concern about negative media effects, all of which confirm findings from previous research. As such, we can confidently conclude that the more a parent perceives parental mediation as effective at preventing harmful effects, the more concerned a parent is of harmful media effects, and the more engaged a parent is with their child, the more they will utilize total mediation and the three subtypes. Moreover, study 1A provided novel insights into previous research by examining positive and negative active mediation independently and found that parents' specific concerns do predict different usage of positive and negative active mediation. Additionally, through the results examining the impact of specific severity concerns, study 1A found that parents likely utilize different forms of mediation to address different concerns.

Study 1A Limitations

Although study 1A offers insights into American parents' mediation habits, it is not without limitations. The first limitation of study 1A is that the data was collected cross-sectionally and through self-report. The data might be influenced by self-report bias and desirability, such that parents might have reported that they engage in more mediation behaviors than they actually do. Future research should consider utilizing observatory methods to examine actual mediation behaviors rather than rely upon self-report. Secondly, although the results offer insights into how parents utilize parental mediation, the data offers limited explanations as to why parents utilize parental mediation, which future research should address through more detailed questions and qualitative data. Thirdly, the survey construction lent itself to some limitation. For example, the current survey did not include attention checks, thus, it is possible that respondents were aimlessly clicking through the survey without carefully considering the

questions being asked. Qualtrics did filter out participants who straight-lined the survey, but we still do not have data on the attention level of participants. Additionally, the current survey only asked questions about the parent's child whose birthday was next; it did not collect data on the parental mediation habits for all children the parent cares for. It is possible that parental mediation behaviors differ between children, something that the current study did not consider. Also, the current study only asked about the respondent's personal mediation behaviors and did not collect data about other household members' mediation. It is possible that the respondents were not the primary caregiver to the child, and thus they might not be the caregiver who typically mediates content with their children. Future cross-sectional work should consider these limitations when constructing surveys.

Study 1B – Application of the EPPM to Parental Mediation

Building upon the clear conclusions of previous research that parental mediation is an effective method at reducing harmful media effects in children (e.g., Buijzen et al., 2007; Cantor & Wilson, 1984; Collier et al., 2016; Corder-Bolz, 1980), study 1B sought to examine the most effective ways at increasing parental mediation intentions, which previous research called for (Riddle & Di, 2020). To meet this goal, we applied the extended parallel process model (EPPM), which is a persuasive model that concludes that in a message recipient must (1) view themselves as susceptible to a severe outcome, and (2) perceive the intended advice measure as easy to implement and an effective measure at preventing the outcome before engaging in the danger control measure (Witte, 1992; Witte, 1994; Witte, 1996).

The first element of the EPPM is perceptions of outcome susceptibility and severity. Study 1A showed that parents reported susceptibility levels above the halfway point on the scale which indicates that parents are reporting that their child is susceptible to negative media effects.

This pattern was also found with severity (see Table 1). Taken together, we can conclude that parents do believe their child is susceptible to negative media effects, and these negative effects are somewhat severe. Applying these results to the EPPM, we can conclude that parents meet the first requirement: perceptions of susceptibility and severity.

The second element of the EPPM is perceptions of the efficacy of the danger control method. In the current project, danger control method was parental mediation intentions. Based upon study 1A, we can conclude that parents perceive parental mediation as an effective intervention (response efficacy) and an easy intervention to implement (self-efficacy; see Table 1). Thus, we can conclude that parental mediation falls in the confounds of the EPPM; there is a perceived threat, and the advice would be seen as effective and implementable.

Knowing that the EPPM does apply to parental mediation, the focus then falls on attempting to increase participant implementation intentions. Previous research examining the effectiveness of advice messaging found that advice messages that combined elements of severity, susceptibility, and response efficacy led to the highest levels of implementation intention (Wong & Cappella, 2009). Based upon this research, we designed the advice to present all parents with a description of their child's susceptibility to a negative media effect (violence) and the severity of the negative media effect (violence), and then manipulated efficacy.

After completing the questions for study 1A, which provided us with parents' baseline attitudes towards negative media effects and baseline mediation behaviors, parents were randomly assigned to one of four advice messaging conditions based upon previous research's findings that efficacious messaging is the most effective at increasing danger control implementation (e.g., Hatchell et al., 2013; Lewis et al., 2013; Muthusamy et al., 2009; Witte, 1992; Witte, 1993; Witte, 1994; Wong & Cappella, 2009). However, most previous research

examined the effectiveness of response efficacy (Lewis et al., 2013; Roskos-Ewoldsen et al., 2004; Witte, 1994), but neglected to methodically examine the impact of an advice message's self-efficacy messaging. Study 1B's four condition design responded to this limitation. The four conditions participants were randomly assigned to manipulated various elements of response efficacy and self-efficacy. The first condition was the no-efficacy condition, which only presented parents with the definitions of positive and negative active mediation (see Appendix B). The second condition was the combination condition, which presented parents with an advice message that included clear elements of response efficacy and self-efficacy (see Appendix C). Third was the self-efficacy condition, which only told parents how capable they are at enacting positive and negative active mediation (see Appendix D). Finally, the fourth condition was the response efficacy condition, which communicated the effectiveness of positive and negative active mediation to parents (see Appendix E). It is important to note that all parents received the same first page of the advice newsletter, which detailed the severity of negative media effects as well as children's susceptibility to negative media effects. We chose to present every parent with a detailed account of the potential harms of media use because previous research has established that the most effective advice includes a combination of fear and efficacy (e.g., Witte & Allen, 2000; Wong & Capella, 2005). This allowed for study 1B to closely examine the impact of specific elements of efficacy.

Effectiveness of Advice Messaging

Study 1B manipulated elements of self-efficacy and/or response efficacy in an advice newsletter. Despite our manipulation, there was no significant change in parents' self-efficacy levels. There was an overall increase in parents' positive and negative active mediation response efficacy, but there was no conditional difference observed. In other words, parents reported

higher levels of positive active mediation and negative active mediation response efficacy after reading the advice, but this did not differ based upon the condition the parents were assigned to. This result suggests that our manipulation of self-efficacy and response efficacy elements was not strong enough. We would have expected that parents in the response efficacy and combination efficacy conditions would report more change in response efficacy levels than parents in the self-efficacy condition and no efficacy condition.

Conclusions. Three possible explanations might offer insights into this trend. First, it is possible that simply defining a mediation strategy is effective at increasing parents' response efficacy levels. It is possible that providing parents with a clear definition of mediation methods and highlighting these methods might signal to parents that these methods are important, and thus must be effective. Because no conditional effect was observed, we can conclude that simply reminding parents about mediation was an effective intervention.

Second, a ceiling effect of pre-advice mediation self-efficacy and response efficacy was observed (see Table 1). We can see that parents entered the study with high levels of self-efficacy and response efficacy. It appears that parents already have experience with parental mediation and this experience is driving their efficacy levels. This result indicates that parents did not need an intervention to increase their efficacy levels, as they already have experience with mediation and have an established sense of its efficacy; they simply needed a reminder to use mediation.

Third, a previous meta-analysis examining the effectiveness of health messaging found that the most effective messages presented messages at more than one time point (Noar et al., 2007). Thus, it is possible that in order to observe an increase in mediation self-efficacy and to

observe a conditional effect of the efficacious messages, more than one message needs to be presented to parent over a span of time.

Implementation Intentions and Attitudes Towards Mediation. Moreover, study 1B produced no significant impact on parents' intentions to implement positive or negative active mediation, rejecting hypothesis 6. This is in direct contrast to the predictions made based upon the EPPM. We had predicted that parents who received the combination message, the message with the most details about positive and negative active mediation, would report the highest implementation intention because they read about the research backed evidence on its effectiveness (response efficacy) and read tips about how simple implementation could be (self-efficacy). However, no conditional differences arose. Previous research had found that advice messaging that did not clearly detail the efficacy of the danger control measure led to low implementation intention (Hatchell et al., 2013), so it is possible that our current intervention did not include enough explicit elements of efficacy. Moreover, ceiling effect observed in pre-advice self-efficacy and response efficacy levels suggests that parents did not necessarily need an intervention to increase their efficacy levels.

We had also predicted that attitudes towards parental mediation would follow the same trend as implementation intention, with the parents in the combination condition reporting the most positive attitudes towards parental mediation, but this was not supported, leading to a full rejection of hypothesis 6. Previous research had found that messaging that highlighted the efficacy of the danger control method led to more positive attitudes towards the danger control method (Roskos-Ewoldsen et al., 2004). However, as with response efficacy levels, we observed a ceiling effect with pre-advice attitudes towards mediation (see Table 1). Parents entered our

study with incredibly positive attitudes towards parental mediation, so any intervention was unlikely to increase that.

Indirect Effect of Response Efficacy. Although our advice intervention failed, we did find support for the propositions posed in the EPPM through two significant mediation models. We found that parents who entered the study with high levels of mediation response efficacy and/or self-efficacy, and who perceived the threat of media violence as high after reading the advice newsletter reported higher levels of implementation intention. This mediation model supports elements of the EPPM, such that parents who believe mediation is effective at preventing negative outcomes and believed they were capable of utilizing mediation, and who perceive their children as being susceptible to a severe threat, are more likely to report an intention to implement parental mediation. This supports the EPPM claim that both response efficacy and self-efficacy levels, along with perceived threat, do predict implementation of a danger control method. This result, as well as the lack of conditional difference in increases in response and self-efficacy levels, indicates that parents did not need an intervention to increase mediation efficacy, but instead simply needed a reminder to use mediation and need a reminder about the negative impacts of media use.

Moreover, it has been found that the most effective health messaging utilizes multiple messages over multiple contact points, which was not utilized in the current study (Noar et al., 2007). It has been found that the impact of health interventions on behavior change are larger when studies utilized multiple messaging. Because the current study only utilized one-shot messaging, it is possible that repeat messaging is needed to observe an impact on implementation intention for all parents, not just parents who entered the study with high levels of response and self-efficacy.

Message Response Variables. Reflecting on persuasion research, it is apparent that implementation intention and attitudes are not the only possible outcomes expected from advice. Study 1B sought to examine if the manipulations of efficacy would influence additional advice response variables proposed by the advice response theory (ART; Feng & MacGeorge, 2010). The current study predicted that the parents who received combination efficacy message would report the highest levels of message quality, feasibility, absence of limitations, confirmation, and efficacy. However, the only variable that was found to have conditional differences was message quality. It was found that parents who received the combination message reported higher perceptions of the advice quality than parents who received the no efficacy message. It is important to note that there was no significant difference between the response efficacy or self-efficacy conditions and the no efficacy conditions. The starkest contrast in conditions was between the no efficacy condition and the combination efficacy condition; the no efficacy condition was the shortest message, whereas the combination efficacy condition was the longest message. It is possible that the difference in message quality measures appear between these two conditions because of this; parents perceived the message with the most details as higher quality than parents who received the message with the least details. It is also important to note that the combination efficacy message was slightly longer than the other conditions, simply because more information needed to be included, and the no efficacy condition was the shortest because it had the least amount of information included. It is possible that parents' perceived message length as signaling the overall quality of a message, but more research is needed to properly examine this.

Study 1B Conclusions

As a whole, study 1B failed to find support for increasing parents' intention to utilize parental mediation strategies. Overall, we did not find an impact of efficacy messaging on implementation intentions or positive attitudes towards parental mediation, which is in direct contrast to previous research. There are four possible explanations for this lack of significant result: (1) parental mediation is not an appropriate behavior to apply the EPPM to, (2) we did not adequately manipulate the efficacy language, (3) there was a ceiling effect of parents entering the study with high levels of mediation self-efficacy, (4) multiple message interventions were needed. Addressing the first possible explanation, the results of study 1B's significant mediation models does imply that parental mediation can be applied the EPPM because the impact of parents' response efficacy levels on implementation intention can be explained by an increase in perceived threat post advice messaging. Thus, it appears that perceived threat and response efficacy do predict implementation intention, which are two elements vital to the EPPM (e.g., Muthusamy et al., 2009; Witte, 1993). Examining the second and third explanations, it appears that the language we used in each condition was not strong enough to show a difference in efficacy levels, but this is likely because parents entered the study with high levels of self-efficacy. Because parents entered the study feeling capable of engaging in parental mediation, there was not much room for an increase in self-efficacy levels. Finally, as previous research has noted, the most effective messages to incite health behavior changes are presented over multiple time points (Noar et al., 2007). It is likely that our one-time message presentation needed to be repeated in order to be most persuasive.

When examining the results of study 1B in tangent with study 1A, we see that parents who are the most concerned about negative media effects are the ones who report the most mediation frequency, so, future research might work to screen out parents who are highly

concerned about negative media effects at baseline to try and increase the mediation behaviors for the most vulnerable populations, or parents who do not believe media is potentially harmful to their children.

Study 1B Limitations. As previously noted, it appears that our experimental manipulation was not strong enough to produce a difference in parents' implementation intentions or attitudes towards parental mediation, which is the largest limitation of study 1B, as well as our lack of a larger pilot test. Future research should be more intentional about methodically manipulating the efficacy elements in advice messaging. However, it is important to note that our interventions were pilot tested with experts in the field of communication. The experts correctly identified which newsletter applied to each condition, and then offered us suggestions on how to improve the advice.

Another limitation to study 1B was that we did not force the parents to remain on the advice messaging pages for a certain amount of time, so it is possible parents immediately advanced through the advice messages without reading them. Qualtrics did remove participants who seemingly straight-lined the survey, but we did not ask parents any comprehension questions that specifically measured their reading of the advice message, so we do not have any data on how carefully parents were reading the message or how much of the message they recalled.

It is also important to note the limitations of the survey method. Because parents completed the data collection for both study 1A and study 1B, they might have been fatigued by the time they were asked to read the advice message and respond to the post-advice questions, leading to respondents rushing through the survey. Moreover, the survey method was likely not the most effective method to use in order to observe differences in parents' implementation

intentions. Future research should strive to utilize behavioral observations to examine if there is a difference in implementation intentions and actual behavior change.

Overall, study 1B failed to find support for the prediction that parental mediation intentions would be higher for parents who read a message that informed them about the effectiveness of parental mediation, as well as their capability at implementing parental mediation. These predictions were in line with the EPPM, but no support was found. However, there were two significant mediation models that indicated that parents' levels of response efficacy and self-efficacy prior to receiving the advice message did predict implementation intentions, through an increase in perceived threat. This result supports the propositions of the EPPM, such that when a message recipient has high baseline efficacy levels and feels that the threat is severe, they engage in a danger control measure. However, this result suggests that interventions do not need to focus on increasing efficacy, but rather, should focus on increasing perceived threat. The significant mediation models shows that parents did pick up on the threat element of our advice messages, indicating that parents did read the advice, and this perceived threat is what led to higher implementation intentions.

Theoretical Implications

The theoretical implications from the current project are two-fold. First, the current project offers insights into the developmental parental mediation theory proposed by Beyens et al. (2019). Second, the current project offers insights into parents' mediation efficacy levels, offering insights into how the EPPM (Witte, 1992) can be applied to parental mediation.

The Developmental Parental Mediation Theory

First, the implications for the developmental parental mediation theory will be a discussed. The developmental parental mediation theory suggests that parental mediation

behaviors vary depending on the developmental stage of the child, ultimately resulting in a curvilinear pattern of parental mediation, where parents increase their mediation throughout early childhood and decrease as their child enters middle childhood (Beyens et al., 2019). Utilizing longitudinal data, Beyens and colleagues found that restrictive and active mediation follow a curvilinear trend from ages 3- through 10-years-old. However, Beyens et al., did not examine if the curvilinear trend would extend into adolescence and did not measure the influence of various predictors on parental mediation. The current project sought to expand upon the developmental parental mediation theory by examining mediation patterns up to age 18 and by examining a wide range of predictors to mediation, specifically, parental concern.

The current project offers the following insights. First, we observed no curvilinear patterns between child age and parental mediation frequency which suggests that the curvilinear trend does not extend past middle childhood (about age 10). The current project is the first known study to attempt to apply the developmental mediation theory to adolescents, so replication is needed.

The second insight into the developmental parental mediation theory that the current study offers is an expansion of our understanding of the role of parental concern in predicting mediation behaviors. Beyens et al. (2019) examined the predictive nature of family demographics and parenting style but stopped short at examining the impact of parents' attitudes towards media. The current project explicitly measured the predictive value of parental concerns on mediation behaviors and the results of study 1A add more context to the developmental parental mediation theory. For example, we found that parental concern about fear predicted restrictive mediation, parental concern about cultivation predicted positive active mediation, and parental concern about aggression predicted negative active mediation despite a child's age.

These distinct results indicate that parents utilize specific mediation techniques depending on their attitudes towards media use and adds context to the motivations behind parental mediation. Moreover, the positive interaction between child age and parental concern indicates that parents who are concerned about negative media effects actually increase in their mediation use as a child enters adolescence. This result suggests that the curvilinear trend Beyens et al. observed is likely mitigated when additional predictor variables are considered. In short, the current project found that parents are considering media outcomes when choosing to mediate content with their child. It is important to note that parent's concerns about media likely change over a child's lifespan depending on their developmental level (Cantor & Sparks, 1984). Parental concerns are likely a response to their child's development level and thus should be considered in future work testing the developmental parental mediation theory. Our current project offers insights into the developmental parental mediation theory by finding that the curvilinear trend between child age and parental mediation is not found when adolescence is included in the sample, and instead a negative relationship is found. However, the current project shows that particular predictor variables might reverse a negative relationship between child age and parental mediation, offering insights into how parents choose to mediate content with their child.

The Extended Parallel Process Model

The second theoretical implication the current project offers is in relation to the extended parallel process model (Witte, 1992). The EPPM predicts that a message recipient must perceive themselves as susceptible to a threat and that the threat must be severe, and the message recipient must view threat mitigation measures as effective and easy to implement (Witte, 1992). The current study applied the EPPM to the threat of negative media effects in children with the threat mitigation measure being parental mediation. The current project's examination of parental

mediation directly answered a call from Riddle and Di (2020) for future research to examine the impact of parental perceptions of susceptibility and severity on parental mediation behaviors. Riddle and Di examined parental perceptions of their child's susceptibility to and severity of desensitization, fear, hostility, aggression, and cultivation from media use but did not examine parental mediation behaviors. Notably, Riddle and Di found that parental perceptions of susceptibility were the driving predictor of parental anxiety about desensitization, hostility, aggression, and cultivation. Interestingly, the current project found that parental perceptions of susceptibility did not predict mediation frequency, but specific parental perceptions of severity did, indicating that parents engage in danger control measures when they believe that the negative media effect is severe. Applying this result to the EPPM, it is possible that parents who perceive their child as susceptible to negative media effects and are anxious about these effects enter into message minimization and rejection rather than utilizing the proposed mitigation techniques (Gore & Campanella, 2005; Witte, 1994).

Additionally, the current project sought to offer specific insights into the independent influence of response efficacy and self-efficacy. When examining previous research, we noticed that studies mainly manipulated elements of response efficacy in advice given to message recipients, which the current study sought to expand upon by manipulating response and self-efficacy (Lewis et al., 2013; Roskos-Ewoldsen et al., 2004; Witte, 1994). With this systematic manipulation of response efficacy and self-efficacy, the current project sought to offer insights into whether parents are more persuaded by the effectiveness of mediation or the ease of mediation. Despite our careful manipulation of response efficacy and self-efficacy, we found no difference in implementation intention between conditions. This is likely because parents entered the study with high levels of response and self-efficacy, which indicates that parents have

experience with mediation, and they did not need an intervention to increase their efficacy. Future research should apply our careful manipulation of efficacy to additional issues to examine if response efficacy and self-efficacy lead to a difference in implementation intentions or should focus more on initial levels of efficacy.

Practical Implications

The current project arose from the COVID-19 pandemic when children were spending more time on media than pre-pandemic days (Nagata et al., 2021), but less than half of surveyed Irish parents reported mediating content more than they were pre-pandemic (Sciacca et al., 2022). Thus, we were curious to examine the current patterns in American parental mediation, as well as attempt to increase mediation behaviors in light of children's increased media use.

Examining the current patterns of parental mediation, our sample of American parents indicated that they engage in parental mediation slightly more than "sometimes" (see Table 1). This result suggests that parents do utilize parental mediation somewhat, but they are not utilizing it every time their child is on media. Thus, there is room to increase parental mediation behaviors. Thus, future interventions should focus on attempting to increase parental mediation frequency.

The current study's failure to find that parental accessibility predicted parental mediation signals that the rise of private media use on personal devices (e.g., cellphones and tablets) makes a parent less privy to their child's media consumption. Just because a parent is physically in the home with their child no longer signals that they know what media their child is consuming because children are not using shared family devices (e.g., televisions). Future interventions should focus on informing parents of ways to be aware of the content their children are consuming on private devices.

Second, our results indicate that parents have high levels of parental mediation response efficacy and self-efficacy. The results of study 1B show that, overall, parents reported increased levels of negative and positive active mediation response efficacy after reading the advice message, but there was no increase in self-efficacy levels. Additionally, there was no difference in efficacy levels based on condition. This indicates that parents did not need their efficacy levels increased, but rather, they simply needed a reminder about mediation. Future interventions should not focus on increasing parents' efficacy levels, but rather, should focus on reminding parents to utilize mediation.

Additionally, our significant mediation models indicate that increasing perceived threat levels can lead to higher implementation intentions for parents who have high levels of response and self-efficacy. This result indicates that parents should be kept up to date on the research surrounding negative media effects, because if a parent with high mediation efficacy perceives a threat, they are more likely to engage in mediation.

Overall Conclusions

In an effort to examine American parents' parental mediation behaviors, study 1A collected information about parent and child demographic information and parental mediation patterns to allow for a full examination of what predicts parental mediation in America. Extending beyond the general patterns of mediation, study 1B sought to experimentally manipulate parents' exposure to advice messages that presented different levels of response and/or self-efficacy to examine if differences in implementation intentions would arise.

When examining the results of study 1A, it is clear that parents who are engaged with their child, who are concerned about media effects, and/or who believe parental mediation is effective at preventing harmful effects are more likely to engage in restrictive mediation, positive

active mediation, and negative active mediation. Moreover, study 1A found evidence that parents utilize different parental mediation methods depending on what media effects they perceive as being the most severe, suggesting that parents do utilize parental mediation as a danger control method, attempting to shield their child from negative mediation effects.

Adding more insights into parental mediation patterns, study 1B sought to examine what type of messaging is most effective at increasing parental mediation intentions under the theoretical guidelines proposed by the extended parallel process model. We attempted to manipulate the levels of efficacy presented in advice messaging, but our intervention failed to produce any significant conditional effects.

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TABLES

Table 1

Study 1A Descriptive Statistics

	M	*SD*	*Min*	*Max*	*Skewness M*
Child demographics					
Child age	9.30	4.54	3.00	18.00	0.15
Weekly screen time (hours)	31.68	15.47	7.00	70.00	0.65
Screen time COVID change	2.45	0.58	1.00	3.00	-0.51
Frequency of device use					
Television	3.98	0.87	1.00	5.00	-0.96
Tablet	3.38	1.27	1.00	5.00	-0.58
Video game console	3.12	1.36	1.00	5.00	-0.31
E-reader	2.18	1.32	1.00	5.00	0.66
Cell phone	3.51	1.33	1.00	5.00	-0.77
Computer	2.95	1.31	1.00	5.00	-0.19
Frequency of screen activity					
Watching TV/movies	3.27	1.64	1.00	6.00	0.18
Watching short videos	3.25	1.65	1.00	6.00	0.15
Playing games	3.18	1.77	1.00	6.00	0.25
Using social media	3.60	1.79	1.00	6.00	-0.38
Communicating with friends	3.86	1.70	1.00	6.00	-0.32
Browsing the web	3.83	1.57	1.00	6.00	-0.20
Parent demographics					
Parent age	3.63	0.92	1.00	7.00	0.30
Parent education	3.95	1.55	1.00	7.00	-0.26
Parent employment	2.47	0.83	1.00	3.00	-1.05
Transformed parent employment	1.20	0.31	1.00	1.73	0.99
Parent political affiliation					
Parent religion	1.53	0.50	1.00	2.00	-0.12
Parent devoutness	2.24	0.75	1.00	3.00	-0.43
Household size	2.76	1.36	1.00	9.00	1.11
Transformed household size	1.61	0.40	1.00	3.00	0.37
Gross annual income	5.34	2.04	1.00	10.00	-0.18
Parent involvement					
Accessibility (hours)	90.35	48.55	0.00	168.00	0.20
Engagement	2.63	0.61	1.14	4.00	0.20
Parental mediation behaviors					
Restrictive mediation	2.51	0.80	1.00	4.00	-0.02

	M	*SD*	*Min*	*Max*	*Skewness M*
Active mediation	2.81	0.67	1.00	4.00	-0.30
Positive active mediation	2.82	0.78	1.00	4.00	-0.23
Negative active mediation	2.80	0.77	1.00	4.00	-0.30
Average mediation	2.66	0.65	1.00	4.00	-0.11
Parental mediation response efficacy					
Restrictive mediation	4.96	1.40	1.00	7.00	-0.75
Positive active mediation	5.25	1.15	1.00	7.00	-0.74
Negative active mediation	5.39	1.18	1.00	7.00	-0.88
Average mediation	5.14	1.13	1.00	7.00	-0.65
Parental mediation self-efficacy					
Restrictive mediation	5.41	1.32	1.00	7.00	-0.79
Positive active mediation	5.56	1.24	1.00	7.00	-0.90
Negative active mediation	5.64	1.21	1.00	7.00	-0.88
Average mediation	5.50	1.00	7.00	1.17	-0.81
Parental attitudes towards mediation					
Restrictive mediation	4.10	0.77	1.60	5.00	-0.72
Active mediation	4.13	0.80	1.60	5.00	-0.80
Average mediation	4.12	0.73	1.70	5.00	-0.79
Parental perceptions of susceptibility					
Desensitization	3.29	1.03	1.00	5.00	-0.44
Fear	3.37	1.10	1.00	5.00	-0.45
Hostility	3.20	1.09	1.00	5.00	-0.24
Aggression	3.19	1.11	1.00	5.00	-0.20
Cultivation	3.27	1.03	1.00	5.00	-0.38
Parental perceptions of severity					
Desensitization	3.57	0.94	1.00	5.00	-0.63
Fear	3.33	1.06	1.00	5.00	-0.53
Hostility	3.65	0.95	1.00	5.00	-0.74
Aggression	3.61	1.00	1.00	5.00	-0.76
Cultivation	3.53	0.95	1.00	5.00	-0.61
Parental anxiety					
Desensitization	2.92	1.23	1.00	5.00	-0.09
Fear	2.85	1.24	1.00	5.00	-0.06
Hostility	2.94	1.29	1.00	5.00	-0.10
Aggression	2.94	1.25	1.00	5.00	-0.14
Cultivation	2.93	1.23	1.00	5.00	-0.16
Parental threat perception					
Desensitization	3.43	0.86	1.00	5.00	-.49
Fear	3.35	0.92	1.00	5.00	-.48

	M	*SD*	*Min*	*Max*	*Skewness M*
Hostility	3.43	0.87	1.00	5.00	-.34
Aggression	3.40	0.94	1.00	5.00	-.42
Cultivation	3.40	0.86	1.00	5.00	-.40
Parental concern					
Desensitization	3.18	0.93	1.00	5.00	-0.09
Fear	3.10	0.97	1.00	5.00	-0.16
Hostility	3.18	0.97	1.00	5.00	-0.11
Aggression	3.17	0.98	1.00	5.00	-0.18
Cultivation	3.16	0.93	1.00	5.00	-0.16
Total	3.16	0.87	1.00	5.00	-0.12

Table 2

Pearson's R Correlations Between Mediation Variables

Variable	2	3	4	5	6	7	8	9	10	11	12
1. Total mediation frequency	.50**	.30**	.91**	.48**	.27**	.79**	.38**	.27**	.70**	.41**	.29**
2. Total mediation response efficacy	-	.70**	.39**	.93**	.66**	.39**	.83**	.61**	.47**	.80**	.66**
3. Total mediation self-efficacy	-	-	.18**	.56**	.95**	.28**	.72**	.88**	.35**	.67**	.89**
4. Restrictive mediation frequency	-	-	-	.43**	.18**	.57**	.24**	.13*	.42**	.25**	.16**
5. Restrictive mediation response efficacy	-	-	-	-	.56**	.32**	.63**	.44**	.40**	.58**	.51**
6. Restrictive mediation self-efficacy	-	-	-	-	-	.23**	.63**	.73**	.30**	.59**	.75**
7. Negative active mediation frequency	-	-	-	-	-	-	.42**	.33**	.49**	.34**	.26**
8. Negative active mediation response efficacy	-	-	-	-	-	-	-	.72**	.38**	.71**	.65**
9. Negative active mediation self-efficacy	-	-	-	-	-	-	-	-	.32**	.58**	.77**
10. Positive active mediation frequency	-	-	-	-	-	-	-	-	-	.51**	.38**
11. Positive active mediation response efficacy	-	-	-	-	-	-	-	-	-	-	.69**
12. Positive active mediation self-efficacy	-	-	-	-	-	-	-	-	-	-	-

Note: *p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 3

Pearson's R Correlations Between Parental Concern Variables

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Desensitization susceptibility	.59	.88	.47	.72	.50	.50	.58	.40	.53	.62	.47	.64	.37	.54	.59	.52	.63	.49	.55	.70	.46	.67	.39	.58	.64
2. Desensitization severity	-	.85	.52	.73	.44	.64	.63	.43	.57	.41	.62	.61	.39	.54	.44	.63	.60	.40	.54	.43	.60	.59	.41	.55	.64
3. Desensitization threat	-	-	.57	.84	.55	.65	.70	.48	.64	.60	.64	.72	.44	.62	.60	.66	.71	.46	.63	.66	.61	.73	.46	.65	.74
4. Desensitization anxiety	-	-	-	.92	.35	.50	.49	.73	.70	.47	.40	.51	.75	.73	.50	.43	.52	.74	.72	.39	.47	.49	.78	.75	.84
5. Desensitization concerns	-	-	-	-	.48	.64	.65	.70	.76	.59	.56	.67	.70	.77	.61	.59	.67	.70	.77	.56	.59	.67	.73	.79	.89
6. Fright susceptibility	-	-	-	-	-	.47	.86	.42	.68	.58	.48	.62	.34	.51	.56	.45	.57	.35	.49	.59	.34	.59	.36	.52	.59
7. Fright severity	-	-	-	-	-	-	.85	.61	.80	.52	.56	.63	.52	.63	.49	.63	.62	.53	.63	.51	.64	.66	.49	.63	.73
8. Fright threat	-	-	-	-	-	-	-	.60	.86	.64	.61	.73	.50	.66	.61	.62	.70	.51	.66	.64	.62	.72	.50	.67	.77
9. Fright anxiety	-	-	-	-	-	-	-	-	.92	.49	.38	.51	.79	.76	.50	.41	.52	.76	.73	.42	.44	.49	.76	.73	.85
10. Fright concerns	-	-	-	-	-	-	-	-	-	.62	.53	.67	.74	.80	.61	.56	.66	.73	.78	.57	.57	.66	.72	.79	.91
11. Hostility susceptibility	-	-	-	-	-	-	-	-	-	-	.47	.88	.53	.75	.69	.44	.64	.53	.64	.65	.47	.65	.52	.65	.71
12. Hostility severity	-	-	-	-	-	-	-	-	-	-	-	.84	.45	.68	.42	.69	.59	.41	.54	.44	.60	.59	.37	.53	.62
13. Hostility threat	-	-	-	-	-	-	-	-	-	-	-	-	.58	.84	.66	.62	.72	.55	.69	.65	.62	.72	.52	.69	.78
14. Hostility anxiety	-	-	-	-	-	-	-	-	-	-	-	-	-	.93	.51	.42	.53	.84	.79	.40	.39	.46	.78	.73	.85
15. Hostility concern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.64	.56	.68	.81	.84	.56	.54	.63	.76	.80	.92
16. Aggression susceptibility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.57	.90	.58	.80	.67	.46	.66	.55	.67	.73

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
17. Aggression severity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.87	.49	.73	.50	.61	.64	.39	.56	.66
18. Aggression threat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.61	.86	.67	.60	.73	.53	.69	.78
19. Aggression anxiety	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.93	.43	.40	.48	.79	.75	.86
20. Aggression concern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.59	.54	.65	.76	.80	.92
21. Cultivation susceptibility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.52	.88	.46	.72	.66
22. Cultivation severity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.86	.51	.74	.65
23. Cultivation threat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.56	.84	.75
24. Cultivation anxiety	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.92	.85
25. Cultivation concern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.92
26. Total parental concern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: All correlations are significant at $p < .001$.

Table 4

Pearson's R Correlations Between Parental Mediation Frequency and Parental Concern Variables

Variable	Total Mediation Frequency	Restrictive Mediation Frequency	Negative Active Mediation Frequency	Positive Active Mediation Frequency
Desensitization susceptibility	.31**	.31**	.26**	.15**
Desensitization severity	.29**	.24**	.28**	.21**
Desensitization threat	.35**	.32**	.31**	.21**
Desensitization anxiety	.27**	.26**	.22**	.15**
Desensitization concerns	.34**	.32**	.29**	.19**
Fright susceptibility	.29**	.27**	.21**	.21**
Fright severity	.39**	.38**	.24**	.29**
Fright threat	.39**	.37**	.26**	.29**
Fright anxiety	.39**	.39**	.27**	.25**
Fright concerns	.43**	.42**	.29**	.30**
Hostility susceptibility	.35**	.36**	.21**	.21**
Hostility severity	.35**	.28**	.34**	.23**
Hostility threat	.40**	.38**	.31**	.25**
Hostility anxiety	.38**	.38**	.28**	.22**
Hostility concern	.44**	.42**	.33**	.26**
Aggression susceptibility	.35**	.34**	.21**	.26**
Aggression severity	.37**	.32**	.33**	.26**
Aggression threat	.41**	.37**	.30**	.29**
Aggression anxiety	.35**	.34**	.25**	.23**
Aggression concern	.42**	.39**	.30**	.28**
Cultivation susceptibility	.31**	.27**	.24**	.24**

Variable	Total Mediation Frequency	Restrictive Mediation Frequency	Negative Active Mediation Frequency	Positive Active Mediation Frequency
Cultivation severity	.35**	.29**	.28**	.29**
Cultivation threat	.38**	.32**	.30**	.31**
Cultivation anxiety	.32**	.32**	.21**	.22**
Cultivation concern	.39**	.36**	.28**	.29**
Total parental concern	.44**	.42**	.33**	.29**

Note: *p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 5

Pearson's R Correlations Between Demographic Variables and Parental Mediation Variables

Variable	Child age	Child gender	Parent age	Parent gender	Parent educat-ion	Parent employ-ment	Parent politi-cal views	Parent religios-ity	Parent devout-ness	House-hold size	Annual income
Average mediation frequency	-.12*	.02	-.01	.00	.07	.11*	-.10	.14*	.20**	.01	.06
Average mediation RE	-.19**	.04	.03	.06	.04	.07	.02	.12*	.15*	-.03	.14*
Average mediation SE	-.11*	.01	.06	.07	.00	-.01	.06	.06	.08	-.04	.10
Restrictive mediation frequency	-.06	.00	-.01	-.06	.10	.13*	-.08	.12*	.19*	-.02	.09
Restrictive mediation RE	-.20**	.04	-.01	.04	.06	.07	.03	.13*	.18*	-.07	.10
Restrictive mediation SE	-.13*	.01	-.01	.05	-.01	-.01	.05	.05	.12	-.07	.08
Negative active mediation frequency	-.04	.06	.06	.07	.04	.05	-.07	.11*	.16*	.07	.00
Negative active mediation RE	-.07	.05	.11*	.06	.04	.07	.01	.06	.07	.01	.14**
Negative active mediation SE	.01	.02	.19*	.08	.04	.00	.05	.02	.06	.03	.12*
Positive active mediation frequency	-.22**	.01	-.07	.04	.00	.07	-.11*	.10	.13	.02	.02
Positive active mediation RE	-.18**	.01	.00	.07	.00	.01	.01	.09	.08	.04	.14**
Positive active mediation SE	-.14**	-.01	.07	.08	-.03	-.01	.06	.08	.00	-.03	.08

Note: RE = response efficacy, SE = self-efficacy *p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 6

Pearson's R Correlations Between Demographic Variables and Parental Concern Variables

Variable	Child age	Child gender	Parent age	Parent gender	Parent education	Parent employment	Parent political views	Parent religiosity	Parent devoutness	Household size	Annual income
Desensitization susceptibility	-.11*	.01	-.04	.04	.09	.08	.01	.10	.12	-.03	.10
Desensitization severity	-.14**	.08	-.05	.11*	.06	.02	-.04	.12*	.19	.06	.04
Desensitization threat	-.15**	.05	-.05	.08	.09	.06	-.02	.13*	.13	.02	.08
Desensitization anxiety	-.07	.04	-.11*	.12*	.03	.11*	-.06	.13*	.04	.00	.01
Desensitization concerns	-.11*	.05	-.10	.12*	.06	.10	-.05	.14*	.09	.01	.05
Fright susceptibility	-.23**	.05	-.13*	.11*	.08	-.09	.01	.12*	.00	.01	.05
Fright severity	-.13*	-.02	-.09	.02	.11*	.06	-.06	.19**	.23**	-.01	.05
Fright threat	-.21**	.02	-.13*	.08	.11*	-.02	-.03	.18**	.13	.00	.06
Fright anxiety	-.09	.01	-.16**	.12*	.02	.07	-.05	.14**	.13	-.02	-.05
Fright concerns	-.15**	.02	-.16**	.12*	.06	.03	-.04	.17**	.14	-.01	-.01
Hostility susceptibility	-.16**	-.03	-.14**	-.02	.13*	.04	.03	.15**	.16**	-.02	.10
Hostility severity	-.09	.07	-.01	.03	.09	.02	.01	.09	.15*	.01	.08
Hostility threat	-.15**	.02	-.09	.01	.13	.03	.02	.14**	.18*	-.01	.10
Hostility anxiety	-.06	.04	-.06	.05	.04	.10	-.02	.11*	.09	-.03	-.04
Hostility concern	-.11*	.04	-.08	.04	.09	.08	.00	.14*	.14	-.02	.02
Aggression susceptibility	-.25**	-.05	-.10	.06	.12*	.04	-.03	.11*	.08	.01	.06
Aggression severity	-.12*	-.06	-.03	.03	.15*	.10	-.11*	.11*	.19**	.03	.11*
Aggression threat	-.22**	-.06	-.08	.05	.15**	.07	-.07	.12*	.15*	.02	.09
Aggression anxiety	-.07	.04	-.07	.04	.06	.09	-.05	.10	.05	-.01	-.03

Variable	Child age	Child gender	Parent age	Parent gender	Parent educa-tion	Parent employ-ment	Parent political views	Parent religios-ity	Parent devout-ness	House-hold size	Annual income
Aggression concern	-.15**	-.01	-.09	.05	.11*	.09	-.07	.12*	.10	.01	.03
Cultivation susceptibility	-.21**	.03	-.05	.05	.12*	.04	.03	.16*	.08	.01	.12*
Cultivation severity	-.12*	-.01	-.07	.05	.12*	.12*	-.01	.15*	.15*	.00	.08
Cultivation threat	-.20**	.01	-.08	.06	.14*	.09	.01	.17**	.13	.01	.11*
Cultivation anxiety	-.08	.05	-.08	.07	.03	.08	.02	.13*	.11	.03	-.02
Cultivation concern	-.14**	.04	-.09	.07	.09	.10	.02	.17**	.13	.02	.04
Total parental concern	-.11*	.03	-.11*	.09	.08	.09	-.03	.16*	.13	.00	.02

Note: *p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 7

Pearson's R Correlations between Child Media Use Variables and Parental Mediation

Variable	Weekly screen use	TV freq	Tablet freq	Video game freq	E-reader freq	Cell phone freq	Computer freq	Watch tv	Watch short videos	Play games	Social media	Talk to friends	Browse the web	COVID screen use change
Average mediation frequency	-.02	.11*	.23*	.07	.26**	-.12*	.06	-.05	.07	.02	.03	-.01	-.07	.03
Average mediation RE	-.09	.22**	.19**	-.04	.16**	-.09	.01	-.06	-.04	-.02	.04	.03	.05	.04
Average mediation SE	-.11*	.30**	.11*	-.08	.02	-.01	.01	-.07	-.03	-.02	.06	.01	.05	.17**
Restrictive mediation frequency	-.02	.07	.19**	.08	.29**	-.10	.07	-.01	.06	.02	.03	.00	-.10	-.02
Restrictive mediation RE	-.06	.17**	.18**	-.03	.18**	-.11*	.01	-.05	-.04	.01	.01	.04	.02	-.03
Restrictive mediation SE	-.10	.28**	.10	-.09	.05	-.01	.01	-.08	-.03	-.01	.05	.02	.05	.13*
Negative active mediation frequency	-.01	.10	.15**	.08	.10	-.06	.01	-.08	.05	.02	.05	-.03	-.02	.04
Negative active mediation RE	-.09	.23**	.10	-.01	.06	-.03	.02	-.05	-.02	-.03	.07	-.01	.04	.12*
Negative active mediation SE	-.09	.25**	.07	-.01	-.06	.04	.02	-.01	-.01	.00	.02	-.05	.04	.21**
Positive active mediation frequency	-.03	.14*	.24**	-.01	.17**	-.14**	.04	-.07	.06	.01	.02	.01	-.03	.09
Positive active mediation RE	-.15*	.21**	.21**	-.05	.12*	-.08	.00	-.05	-.04	-.07	.05	.03	.10	.08
Positive active SE	-.12*	.28**	.14**	-.10	.01	-.08	-.02	-.09	-.04	-.05	.10	.03	.05	.15**

Note: RE = response efficacy, SE = self-efficacy *p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 8

Pearson's R Correlations Between Child Media Use Variables and Parental Concern Variables

Variable	Weekly screen use	TV freq	Tablet freq	Video game freq	E-reader freq	Cell phone freq	Computer freq	Watch tv	Watch short videos	Play games	Social media	Talk to friends	Browse the web	COVID screen use change
Desensitization susceptibility	.11*	.09	.21**	.08	.17**	.01	.07	.05	-.02	.06	-.02	.01	-.08	.04
Desensitization severity	.01	.05	.12*	.00	.05	.01	-.03	-.06	-.08	-.02	.04	.06	.05	.09
Desensitization threat	.07	.09	.19*	.05	.13*	.01	.02	.00	-.06	.02	.01	.04	-.03	.08
Desensitization anxiety	.08	.00	.16**	.02	.16**	.03	.13**	.02	-.03	.01	.03	-.02	-.01	.06
Desensitization concerns	.09	.04	.19**	.04	.17**	.02	.10	.01	-.05	.02	.03	.00	-.02	-.08
Fright susceptibility	.02	.13*	.21**	-.03	.08	-.11*	-.02	-.03	-.12*	.02	.03	.07	.03	.09
Fright severity	.07	.07	.19**	.06	.22**	-.06	.07	.01	-.09	-.05	-.02	.10	.06	.06
Fright threat	.05	.12*	.24**	.01	.17**	-.10	.03	-.01	-.12*	-.02	.00	.10	.05	.09
Fright anxiety	.06	.00	.22**	.06	.24**	-.05	.09	.05	-.02	.00	-.04	.04	-.02	.06
Fright concerns	.06	.06	.25**	.05	.23**	-.08	.07	.03	-.07	-.01	-.03	.07	.01	.09
Hostility susceptibility	.12*	.11*	.21*	.05	.20**	-.02	.08	.07	-.12*	.04	-.04	.09	-.06	.08
Hostility severity	-.04	.08	.15**	.01	.08	-.05	.01	-.04	-.01	-.04	.02	.08	.00	.08
Hostility threat	.05	.11*	.21*	.04	.17*	-.04	.05	.02	-.08	.01	-.01	.10	-.04	.09
Hostility anxiety	.03	.02	.20**	.05	.17**	-.04	-.08	.03	.01	-.02	-.03	.05	-.03	.03
Hostility concern	.04	.07	.23**	.05	.19**	-.05	.08	.03	-.03	-.01	-.03	.08	-.04	.06
Aggression susceptibility	.02	.11*	.25*	.03	.12*	-.07	.03	.08	-.07	.01	-.02	.08	-.08	.02
Aggression severity	.04	.14*	.14*	.07	.06	-.06	.04	-.02	-.04	-.11*	.08	.07	.02	.12*
Aggression threat	.03	.14**	.23**	.05	.11*	-.08	.04	.03	-.06	-.05	.03	.09	-.04	.08
Aggression anxiety	.05	.02	.19**	.09	.17**	-.03	.08	.04	-.02	-.05	-.01	.08	-.04	.07

Variable	Weekly screen use	TV freq	Tablet freq	Video game freq	E-reader freq	Cell phone freq	Computer freq	Watch tv	Watch short videos	Play games	Social media	Talk to friends	Browse the web	COVID screen use change
Aggression concern	.05	.08	.23**	.09	.16**	-.06	.07	.04	-.04	-.06	.01	.09	-.04	.08
Cultivation susceptibility	.07	.08	.24*	.05	.15*	-.03	.06	.05	-.08	.06	.01	.04	-.08	.01
Cultivation severity	.09	.10	.12*	.08	.12*	-.01	.13*	.03	-.09	-.03	.07	.00	.01	.05
Cultivation threat	.09	.10	.22**	.07	.15**	-.02	.10	.04	-.10	.02	.04	.03	-.04	.04
Cultivation anxiety	.12*	.01	.19*	.07	.21**	.01	.09	.08	-.03	-.02	-.02	.04	-.04	.04
Cultivation concern	.12*	.05	.22**	.08	.21**	-.01	.11*	.07	-.06	-.01	.01	.04	-.05	.04
Total parental concern	.08	.07	.25**	.06	.21**	-.04	.09	.04	-.05	-.01	-.01	.06	-.03	.80

Note: *p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 9

Linear Regression Examining Predictors of Average Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parent employment	.03	.04	-.06	.11	.584
Parent religiosity (1 = practice religion)	.13*	.07	.00	.26	.045
Parent devoutness	.11*	.06	.01	.25	.034
Child tv viewing	.08	.04	-.02	.14	.167
Child tablet use	.15**	.03	.02	.13	.009
Child e-reader use	.19***	.03	.04	.15	<.001
Child cell phone use	-.15**	.03	-.13	-.03	.004
R^2	.14				
Model 2: Main Effects					
Parent employment	.01	.04	-.07	.08	.909
Parent religiosity (1 = practice religion)	-.02	.06	-.12	.10	.809
Parent devoutness	.01	.05	-.09	.12	.801
Child tv viewing	-.02	.04	-.08	.06	.716
Child tablet use	.02	.02	-.04	.06	.685
Child e-reader use	.06	.02	-.02	.08	.204
Child cell phone use	-.13**	.02	-.11	-.02	.007
Child age	.07	.01	.00	.02	.161
Total parental concern	.24***	.04	.12	.25	<.001
Parental engagement	.25***	.05	.17	.38	<.001
Parental accessibility	.01	.00	.00	.00	.783
Mediation response efficacy	.36***	.04	.14	.28	<.001
Mediation self-efficacy	-.04	.04	-.09	.05	.554
R^2	.42				
R^2 change	.38				
ΔF	27.44***				<.001
Model 3: Interaction Effects					
Parent employment	-.01	.04	-.08	.06	.777
Parent religiosity (1 = practice religion)	-.04	.06	-.14	.08	.533
Parent devoutness	.03	.05	-.07	.13	.593
Child tv viewing	.00	.04	-.07	.07	.954
Child tablet use	.01	.02	-.04	.05	.880
Child e-reader use	.05	.02	-.02	.07	.252
Child cell phone use	-.13**	.02	-.11	-.02	.007
Child age	.08	.01	.00	.03	.094
Total parental concern	.24***	.03	.12	.25	<.001
Parental engagement	.25***	.05	.16	.37	<.001
Parental accessibility	.02	.00	.00	.00	.668

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Mediation response efficacy	.34***	.04	.12	.27	<.001
Mediation self-efficacy	-.02	.04	-.08	.06	.744
Child age X parental concern	.12*	.01	.00	.04	.011
Child age X parental engagement	-.13**	.01	-.05	-.01	.006
Child age X parental accessibility	.02	.00	.00	.00	.632
Child age X response efficacy	.13*	.01	.00	.03	.031
Child age X self-efficacy	-.07	.01	-.02	.01	.243
R^2	.45				
R^2 change	.03				
ΔF	3.29**				.006

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*p < .05; **p<.01; ***p<.001

Table 10

Linear Regression Examining the Impact of Media Effect Concerns on Average Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parent employment	.03	.04	-.06	.11	.584
Parent religiosity (1 = practice religion)	.13*	.07	.00	.26	.045
Parent devoutness	.11*	.06	.01	.25	.034
Child tv viewing	.08	.04	-.02	.14	.167
Child tablet use	.15**	.03	.02	.13	.009
Child e-reader use	.19***	.03	.04	.15	<.001
Child cell phone use	-.15**	.03	-.13	-.03	.004
R^2	.14				
Model 2: Main Effects					
Parent employment	.03	.04	-.06	.10	.629
Parent religiosity (1 = practice religion)	.06	.06	-.06	.19	.310
Parent devoutness	.06	.06	-.05	.18	.253
Child tv viewing	.04	.04	-.05	.11	.448
Child tablet use	.09	.03	-.01	.10	.111
Child e-reader use	.16**	.03	.03	.13	.003
Child cell phone use	-.12*	.03	-.11	-.01	.026
Child age	.00	.01	-.02	.02	.973
Desensitization susceptibility	.03	.05	-.08	.11	.731
Desensitization severity	-.03	.05	-.12	.08	.736
Fear susceptibility	.01	.04	-.07	.08	.861
Fear severity	.08	.05	-.04	.14	.26
Hostility susceptibility	.06	.05	-.05	.13	.431
Hostility severity	.09	.05	-.04	.16	.215
Aggression susceptibility	.09	.05	-.04	.14	.263
Aggression severity	.10	.05	-.03	.17	.187
Cultivation susceptibility	-.04	.05	-.13	.07	.598
Cultivation severity	.08	.05	-.04	.15	.229
R^2	.27				
R^2 change	.19				
ΔF	5.32***				<.001
Model 3: Interaction Effects					
Parent employment	.04	.04	-.05	.11	.432
Parent religiosity (1 = practice religion)	.03	.06	-.10	.15	.700
Parent devoutness	.05	.06	-.05	.18	.299
Child viewing	.06	.04	-.04	.12	.290

	Estimate	*SE*	*95% C.I.*		*p*
			LL	*UL*	
Child tablet use	.09	.03	-.01	.10	.093
Child e-reader use	.15**	.03	.02	.13	.006
Child cell phone use	-.11	.03	-.11	.00	.052
Child age	.00	.01	-.02	.02	.937
Desensitization susceptibility	-.01	.05	-.10	.09	.904
Desensitization severity	-.04	.05	-.13	.07	.558
Fear susceptibility	.04	.04	-.06	.1-	.610
Fear severity	.09	.05	-.03	.15	.206
Hostility susceptibility	.10	.05	-.03	.15	.212
Hostility severity	.06	.05	-.06	.14	.446
Aggression susceptibility	.06	.05	-.06	.12	.463
Aggression severity	.14	.05	-.02	.19	.093
Cultivation susceptibility	-.04	.05	-.13	.08	.617
Cultivation severity	.09	.05	-.03	.16	.199
Child age X desensitization susceptibility	.02	.01	-.02	.02	.843
Child age X desensitization severity	.12	.01	-.01	.04	.138
Child age X fear susceptibility	-.06	.01	-.03	.01	.387
Child age X fear severity	-.17*	.01	-.04	.00	.026
Child age X hostility susceptibility	.10	.01	-.01	.03	.216
Child age X hostility severity	.23	.01	-.01	.04	.113
Child age X aggression susceptibility	-.04	.01	-.03	.02	.616
Child age X aggression severity	-.06	.01	-.03	.01	.476
Child age X cultivation susceptibility	.07	.01	-.01	.03	.368
Child age X cultivation severity	-.01	.01	-.02	.02	.859
R^2	.30				
R^2 change	.03				
ΔF	1.46				.154

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*p < .05; **p<.01; ***p<.001

Table 11

Linear Regression Examining Predictors of Restrictive Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parent employment	.03	.05	-.07	.13	.540
Parent religiosity (1 = practice religion)	.12	.08	-.04	.28	.136
Parent devoutness	.08	.08	-.01	.29	.076
Child tablet use	.13*	.03	.02	.15	.013
Child e-reader use	.22***	.03	.07	.20	<.001
R^2	.11				
Model 2: Main Effects					
Parent employment	.00	.05	-.09	.10	.943
Parent religiosity (1 = practice religion)	-.02	.07	-.17	.12	.761
Parent devoutness	.01	.07	-.12	.15	.795
Child tablet use	.01	.03	-.06	.07	.891
Child e-reader use	.11*	.03	.00	.13	.036
Child age	.05	.01	-.01	.03	.287
Total parental concern	.25***	.05	.14	.32	<.001
Parental engagement	.16**	.07	.07	.35	.003
Parental accessibility	-.03	.00	.00	.00	.597
Mediation response efficacy	.33***	.03	.12	.25	<.001
Mediation self-efficacy	-.05	.03	-.10	.04	.383
R^2	.33				
R^2 change	.22				
ΔF	18.11***				<.001
Model 3: Interaction Effects					
Parent employment	.00	.05	-.10	.09	.973
Parent religiosity (1 = practice religion)	-.04	.08	-.19	.11	.605
Parent devoutness	.02	.07	-.11	.16	.700
Child tablet use	.00	.03	-.06	.06	.973
Child e-reader use	.10	.03	.00	.12	.060
Child age	.06	.01	-.01	.03	.217
Total parental concern	.25***	.07	.14	.32	<.001
Parental engagement	.16**	.07	.08	.35	.003
Parental accessibility	-.02	.00	.00	.00	.665
Mediation response efficacy	.30***	.03	.11	.24	<.001
Mediation self-efficacy	-.04	.04	-.09	.05	.514
Child age X parental concern	.08	.01	.00	.04	.130
Child age X parental engagement	-.06	.01	-.04	.01	.244
Child age X parental accessibility	.02	.00	.00	.00	.740
Child age X response efficacy	.10	.01	.00	.04	.111

	Estimate	*SE*	*95% C.I.*		*p*
			LL	*UL*	
Child age X self-efficacy	-.03	.01	-.02	.01	.154
R^2	.34				
R^2 change	.01				
ΔF	1.30				.262

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*$p < .05$; **$p<.01$; ***$p<.001$

Table 12

Linear Regression Examining the Impact of Media Effect Concerns on Restrictive Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parent employment	.03	.05	-.07	.13	.540
Parent religiosity (1 = practice religion)	.12	.08	-.04	.28	.136
Parent devoutness	.09	.08	-.01	.28	.136
Child tablet use	.13*	.03	.02	.15	.013
Child e-reader use	.22***	.03	.07	.20	<.001
R^2	.11				
Model 2: Main Effects					
Parent employment	.04	.05	-.06	.14	.444
Parent religiosity (1 = practice religion)	.05	.08	-.11	.20	.566
Parent devoutness	.04	.07	-.09	.20	.436
Child tablet use	.05	.03	-.03	.10	.297
Child e-reader use	.17**	.03	.04	.17	.001
Child age	.00	.01	-.02	.02	.944
Desensitization susceptibility	.06	.06	-.19	.06	.428
Desensitization severity	-.08	.06	-.07	.16	.309
Fear susceptibility	.03	.05	-.07	.12	.612
Fear severity	.16*	.06	.01	.23	.035
Hostility susceptibility	.13	.06	-.01	.21	.085
Hostility severity	.04	.06	-.08	.16	.564
Aggression susceptibility	.11	.06	-.03	.19	.161
Aggression severity	.09	.06	-.05	.19	.265
Cultivation susceptibility	-.12	.06	-.22	.03	.124
Cultivation severity	.03	.06	-.09	.14	.662
R^2	.24				
R^2 change	.13				
ΔF	5.21***				<.001
Model 3: Interaction Effects					
Parent employment	.06	.05	-.05	.16	.278
Parent religiosity (1 = practice religion)	.00	.08	-.16	.16	.998
Parent devoutness	.03	.07	-.10	.19	.559
Child tablet use	.06	.03	-.03	.11	.223
Child e-reader use	.16**	.03	.03	.16	.003
Child age	.01	.01	-.02	.02	.804
Desensitization susceptibility	.02	.06	-.10	.13	.791
Desensitization severity	-.09	.06	-.20	.05	.244

	Estimate	*SE*	*95% C.I.*		*p*
			LL	*UL*	
Fear susceptibility	.06	.05	-.06	.14	.404
Fear severity	.17*	.06	.01	.24	.027
Hostility susceptibility	.17*	.06	.01	.24	.029
Hostility severity	.02	.06	-.11	.14	.830
Aggression susceptibility	.09	.06	-.05	.17	.282
Aggression severity	.12	.07	-.03	.23	.129
Cultivation susceptibility	-.12	.06	-.22	.03	.136
Cultivation severity	.04	.06	-.10	.14	.719
Child age X desensitization susceptibility	.00	.01	-.03	.03	.995
Child age X desensitization severity	.11	.02	-.01	.05	.168
Child age X fear susceptibility	-.04	.01	-.03	.02	.592
Child age X fear severity	-.16*	.01	-.05	.00	.038
Child age X hostility susceptibility	.10	.01	-.01	.04	.246
Child age X hostility severity	.10	.01	-.01	.05	.184
Child age X aggression susceptibility	-.05	.01	-.04	.02	.509
Child age X aggression severity	-.09	.01	-.04	.01	.280
Child age X cultivation susceptibility	.11	.01	-.01	.05	.174
Child age X cultivation severity	.01	.01	-.02	.03	.906
R^2	.27				
R^2 change	.03				
ΔF	1.44				.160

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*$p < .05$; **$p<.01$; ***$p<.001$

Table 13

Linear Regression Examining Predictors of Negative Active Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parent religiosity (1 = practice religion)	.15	.08	-.01	.31	.067
Parent devoutness	.11*	.07	.02	.31	.030
Child tablet use	.14**	.03	.02	.15	.007
R^2	.04				
Model 2: Main Effects					
Parent religiosity (1 = practice religion)	.01	.07	-.14	.15	.926
Parent devoutness	.03	.07	-.09	.17	.578
Child tablet use	.00	.03	-.06	.06	.948
Child age	.03	.01	-.01	.02	.474
Total parental concern	.22***	.04	.11	.29	<.001
Parental engagement	.21***	.07	.13	.39	<.001
Parental accessibility	-.01	.00	.00	.00	.838
Mediation response efficacy	.29***	.04	.11	.28	<.001
Mediation self-efficacy	.07	.04	-.04	.13	.285
R^2	.28				
R^2 change	.25				
ΔF	20.49***				<.001
Model 3: Interaction Effects					
Parent religiosity (1 = practice religion)	-.03	.07	-.17	.12	.722
Parent devoutness	.04	.07	-.07	.19	.373
Child tablet use	-.02	.03	-.07	.19	.747
Child age	.05	.01	-.01	.02	.327
Total parental concern	.22***	.04	.11	.28	<.001
Parental engagement	.19***	.07	.11	.37	<.001
Parental accessibility	.01	.00	.00	.00	.856
Mediation response efficacy	.27***	.04	.09	.26	<.001
Mediation self-efficacy	.09	.00	.00	.00	.181
Child age X parental concern	.16**	.01	.01	.05	.002
Child age X parental engagement	-.13*	.01	-.06	-.01	.010
Child age X parental accessibility	.00	.00	.00	.00	.944
Child age X response efficacy	.14*	.01	.00	.04	.048
Child age X self-efficacy	-.08	.01	-.03	.01	.215
R^2	.30				
R^2 change	.03				
ΔF	3.22				.007

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*$p < .05$; **$p<.01$; ***$p<.00$

Table 14

Linear Regression Examining the Impact of Media Effect Concerns on Negative Active Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parent Religiosity (1 = practice religion)	.15	.08	-.01	.31	.067
Parent devoutness	.11*	.07	.02	.31	.030
Child tablet use	.14**	.03	.02	.15	.007
R^2	.04				
Model 2: Main Effects					
Parent religiosity (1 = practice religion)	.10	.08	-.06	.26	.208
Parent devoutness	.07	.07	-.04	.25	.160
Child tablet use	.09	.03	-.01	.12	.088
Child age	.01	.01	-.02	.02	.912
Desensitization susceptibility	.09	.06	-.05	.18	.259
Desensitization severity	.02	.06	-.11	.14	.818
Fear susceptibility	.00	.05	-.10	.10	1.00
Fear severity	-.07	.06	-.16	.06	.345
Hostility susceptibility	-.03	.06	-.13	.09	.732
Hostility severity	.19*	.06	.03	.27	.015
Aggression susceptibility	-.04	.06	-.14	.09	.650
Aggression severity	.16	.06	.00	.24	.055
Cultivation susceptibility	.03	.06	-.10	.14	.749
Cultivation severity	.06	.06	-.07	.17	.433
R^2	.16				
R^2 change	.12				
ΔF	4.35***				<.001
Model 3: Interaction Effects					
Parent Religiosity (1 = practice religion)	.04	.08	-.12	.20	.628
Parent devoutness	.06	.07	-.05	.23	.214
Child tablet use	.10	.03	.00	.13	.051
Child age	.02	.01	-.02	.02	.770
Desensitization susceptibility	.04	.05	-.08	.15	.584
Desensitization severity	.00	.06	-.13	.12	.962
Fear susceptibility	.03	.05	-.08	.12	.703
Fear severity	-.07	.06	-.16	.06	.393
Hostility susceptibility	.01	.06	-.10	.12	.872
Hostility severity	.15	.06	-.01	.24	.062

	Estimate	*SE*	*95% C.I.*		*p*
			LL	*UL*	
Aggression susceptibility	-.08	.06	-.17	.06	.360
Aggression severity	.20*	.06	.03	.28	.017
Cultivation susceptibility	.03	.06	-.10	.15	.708
Cultivation severity	.08	.06	-.06	.18	.322
Child age X desensitization susceptibility	.03	.01	-.02	.03	.673
Child age X desensitization severity	.14	.02	.00	.06	.087
Child age X fear susceptibility	-.07	.01	-.03	.01	.357
Child age X fear severity	-.16*	.01	-.05	.00	.049
Child age X hostility susceptibility	.13	.01	-.01	.05	.117
Child age X hostility severity	.15	.02	.00	.06	.078
Child age X aggression susceptibility	-.05	.01	-.03	.02	.570
Child age X aggression severity	-.10	.01	-.04	.01	.252
Child age X cultivation susceptibility	.07	.01	-.02	.04	.382
Child age X cultivation severity	-.04	.01	-.03	.02	.545
R^2	.21				
R^2 change	.05				
ΔF	1.91*				.043

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*p < .05; **p<.01; ***p<.001

Table 15

Linear Regression Examining Predictors of Positive Active Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parental political views	-.08	.04	-.14	.01	.107
Child tv viewing	.10	.05	-.01	.19	.062
Child tablet use	.15**	.04	.03	.16	.006
Child e-reader use	.14**	.03	.02	.14	.009
Child cell phone use	-.16**	.03	-.16	-.04	.002
R^2	.09				
Model 2: Main Effects					
Parental political views	-.09*	.03	-.13	.00	.049
Child tv viewing	-.01	.04	-.09	.08	.884
Child tablet use	.04	.03	-.04	.08	.481
Child e-reader use	.02	.03	-.04	.07	.624
Child cell phone use	-.10*	.03	-.11	.00	.044
Child age	-.07	.01	-.03	.01	.181
Total parental concern	.09*	.04	.00	.17	.046
Parental engagement	.24***	.06	.18	.44	<.001
Parental accessibility	.06	.00	.00	.00	.213
Mediation response efficacy	.36***	.04	.16	.33	<.001
Mediation self-efficacy	.04	.04	-.06	.10	.568
R^2	.36				
R^2 change	.27				
ΔF	24.73***				<.001
Model 3: Interaction Effects					
Parental political views	-.09*	.03	-.13	.00	.040
Child tv viewing	.01	.04	-.07	.09	.804
Child tablet use	.01	.03	-.05	.07	.782
Child e-reader use	.02	.03	-.04	.07	.679
Child cell phone use	-.10*	.03	-.12	-.01	.029
Child age	-.06	.01	-.03	.01	.236
Total parental concern	.09*	.04	.00	.17	.043
Parental engagement	.21***	.06	.14	.39	<.001
Parental accessibility	.07	.00	.00	.00	.102
Mediation response efficacy	.36***	.04	.16	.33	<.001
Mediation self-efficacy	.04	.04	-.05	.10	.514
Child age X parental concern	.14**	.04	.01	.05	.004
Child age X parental engagement	-.16***	.01	-.09	-.02	<.001
Child age X parental accessibility	.30	.00	.00	.00	.497
Child age X response efficacy	.14**	.01	.00	.04	.022

	Estimate	*SE*	*95% C.I.*		*p*
			LL	*UL*	
Child age X self-efficacy	-.08	.01	-.03	.01	.194
R^2	.39				
R^2 change	.04				
ΔF	4.36				<.001

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*p < .05; **p<.01; ***p<.001

Table 16

Linear Regression Examining the Impact of Media Effect Concerns on Positive Active Mediation Frequency

	Estimate	***SE***	***95% C.I.***		***p***
			LL	***UL***	
Model 1: Control Variables					
Parental political views	-.08	.04	-.14	.01	.107
Child tv viewing	.10	.05	-.01	.19	.062
Child tablet use	.15**	.04	.03	.16	.006
Child e-reader use	.14**	.03	.02	.14	.009
Child cell phone use	-.16**	.03	-.16	.04	.002
R^2	.11				
Model 2: Main Effects					
Parental political views	-.08	.04	-.14	.01	.101
Child tv viewing	.08	.05	-.02	.17	.131
Child tablet use	.11	.02	.00	.13	.062
Child e-reader use	.11*	.03	.01	.13	.034
Child cell phone use	-.09	.03	-.12	.01	.107
Child age	-.13*	.01	-.04	.00	.025
Desensitization susceptibility	-.13	.06	-.21	.02	.094
Desensitization severity	-.01	.06	-.13	.11	.865
Fear susceptibility	-.01	.05	-.10	.08	.843
Fear severity	.80	.06	-.05	.17	.292
Hostility susceptibility	-.04	.06	-.14	.08	.630
Hostility severity	.06	.06	-.07	.17	.430
Aggression susceptibility	.09	.06	-.05	.18	.252
Aggression severity	.02	.06	-.11	.14	.790
Cultivation susceptibility	.08	.06	-.07	.18	.360
Cultivation severity	.15*	.06	.01	.24	.038
R^2	.20				
R^2 change	.10				
ΔF	3.63***				<.001
Model 3: Interaction Effects					
Parental political views	-.10	.04	-.15	.01	.071
Child tv viewing	.08	.05	-.03	.17	.144
Child tablet use	.11	.04	.00	.14	.061
Child e-reader use	.10	.03	.00	.12	.060
Child cell phone use	-.08	.03	-.11	.02	.179
Child age	-.13*	.01	.02	-.04	.024
Desensitization susceptibility	-.11	.06	-.20	.03	.146
Desensitization severity	-.03	.07	-.15	.11	.722

	Estimate	*SE*	*95% C.I.*		*p*
			LL	*UL*	
Fear susceptibility	-.02	.05	-.11	.09	.834
Fear severity	.07	.06	-.06	.17	.336
Hostility susceptibility	-.03	.06	-.14	.09	.702
Hostility severity	.04	.06	-.09	.16	.579
Aggression susceptibility	.08	.06	-.06	.17	.349
Aggression severity	.02	.07	-.11	.15	.786
Cultivation susceptibility	.06	.07	-.08	.18	.460
Cultivation severity	.19*	.06	.03	.28*	.012
Child age X desensitization susceptibility	.03	.01	-.02	.03	.663
Child age X desensitization severity	.01	.02	-.03	.03	.869
Child age X fear susceptibility	-.09	.01	-.04	.01	.233
Child age X fear severity	-.06	.01	-.04	.02	.478
Child age X hostility susceptibility	.08	.01	-.01	.04	.351
Child age X hostility severity	.05	.02	-.02	.04	.552
Child age X aggression susceptibility	.03	.01	-.02	.03	.707
Child age X aggression severity	.06	.01	-.02	.04	.456
Child age X cultivation susceptibility	-.09	.01	-.04	.01	.300
Child age X cultivation severity	.00	.01	-.03	.03	.985
R^2	.21				
R^2 change	.01				
ΔF	0.55				.853

Note: Standardized regression coefficients are presented for all explanatory variables, with the exception of dichotomous variables. CI = confidence interval; *LL* = lower limit, *UL* = upper limit
*$p < .05$; **$p<.01$; ***$p<.001$

Table 17

Study 1B Descriptive Statistics

	M	*SD*	*Min*	*Max*	*Skewness M*
Parental mediation response efficacy					
Positive active mediation	5.45	1.22	1.00	7.00	-.88
Negative active mediation	5.55	1.12	1.00	7.00	-.90
Average	5.59	1.15	1.50	7.00	-.75
Parental mediation self-efficacy					
Positive active mediation	5.60	1.22	1.00	7.00	-.82
Negative active mediation	5.68	1.14	1.00	7.00	-.78
Average	5.45	1.11	1.63	7.00	-.64
Parental attitudes towards mediation					
Restrictive mediation	4.06	0.81	1.00	5.00	-.58
Active mediation	4.08	0.81	1.00	5.00	-.54
Overall mediation	4.12	0.73	1.00	5.00	-.79
Advice response					
Fear	2.40	1.21	1.00	5.00	.38
Efficacy	3.96	0.82	1.00	5.00	-.65
Comprehensibility	3.89	0.70	1.00	5.00	.00
Feasibility	3.59	0.75	1.00	5.00	.33
Absence of limitations	3.22	0.83	1.00	5.00	.58
Confirmation	3.87	0.83	1.00	5.00	-.68
Quality	4.02	0.79	1.00	5.00	.56
Implementation intention	3.95	0.81	1.00	5.00	-.49
Parental perceptions of susceptibility					
Desensitization	3.32	1.08	1.00	5.00	-.45
Fear	3.29	1.16	1.00	5.00	-.49
Hostility	3.23	1.12	1.00	5.00	-.30
Aggression	3.25	1.08	1.00	5.00	-.36
Cultivation	3.26	1.12	1.00	5.00	-.40
Parental perceptions of severity					
Desensitization	3.47	1.04	1.00	5.00	-.64
Fear	3.40	1.10	1.00	5.00	-.54
Hostility	3.50	1.05	1.00	5.00	-.58
Aggression	3.60	1.03	1.00	5.00	-.77
Cultivation	3.49	1.03	1.00	5.00	-.65
Parental anxiety					
Desensitization	2.77	1.24	1.00	5.00	.01

	M	*SD*	*Min*	*Max*	*Skewness M*
Fear	2.75	1.29	1.00	5.00	-.03
Hostility	2.79	1.28	1.00	5.00	.03
Aggression	2.85	1.31	1.00	5.00	-.03
Cultivation	2.80	1.28	1.00	5.00	-.05
Parental threat perception					
Desensitization	3.39	0.92	1.00	5.00	-.53
Fear	3.34	1.00	1.00	5.00	-.49
Hostility	3.36	0.96	1.00	5.00	-.42
Aggression	3.42	0.92	1.00	5.00	-.54
Cultivation	3.37	0.96	1.00	5.00	-.55
Total	3.38	0.86	1.00	5.00	-.53
Parental concern					
Desensitization	3.19	0.90	1.00	5.00	-.31
Fear	3.14	0.98	1.00	5.00	-.31
Hostility	3.17	0.95	1.00	5.00	-.21
Aggression	3.32	0.94	1.00	5.00	-.29
Cultivation	3.18	0.95	1.00	5.00	-.34
Total	3.18	0.88	1.00	5.00	-.30

Table 18

Study 1B Correlations Between Predictor and Dependent Variables

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Implementation Intention	.62**	.61**	.75**	.50**	.24**	.37**	.65**	.28**	.08	.23**	.45**	.52**	.46**	.47**
2. Attitudes towards active mediation	–	.77**	.65**	.47**	.29**	.50**	.65**	.30**	-.04	.19**	.59**	.56**	.65**	.63**
3. Attitudes towards restrictive mediation	–	–	.59**	.39**	.22**	.40**	.59**	.38**	.03	.22**	.54**	.57**	.58**	.61**
4. Message quality	–	–	–	.55**	.23**	.42**	.67**	.32**	.11*	.21**	.50**	.53**	.56**	.55**
5. Message confirmation	–	–	–	–	.09	.23**	.53**	.34**	.08	.18**	.38**	.37**	.39**	.36**
6. Message limitation	–	–	–	–	–	.51**	.22**	-.11*	-.19**	-.03	-.23**	.18*	.24**	.22**
7. Message feasibility	–	–	–	–	–	–	.40**	-.06	-.06	.06	.43**	.34**	.45**	.38**
8. Message efficacy	–	–	–	–	–	–	–	.43**	.12*	.25**	.51**	.54**	.50**	.56**
9. Message comprehensibility	–	–	–	–	–	–	–	–	.11*	.19**	.28**	.32**	.28**	.31**
10. Effect susceptibility	–	–	–	–	–	–	–	–	–	.57**	.02	.06	-.05	.01
11. Effect severity	–	–	–	–	–	–	–	–	–	–	.25**	.27**	.15**	.20**
12. Positive active mediation self-efficacy	–	–	–	–	–	–	–	–	–	–	–	.81**	.73**	.68**
13. Positive active mediation response efficacy	–	–	–	–	–	–	–	–	–	–	–	–	.67**	.71**
14. Negative active mediation self-efficacy	–	–	–	–	–	–	–	–	–	–	–	–	–	.82**
15. Negative active mediation response-efficacy	–	–	–	–	–	–	–	–	–	–	–	–	–	–

*p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 19

Means, Standard Deviations, and One-Way ANOVA Statistics in Pre- and Post-Advice Self-Efficacy and Response Efficacy

	No efficacy		***Combination***		***Self-Efficacy***		***Response Efficacy***			
Positive Active Mediation	***M***	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***	***F***	***p***
Pre-advice SE	5.41	1.21	5.68	1.10	5.46	1.39	5.68	1.24		
Post-advice SE	5.46	1.34	5.73	1.14	5.50	1.16	5.59	1.35		
Self-efficacy									0.01 (1, 348)	.909
SE X Condition									0.35 (3, 348)	.788
Pre-advice RE	5.18	1.18	5.31	1.17	5.16	0.99	5.35	1.26		
Post-advice RE	5.21	1.26	5.54	1.24	5.41	1.22	5.47	1.24		
Response efficacy									9.04* (1, 348)	.003
RE X Condition									0.98 (3, 348)	.400
Negative Active Mediation										
Pre-advice SE	5.47	1.25	5.70	1.10	5.59	1.32	5.80	1.16		
Post-advice SE	5.37	1.24	5.76	1.15	5.67	1.24	5.74	1.19		
Self-efficacy									.05 (1, 349)	.831
SE X Condition									.77 (1, 349)	.512
Pre-advice RE	5.18	1.22	5.48	1.18	5.38	1.11	5.54	1.15		
Post-advice RE	5.28	1.22	5.71	1.04	5.45	1.22	5.56	1.18		
Response efficacy									3.98* (3, 349)	.047
RE X Condition									0.71 (3, 349)	.545

Note: SE = self-efficacy, RE = response efficacy, (intercept df, error df), *$p < .05$

Table 20

Means, Standard Deviations, and One-Way ANOVA Statistics for Message Response Variables

	No efficacy		***Combina-tion***		***Self-Efficacy***		***Response Efficacy***				
	M	***SE***	***M***	***SE***	***M***	***SE***	***M***	***SE***	***F***	η_p^2	***p***
Implementation intention	3.86	.08	3.97	.09	3.89	.09	4.07	.09	1.20 (3, 349)	.01	.309
Overall attitudes	3.96	.08	4.17	.08	4.05	.08	4.10	.08	1.24 (3, 349)	.01	.296
Message quality	3.85	.08	4.07	.08	3.98	.09	4.18	.09	2.77* (3, 348)	.02	.042
Feasibility	3.54	.08	3.65	.08	3.56	.08	3.59	.08	0.35 (3, 348)	.00	.789
Limitation	3.20	.09	3.16	.09	3.23	.09	3.29	.09	0.37 (3, 349)	.00	.777
Confirmation	3.88	.09	3.79	.09	3.82	.09	4.01	.09	1.17 (3, 348)	.01	.320
Efficacy	3.86	.09	3.97	.09	3.95	.09	4.07	.09	0.95 (3, 348)	.01	.415

Note: (intercept df, error df), *$p < .05$

Table 21

Indirect Effect of Response Efficacy on Implementation Intention

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		Conclusion
	M *SD*	M *SD*	M *SD*	Lower Bound	Upper Bound	
Response efficacy→ perceived threat→ implementation intention	.29** *.04*	.24** *.04*	.05 *.02*	.02	.08	Partial mediation
Self-efficacy→ perceived threat→ implementation intention	.34** *.03*	.31** *.03*	.03 *.01*	.01	.06	Partial mediation

*p-value < 0.05 (2-tailed) **p-value < 0.01 (2-tailed).

Table 22

Mean Differences in Message Quality by Condition

	MD	*SE*	*95% CI* [LL, UL]	*Two-Sided p-value*
No efficacy condition vs.				
Combination condition	-0.22	.12	[-.52, .08]	.227
Self-efficacy condition	-0.13	.12	[-.43, .18]	.716
Response efficacy condition	-0.33*	.12	[-.63, -.02]	.031
Combination efficacy condition vs.				
Self-efficacy condition	.10	.12	[-.14, .33]	.415
Response efficacy condition	-.11	.12	[-.34, 13]	.377
Self-efficacy condition vs.				
Response efficacy condition	-.20	.12	[-.44, .04]	.09

*$p < .05$

FIGURES

Figure 1

Relationship Between Child Age and Frequency of Parental Mediation Behaviors

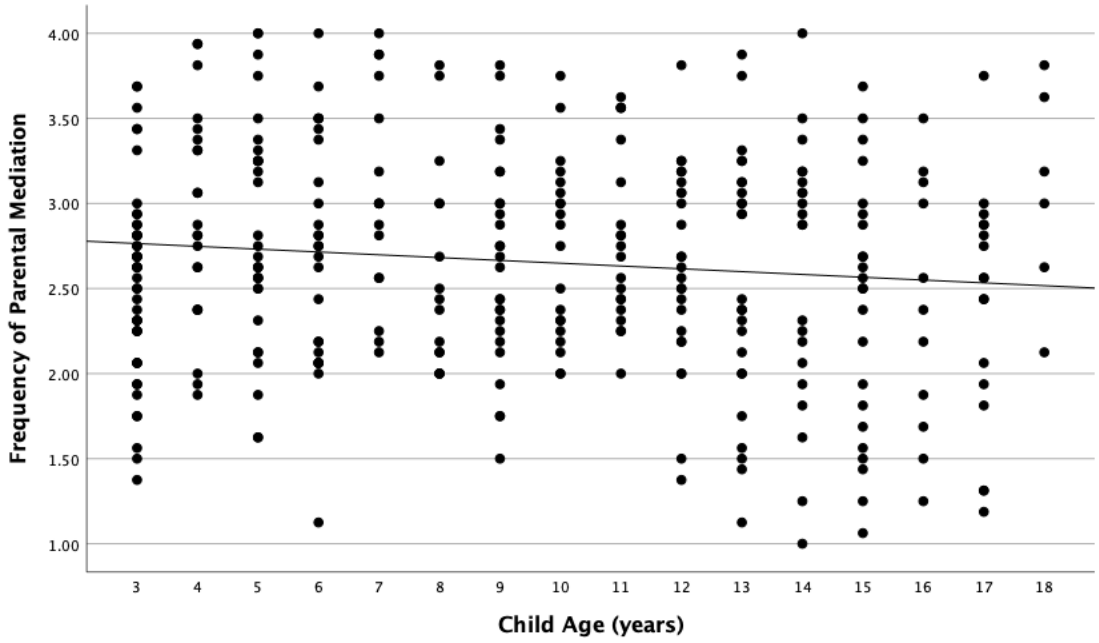


Figure 2

Relationship Between Child Age and Restrictive Mediation Frequency

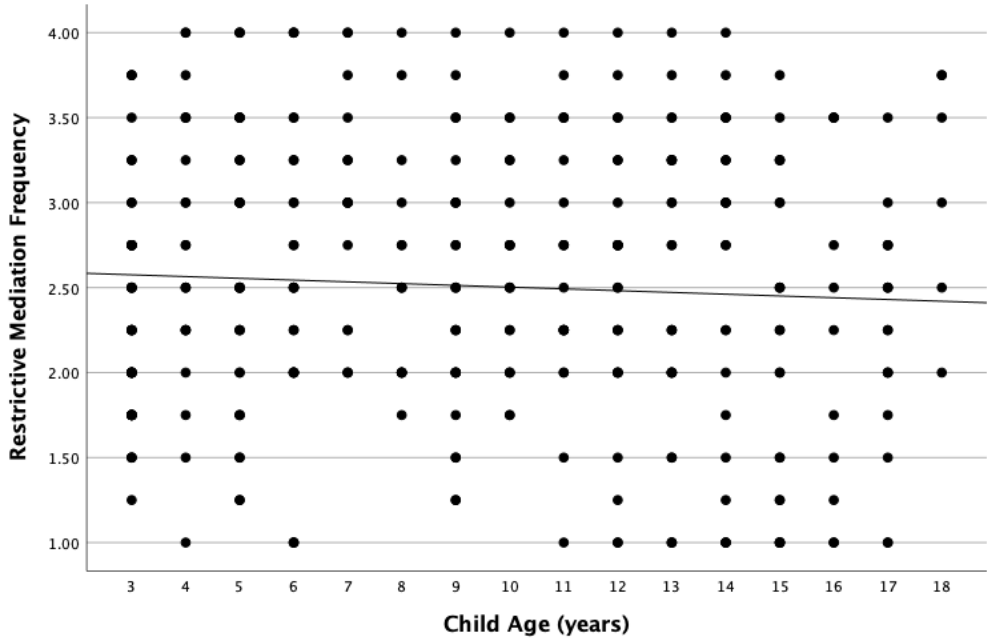


Figure 3

Relationship Between Child Age and Negative Active Mediation Frequency

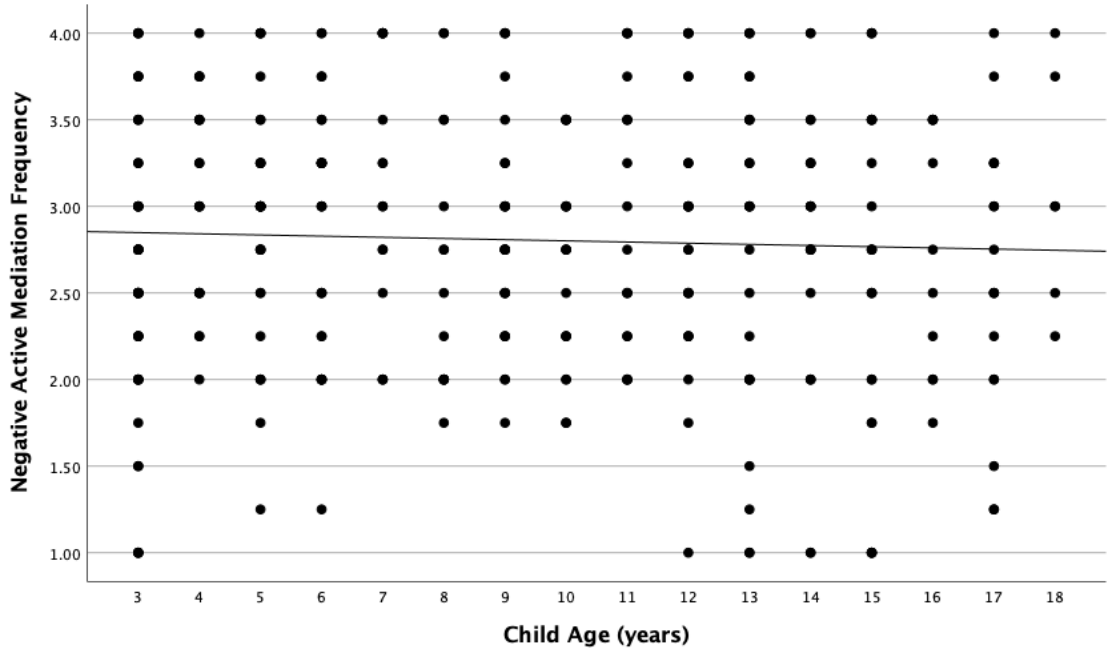


Figure 4

Relationship Between Child Age and Positive Active Mediation Frequency

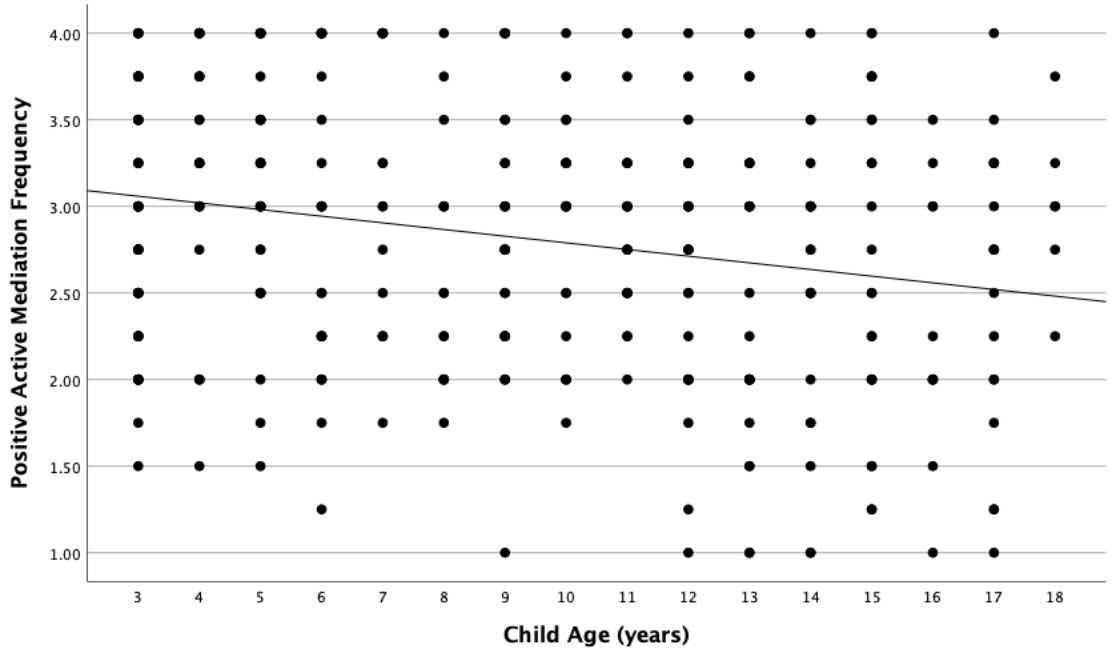


Figure 5

Interaction Between Parental Concerns and Child Age on Frequency of Parental Mediation

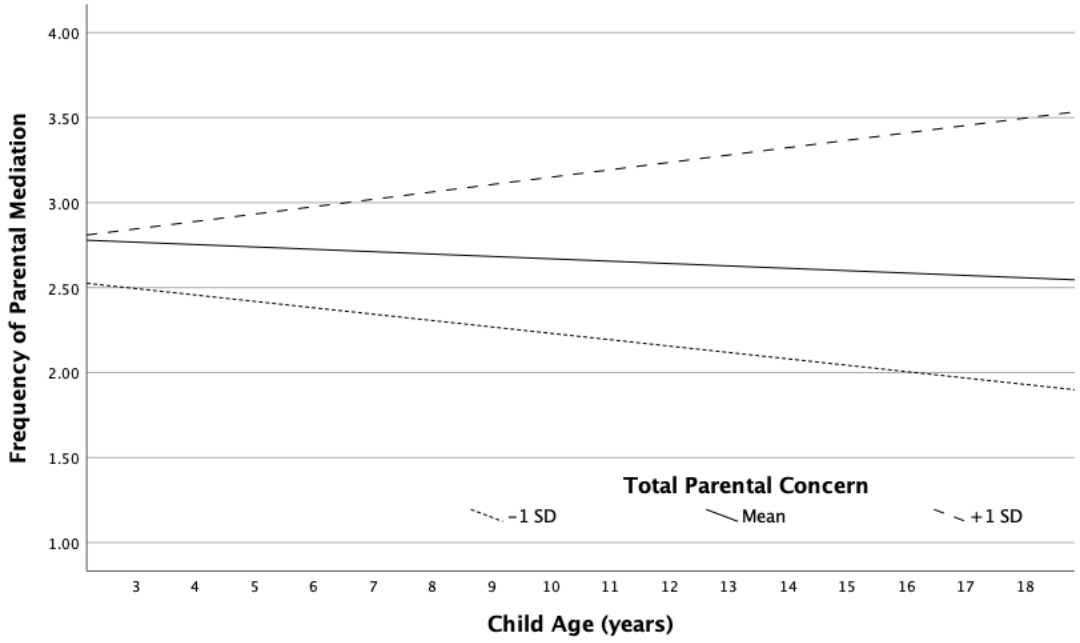


Figure 6

Interaction Between Parental Engagement and Child Age on the Frequency of Parental Mediation

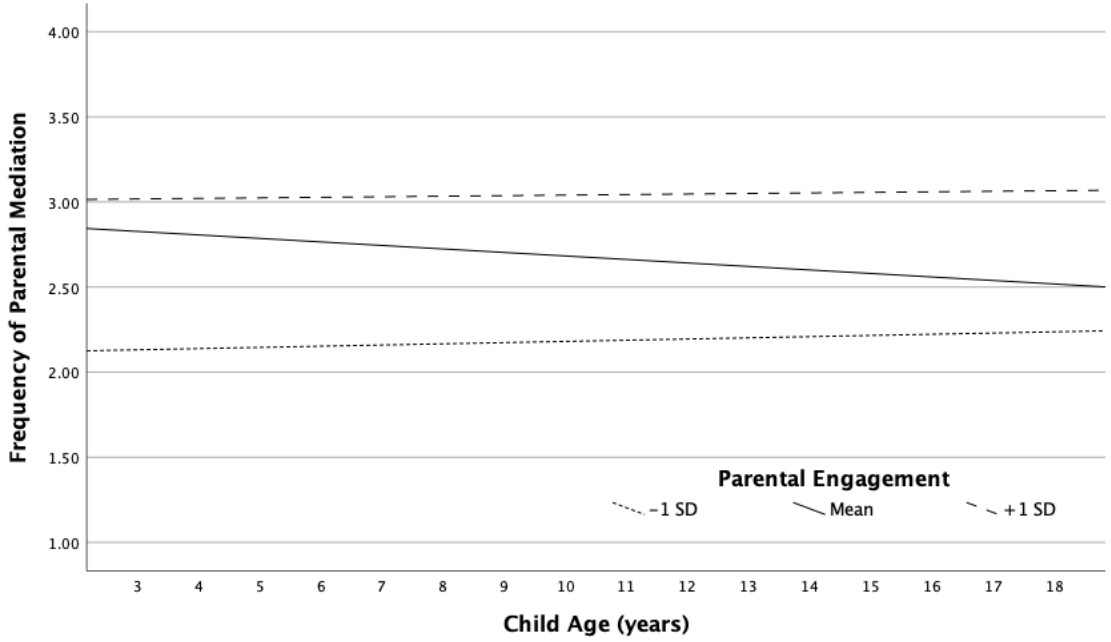


Figure 7

Interaction Between Parent Response Efficacy and Child Age on the Frequency of Parental Mediation

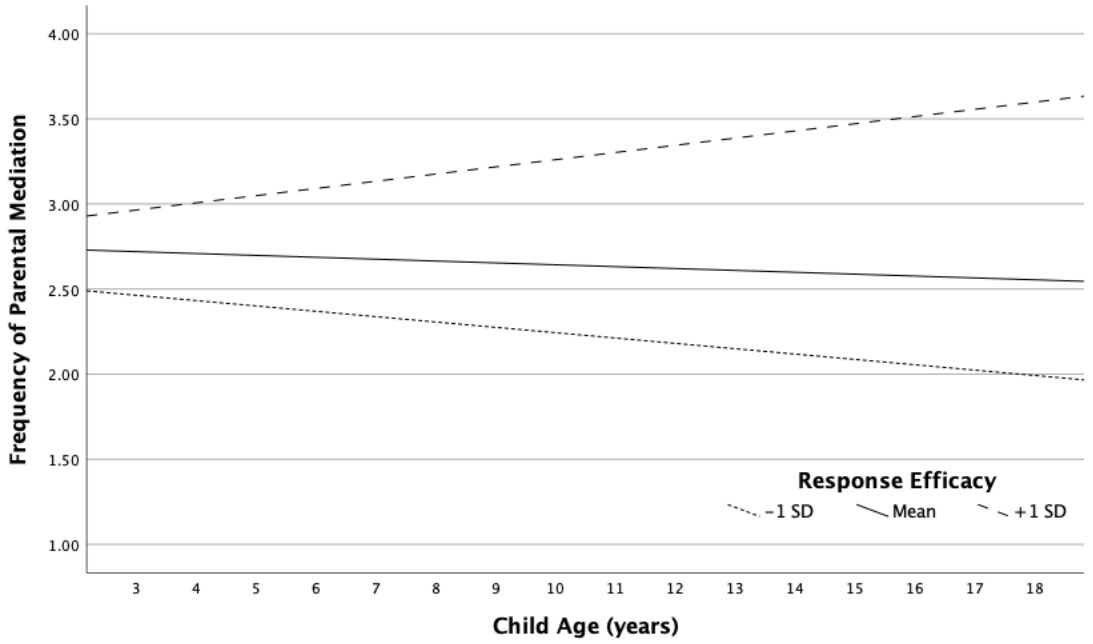


Figure 8

Interaction Between Parental Concerns and Child Age on Negative Active Mediation Frequency

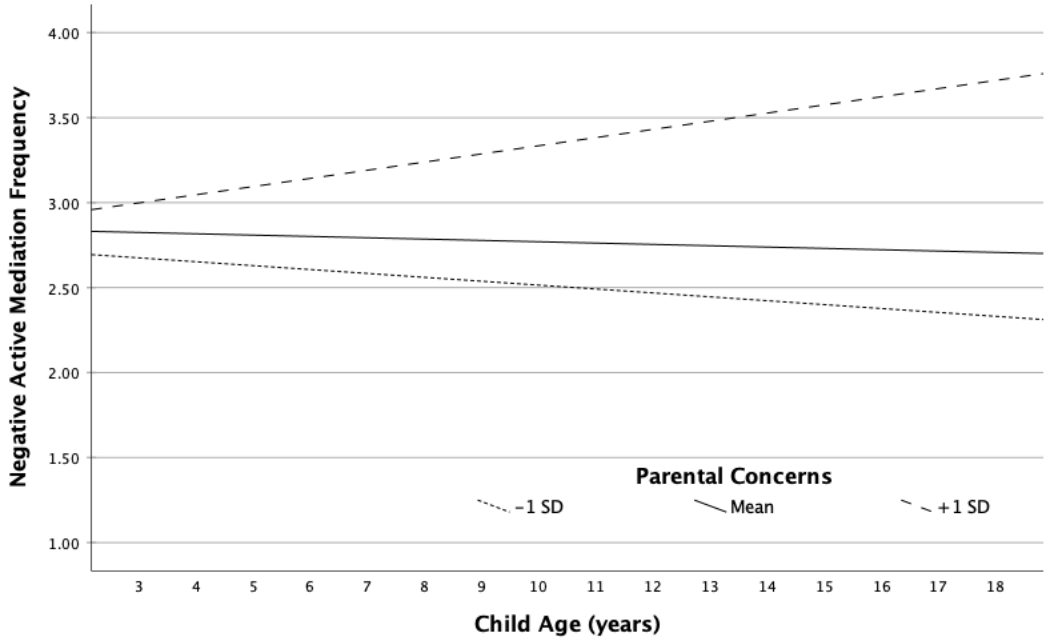


Figure 9

Interaction Between Parental Engagement and Child Age on Negative Active Mediation Frequency

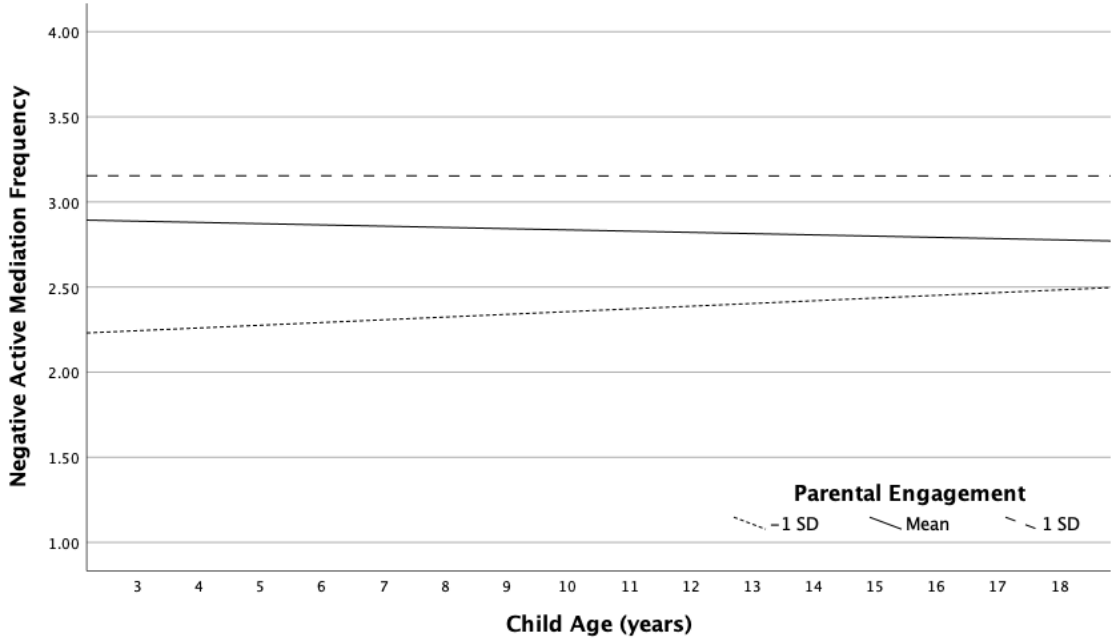


Figure 10

Interaction Between Negative Active Mediation Response Efficacy and Child Age on Negative Active Mediation Frequency

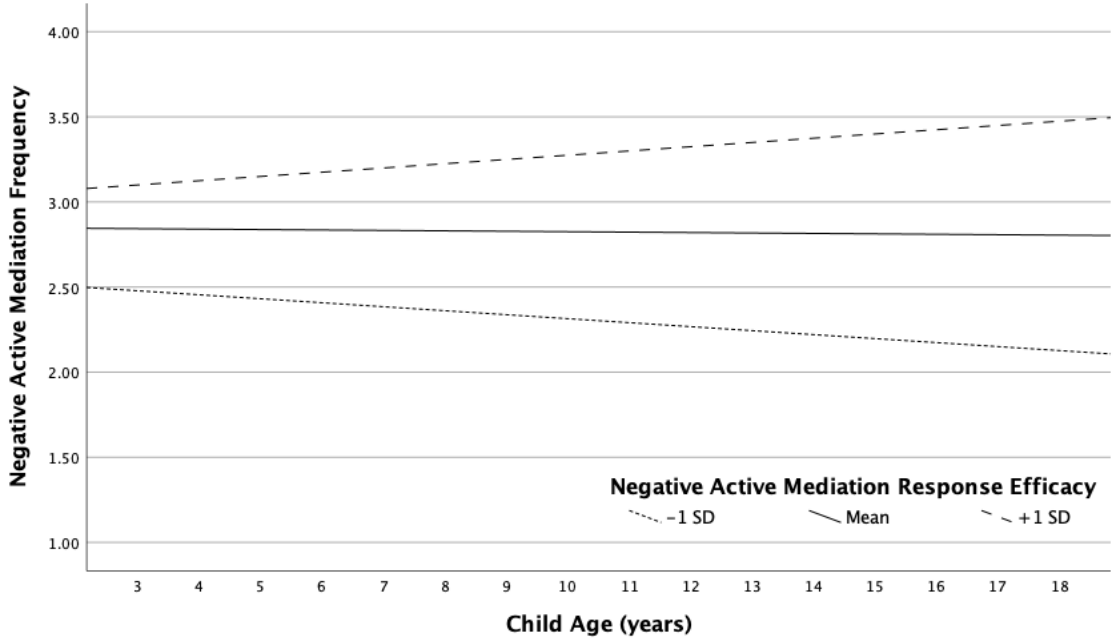


Figure 11

Interaction Between Perceptions of the Severity of Fear and Child Age on Negative Active Mediation Frequency

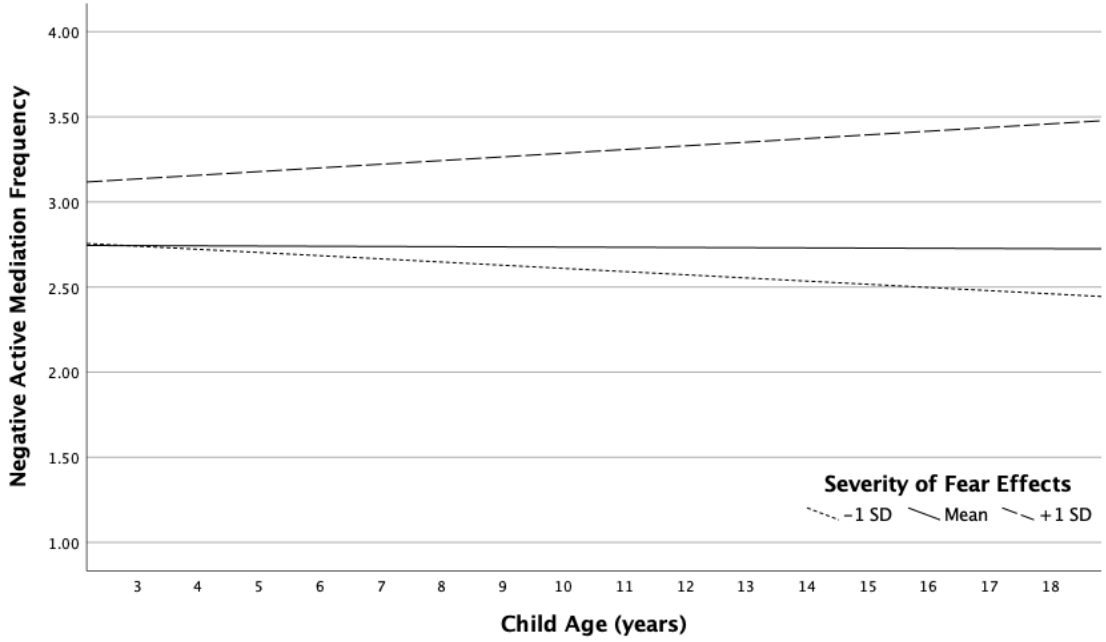


Figure 12

Interaction Between Child Age and Parental Concern on Positive Active Mediation

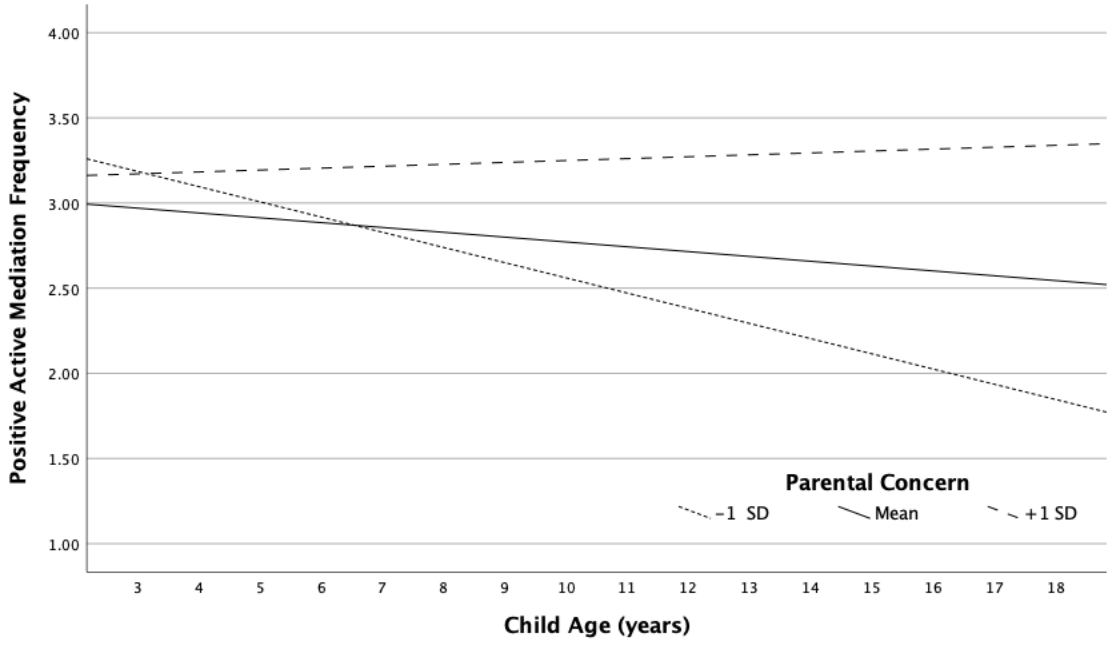


Figure 13

Interaction Between Child Age and Parental Engagement on Positive Active Mediation Frequency

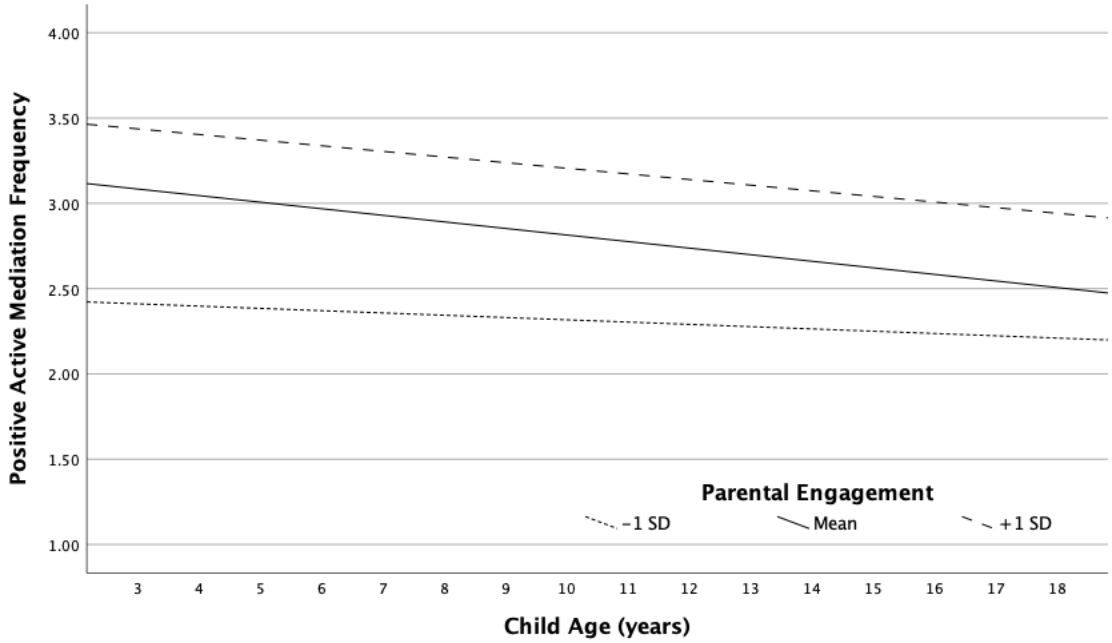
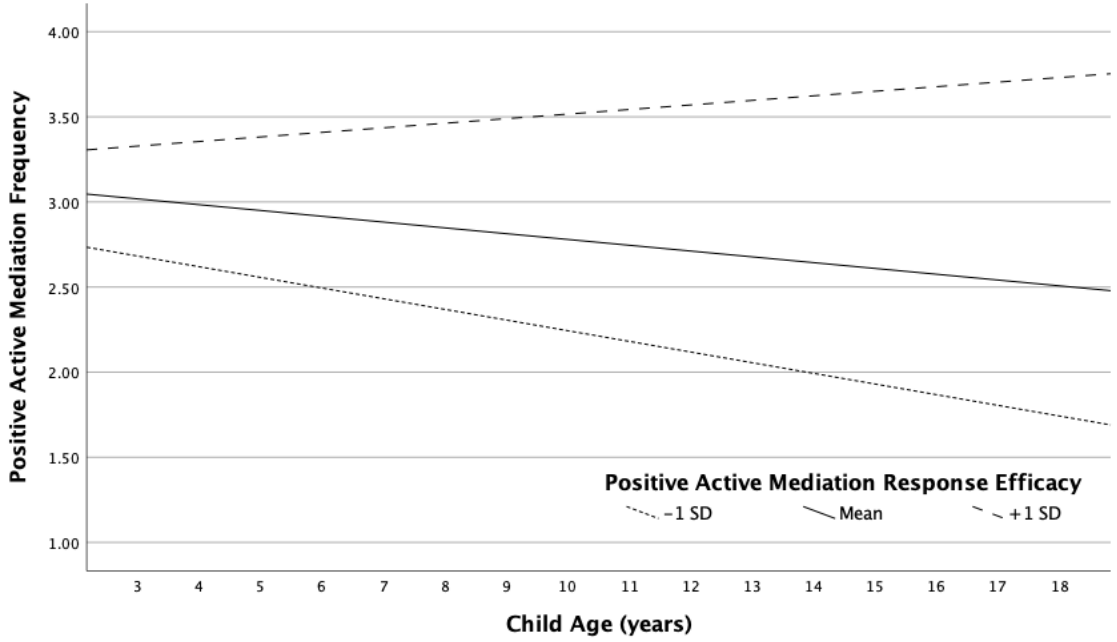


Figure 14

Interaction Between Child Age and Positive Active Mediation Response Efficacy on Positive Active Mediation Frequency



APPENDICES

Appendix A: Complete Questionnaire

Demographic information

Child age & gender

For the following survey, please think about your child who has the next birthday and respond to the survey with that child in mind.

How old is your child (years)?	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

What gender does your child identify as?	Male	Female	Nonbinary	Other

Child Screen Use

How many hours does your child use screen media for non-school activities per weekday?	0	1	2	3	4	5	6	7	8	9	10+
Weekend Day?	0	1	2	3	4	5	6	7	8	9	10+

What medium does your child use the most?	TV	Tablet	Video game console	E-reader	Cell phone
In order of frequency, rank the activities your child engages with during their screen time?	Watching TV shows or movies	Playing games	Using social media	Texting or calling friends	Browsing the web
How has your child's screen time changed since the start of the COVID-19 pandemic?	Stayed the same	Increased	Decreased		

Parent demographics

How old are you (in years)	>18	18-24	25-34	35-44	45-54	55-64	65+

What gender do you identify as?	Male	Female	Nonbinary	Other

What race or ethnicity applies to you?	American Indian or Alaskan Native	Asian	Black or African American	Hispanic, Latino, or Spanish	Middle Eastern or North African
	Native Hawaiian or other Pacific Islander	White	Multiethnic	Prefer not to disclose	Other

What is your highest level of education?	Some high school	High school degree or GED	Trade school or vocational school	Some college	Bachelor's degree	Master's degree	Professional degree or doctorate

What is your current employment status?	Currently employed full time	Currently employed part time	Currently unemployed	
How would you classify your political views?	Extremely liberal	Liberal	Neutral	Conservative	Extremely conservative

Do you actively practice religion?	Yes				No
	How devout would you describe yourself?	Extremely devout (actively practice my religion daily)	Somewhat devout (actively practice my religion most days)	Not very devout (sporadically practice my religion)	

Family Structure

How many people (including yourself) live in your household?	2	3	4	5	6	7	8	9	10+

What is your gross annual household income?	>$10,000	$10,000-$14,999	$15,000-$24,999	$25,000-$34,999	$35,000-$49,999
	$50,000-$74,999	$75,000-$99,999	$100,000-$149,999	$150,000-$199,999	$200,000+

Parental Involvement

Accessibility

How many hours do you spend at home or other places with children on a typical weekday?	Numerical Input
How many hours do you spend at home or other places with children on a typical weekend day?	Numerical Input

Engagement

How often do you do the d with your child?

1 = never, 4 = always

Participate in recreational activities like picnics, movies, sporting events, or concerts?
Have social get-togethers with friends or relatives?
Attend religious services or church groups?
Participate in hobby, service, or community groups?
Help your child with reading or homework?
Spend time at home working on a project or playing together?
Have private talks about school or other things?

Baseline Mediation Questions

Current parental mediation practices (Beyens et al., 2019)

Think about how you currently interact with your child about their media use. How often do you…

1 = never, 4 = always		
Restrictive	**Negative Active**	**Positive Active**
forbid your child to watch certain TV programs or movies?	tell your child that certain things in a television program or movie are wrong?	encourage your child to play an educational computer or video game?
tell your child that s/he is not allowed to play a certain computer or video games?	explain your child that things that happen in computer or video games are often not possible in real life?	encourage your child to watch an educational program or DVD?
forbid your child to watch television programs or movies that contain violence?	explain your child that violence in real life often hurts more than is shown in computer or video games?	encourage your child to play a certain computer or video game because it is good for his/her cognitive development?
tell your child that s/he is not allowed to play violent computer or video games?	tell your child that s/he is not allowed to imitate the fighting in television programs or computer or video games?	encourage your child to watch a certain program or DVD because it is good for his/her emotional or social development?

Attitudes towards parental mediation (Rasmussen et al., 2016)

1= strongly disagree, 3= neither agree nor disagree, 5 = strongly agree	
Active Mediation	**Restrictive Mediation**
Parents should sit down and talk with their kids about all of the bad and good things about TV and movies.	Parents should make rules about the amount of time their kids can spend with TV/movies.
Parents should have regular conversations with their kids about what their kids see on TV and in movies.	Parents should make rules about what kind of TV/movie content their kids can view.
Parents should have regular conversations with their kids about TV/movie content the parent thinks is objectionable.	Parents should not allow their kids to view certain TV/movie content until they are older.

Parents should regularly ask their kids about how appropriate they think certain TV/movie content is.	Parents should use technology to block TV/movie content they think is bad for their kids.
Parents should regularly share their opinions with their kids about certain TV/movie content.	Parents should use technology to monitor their kids' exposure to TV/movies.

Parental mediation self-efficacy (Nathanson et al., 2002)

1= not at all capable,4= neither capable nor incapable, 7= extremely capable		
Restrictive	**Negative Active**	**Positive Active**
How capable are you at forbidding your child from watching certain TV programs or movies?	How capable are you at telling your child that certain things in a television program or movie are wrong?	How capable are you at encouraging your child to play an educational computer or video game?
How capable are you at telling your child that s/he is not allowed to play a certain computer or video game?	How capable are you at explaining to your child that things that happen in computer or video games are often not possible in real life?	How capable are you at encouraging your child to watch an educational program or DVD?
How capable are you at forbidding your child from watching television programs or movies that contain violence?	How capable are you at explaining to your child that violence in real life often hurts more than is shown in computer or video games?	How capable are you at encouraging your child to play a certain computer or video game because it is good for his/her cognitive development?
How capable are you at telling your child that s/he is not allowed to play violent computer or video games?	How capable are you at telling your child that s/he is not allowed to imitate the fighting in television programs or computer or video games?	How capable are you at encouraging your child to watch a certain program or DVD because it is good for his/her emotional or social development?

Parental mediation response efficacy (Nathanson et al., 2002)

For the following items, please indicate how effective the actions are at reducing unwanted, negative effects from media…

1= not at all effective, 4 = neither effective nor ineffective, 7= extremely effective	
Restrictive	**Negative Active**
How effective is forbidding your child from watch certain TV programs or movies?	How effective is telling your child that certain things in a television program or movie are wrong?
How effective is telling your child that s/he is not allowed to play a certain computer or video game?	How effective is explaining to your child that things that happen in computer or video games are often not possible in real life?

How effective is forbidding your child to watch television programs or movies that contain violence?	How effective is explaining to your child that violence in real life often hurts more than is shown in computer or video games?
How effective is telling your child that s/he is not allowed to play violent computer or video games?	How effective is telling your child that s/he is not allowed to imitate the fighting in television programs or computer/video games?

For the following items, please indicate how effective the actions are at increasing desired, positive effects from media…

1= not at all effective, 4 = neither effective nor ineffective, 7= extremely effective
Positive Active
How effective is encouraging your child to play an educational computer or video game?
How effective is encouraging your child to watch an educational program or DVD?
How effective is encouraging your child to play a certain game because it is good for his/her cognitive development?
How effective is encouraging your child to watch a certain program or DVD because it is good for his/her emotional or social development?

Baseline parental perceptions of child susceptibility of negative effects (Riddle & Di, 2020)

Desensitization: Some people say violent video games/movies/TV programs can desensitize children. This means the violence makes them care about or empathize with victims of real-world violence less.

Fright: Some people say violent video games/movies/TV programs can scare children

Cultivation: Some people say violent video games/movies/TV programs can make children believe the real word is more violent and dangerous than it actually is.

Hostility: Some people say violent video games/movies/TV programs can make children feel hostile or angry

Aggression: Some people say violent video games/movies/TV programs can increase aggressive behaviors in children, like pushing, shoving, and bullying behaviors

1= definitely impossible, 3= neither possible nor impossible, 5= definitely possible				
Desensitization	**Fright**	**Hostility**	**Aggression**	**Cultivation**
do you think it is possible your child could become desensitized due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could become frightened due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could become hostile due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could become aggressive due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could cultivate the belief of a violent world due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?
1 = extremely unlikely, 3= neither likely nor unlikely, 5= extremely likely				

how likely is it your child would become desensitized in this scenario?	how likely is it your child would become frightened in this scenario?	how likely is it your child would become hostile in this scenario?	how likely is it your child would become aggressive in this scenario?	how likely is it your child would cultivate the belief of a violent world in this scenario?

Baseline parental perceptions of severity (Riddle & Di, 2020)

1= strongly disagree, 3= neither agree nor disagree, 5= strongly agree				
Desensitization	**Fright**	**Hostility**	**Aggression**	**Cultivation**
Imagine your child did experience desensitization…	Imagine your child did experience fright…	Imagine your child did experience hostility…	Imagine your child did experience aggression…	Imagine your child did experience cultivation…
This would be a serious problem	This would be a serious problem	This would be a serious problem	This would be a serious problem	this would be a serious problem
The consequences for society would be severe	The consequences for society would be severe	The consequences for society would be severe	The consequences for society would be severe	The consequences for society would be severe
The consequences for our family would be severe	The consequences for our family would be severe	The consequences for our family would be severe	The consequences for our family would be severe	The consequences for our family would be severe
It would be a significant threat to my child's well-being	It would be a significant threat to my child's well-being	It would be a significant threat to my child's well-being	It would be a significant threat to my child's well-being	It would be a significant threat to my child's well-being

Baseline parental anxiety (Riddle & Di, 2020)

1= not at all, 3= a moderate amount, 5= a great deal				
Desensitization	**Fright**	**Hostility**	**Aggression**	**Cultivation**
How nervous are you that desensitization could occur?	How nervous are you that fright could occur?	How nervous are you that hostility could occur?	How nervous are you that aggression could occur?	How nervous are you that cultivation could occur?
How anxious are you that desensitization could occur?	How anxious are you that fright could occur?	How anxious are you that hostility could occur?	How anxious are you that aggression could occur?	How anxious are you that cultivation could occur?
How worried are you that	How worried are you that fright could occur?	How worried are you that hostility could occur?	How worried are you that	How worried are you that

desensitization could occur?			aggression could occur?	cultivation could occur?
How concerned are you that desensitization could occur?	How concerned are you that fright could occur?	How concerned are you that hostility could occur?	How concerned are you that aggression could occur?	How concerned are you that cultivation could occur?

Advice exposure, mediation order counterbalanced

Efficacy Measures, completed after each subsection of advice

Post-advice parental mediation self-efficacy (Nathanson et al., 2002)

Now that you have read a doctor's advice about parental mediation, please indicate your perceived capability to engage in the following actions.

1= not at all capable,4= neither capable nor incapable, 7= extremely capable	
Negative Active	**Positive Active**
How capable are you at telling your child that certain things in a television program or movie are wrong?	How capable are you at encouraging your child to play an educational computer or video game?
How capable are you at explaining to your child that things that happen in computer or video games are often not possible in real life?	How capable are you at stimulating your child to watch an educational program or DVD?
How capable are you at explaining to your child that violence in real life often hurts more than is shown in computer or video games?	How capable are you at encouraging your child to play a certain computer or video game because it is good for his/her cognitive development?
How capable are you at telling your child that s/he is not allowed to imitate the fighting in television programs or computer or video games?	How capable are you at encouraging your child to watch a certain program or DVD because it is good for his/her emotional or social development?

Post-advice parental mediation response efficacy (Nathanson et al., 2002)

Now that you have received a doctor's advice about parental mediation, please indicate how effective the actions are at reducing unwanted, negative effects from media…

1= not at all effective, 4 = neither effective nor ineffective, 7= extremely effective
Negative Active
How effective is telling your child that certain things in a television program or movie are wrong?
How effective is explaining to your child that things that happen in computer or video games are often not possible in real life?
How effective is explaining to your child that violence in real life often hurts more than is shown in computer or video games?
How effective is telling your child that s/he is not allowed to imitate the fighting in television programs or computer/video games?

Now that you have received a doctor's advice about parental mediation, please indicate how effective the actions are at increasing desired, positive effects from media…

1= not at all effective, 4 = neither effective nor ineffective, 7= extremely effective
Positive Active
How effective is encouraging your child to play an educational computer or video game?
How effective is stimulating your child to watch an educational program or DVD?
How effective is encouraging your child to play a certain game because it is good for his/her cognitive development?
How effective is encouraging your child to watch a certain program or DVD because it is good for his/her emotional or social development?

Message response variables

Fear arousal (Witte, 1994)

Please rate how (nervous/tense/frightened/anxious/uncomfortable) you feel after reading the advice.

1= not at all, 5= very much
Nervous
Tense
Frightened
Anxious
Uncomfortable

Perceptions of Advice

Advice comprehensibility (MacGeorge et al., 2004)

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
I understood the advice
I was able to make sense of the advice
I was unable to comprehend the advice

Advice efficacy (Feng & MacGeorge, 2010)

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
I believe that the advised action can help solve my problem
I think the advised action can solve my difficulties
I perceive that the advised action can help fix my problem

Advice feasibility (MacGeorge et al., 2004)

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
The advice given is something I could do
The advice is suited to the problem I am having
I was advised to do something I am not capable of accomplishing
The advice recommended an action that is impossible for me to do

Advice limitations (Feng & MacGeorge, 2010)

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
I can see that the advised action has significant disadvantages
I can predict that the advised action has serious drawbacks

The advice does not impose too much on me

Advice confirmation (Feng & MacGeorge, 2010)

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
The advised action is something I had already planned to do
The advice recommended is something I already intended to do
I had already anticipated doing what the advice told me to do

Advice quality

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
The advice given was helpful
The advice given was appropriate
The advice given was effective

Advice implementation intentions (MacGeorge et al., 2004)

Please rate your agreement with the following statements

1 = strongly disagree, 3= neither disagree nor agree, 5= strongly agree
I intend to do what I was advised
I plan to follow the advice I was given
It is my intention to use the advice I was given

Post-advice attitude measures

Post-advice attitudes towards parental mediation (Rasmussen et al., 2016)

Now that you have read a doctor's advice about parental mediation, please indicate your agreement with the following statements.

1= strongly disagree, 3= neither agree nor disagree, 5 = strongly agree	
Active Mediation	**Restrictive Mediation**
Parents should sit down and talk with their kids about all of the bad and good things about TV and movies.	Parents should make rules about the amount of time their kids can spend with TV/movies.
Parents should have regular conversations with their kids about what their kids see on TV and in movies.	Parents should make rules about what kind of TV/movie content their kids can view.
Parents should have regular conversations with their kids about TV/movie content the parent thinks is objectionable.	Parents should not allow their kids to view certain TV/movie content until they are older.
Parents should regularly ask their kids about how appropriate they think certain TV/movie content is.	Parents should use technology to block TV/movie content they think is bad for their kids.
Parents should regularly share their opinions with their kids about certain TV/movie content.	Parents should use technology to monitor their kids' exposure to TV/movies.

Post-advice parental perceptions of child susceptibility of negative effects (Riddle & Di, 2020)

Now that you have received a doctor's advice about parental mediation, please indicate how possible the believe the following outcomes are for your child.

1= definitely impossible, 3= neither possible nor impossible, 5= definitely possible				
Desensitization	**Fright**	**Hostility**	**Aggression**	**Cultivation**

do you think it is possible your child could become desensitized due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could become frightened due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could become hostile due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could become aggressive due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?	do you think it is possible your child could cultivate the belief of a violent world due to playing violent video games/watching violent movies/watching violent TV programs for several weeks?
1 = extremely unlikely, 3= neither likely nor unlikely, 5= extremely likely				
how likely is it your child would become desensitized in this scenario?	how likely is it your child would become frightened in this scenario?	how likely is it your child would become hostile in this scenario?	how likely is it your child would become aggressive in this scenario?	how likely is it your child would cultivate the belief of a violent world in this scenario?

Post-advice parental perceptions of severity (Riddle & Di, 2020)

Now that you have received a doctor's advice about parental mediation, please indicate how possible the believe the following outcomes are for your child.

1= strongly disagree, 3= neither agree nor disagree, 5= strongly agree				
Desensitization	**Fright**	**Hostility**	**Aggression**	**Cultivation**
Imagine your child did experience desensitization…	Imagine your child did experience fright…	Imagine your child did experience hostility…	Imagine your child did experience aggression…	Imagine your child did experience cultivation…
This would be a serious problem	This would be a serious problem	This would be a serious problem	This would be a serious problem	this would be a serious problem
The consequences for society would be severe	The consequences for society would be severe	The consequences for society would be severe	The consequences for society would be severe	The consequences for society would be severe
The consequences for our family would be severe	The consequences for our family would be severe	The consequences for our family would be severe	The consequences for our family would be severe	The consequences for our family would be severe
It would be a significant threat to my	It would be a significant threat to my	It would be a significant threat to my	It would be a significant threat to my	It would be a significant threat to my

child's well-being	child's well-being	child's well-being	child's well-being	child's well-being

Post-advice parental anxiety (Riddle & Di, 2020)

Now that you have received a doctor's advice about parental mediation, please indicate your level of concern.

1= not at all, 3= a moderate amount, 5= a great deal				
Desensitization	**Fright**	**Hostility**	**Aggression**	**Cultivation**
How nervous are you that desensitization could occur?	How nervous are you that fright could occur?	How nervous are you that hostility could occur?	How nervous are you that aggression could occur?	How nervous are you that cultivation could occur?
How anxious are you that desensitization could occur?	How anxious are you that fright could occur?	How anxious are you that hostility could occur?	How anxious are you that aggression could occur?	How anxious are you that cultivation could occur?
How worried are you that desensitization could occur?	How worried are you that fright could occur?	How worried are you that hostility could occur?	How worried are you that aggression could occur?	How worried are you that cultivation could occur?
How concerned are you that desensitization could occur?	How concerned are you that fright could occur?	How concerned are you that hostility could occur?	How concerned are you that aggression could occur?	How concerned are you that cultivation could occur?

Appendix B: No Efficacy Advice Newsletter

AMERICAN ACADEMY OF PEDIATRICS NEWS

July 2022

FROM THE DESK OF DR. WILSON

Screens have found their way into every part of our kids' lives, and the research shows that as parents, we need to manage it. There are so many negative outcomes that can happen from our children's media use. It's not an exaggeration to say that kids mimic what they see in media. Do you remember the Slender Man stabbings? In 2014, 2 Wisconsin 12-year-old girls stabbed their friend 19 times because they thought it would make Slender Man, a faceless, long-armed, tall, ghostly video game character proud. Young girls had their childhood derailed all because they thought a video game character was real. The victim has gone on record detailing her prolonged sleep disturbances and trust issues. The perpetrators were sentenced to 25-40 years in a mental institution for something they did before they were 13. The majority of their lives will be experienced as a direct result of these actions from media use.

Unfortunately, negative outcomes from children's media use are all too common. Have you ever watched Netflix's 13 *Reasons Why*? Teen suicides spiked by 28% in the month following the release of 13 *Reasons Why*. Almost a 30% increase in teen suicides because of a TV show that glorified suicide. Teenage lives that could have been saved if not for this TV show.

These are some of the outcomes that can happen to our kids when parents are not involved in our children's media use. Any child can experience negative outcomes from their media use; no child is immune. Across the country, children are exposed to unprecedented levels of media violence, substance use, sex, profanity. Children are experiencing sleep disturbances and technology addiction. Every child is at risk to imitate what they see in the media.

Read on to learn about two types of interactions, formally called parental mediation, during your child's media use.

POSITIVE ACTIVE MEDIATION

Positive active mediation is any **type of comment a parent makes about the good they see in media**.

Positive active mediation can include a parent expressing approval of a certain program or character, endorsing a specific behavior in a show, or commenting about how realistic a show is.

Comments **communicate to a child that a parent approves** of an element of the media.

Examples of behaviors parents often comment on are:

- Helping others
- Expressing feelings
- Standing up for oneself
- Academic lessons, like:
  - Letter learning
  - Number learning
  - Word learning
  - Math skills
  - How to behave in social situations

Positive active mediation is a great tool to add to your parenting toolbox!

NEGATIVE ACTIVE MEDIATION

Negative active mediation is any **comment a parent makes disapproving of something in media**.

Negative active mediation uses a negative tone to communicate to a child that something in the media either isn't real, isn't likely to happen, is dangerous, or is something a parent disapproves of.

There is so much negative content in the media, there are many examples of content that parents can comment on, but some common examples are:

- Violence, such as:
  - Physical fighting
  - Gun use
  - Criminal activity
  - Blood and gore
- Substance use
- Scary content
- Sexual behavior
- Profanity use

Negative active mediation is a great way to **communicate to your child** that you **disapprove of something in the media**.

Appendix C: Combination Efficacy Newsletter

AMERICAN ACADEMY OF PEDIATRICS NEWS

July 2022

FROM THE DESK OF DR. WILSON

Screens have found their way into every part of our kids' lives, and the research shows that as parents, we need to manage it. There are so many negative outcomes that can happen from our children's media use. It's not an exaggeration to say that kids mimic what they see in media. Do you remember the Slender Man stabbings? In 2014, 2 Wisconsin 12-year-old girls stabbed their friend 19 times because they thought it would make Slender Man, a faceless, long-armed, tall, ghostly video game character proud. Young girls had their childhood derailed all because they thought a video game character was real. The victim has gone on record detailing her prolonged sleep disturbances and trust issues. The perpetrators were sentenced to 25-40 years in a mental institution for something they did before they were 13. The majority of their lives will be experienced as a direct result of these actions from media use.

Unfortunately, negative outcomes from children's media use are all too common. Have you ever watched Netflix's 13 *Reasons Why*? Teen suicides spiked by 28% in the month following the release of 13 *Reasons Why*. Almost a 30% increase in teen suicides because of a TV show that glorified suicide. Teenage lives that could have been saved if not for this TV show.

These are some of the outcomes that can happen to our kids when parents are not involved in our children's media use. Any child can experience negative outcomes from their media use; no child is immune. Across the country, children are exposed to unprecedented levels of media violence, substance use, sex, profanity. Children are experiencing sleep disturbances and technology addiction. Every child is at risk to imitate what they see in the media.

Read on to learn about research showing the effectiveness of two types of interactions, *formally called parental mediation*, as well as tips for easily using these mediation strategies.

NEGATIVE ACTIVE MEDIATION

Negative active mediation is any **comment a parent makes disapproving of something in media**. Parents often comment on behaviors they don't want their kid to imitate, but negative active mediation can also be used to challenge the reality of media.

When we comment on something we **don't like** in the content our kids watch, we **help them learn what is NOT acceptable.** Research has found benefits of negative active mediation.

- In one study, kids who watched Batman with an adult who explicitly made comments disapproving of the violence reported **less approval of violent acts.**
- Another study found **kids felt less fear** after watching a scary movie when their **parent reminded them that it wasn't real.**

Negative active mediation is simple to use. Making comments here and there while your child is watching media will make a big difference. Here are some examples:

- Make a **comment about how you don't like when people are violent**
  - "Ouch! That must've hurt when he got hit, I don't like that"
  - "Those bad guys look really scary, but luckily they aren't real"
- Express your **disapproval of any substance use you see in media.**
  - "Those kids look pretty young to be drinking, that is really dangerous."
- Take a **couple extra moments to peek over your kid's iPad while they play video games** and make a comment about how you don't like the guns they use.
  - "Those guns look very realistic, I bet they are really unsafe in real life."
- If you see something scary on the news, **explain to your child that it likely won't happen to them.**
  - "It is really scary that there was a shooting at that elementary school, but your school does a lot to keep you safe."
- If a scary moment happens in a movie, **remind your child that it is not real.**
  - "That monster looks really scary, but luckily monsters don't exist in the real world, they are just pretend."

POSITIVE ACTIVE MEDIATION

Positive active mediation is any **type of comment a parent makes about the good they see in media**.

According to research, kids can learn from parental comments on media, including: standing up for ourselves, standing up for others, helping others, expressing our feelings, perseverance, and academic skills.

- One study found that kids who watched an episode of *The Electric Company* with an **adult who explained the lessons in the show scored better on a vocabulary test** than children who watched with an adult who did not make any comments.
  - Researchers also found that **toddlers learned the name of a new object** if their **parent commented that the object was the same** one in the TV show.
- Another study found that kids who watched *All in the Family* with an **adult who made comments endorsing the nontraditional gender roles** in the show (ex: "*I really like how Michael is cooking while Gloria works.*") had **higher acceptance of nontraditional gender roles** than kids who did not hear these positive comments.

Making positive comments can be easy. When your kid is watching a TV show or playing a game, **take just a couple of seconds to pause** while you walk past them. When you see something good in the media, **make a quick comment** - it is that simple.

- While watching *Encanto*, you could say, "I really like how Luisa is telling Mirabel about how worn out she is feeling. Being honest about how we feel is really important!"
- While watching *Beauty & the Beast*, you could say, "It is really nice that Belle is helping the Beast after he was hurt by the wolves. Helping our friends when they get hurt is a really important part of friendship."

Appendix D: Self-Efficacy Newsletter

AMERICAN ACADEMY OF PEDIATRICS NEWS

July 2022

FROM THE DESK OF DR. WILSON

Screens have found their way into every part of our kids' lives, and the research shows that as parents, we need to manage it. There are so many negative outcomes that can happen from our children's media use. It's not an exaggeration to say that kids mimic what they see in media. Do you remember the Slender Man stabbings? In 2014, 2 Wisconsin 12-year-old girls stabbed their friend 19 times because they thought it would make Slender Man, a faceless, long-armed, tall, ghostly video game character proud. Young girls had their childhood derailed all because they thought a video game character was real. The victim has gone on record detailing her prolonged sleep disturbances and trust issues. The perpetrators were sentenced to 25-40 years in a mental institution for something they did before they were 13. The majority of their lives will be experienced as a direct result of these actions from media use.

Unfortunately, negative outcomes from children's media use are all too common. Have you ever watched Netflix's 13 *Reasons Why*? Teen suicides spiked by 28% in the month following the release of 13 *Reasons Why*. Almost a 30% increase in teen suicides because of a TV show that glorified suicide. Teenage lives that could have been saved if not for this TV show.

These are some of the outcomes that can happen to our kids when parents are not involved in our children's media use. Any child can experience negative outcomes from their media use; no child is immune. Across the country, children are exposed to unprecedented levels of media violence, substance use, sex, profanity. Children are experiencing sleep disturbances and technology addiction. Every child is at risk to imitate what they see in the media.

Read on to learn how to easily use two types of interactions, *formally called parental mediation*, during your child's media use.

NEGATIVE ACTIVE MEDIATION

Negative active mediation is any **comment a parent makes disapproving of something in media**. When we explicitly comment on something we don't like in the content our kids are watching, we are **helping them learn what is unacceptable.**

Negative active mediation is straightforward. Follow these examples to teach your child what is inappropriate:

- Make a **comment about how you don't like when people are violent**
  - “Ouch! That must've hurt when he got hit, I don't like that"
  - "Those bad guys look really scary, but luckily they aren't real"
- Express your **disapproval of any substance use** you see in media.
  - “Those kids look pretty young to be drinking, that is really dangerous.”
- Take a couple extra moments to **peek over your kid's iPad while they play video games** and make a comment about how you don’t like the guns they use.
  - “Those guns look very realistic, I bet they are really unsafe in real life.”
- If you see something scary on the news, e**xplain to your child that it likely won’t happen to them.**
  - “It is really scary that there was a shooting at that elementary school, but your school does a lot to keep you safe.”
- If a scary moment happens in a movie, **remind your child that it is not real.**
  - “That monster looks really scary, but luckily monsters don’t exist in the real world, they are just pretend.”

Negative active mediation is easy, you don’t even need to watch a whole program with your child. Pause while you walk past the TV and m**ake a comment here or there** to let your child know what behaviors are wrong, and remember to keep your tone negative when you see something negative on the screen.

POSITIVE ACTIVE MEDIATION

Positive active mediation is any **type of comment a parent makes about the good they see in media**. These comments can be as simple as you want. For example,

- While watching *Encanto* you could say, "I really like how Luisa is telling Mirabel about how worn out she is feeling. Being honest about how we feel is really important!"
- While watching Beauty & the Beast, you could say, "It is really nice that Belle is helping the Beast after he was hurt by the wolves. Helping our friends when they get hurt is a really important part of friendship.

It might feel like a lot of work to comment on everything your kid sees in media, but it is actually quite simple. Follow these tips to get into the habit of commenting on the good in your child's media!

1. When your kid is watching a TV show or playing a game, **take just a couple of seconds to pause** while you walk past them.
2. When you see something good in the media they are using, **make a quick comment** - it is that simple.

Quick comments about what your kid is seeing helps bring your **child's attention to good behaviors** that your child may not have noticed.

The best part is that positive active mediation can focus on what is important to your values:

- You get to choose what comments you make
- You get to choose what to bring to your child's attention to
- You are the one that is in control

Positive active mediation is a **simple way to highlight the good** in your child's media. Consistency is key, so make repeated comments and it will become second nature to you before you know it.

Appendix E: Response Efficacy Newsletter

AMERICAN ACADEMY OF PEDIATRICS NEWS

July 2022

FROM THE DESK OF DR. WILSON

Screens have found their way into every part of our kids' lives, and the research shows that as parents, we need to manage it. There are so many negative outcomes that can happen from our children's media use. It's not an exaggeration to say that kids mimic what they see in media. Do you remember the Slender Man stabbings? In 2014, 2 Wisconsin 12-year-old girls stabbed their friend 19 times because they thought it would make Slender Man, a faceless, long-armed, tall, ghostly video game character proud. Young girls had their childhood derailed all because they thought a video game character was real. The victim has gone on record detailing her prolonged sleep disturbances and trust issues. The perpetrators were sentenced to 25-40 years in a mental institution for something they did before they were 13. The majority of their lives will be experienced as a direct result of these actions from media use.

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These are some of the outcomes that can happen to our kids when parents are not involved in our children's media use. Any child can experience negative outcomes from their media use; no child is immune. Across the country, children are exposed to unprecedented levels of media violence, substance use, sex, profanity. Children are experiencing sleep disturbances and technology addiction. Every child is at risk to imitate what they see in the media.

Read on to learn what researchers are discovering about how two types of interactions, *formally called parental mediation*, can reduce these negative effects.

NEGATIVE ACTIVE MEDIATION

Negative active mediation is any **comment a parent makes disapproving of something in media**. Parents often comment on behaviors they don't want their kid to imitate, but negative active mediation can also be used to challenge the reality of media.

See a character punch someone in the movie your kid is watching?
Make a comment about how you don't like when people settle arguments with violence.

When we **comment on something we don't like** in the content our kids are watching, we are **helping them learn what is unacceptable**. Research has found multiple benefits of negative active mediation.

- In one study, kids who watched Batman with an adult who explicitly made comments disapproving of the violence reported **less approval of violent acts.**

The benefits go even further than just with violent content, too.

- Another research study found **kids felt less fear** after watching a scary movie when their **parent reminded them that it wasn't real.**
- Recent research has found that **negative active mediation reduced children's substance use, aggression, and sexual behaviors.**

Researchers have examined the benefits of negative active mediation for almost 50 years, and the results remain the same: Parent comments help children learn that what they see in the media is not appropriate.

POSITIVE ACTIVE MEDIATION

Positive active mediation is any **type of comment a parent makes about the good they see in media**.

These comments can be as simple as you want. For example, while watching Encanto you could say, "I really like how Luisa is telling Mirabel about how worn out she is feeling. Being honest about how we feel is really important!"

Over the years, researchers have been examining how positive active mediation can help children learn from media.

Some common behaviors that research tells us kids can learn from media include: standing up for ourselves, standing up for others, helping others, expressing our feelings, perseverance, and academic skills.

- One study found that kids who watched an episode of *The Electric Company* with an **adult who explained the lessons in the show scored better on a vocabulary test** than children who watched with an adult who did not make any comments.
  - Researchers also found that **toddlers learned the name of a new object** if their **parent commented that the object was the same** one in the TV show.
- Another study found that kids who watched *All in the Family* with an **adult who made comments endorsing the nontraditional gender roles** in the show (ex: "*I really like how Michael is cooking while Gloria works.*") had **higher acceptance of nontraditional gender roles** than kids who did not hear these positive comments.

These studies are just 3 examples of the abundance of research demonstrating the benefits of positive active mediation. Time and time again, research has shown that positive active mediation can make a big difference in children's media outcomes.