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Parental Media Mediation in Adolescence: A Comparative Study of Parent and Adolescent Reports

Ine Beyens and Patti M. Valkenburg

Whether studies should rely on parent or child reports of parental mediation remains a much-debated question. We investigated the agreement between parent and adolescent reports of the frequency and style (autonomy-supportive, controlling, inconsistent) of restrictive and active mediation, and their relative validity. Results revealed perceptual differences, with parents reporting more autonomy-supportive mediation. With some exceptions, both parent and adolescent reports correlated with relevant criterion measures. Results suggest that parent and adolescent reports are equally valid to assess the frequency and style of mediation, and that both reports should be considered to obtain a complete understanding of parents' mediation efforts.

Over the past decades, dozens of studies have investigated the strategies that parents use to monitor children's media use. While the earliest studies in this area focused on television (e.g., Bybee, Robinson, & Turow, 1982; Corder-Bolz, 1980; Nathanson, 1999), later studies focused on more recent media, including games (e.g., Coyne, Padilla-Walker, Stockdale, & Day, 2011; Nikken & Jansz, 2006) and the Internet (e.g., Livingstone & Helsper, 2008). Generally, most of these studies have focused on at least two strategies: Restrictive mediation, which entails parents' efforts to restrict children's exposure to certain content and the time children spend using media, and active mediation, which refers to parents' efforts to explain media content to their children and encourage critical thinking. Both strategies, especially active mediation, have the potential to enhance positive effects (e.g., the effects of gaming on prosocial behavior; Coyne et al., 2011) and offset negative media effects (e.g., the effects of viewing violent television on aggression; Nathanson, 1999).

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While these studies have provided better insights into the mediation strategies that parents use, and how frequently these strategies are being used, a much-debated question in the literature is whether studies should rely on parent or child reports of parental mediation (Buijzen, Rozendaal, Moorman, & Tanis, 2008; Gentile, Nathanson, Rasmussen, Reimer, & Walsh, 2012). The opinions on this issue are mixed. While some researchers have questioned the validity of parent reports and argue that child reports are more valid (Liau, Khoo, & Ang, 2005; Van den Bulck & Van den Bergh, 2000), others argue that parent and child reports are equally valid (Nathanson, 2001b; Van der Voort, van Lil, & Peeters, 1998). However, since most parental mediation studies rely on either parent or child reports, very few empirical attempts have been made to systematically investigate the extent of agreement between parent and child reports of parental mediation and their relative validity. Yet, understanding whether perceptual differences exist among parents and children, and whether some mediation efforts are perceived as more common by parents than by children, or vice versa, is important.

To our knowledge, only a handful of earlier studies have investigated parent-child agreement in the reporting of parental mediation, focusing on television viewing (Fujioka & Austin, 2003; Gentile et al., 2012; Koolstra & Lucassen, 2004; Nathanson, 2001a), video game playing (Gentile et al., 2012; Nikken & Jansz, 2006), and advertising (Buijzen et al., 2008). Although these studies have provided relevant insights, the literature is characterized by several important gaps. First, most studies have focused on children under 12 years (Buijzen et al., 2008; Gentile et al., 2012; Nathanson, 2001a). These studies found that parent-child agreement was rather weak. The two studies that investigated parent-child agreement among older children and adolescents yielded opposite results. In fact, whereas Fujioka and Austin (2003) found that children reported more reinforcement (e.g., parents saying that they agree with television) than parents, Nikken and Jansz (2006) found that *parents* reported more restrictive and active mediation than their children. Moreover, both studies used mixed samples of both children and adolescents. As such, the extent of agreement between parent and adolescent reports of parental mediation remains unclear. Therefore, as called upon by other scholars (Gentile et al., 2012), the first goal of the current study is to investigate the agreement between parent and adolescent reports of restrictive and active parental mediation and the validity of both reports.

A second gap in the literature is that studies on parent-child agreement have only focused on the frequency with which parents use certain parental mediation strategies (e.g., restrictive mediation, active mediation) without considering the *style* that parents use when they engage in parental mediation. This is an important limitation, since recently, researchers have suggested that the style of parental mediation -for example, whether it occurs in an autonomy-supportive, controlling, or inconsistent way -may be more important than the frequency with which it is used (Valkenburg, Piotrowski, Hermanns, & de Leeuw, 2013). Focusing on the style of parental mediation is important, especially in

adolescence, when reactance to parental restrictions is more common than in childhood (Nathanson, 2002). For example, when parents use an autonomy-supportive style when engaging in restrictive mediation, that is, a style in which they provide an explanation for the restriction and take adolescents' perspective into account, reactance can be minimized or even avoided (Valkenburg et al., 2013). Because of the importance of mediation style, the study's second goal is to investigate the extent to which parents and adolescents agree or disagree in their reporting of both the frequency and the style of parental mediation.

The Perceived Parental Media Mediation Scale

The current study will employ the Perceived Parental Media Mediation Scale (PPMMS), a self-report scale developed by Valkenburg et al. (2013) to measure adolescents' perceptions of their parents' restrictive and active mediation strategies. Besides investigating adolescents' perceptions of the frequency of parental mediation, the PPMMS also investigates their perceptions of three styles that parents may use to deliver their mediation strategies: (1) Autonomy-supportive parental mediation, which entails restrictive and active mediation in which parents provide a rationale for their mediation strategies and recognize their child's perspective, (2) controlling parental mediation, which involves restrictive and active mediation in which parents set rules in a threatening, controlling way, and (3) inconsistent restrictive mediation, which refers to restriction that is strict at some points and not strict at other points.

The PPMMS consists of 28 items. Four main items measure the frequency of restrictive mediation and four main items measure the frequency of active mediation. Each main restrictive item is followed by three follow-up items that measure the extent to which the mediation is autonomy-supportive, controlling, or inconsistent. Each main active mediation item is followed by two follow-up items to measure the extent to which active mediation is autonomy-supportive or controlling. The scale has provided good reliability and validity among adolescents (Meeus, Beyens, Geusens, Sodermans, & Beullens, 2018; Valkenburg et al., 2013).

To investigate the agreement between parent and adolescent reports of parental mediation, we converted the original PPMMS child-report scale into a parent-report scale. By doing so, we are able to investigate whether adolescents' perceptions of their parents' mediation efforts correspond with how parents perceive their own mediation efforts. In addition, we will be able to systematically investigate the extent of parent-adolescent agreement for both the frequency and style of restrictive and active mediation. As such, we posit the following questions:

Research Question 1 (RQ1): To what extent do parents and adolescents agree or disagree in their reporting of the frequency of restrictive and active parental mediation?

Research Question 2 (RQ2): To what extent do parents and adolescents agree or disagree in their reporting of the style of restrictive and active parental mediation?

Parental Mediation and Demographic Factors

To investigate the validity of both restrictive and active mediation, we will evaluate the parent and adolescent reports against different external criteria (Bryman, 2012). In a first step, we will evaluate the validity of the frequency reports of restrictive and active mediation by investigating their associations with relevant demographic variables that have been shown to correlate with both types of mediation: adolescent's age and parent's education level. It has been shown, for instance, that parents of younger adolescents engage in more restrictive and active mediation than parents of older adolescents (Meeus et al., 2018; Warren, 2017). In addition, higher educated parents more frequently engage in parental mediation than lower educated parents (Gentile et al., 2012). Based on these findings, we hypothesize:

Hypothesis 1: Both parent and adolescent reports of the frequency of restrictive and active mediation are negatively associated with adolescent's age (H1a) and positively with parent's education level (H1b).

Parental Mediation and General Parenting Styles

In a second step, we will evaluate the validity of the parent and adolescent reports of the style of restrictive and active mediation by investigating their relationships with equivalent general parenting styles. Valkenburg et al. (2013) found that adolescents' reports of general autonomy-supportive parenting were positively related to their reports of autonomy-supportive restrictive and active parental mediation, and negatively related to their reports of inconsistent restrictive and controlling active mediation. Inconsistent general parenting was positively related to controlling restrictive and active mediation and inconsistent restrictive mediation, and negatively related to autonomy-supportive active and restrictive mediation styles. Based on these findings, we hypothesize:

Hypothesis 2a (H2a): Parent and adolescent reports of autonomy-supportive restrictive and active mediation are positively related to a general autonomy-supportive parenting style and negatively related to a general inconsistent parenting style.

Hypothesis 2b (H2b): Parent and adolescent reports of controlling restrictive and active mediation are positively related to a general inconsistent parenting style and negatively related to a general autonomy-supportive parenting style.

Hypothesis 2c (H2c): Parent and adolescent reports of inconsistent restrictive mediation are positively related to a general inconsistent parenting style and negatively related to a general autonomy-supportive parenting style.

Parental Mediation and Family Conflict

In a third step, we will evaluate the validity of the parent and adolescent reports of both the frequency and style of restrictive and active mediation by investigating their relationships with family conflict. Valkenburg et al. (2013) found that higher levels of restrictive and active mediation are related to more family conflict. Similarly, higher levels of controlling restrictive and active mediation as well as inconsistent restrictive mediation are all associated with more family conflict. This result can be explained by reactance theory (Brehm & Brehm, 1981), which supposes that adolescents show reactance to their parents' mediation efforts, especially those provided in a controlling and inconsistent way, because adolescents strive to retain their autonomy. Adolescents' reactance may, in turn, increase the likelihood of family conflict. Conversely, higher levels of autonomy-supportive restrictive and active mediation are both correlated with less family conflict (Valkenburg et al., 2013). In line with these findings, we hypothesize:

Hypothesis 3a (H3a): Parent and adolescent reports of the frequency of restrictive and active mediation are positively related to family conflict.

Hypothesis 3b (H3b): Parent and adolescent reports of autonomy-supportive restrictive and active mediation are negatively related to family conflict.

Hypothesis 3c (H3c): Parent and adolescent reports of controlling restrictive and active mediation are positively related to family conflict.

Hypothesis 3d (H3d): Parent and adolescent reports of inconsistent restrictive mediation are positively related to family conflict.

Parental Mediation and Adolescents' Media Use

In a final step, we will evaluate the validity of the parent and adolescent reports of both the frequency and style of restrictive and active mediation by investigating their relationships with adolescents' media use. Prior research has shown that restrictive and active mediation are associated with decreased overall and violent media use among children (Gentile et al., 2012; Gentile, Reimer, Nathanson, Walsh, & Eisenmann, 2014; Ramirez et al., 2011). In addition, research has shown that autonomy-supportive parental mediation is associated with decreases in television viewing and game playing, but controlling

mediation is associated with increases in media use (Bjelland et al., 2015). Similarly, inconsistent restrictive mediation is associated with increased violent media use (Nikkelen, Vossen, Piotrowski, & Valkenburg, 2016) and overall media use (Gentile & Walsh, 2002). Based on the theoretical discussion and empirical research reviewed above, we hypothesize:

Hypothesis 4a (H4a): Parent and adolescent reports of the frequency of restrictive and active mediation are negatively related to adolescents' overall and violent media use.

Hypothesis 4b (H4b): Parent and adolescent reports of autonomy-supportive restrictive and active mediation are negatively related to adolescents' overall and violent media use.

Hypothesis 4c (H4c): Parent and adolescent reports of controlling restrictive and active mediation are positively related to adolescents' overall and violent media use.

Hypothesis 4d (H4d): Parent and adolescent reports of inconsistent restrictive mediation are positively related to adolescents' overall and violent media use.

Method

Participants and Procedure

Participants consisted of 868 adolescents (12 to 16 years) and their parents, who participated in a larger study investigating adolescents' media use. Families were recruited through a private survey research institute that maintains a nationally representative, online panel of approximately 60,000 families living in urban and rural regions in The Netherlands. After ethical approval for the study was provided by the Institutional Review Board, trained interviewers visited the families at home. Parents and adolescents completed questionnaires using a laptop. The larger study protocol involved a sibling design, which included two children per family. Parents completed a questionnaire for each of the two children and each of the two children completed a questionnaire. On average, participating adolescents were 14 years old ($M = 13.86$, $SD = 1.41$) and participating parents were 45 years old ($M = 44.63$, $SD = 4.41$). Half of the adolescents were girls (50.7%) and most parents were mothers (78.3%). Most parents reported their ethnicity as Dutch (97.5%). More than half of the parents had received secondary education (52.3%), 36.9% held a bachelor's degree, 10.6% held a master's or doctoral degree, and 0.2% had received primary education.

Measures

Parental Mediation Adolescent Report. Adolescents completed the Perceived Parental Media Mediation Scale (PPMMS) that was developed by Valkenburg et al. (2013). A total of four items measured the frequency of restrictive mediation (e.g., “How often do your parents forbid you to watch TV-programs or movies because they contain too much violence?”), and four items measured the frequency of active mediation (e.g., “How often do your parents tell that people in the media [e.g., on TV or in movies] are too rude to each other?”). All 8 items were measured on a 5-point Likert scale including 1 (*never*), 2 (*almost never*), 3 (*sometimes*), 4 (*often*), and 5 (*very often*). Responses for the main items were averaged to create a frequency scale for adolescent-reported restrictive ($\alpha = .70$) and active mediation ($\alpha = .70$). Each of the main items was followed by follow-up items that assessed adolescents’ perception of the style in which parents restrict and actively mediate their media use. For instance, adolescents were asked “If your parents would forbid you to watch TV-programs or movies because they contain too much violence, how would they do this?” Each main restriction item was followed by three follow-up items to identify the extent to which parental restriction for the specific behavior was (a) autonomy-supportive (e.g., “My parents would explain to me why I better not watch these programs or movies”), (b) controlling (e.g., “My parents would threaten to punish me if I still want to watch these programs or movies”), or (c) inconsistent (e.g., “Although my parents would tell me that I am not allowed to watch such programs or movies, I know that after a while I can still watch them”). Each main active mediation item was followed by two follow-up items to identify whether active mediation was autonomy-supportive (e.g., “My parents would be curious to know how I think about this”) or controlling (e.g., “My parents would think they are right and I cannot do anything to change that”). Response categories for the follow-up items were 1 (*not true at all*), 2 (*not true*), 3 (*neutral*), 4 (*true*), and 5 (*completely true*). Responses to the follow-up items were averaged to create scales for adolescent-reported autonomy-supportive restrictive mediation ($\alpha = .86$), autonomy-supportive active mediation ($\alpha = .87$), controlling restrictive mediation ($\alpha = .76$), controlling active mediation ($\alpha = .78$), and inconsistent restrictive mediation ($\alpha = .80$).

Parental Mediation Parent Report. Parents completed a parent-report version of the PPMMS (Valkenburg et al., 2013). Adapted from the original PPMMS, this scale measured the frequency with which parents reported engaging in restrictive and active mediation (main scales), and the style in which they provided these mediation strategies (follow-up scales). The same procedure of administering the main and follow-up items was used as was used with adolescents, but parents reported on their own behavior. Responses for the main items were averaged to create a frequency scale for parent-reported restrictive ($\alpha = .80$) and active mediation ($\alpha = .83$). Responses to the follow-up items were averaged to create

scales for parent-reported autonomy-supportive restrictive mediation ($\alpha = .88$), autonomy-supportive active mediation ($\alpha = .89$), controlling restrictive mediation ($\alpha = .83$), controlling active mediation ($\alpha = .91$), and inconsistent restrictive mediation ($\alpha = .89$).

Demographic Factors. Adolescents indicated their age in years. Parents indicated their education level (1 = *no degree* to 8 = *master or doctoral degree*).

General Parenting Styles. Parents completed the Parenting Dimensions Inventory–Short Version (PDI–S; Power, 2002), which is a reliable and valid instrument for use with parents (Power, 2002). Four items assessed autonomy-supportive parenting (e.g., “I encourage my child to talk about his/her problems”) and four items assessed inconsistent parenting (e.g., “My child can often persuade me to give lighter punishments than I had intended”). Response options ranged from 1 (*completely disagree*) to 6 (*completely agree*). Responses to the items were averaged to create scales of autonomy-supportive parenting ($\alpha = .81$, $M = 5.22$, $SD = 0.55$) and inconsistent parenting ($\alpha = .76$, $M = 2.55$, $SD = 0.87$), with higher scores indicating more autonomy support and inconsistency, respectively.

Family Conflict. Family conflict was measured using five items of the conflict subscale of the Family Environment Scale (FES; Moos & Moos, 1994). Adolescents were asked to indicate how often family members (1) criticize each other, (2) hit each other, (3) argue, (4) curse, and (5) become so angry that they start throwing things at each other. Response options were 1 (*never*), 2 (*almost never*), 3 (*sometimes*), and 4 (*often*). Responses to the items were averaged to create a family conflict scale ($\alpha = .76$, $M = 2.24$, $SD = 0.57$), with higher scores indicating more family conflict.

Adolescents' Media Use. Adolescents' overall media use was assessed using direct estimates of the frequency and duration of television viewing and game playing. First, adolescents indicated how often they watch television programs and play video games, using response categories that ranged from 0 (*never*) to 7 (*7 days a week*). Next, adolescents indicated how much time (hours and minutes) they spend watching television programs and playing games on the days they are doing these activities. The frequency scores were multiplied with the duration per day to create a television exposure time score and game exposure time score, in hours per week. These two products were then summed to produce a total media use score, in hours per week ($M = 19.40$, $SD = 18.78$). Adolescents' violent media use was assessed using the same procedure. Adolescents indicated how often and how long they watch television programs and play video games that contain violence. Violence was described as “all violence (e.g., fighting and shooting) that living beings (e.g., humans and monsters) do to each other.” A total violent media use score, in hours per week was created ($M = 6.99$, $SD = 12.33$).

Statistical Analyses

To investigate the extent of agreement between parent and adolescent reports of the frequency (RQ1) and style (RQ2) of restrictive and active mediation, we investigated the zero-order correlations between parent and adolescent reports and conducted paired-samples *t* tests, following the procedure used by Gentile et al. (2012). To investigate the relative validity of parent and adolescent reports of restrictive and active mediation, we examined zero-order correlations between the reports of the frequency and style of mediation and the proposed validation constructs (H1-H4).

Results

The Extent of Agreement between Parent and Adolescent Reports

The Frequency of Mediation. RQ1 asked to what extent parents and adolescents agree or disagree in their reporting of the frequency of restrictive and active parental mediation. As Table 1 shows, parent and adolescent reports were significantly correlated. However, paired-samples *t* tests further revealed that adolescents and their parents differed significantly in their reported levels of restrictive and active mediation, with parents reporting more restrictive mediation ($M = 2.11$, $SD = 0.78$ vs $M = 1.99$, $SD = 0.76$) and active mediation ($M = 2.64$, $SD = 0.76$ vs $M = 2.20$, $SD = 0.77$) than their children. Cohen's *d* values (Cohen, 1988) indicated that the standardized mean differences were small ($d = 0.14$ for restrictive mediation; $d = 0.46$ for active mediation).

The Style of Mediation. RQ2 asked to what extent parents and adolescents agree or disagree in their reporting of the style of parental mediation. As Table 1 shows, parent and adolescent reports of autonomy-supportive mediation, controlling mediation, and inconsistent restrictive mediation were significantly correlated. Both parents and children reported that an autonomy-supportive mediation style was most prevalent. Paired-samples *t* tests indicated that parents reported significantly higher levels of autonomy-supportive restrictive ($M = 4.21$, $SD = 0.59$ vs $M = 3.30$, $SD = 1.03$) and active mediation ($M = 4.09$, $SD = 0.55$ vs $M = 3.02$, $SD = 0.94$). Cohen's *d* values pointed at large standardized mean differences ($d = 0.83$ for restrictive mediation; $d = 1.05$ for active mediation). Furthermore, parents reported significantly lower levels of controlling active mediation ($M = 2.36$, $SD = 0.83$ vs $M = 2.44$, $SD = 0.82$) and inconsistent restrictive mediation than their children ($M = 1.99$, $SD = 0.79$ vs $M = 2.26$, $SD = 0.86$). The standardized mean differences were small ($d = -0.08$ for controlling active mediation; $d = -0.26$ for inconsistent restrictive mediation). No significant differences were found between parents and adolescents in their reporting of controlling restrictive mediation.

Table 1
Means, Standard Deviations, Correlations, T Tests, and Effect Sizes for Parent and Adolescent Reports of the Frequency and Style of Parental Mediation

	Parent Report		Adolescent Report		Statistics		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Correlation	<i>t</i> <i>df</i> = 860	Cohen's <i>d</i>
RM Frequency	2.11	0.78	1.99	0.76	.38***	4.16***	0.14
AM Frequency	2.64	0.76	2.20	0.77	.23***	13.66***	0.46
RM Autonomy-supportive	4.21	0.59	3.30	1.03	.16***	24.34***	0.83
AM Autonomy-supportive	4.09	0.55	3.02	0.94	.15***	30.82***	1.05
RM Controlling	2.12	0.81	2.07	0.80	.23***	1.41	0.05
AM Controlling	2.36	0.83	2.44	0.82	.21***	-2.38*	-0.08
RM Inconsistent	1.99	0.79	2.26	0.86	.17***	-7.58***	-0.26

Note. RM = restrictive mediation; AM = active mediation. * $p < .05$. ** $p < .01$. *** $p < .001$.

Validity of the Frequency of Mediation

To investigate the validity of the parent and adolescent reports of the frequency of restrictive and active mediation (H1a and H1b), we examined the correlations of relevant demographic factors (i.e., adolescent's age and parent's education) with the PPMMS main (i.e., frequency) scales. The findings showed that parent and adolescent reports share a similar level and direction of correlations with the demographic factors. Consistent with H1a, both parent and adolescent reports of restrictive mediation ($r = -.22, p < .001$ and $r = -.28, p < .001$) and active mediation ($r = -.18, p < .001$ and $r = -.10, p < .01$) were negatively correlated with adolescent's age. Contrary to H1b, both parent and adolescent reports of restrictive mediation ($r = .01, p = .87$ and $r = .03, p = .42$) and active mediation ($r = -.04, p = .28$ and $r = .04, p = .27$) were not related to parent's education.

Validity of the Style of Mediation

To investigate the validity of the parent and adolescent reports of the style of restrictive and active mediation (H2a-c), we examined the correlations of general parenting styles (i.e., autonomy-supportive parenting and inconsistent parenting) with the PPMMS follow-up (i.e., style) scales. As Table 2 shows, overall, both parent and adolescent reports of the style of mediation correlated with general

parenting styles in the expected directions. Consistent with H2a, parent and adolescent reports of autonomy-supportive restrictive and active mediation were positively related to a general autonomy-supportive parenting style (except for adolescent reports of autonomy-supportive restrictive mediation) and negatively related to a general inconsistent parenting style. Consistent with H2b and H2c, both parent and adolescent reports of controlling restrictive and active mediation, and inconsistent restrictive mediation were positively related to a general inconsistent parenting style and negatively related to a general autonomy-supportive parenting style.

Family Conflict and the Frequency and Style of Mediation

To further investigate the validity of the parent and adolescent reports of the frequency and style of restrictive and active mediation, we examined the correlations of measures of family conflict (H3a-d) with the PPMMS main (i.e., frequency) and follow-up (i.e., style) scales. As [Table 3](#) reveals, with some exceptions, both parent and adolescent reports correlated with family conflict in the expected directions. While, contrary to H3a, parent and adolescent reports of the frequency of restrictive and active mediation were not related to family conflict, consistent with H3b, parent reports of autonomy-supportive restrictive mediation and parent and adolescent reports of autonomy-supportive active mediation were negatively correlated with family conflict. In addition, consistent with H3c and H3d, both parent and adolescent reports of controlling restrictive and active mediation, and inconsistent restrictive mediation were positively related to family conflict.

Adolescents' Media Use and the Frequency and Style of Mediation

As a final investigation of the validity of the parent and adolescent reports of the frequency and style of restrictive and active mediation, we examined the correlations of adolescents' media use (H4a-d) with the PPMMS main (i.e., frequency) and follow-up (i.e., style) scales. As [Table 4](#) shows, the large share of adolescent reports and especially parent reports did not correlate with adolescents' media use or in directions opposite to those hypothesized. Contrary to H4a, parent reports of the frequency of restrictive mediation were positively rather than negatively related to adolescents' overall and violent media use, and adolescent reports of restrictive mediation were unrelated to their own media use. Consistent with H4a, adolescent reports (but not parent reports) of the frequency of active mediation were negatively related to adolescents' overall and violent media use. Consistent with H4b, both parent and adolescent reports of autonomy-supportive restrictive mediation were negatively related to adolescents' overall media use, whereas only adolescent reports of autonomy-supportive restrictive mediation were negatively related to their own violent media use, and adolescent reports of autonomy-supportive active mediation were negatively related to their own overall and violent media use.

Table 2
Correlations between Parent and Adolescent Reports of the Style of Parental Mediation and Parent Reports of General Parenting Styles

	RM Autonomy-Supportive	AM Autonomy-Supportive	RM Controlling	AM Controlling	RM Inconsistent
Autonomy-Supportive Parenting	Parent Adolescent	.46*** .05	-.22*** -.17***	-.27*** -.13***	-.26*** -.10***
Inconsistent Parenting	Parent Adolescent	-.20*** -.08*	.27*** .10**	.26*** .11**	.43*** .17***

Note. RM = restrictive mediation; AM = active mediation.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3
Correlations between Parent and Adolescent Reports of the Frequency and Style of Parental Mediation and Adolescent Reports of Family Conflict

	RM Frequency	AM Frequency	RM Autonomy-Supportive	AM Autonomy-Supportive	RM Controlling	AM Controlling	RM Inconsistent
Family Conflict Parent	.04	.02	-.07*	-.15***	.15***	.17***	.14***
Family Conflict Adolescent	.02	.02	-.06	-.16***	.22***	.26***	.18***

Note. RM = restrictive mediation; AM = active mediation. * $p < .05$. ** $p < .01$. *** $p < .001$.

Contrary to H4c, both parent and adolescent reports of controlling restrictive and active mediation were either not related to adolescents' media use, or in the direction opposite to the one that was hypothesized (i.e., parent-reported controlling active mediation was negatively related to overall media use). Finally, consistent with H4d, both parent and adolescent reports of inconsistent restrictive mediation were positively related to adolescents' violent media use, but not to their overall media use.

Discussion

A first goal of this study was to investigate the extent of agreement between parents and adolescents in their reporting of parental media mediation. We found that parent and adolescent reports of the frequency of mediation were moderately correlated at best. While the correlation between parent and adolescent reports of the frequency of restrictive mediation was moderate, other correlations were small. This suggests that there is relatively low agreement between parents and adolescents in their reporting of these mediation strategies, corroborating the findings of other studies investigating parent-child agreement in parental mediation (Fujioka & Austin, 2003; Nathanson, 2001a) and family communication more generally (Austin, 1993; Tims & Masland, 1985).

Parents tended to report a higher frequency of both restrictive and active mediation than their children, a finding that is also consistent with prior studies (e.g., Gentile et al., 2012; Nikken & Jansz, 2006). Yet, the differences between the means of parent and adolescent reports of the frequency of mediation were small, as indicated by the small standardized mean differences (Cohen's $d = 0.14$ and 0.46 , respectively). Specifically, for both parents and adolescents alike, the reported frequency for restrictive mediation averaged around "almost never," and for active mediation between "almost never" and "sometimes." All in all, it seems reasonable to conclude that parents and adolescents tend to agree in their perceptions of the frequency of parental mediation.

Agreement was also found for the mediation styles. Parents and adolescents agreed in their reporting of controlling restrictive mediation, with both reports averaging around "not true." And although adolescents reported somewhat more controlling active and inconsistent restrictive mediation than their parents, the differences were small (Cohen's $d = -0.08$ and -0.26 , respectively), with parent and adolescent reports both averaging around "not true." Furthermore, both parents and adolescents identified an autonomy-supportive mediation style as the most prevalent one. This finding is reassuring, since autonomy-supportive mediation is the most effective mediation style to enhance positive and mitigate negative media effects (Valkenburg et al., 2013).

However, parents reported significantly more autonomy-supportive restrictive and active mediation than their children (Cohen's $d = 0.83$ and 1.05 , respectively).

Table 4
Correlations between Parent and Adolescent Reports of the Frequency and Style of Parental Mediation and Adolescent Reports of Adolescent Media Use

	RM Frequency	AM Frequency	RM Autonomy-Supportive	AM Autonomy-Supportive	RM Controlling	AM Controlling	RM Inconsistent
Overall Media Use	.14***	.03	-.08*	-.00	-.01	-.07*	.07
Parent	-.04	-.09**	-.18***	-.10**	-.05	-.06	.03
Adolescent	.18***	.06	-.03	-.03	.03	.02	.07*
Parent	-.01	-.07*	-.16***	-.10**	.00	-.03	.09**
Adolescent							

Note. RM = restrictive mediation; AM = active mediation.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

These perceptual differences might be explained by bias reflected in both the parent and adolescent reports (Hartos & Power, 2000). On the one hand, parents may over-report autonomy-supportive parental mediation styles, due to a tendency to provide socially desirable responses (Fujioka & Austin, 2003). On the other hand, adolescents may under-report the use of these styles, due to their developmentally induced striving for autonomy (Ryan, Deci, & Grolnick, 1995) and, as such, a tendency to provide responses that emphasize their autonomy over their own media use.

However, the relatively low agreement between parents and adolescents may also be correct and valid. Scholars have argued that parents and children may both have valid, yet different perspectives about parental mediation, and family communication more generally (Austin, 1992, 1993). For instance, Austin (1993) found that different perceptions about family communication may exist within a family, with parental involvement being more salient for children than other aspects of family communication, such as socio or concept orientation. Also, differences in the perception of parental mediation may develop as children mature, with certain parenting efforts becoming more or less salient to children than other (Austin, 1993; Meadowcroft, 1986).

It is very likely that at their stage of development, adolescents have already internalized their parents' media-related rules and, as such, no longer perceive them as rules. As self-determination theory (Ryan & Deci, 2000) postulates, children gradually internalize rules set by their parents, such that instead of being extrinsically motivated (e.g., to circumvent punishment), they become intrinsically motivated to regulate their media use. Once they have already internalized these rules, adolescents may perceive their parents' mediation efforts as less present. Altogether then, the findings suggest that, overall, parents and adolescents agree in their reporting of both the frequencies and the styles of parental mediation, but disagree in their reported levels of autonomy-supportive mediation.

The Relative Validity of Parent and Adolescent Reports

A second goal of this study was to investigate the relative validity of parent and adolescent reports of parental mediation. We found that the correlations between the mediation reports and external criterion measures were highly similar for parents and adolescents. First, we found that parent and adolescent reports of the frequency of restrictive and active mediation were both correlated with demographic variables at a similar level and direction. In particular, both younger adolescents and their parents reported more mediation than older adolescents and their parents. In addition, both parent and adolescent reports were unrelated to parent education. The latter finding is consistent with prior studies among adolescents (Austin, Knaus, & Meneguelli, 1997; Nathanson, 2002; Warren, 2017), but inconsistent with parental mediation research among younger children, which

found that higher educated parents more frequently engage in restrictive mediation than lower educated parents (Beyens, Valkenburg, & Piotrowski, 2019; Gentile et al., 2012; Valkenburg, Krccmar, Peeters, & Marseille, 1999).

Given this earlier evidence, and our own finding that parent and adolescent reports were both unrelated to parental education level, there is reason to assume that this relationship only holds for younger children. A possible explanation may be that, compared to parents of adolescents, parents of younger children may more easily think of restrictive mediation (e.g., because they consider their child too young for certain media content), which is related to parental education level (Beyens et al., 2019; Gentile et al., 2012; Valkenburg et al., 1999). Another explanation may be that parents' control over children's media use declines across adolescence (Steinberg & Silk, 2002), which may reduce the influence of demographic factors, such as parents' education.

Second, with one exception, both parent and adolescent reports of the styles of mediation correlated with the equivalent subscales of general parenting styles. Specifically, all parent reports of autonomy-supportive, controlling, and inconsistent mediation were significantly correlated in the expected directions with general parenting styles, with correlation coefficients ranging from $r = .20$ to $r = .58$. Adolescent reports of the styles of mediation were less strongly correlated with general parenting styles, with correlation coefficients ranging from $r = .05$ to $r = .17$.

Moreover, whereas autonomy-supportive restrictive mediation as reported by adolescents was not related to general autonomy-supportive parenting, parent reports showed a rather strong correlation ($r = .46$). A similar difference was found for autonomy-supportive active mediation. Consistent with the study by Gentile et al. (2012), these differences could be due to the fact that within-rater correlations (e.g., correlations across parent reports) are generally stronger than cross-rater correlations (e.g., correlations between parent reports and adolescent reports; Hartos & Power, 2000). In fact, since the general parenting styles were reported by parents (and not by adolescents), it seems unsurprising that we found stronger correlations for the parent reports of equivalent mediation styles than for the adolescent reports.

Third, the correlations between parent and adolescent reports of parental mediation and family conflict also showed a similar pattern. Both parents and adolescents who reported more controlling restrictive and active mediation, and more inconsistent restrictive mediation reported more family conflict. In addition, both parents and adolescents who reported more autonomy-supportive active mediation reported less family conflict. Adolescent reports were somewhat more strongly correlated with family conflict than parent reports. Similar to the findings concerning general parenting styles, these findings might be explained by differences in within- and cross-rater correlations (Hartos & Power, 2000), since family conflict was reported by adolescents, not by parents.

Finally, both parent and adolescent reports of the style of restrictive mediation showed similar associations with adolescents' media use. Specifically, both parent and adolescent reports of autonomy-supportive restrictive mediation were

associated with lower levels of overall media use, and both parent and adolescent reports of inconsistent restrictive mediation were associated with higher levels of violent media use. Consistent with prior research (Valkenburg et al., 2013), these findings indicate that the style of mediation matters, by showing that when parents use an inconsistent style when engaging in restrictive mediation, adolescents may show reactance, whereas an autonomy-supportive style seems to neutralize reactance. Furthermore, both parent and adolescent reports of controlling restrictive mediation were unrelated to adolescents' media use. For active mediation, patterns were somewhat different, with adolescent reports of autonomy-supportive active mediation being associated with lower levels of overall and violent media use, but parent reports being unrelated to adolescents' media use. Yet, for controlling active mediation, parent reports were as strongly associated with adolescents' media use as adolescent reports.

Limitations and Future Research

The current study extends prior research on the frequency and style of parental mediation (e.g., Valkenburg et al., 2013) by showing how adolescents' perceptions of the frequency and style of parents' mediation efforts correspond with how parents perceive their own mediation efforts. Further research is required to establish a true understanding of how adolescent and parent perceptions of parental mediation relate to parents' actual mediation behavior. Moreover, additional studies will be needed that seek to understand why perceptual differences exist. For instance, research might explore whether differences might be explained by parents' tendency to provide socially desirable responses (Fujioka & Austin, 2003) and/or adolescents' striving for autonomy (Ryan et al., 1995). Besides exploring such explanations, research will also be needed to investigate the potential implications of perceptual differences for adolescents' internalization of media-related rules.

Another avenue for future research lies in the investigation of similarities and differences across other aspects of mediation, including other types of media use (e.g., social media), media content (e.g., advertising), and mediation strategies (e.g., positive and negative mediation; Austin, Bolls, Fujioka, & Engelbertson, 1999). As Valkenburg et al. (2013) argued, the PPMMS does not comprise all aspects of parental mediation, nor does it focus on other types of media use than television viewing and gaming. While expanding the PPMMS to encompass other aspects of mediation, future studies should also explore the extent of agreement between parent and adolescent reports across those topics, as well as its implications.

Conclusion

The current study investigated the extent of agreement between parental mediation reports from parents and adolescents, and their relative validity. The overall trend

suggests that parents and adolescents share congruent views about how frequently and in which style parents engage in restrictive and active parental mediation, but perceptual differences exist. In addition, this study confirms the validity of the adolescent-report version of the PPMMS (Valkenburg et al., 2013) and establishes the validity of the parent-report version. Consistent with other studies investigating agreement between parent and child reports of parental mediation (Fujioka & Austin, 2003; Nathanson, 2001a) and family communication patterns more generally (Austin, 1993; Tims & Masland, 1985), the current study suggests that both parent and adolescent reports are equally valid to assess the frequency and style of parental mediation, but that correlations between both reports are relatively low. In order to obtain a full understanding of the prevalence and implications of parental media mediation, future research should consider both parent and adolescent reports.

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