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The Parental Media Mediation Context of Young Children's Media Use

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Abstract

Researchers widely agree that how children spend their time is an important predictor of the development of their skills, relationships, attitudes, and behavior patterns. And while media estimates indicate that media plays a considerable presence in the daily life of most youngsters today, media use estimates in the absence of context present an incomplete picture. Not only can the context of media use influence whether or not media is consumed, but context can also influence the experience and subsequent effects of such media content. Despite this importance, media context is inconsistently investigated in the context of children's media use. To help address this gap, this study evaluated young Dutch children's media use through the contours of one context variable –parental media mediation. Working with parent-report data from a sample of children 3-8 years old, results of this study support the argument that the context matters. Not only is the type of parental mediation (restrictive, active) associated with different types of media use, but the style of mediation is also differentially associated with media use. Perhaps most notably, not only were children more likely to consume greater amounts of educational media content when their parents actively encouraged such content (as well as consume less violent content), but the effect size of these relationships was the largest among all of the relationships discovered in this study. Such findings have important implications for future research as well as for the messages that we share with parents about managing media at home.

Keywords. active mediation, children, context, parents, media, mediation, television, restrictive mediation

The Parental Media Mediation Context of Young Children's Media Use

For most young children today, media plays a key role in their daily home life. Whether watching television, playing video games, using apps, or even streaming YouTube videos, media are inextricably linked to the lives of most youngsters. Researchers have long contended that how children spend their time has a substantial influence on their development of skills, relationships, attitudes, and behavior patterns (Huston, Wright, Marquis, & Green, 1999). Just as adult's time use is considered a form of human capital (Juster & Stafford, 1991), children's investments of time can be viewed similarly, as these investments provide opportunities for learning, social activities, and other outcomes (Huston et al., 1999; Larson & Verman, 1999). Given that children's time use is an important determinant for development, it is not surprising that researchers are frequently in search of updated estimates on the amount of the time that youngsters spend with media. While these estimates are certainly valuable as researchers try to understand the types of socialization and developmental opportunities that youngsters are experiencing, they are often incomplete as they typically omit the crucial role of context.

Defined as the circumstances through which media use occurs, context can be conceptualized in many different ways. Ecological systems theory, for example, posits that media use can be examined through micro-level contexts (e.g., role of parents, peers), meso-level contexts (e.g., institutional influences), and macro-level contexts (e.g., influence of cultural norms and values) (Bronfenbrenner & Morris, 1998). Just as parents can restrict access to certain media content, norms and values in a given society may similarly discourage access to specific media (Valkenburg & Peter, 2013). Moreover, these contexts not only can influence whether or not media content is consumed, but they can also influence the experience and subsequent effects of such media content (Valkenburg & Peter, 2013). As such, understanding children's media use

through the contextual contours of their daily life can provide crucial information not only on the media children are using, but potentially how they experience and affected by it.

Despite the valuable information that context provides, research on the role of context in children's media use tends to be scattered and inconsistent. While some scholars treat context as core variables in theoretical models, the majority have either disregarded the role of context entirely or opted to statistically control for context rather than formally evaluating its relationship with media (Piotrowski & Valkenburg, in press). As a result, researchers have recently called for more systematic theorizing and investigations on the role of context in media research (Valkenburg & Peter, 2013). To help address this call, the aim of this research is to contribute to our understanding of young children's time spent with media by investigating their media use within the contours of one particularly relevant context - parental media mediation.

Social Context & Media Use

When looking across the media effects literature, there are a host of theories that explicitly posit that the process of media selection, processing, and subsequent effects is likely to be influenced by contextual variables. Most notably, Valkenburg & Peter (2013), in their presentation of the Differential Susceptibility to Media effects Model, argue that context can influence media use both deliberately, whereby particular individuals or institutions have specific rules about media use, or less intentionally whereby prevailing norms may influence the selection process. These researchers further argue that contexts can also amplify or dampen how users experience media content. Described as the context-convergence hypothesis, Valkenburg & Peter (2013) explain that media effects can be amplified if the messages converge with the opinions, values, and norms of the social context of the user (see also resonance in cultivation theory, Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002). Similarly, when media content

diverges with the social context of the user, this is thought to result in dissonance (Festinger, 1957) and, in most cases, leads to a weaker effect of the media content on the user. Given the powerful role of context both in media use and media experience, it is somewhat surprising that the literature on media use – including children's media use – inconsistently includes contextual variables. While some studies formally include contextual variables in their work (e.g., Fikkers, Piotrowski, Weeda, Vossen, & Valkenburg, 2013), the great majority tend to either omit context, treat context as noise that is randomly distributed across experimental conditions, or treat context as control variables in survey and longitudinal models (Piotrowski & Valkenburg, in press).

While there are often statistical or methodological explanations for how context is treated in research studies, the mismatch between theoretical propositions and empirical practice is problematic. By averaging out differences across contexts, rather than formally investigating them, not only are we likely to miss potentially valuable differences in the process of media selection and effects, but we are likely to make erroneous conclusions about the size of these effects. For example, in a recent study by Fikkers, Piotrowski, & Valkenburg (in press), the researchers were interested to understand how teens' perceived peer norms may mediate the relationship between media violence and subsequent aggression. At the omnibus mediation level, there was no evidence of a relationship between media violence and aggression. However, a more detailed moderated-mediation model revealed that the process differed for different youth. On the one hand, for teens who believed their peer environment was particularly aggressive, media violence exposure predicted increased aggression via peer approval of aggression. On the other hand, for teens who did not feel that their peer environment was particularly violent, media violence exposure predicted decreased aggression via peer approval of aggression. In other words, the peer context influenced how media violence affected these teens. For media violence

researchers, these results offer valuable nuance to an area of study wrought with inconsistencies, and more broadly, this work reminds us what our theories already tell us – that is, that media effects are not that simple and indeed are best understood through their contextual contours.

Parental Media Mediation

When it comes to young children's media use, one particularly relevant contextual variable is parental media mediation. Conceptualized as the practices that parents engage in to manage and regulate their children's experience with media (Clark, 2011; Valkenburg, Krcmar, Peeters, & Marseille, 1999), parental media mediation is typically thought to reflect one of three types of behaviors: active mediation, restrictive mediation, and co-viewing / co-use. Although evidence for the effects of co-viewing has not been convincingly demonstrated in the literature (Nathanson, 1999; Nathanson, 2001a), research does suggest that whether parents rely on active or restrictive mediation strategies influences children's use and experience with media content in different ways. Early studies, for example, have shown that active mediation - defined as parents' efforts to explain media content to their children and convey their opinion about the content - can increase desirable media effects (e.g., learning from educational television, Huston & Wright, 1994) or reduce undesirable ones (e.g., effects of media violence on aggression, Nathanson, 2004). On the other hand, restrictive mediation – defined as parents' efforts to restrict the amount of time that their children spend with media or the content they are exposed to- has been linked with a forbidden fruit effect whereby youth (particularly teens) are more likely to consume the content which parents deem as restricted (Nathanson, 2001b). As a result of these and other findings, researchers suggest that active mediation is a preferred to restrictive mediation (Fujioka & Austin, 2003).

In recent years, research on parental media mediation has received renewed attention with more researchers recognizing its criticality for both traditional media and new media (Clark, 2011; Nikken & Jansz, 2006). Considering the dramatic growth of children's media use over the past decade, combined with the increasing opportunities and concerns associated with media use, the increasing attention to parental media mediation is unsurprising. Yet, despite this increasing interest, we still lack descriptive information about the frequency of parental mediation behaviors. Not only is it unclear whether and the extent to which parents of young children engage in parental media mediation, it is equally unclear as to whether these behaviors are associated with media use in the current media climate. The majority of the existing work on parental media mediation was conducted more than a decade ago – in other words, before digital media was a fixture in our everyday lives. If we hope to truly understand how parental media mediation may influence how children experience and are affected by media, we need to first understand the parental media mediation climate that young children are growing up in today. To that end, using cross-sectional data from a large sample of parents of children aged 3-8, the current study is designed to provide updated information on the parental media mediation climate. In particular, the study is designed to evaluate the extent to which parents engage in restrictive and active mediation with their young children (RQ1), as well as the relationship of this mediation with young children's media exposure (RQ2).

Method

Sample and Procedure

For this study, survey data from Dutch parents of children aged 3-8 were analyzed. After receiving approval from the sponsoring institution's Institutional Review Board, a private research company (TNS-NIPO/Veldkamp) collected the data between September and December

2012. Families were recruited through the research company's existing panel of approximately 60,000 households that is representative of the Netherlands. Because this study is part of a larger research design in which the inclusion of sibling data was necessary, the research company recruited 467 families with at least two children between three and eight years old from their panel members. Two children from each family participated in the study, resulting in a total of 934 children (52% female, M_{age} = 5.41 years, 95% CI [5.32, 5.50], Min/Max = 2.83 – 7.83 years). All data in this study are parent report data.

Measures

Parental media mediation. To measure parental media mediation, parents completed a 12-item parent report scale. Updated from the original parental mediation scale developed by Valkenburg and colleagues (Valkenburg et al., 1999), this scale measured the frequency with which parents reported engaging in both restrictive and active mediation. Given the inconsistency in the literature on coviewing, this revised scale omitted coviewing and instead expanded the active mediation items to better represent the encouragement of positive media content (4 items, $\alpha = .85$) and discouragement of negative media content (4 items, $\alpha = .83$). An example of an item that measures stimulation of positive media content is "How often do you encourage your child to play an educational computer game?" while an example of an item that discourages negative content is "How often do you tell your child that certain things in a TV-program or movie are wrong?" For restrictive mediation, a total of 4-items were used ($\alpha = .85$). An example of an item that measures restrictive mediation is "How often do you forbid your child to watch TV-programs or movies that contain violence?" All twelve items were measured on a 5-point Likert scale ranging from never (=1) to often (=4).

Media Use. Because parental mediation has been associated with both overall media use as well as content-specific media use, for these analyses, a total of six media use variables were created. Two variables were created to represent average time spent watching television and playing video/computer games per week, two variables were created to represent average time spent watching violent television and playing violent games per week, and lastly, two variables were created to represent average time spent with educational television or educational games per week. All items were created using direct estimates, an approach that has been shown to be valid for assessing media content exposure (Fikkers, Piotrowski, & Valkenburg, 2015).

For overall television and game use, parents were asked "how often does your child watch TV [play games]?" and "on the days that your child watches TV [plays games], how much does s/he spend?" Parents were told that games include "games played on the computer, via internet, on the Xbox, Playstation, Wii, a portable gaming device, an iPad, or on a mobile phone". For violent television and game use, parents completed a similar set of questions except items focused specifically on violent content - "how often does your child watch TV [play games] that contain violence? By violence, we mean all violence (e.g., fighting, shooting) that living beings (e.g., people, monsters – including cartoon and animation) do to each other" followed by "on the days that your child watches violent TV [plays games that contain violence], how much time does s/he spend?" Lastly, to capture educational TV and educational game play, parents were again asked a similar set of questions. Specifically, they were asked "how often does your child watch educational television shows [play games]? By educational, we mean shows [games] with a goal to teach children (e.g., Dora the Explorer, Sesame Street, or Youth News; [Comfyland, Ambrasoft, or Big Brain Academy games]) followed by "on the days your child watches educational TV [plays educational games], how much time does s/he spend?"

For all frequency ("how often") items, responses ranged from 0 (never) to 7 (days per week). The follow-up ("how much") items were open-ended questions in which parents answered by filling in hours and minutes. The two items for each medium and content type were multiplied to calculate the number of hours per week of television use, video game use, violent TV use, violent game use, educational TV use, and educational game use. Descriptive statistics for all items can be found in Table 1.

Analytic Approach

Analyses were conducted STATA 12.1. Descriptive statistics were used to examine the frequency of parental mediation strategies as well as media use estimates. Since the media use measures were calculated, in part, based on open-ended questions, there were some extreme values which can increase the likelihood of making Type 1 errors. These extreme values were defined as values exceeding the mean +/- 3 times the standard deviation. These values were trimmed by recoding the value of the observation closest to the threshold of the mean +/- 3 times the standard deviation. In Table 1, the original mean and standard deviation as well as the trimmed means and standard deviations are reported.

Following this, bivariate correlations and ordinary least squares regression models were used to examine the relationship between parental mediation strategies and media use. To evaluate the bivariate relationship between model variables, Kendall's tau-a was calculated. This statistic is preferred to Pearson's correlation coefficient because it does not assume variable normality nor does it require independent observations when used with the clustering option in Stata 12 (i.e., this data is based on sibling pairs). Stata 12 enables a conversion of Kendall's tau into an approximation of Pearson's *r* using Greiner's relation (Newson, 2002). This converted Pearson's *r* is presented in Table 2.

Although the bivariate relationships provide information on the relationship between mediation strategies and media use, regression models were used to better understand the independent contribution of each mediation strategy[1]. Specifically, six regression models predicting different forms of media use (television, games, violent television, violent games, educational television, and educational games) were conducted. Regression models were examined for residual normality and multivariate outliers. Although Mahalanobis distance indicated no problems with outliers, residual normality was somewhat skewed. To account for this skewness (an artifact of our media use variables), all regression models used bootstrapping (bias-corrected and accelerated 95% confidence intervals, 1,000 bootstrap samples). Finally, in order to ensure that standard errors were not biased as a result of clustering (sibling pairs), robust clustering was used. All models include controls for child gender and child age. For parsimony, only significant findings are discussed in the text. Complete accounting of all regression analyses can be found in Table 3.

Results

Parental Media Mediation Descriptive Statistics

Research question 1 asks the extent to which parents of children 3-8 years old engage in restrictive and active mediation. To address this research question, descriptive statistics were used. Overall, results indicate that encouraging positive media content is the most common mediation strategy that parents of young children use at home. Nearly 80% of parents, on average, report encouraging positive media content “sometimes” (Mean = 2.73; Median = 3.0). Following this, the second most common mediation strategy is discouraging negative media content (Mean = 2.54, Median = 2.50). Here were see that roughly 70% of parents report using this strategy “sometimes”. Lastly, restrictive mediation was the least common among this sample

of parents (Mean = 2.09; Median = 2.0) with slightly more than half of all parents reporting that they "almost never" use this mediation style at home.

Relationship between Parental Media Mediation and Media Use

Research question 2 asks about the relationship between parental mediation approaches (restrictive and active mediation) and young children's media use. Bivariate analyses, presented in Table 2, indicated that parental media mediation strategies are indeed associated with media use in diverse ways. To ascertain the independent relationship between each mediation approach and media use, six regression models (predicting each of the forms of media use) were analyzed.

In model 1 (television), results indicate that all forms of parental mediation are significant correlates of time spent viewing television. While restrictive mediation is associated with less television (b = -1.09, β = -.18), both forms of active mediation (encouraging positive content, b =1.24, β = .21; discouraging negative content, b = .87, β = .14) are associated with increased time spent viewing television. On the other hand, parental mediation was not as robust of a correlate with game play. While encouraging positive media content is associated with increased time spent playing games (b =.40, β = .12), restriction and discouraging negative content are unassociated with time spent playing games.

Models 3 and 4 looked specifically at violent media content. In these models, we see that parental mediation is associated with both violent television viewing and violent game play in the same manner. Specifically, while discouraging negative media content is associated with increased time spent with violent television (b =.14, β = .18) and video games (b =.02, β = .07), encouraging positive media content is associated with less time spent viewing violent television (b = -.08, β = -.11) and playing violent games (b = -.02, β = -.07). Restriction mediation was unassociated with both violent television viewing and violent game playing.

Lastly, models 5 and 6 looked at the relationship between parental media mediation strategies and educational media content. Results indicate that discouraging negative media content is unassociated with viewing educational television or playing educational games. However, encouraging positive media content is strongly related with both educational television viewing (b =1.07, β = .23) and educational game play (b = .36, β = .28). Although restriction is unassociated with educational game play, restrictive mediation is associated with less educational television viewing (b = -.39).

Discussion

Researchers widely agree that how children spend their time is an important predictor of the development of their skills, relationships, attitudes, and behavior patterns (Huston et al., 1999). For the majority of children growing up in today's digital society, media is a mainstay of their daily life. In our sample of youngsters aged 3-8 years old, for example, we see that children are reportedly viewing nearly 9 hours of television per week and playing nearly 2 hours of games per week. In other words, children are spending approximately 90 minutes every day using screen media at home. Considering the potential for media to influence children's development, it is not surprising that many researchers are interested in understanding children's daily media exposure. However, media use estimates in the absence of context present an incomplete picture. Not only can the context of media use influence whether or not media is consumed, but context can also influence the experience and subsequent effects of such media content (Valkenburg & Peter, 2013). Despite its criticality, media context is inconsistently investigated in the context of children's media use. To address this gap, this study evaluated young children's media use through the contours of one particularly relevant context variable –parental media mediation.

Overall, results of this study support Valkenburg & Peter's (2013) argument that the context of media use matters. Specifically, the results show that different parental mediation strategies are correlated with media use in different ways. Not only are restrictive mediation strategies associated in different ways with media when compared to active mediation strategies, but even the manner of active mediation (discouraging negative content, encouraging positive content) is differentially associated with media use. Such findings have important implications for future research as well as for the messages that we share with parents about how to successfully manage media at home.

Restrictive Mediation

Restrictive mediation was the least common mediation style found in this sample. Nearly half of the parents in the sample reported "almost never" using restriction as a way of managing their child's media use. However, for children growing up in homes with parents who tend to rely on restrictive mediation strategies, results indicate that these children are likely to be watching less television – specifically less educational television. Interestingly, however, restrictive mediation does not seem to translate to differences in time spent with games nor does it seem to be associated with violent media content exposure. This lack of a consistent pattern for restriction is somewhat surprising. Restriction mediation reflects parents' efforts to restrict the amount of time or specific content that their children engage with. Based on the goals of this mediation strategy, it would be have been reasonable to see a negative relationship between restrictive mediation and overall media use (television and games) as well as a negative relationship with violent media content. Instead, not only was restrictive mediation not associated with game play, it was negatively associated with educational television content – a type of content one would presume parents would be less likely to restrict. It is possible that

parents view television content, in general, as more concerning that game content. Early research, for example, suggests that parents perceive digital content as having greater positive consequences while television content is perceived as having greater negative consequences (Sneed & Runco, 1992). It may be that parents in our sample are more likely to restrict television content whereas they are not employing similar rules for game content because they believe that digital (game) content can be beneficial for their children. A follow-up investigation as to what restriction looks like for these families, as well as why they engage in these behaviors, would provide important insight into the findings presented here.

Active Mediation

While restrictive mediation was largely an unpopular form of media management for the families in this study, active mediation strategies were much more popular with the majority of families using active mediation at least "sometimes". Although previous studies had not delineated the different ways that parents can actively mediate their children's media content, in this study we looked at parents' efforts to both encourage positive media content as well as discourage negative media content. Interestingly, results reveal a different pattern of results for these different forms of active mediation. On the one hand, for children growing up in homes with parents who tend to discourage negative media content exposure (a form of active mediation), we see that they are *more* likely to be viewing greater amounts of television, particularly violent television, and are *more* likely to be playing violent television games. Yet, on the other hand, for children who are growing up in homes with parents who prefer to encourage positive media content exposure (another form of active mediation), we again see a greater amount of television and game content, yet this content is more likely to be educational in nature.

The significant discrepancy between active mediation approaches is quite interesting. While both seem to be associated with increased media exposure, the type of media exposure that they are linked with differs dramatically. The positive relationship between discouraging negative content exposure and media violent is particularly puzzling. It may be that, for children who show a preference for violent media content, parents are more likely to actively work to discourage this form of content exposure and the effects associated with it. Alternatively, it may be that efforts to discourage negative media content consumption and, relatedly, learning from negative content – particularly violent media content – may lead to reactance among young children and create the so-called forbidden fruit effect that is often associated with restrictive mediation. In other words, by talking with children about why this content is problematic and by discouraging its use, parents may be making this content seem more attractive. Although the cross-sectional design of this study makes it impossible to identify the direction of effect, it seems somewhat more likely that parents are responding to their children's preference for negative media content since reactance (and the forbidden fruit effect) is more commonly associated with adolescence (Smetana, 1995). However, follow-up longitudinal work would provide valuable insight into the direction of this effect.

Just as longitudinal analyses would be particularly helpful in untangling the direction of effect between discouraging negative content and media use, such analyses would also be valuable for better understanding the process of encouraging positive content. The positive relationship between encouraging positive media content and time spent with educational television and games suggests that this form of mediation may be an effective way of encouraging a healthy media diet among children. However, it is also possible that – as with negative media content – there are certain children who prefer educational media content and, as

such, parents respond to this by encouraging more of this behavior. And, of course, it may also be a cyclical relationship whereby parents encourage positive media, children watch and enjoy this media, and parents' mediation behavior is subsequently reinforced. Longitudinal analyses that attempt to identify direction of effect, as well as potential cyclical relationships, would be a fruitful avenue for further investigation.

Implications, Future Directions, & Concluding Thoughts

In all, the findings from this research offer important theoretical, methodological, and practical implications. Theoretically, this work confirms what many of our theories already tell us – that our relationship with media cannot be fully understood without appreciating the role of context. The results presented here highlight that how children's media use varies by the contextual contours of parental mediation. As such, continued efforts to acknowledge and accommodate the role of context in youth and media research is certainly justified. In particular, it is crucial that researchers move away from treating context as a variable to be adjusted for and instead establish a priori more nuanced hypotheses about the interconnected relationship between youth, media, and context.

Second, methodologically, this study makes the important point that *how* parents mediate content may be as important – if not more important – than whether they mediate content. For example, here we see that different approaches to active mediation (encouraging positive versus discouraging negative) are both positively associated with overall media use but hold distinctly different relationships with specific media content. Recently, in other work, my colleagues and I have argued that parental media mediation during adolescence should be considered within the lens of parenting styles (Valkenburg, Piotrowski, Hermanns, & de Leeuw, 2013). Specifically, we argue that some of the inconsistencies in the literature as to the effectiveness of parental

mediation may reflect that *how* mediation is enacted is just as important as whether it is enacted. In particular, whether restrictive and active mediation are done in a manner which supports a teen's autonomy versus in a manner which is more coercive or inconsistent is likely to influence whether a teen consumes particular media content as well as how s/he experiences it. For example, teens may be less likely to react against restriction messages that are done in an autonomy-supportive way compared to restriction messages that are coercive in nature. Based on this argumentation, we developed a revised scale for measuring parental media mediation that takes into account the manner of mediation – the Perceived Parental Media Mediation Scale (PPMMS, Valkenburg et al., 2013). Given the differences found in this study, a more nuanced methodological approach to measuring parental media mediation during early childhood also seems warranted.

In addition to a more nuanced methodological approach to measuring parental media mediation in early childhood, it is also important to consider the value of methodological replication with varied samples. At present, the majority of parental media mediation literature consists of research from the Netherlands (including this study) and the United States. While both of these countries are highly developed countries with similar media use among youth, recently, scholars have suggested that parental media mediation may work differently in these (and other) countries (Krcmar & Cingel, 2015). Specifically, Krcmar & Cingel (2015) found that predictors of parental media mediation differed significantly between Dutch and American parents. Interestingly, while worries about media and parental demographics primarily explained variance in Dutch parents' parental media mediation practices, attitude and subjective norms primarily explained variance in American parents' parental media mediation behaviors. This suggests that culture may play an important role in determining how parents mediate media, and

as such, may also influence the effectiveness of such mediation. Future work which not only seeks to replicate these findings in different cultures, but also conducts cross-cultural comparisons can go a long way towards helping us better understand the role of culture in predicting parental media mediation and explaining its effectiveness.

Finally, this study also lends itself to practical implications. While this correlational design does not permit evaluating which form of mediation is most effective, the findings for encouraging positive media content are particularly notable. Not only were children more likely to consume greater amounts of educational media content when their parents encouraged such content (as well as consume less violent content), but the effect size of these relationships was the largest among all of the relationships discovered in this study. Moreover, preliminary analyses with age suggest that this relationship remains present throughout early childhood (3-8 years old). Although longitudinal data is necessary to assess whether there are positive cumulative effects over time, this suggests that early adoption and continuous use of this strategy may be effective across early childhood and beyond. From the perspective of home media management then, efforts to help parents identify what positive media content looks like as well as clear tips on how to encourage this use are worthwhile. As this study shows, encouraging positive media content is already the most popular form of mediation amongst parents of young children. If we can move this behavior from being a “sometimes” behavior to an “always” behavior, we can play an important role in ensuring that young children have a healthy media diet that effectively balances quantity and quality.

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Table 1

Descriptive Statistics of Study Variables

Variable	Mean Untrimmed Variable	95% CI Untrimmed Variable	Number of Cases Trimmed	Mean Trimmed Variable	95% CI Trimmed Variable
Television Use	8.86	[8.24, 9.48]	5	8.69	[8.17, 9.22]
Game Play	1.96	[1.71, 2.22]	18	1.85	[1.64, 2.05]
Violent TV	0.25	[0.18, 0.32]	26	0.21	[0.16, 0.26]
Violent Games	0.09	[0.05, 0.12]	14	0.06	[0.04, 0.08]
Educational TV	3.23	[2.91, 3.56]	17	3.14	[2.84, 3.43]
Educational Games	0.55	[0.42, 0.67]	9	0.48	[0.41, 0.56]
PM: Restrictive	2.09	[2.03, 2.16]	0	--	--
PM: Discourage Negative	2.54	[2.48, 2.61]	0	--	--
PM: Encourage Positive	2.73	[2.66, 2.79]	0	--	--
Child Age	5.41	[5.31, 5.50]	0	--	--
Child Gender	48% boys	--	0	--	--

Note: Media variables represent hours per week; parent media mediation (PM) was scored on scale of 0 (never) to 4 (often); age is in years.

Table 2

Zero-Order Correlations for Model Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Television Use	**1.0**	.23*	.09*	.03	.52*	.09*	-.04	.14*	.17*	.04	-.02
2. Game Play	.23*	**1.0**	.19*	.15*	.05	.48*	.18*	.21*	.21*	.42*	-.16*
3. Violent TV	.09*	.19*	**1.0**	.17*	.00	.09*	.15*	.14*	-.01	.20*	-.13*
4. Violent Games	.03	.15*	.17*	**1.0**	-.03	.05*	.10*	.07*	.01	.11*	-.09*
5. Educational TV	.52*	.05	.00	-.03	**1.0**	.14*	-.03	.13*	.25*	-.06	.03
6. Educational Games	.09*	.48*	.09*	.05*	.14*	**1.0**	.10*	.16*	.32*	.23*	-.02
7. Restrictive Mediation	-.04	.18*	.15*	.10*	-.03	.10*	**1.0**	.43*	.23*	.29*	-.17*
8. Discourage Negative	.14*	.21*	.14*	.07*	.13*	.16*	.43*	**1.0**	.46*	.15*	-.15*
9. Encourage Positive	.17*	.21*	-.01*	.01	.25*	.32*	.23*	.46*	**1.0**	.10*	-.01
10. Child Age	.04	.42*	.20*	.11*	-.06	.23*	.29*	.15*	.10*	**1.0**	-.01
11. Child Gender	-.02	-.16*	-.13*	-.09*	.03	-.02	-.17*	-.15*	-.01	-.01	**1.0**

Note: Table depicts Pearson's *r* correlations, which were converted from Kendall's tau-a correlations using Greiner's relation in Stata 12. All analyses used trimmed media variables. Gender is coded as boys = 1, girls = 2.
* $p < .05$

Table 3

Regression predicting media use from parental mediation, controlling for age and gender

	1: Television			2: Games		
	B	**95% CI**	**β**	**B**	**95% CI**	**β**
Restrictive	-1.09*	[-1.73, -0.46]	-0.18	-0.19	[-0.42, 0.04]	-0.06
Discourage Negative	0.87*	[0.1, 1.63]	0.14	0.11	[-0.19, 0.41]	0.03
Encourage Positive	1.24*	[0.53, 1.95]	0.21	0.40*	[0.14, 0.66]	0.12
Child Age	0.12	[-0.15, 0.39]	.02	0.55*	[0.44, 0.65]	0.30
Child Gender	-0.63	[-1.48, 0.22]	-0.10	-0.98*	[-1.32, -0.65]	-0.19
F (5,466)	6.67*			26.46*		
R^2	.05			.14		

Note. All regression models use robust clustered standard errors and bootstrapping (1000 bootstrap samples) to correct for clustering in sample (sibling pairs) and residual skewness. Media use variables are trimmed and represent hours per week. Age is measured in years. Gender is coded as boys = 1, girls = 2.
*p <.05

Table 3 continued

Regression predicting media use from parental mediation, controlling for age and gender

	3. Violent TV			4. Violent Games		
	B	**95% CI**	**β**	**B**	**95% CI**	**β**
Restrictive	-0.01	[-0.05, 0.03]	-0.01	0.02	[-.001, 0.04]	0.06
Discourage Negative	0.14*	[0.07, 0.2]	0.18	0.02*	[.001, 0.04]	0.07
Encourage Positive	-0.08*	[-0.14, -0.03]	-0.11	-0.02*	[-0.04, 0]	-0.07
Child Age	0.08*	[0.05, 0.11]	0.19	0.02*	[0.01, 0.03]	0.11
Child Gender	-0.12*	[-0.19, -0.04]	-0.10	-0.07*	[-0.11, -0.03]	-0.13
F (5,466)	10.73*			5.99*		
R^2	.08			.05		

Note. All regression models use robust clustered standard errors and bootstrapping (1000 bootstrap samples) to correct for clustering in sample (sibling pairs) and residual skewness. Media use variables are trimmed and represent hours per week. Age is measured in years. Gender is coded as boys = 1, girls = 2.
*p <.05

Table 3 continued

Regression predicting media use from parental mediation, controlling for age and gender

	5. Educational TV			6. Educational Games		
	B	**95% CI**	**β**	**B**	**95% CI**	**β**
Restrictive	-0.39*	[-0.73, -0.06]	-0.09	-0.05	[-0.14, 0.03]	-0.05
Discourage Negative	0.16	[-0.24, 0.55]	0.03	-0.01	[-0.13, 0.1]	-0.01
Encourage Positive	1.07*	[0.66, 1.49]	0.23	0.36*	[0.24, 0.47]	0.28
Child Age	-0.22*	[-0.38, -0.06]	-0.09	0.11*	[0.06, 0.15]	0.15
Child Gender	0.09	[-0.36, 0.55]	0.01	-0.02	[-0.15, 0.11]	-0.01
F (5,466)	8.61*			13.70*		
R^2	.07			.10		

Note. All regression models use robust clustered standard errors and bootstrapping (1000 bootstrap samples) to correct for clustering in sample (sibling pairs) and residual skewness. Media use variables are trimmed and represent hours per week. Age is measured in years. Gender is coded as boys = 1, girls = 2.
*p <.05

Footnotes

[1] Preliminary models also examined potential interactions with age to identify whether the relationship between parental mediation and media use may vary as a function by age. Although some interactions were significant, no meaningful differences emerged. For model parsimony and to aid interpretation, age was treated as a covariate in final analytic models.