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Developing A Scale to Assess Three Styles of Television Mediation: "Instructive Mediation," "Restrictive Mediation," and "Social Coviewing"

Patti M. Valkenburg, Marina Krcmar, Allerd L. Peeters, and
Nies M. Marseille

Telephone interviews from a random sample of Dutch parents (N = 123 for the pilot study, N = 519 for the main study), provided an opportunity to explore television mediation activities in which parents could engage. From principal components analysis, three reliable styles of television mediation emerged: restrictive mediation, instructive mediation, and social coviewing. In addition to a number of demographic variables, parental concerns about the negative effects of television were significant predictors of style of television mediation.

The past two decades have witnessed a considerable increase of research on adult mediation of children's television viewing. The studies can generally be divided into three categories. The first category consists of research assessing the occurrence of television mediation in the home (Austin, 1993; Bybee, Robinson, & Turow, 1982; Dorr, Kovacic, & Doubleday, 1989; Huston & Wright, 1996; Mohr, 1979; St. Peters, Fitch, Huston, Wright, & Eakins, 1991; Weaver & Barbour, 1992). Occurrence studies document how often parents mediate their child's viewing: how often they restrict their child's television viewing (e.g., Bybee et al., 1982), how often they discuss television shows with their children (e.g., Austin, 1993) or how often they coview (that is, watch television shows together) (e.g., St. Peters et al., 1991).

The second category of mediation studies has enumerated the precursors of various styles of mediation (Abelman & Pettet, 1989; Atkin, Greenberg, & Baldwin, 1991; Brown, Childers, Bauman, & Koch, 1990; Gross & Walsh, 1980; Lin & Atkin, 1989; Messaris & Kerr, 1983; Morgan, Alexander, Shanahan, & Harris, 1990; Van der Voort, Nikken, & Van Lil, 1992; Van Lil, 1995; Weaver & Barbour, 1992). Precursor studies have found that mothers are more likely than fathers to restrict television viewing by their children (e.g., Bybee et al.,

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1982), and are more likely to evaluate television for their children (e.g., Mohr, 1979). It has also been found that parents with higher levels of education are more likely to restrict their children's television viewing (see, for example, Brown et al., 1990) and to discuss the content of the programs with their children (e.g., Gross & Walsh, 1980). Lastly, it has been shown that parents of younger children are likely to engage in more television mediation than parents of older children (e.g., Lin & Atkins, 1989).

The third category of mediation research has examined the *effects* of television mediation (Ball & Bogatz, 1970; Cantor & Wilson, 1984; Collins, 1983; Collins, Sobol, & Westby, 1981; Corder-Bolz, 1980; Corder-Bolz & O'Bryant, 1978; Friedrich & Stein, 1975; Prasad, Rao, & Seikh, 1978; Salomon, 1977; Valkenburg, Krccmar, & De Roos, 1998; Watkins, Calvert, Huston-Stein, & Wright, 1980). Effects studies have shown that a covieing adult who offers comments and interpretations of content can improve children's learning from educational programs (e.g., Ball & Bogatz, 1970), modify children's attitudes toward TV violence (for example, Corder-Bolz & O'Bryant, 1978), make children feel more positive towards non-traditional sex roles (Corder-Bolz, 1980), counteract the undesirable effects of television commercials (Prasad et al., 1978), soothe children who are exposed to frightening television scenes (Cantor & Wilson, 1984), and stimulate children's knowledge of art and culture (Valkenburg et al., 1998).

In terms of method, the first two categories of studies on occurrence of mediation and on precursors of mediation have involved survey data. With the exception of Dorr et al. (1989) and Austin (1993), the third category of studies into the *effects* of mediation has involved experimental designs only. Despite the fact that experiments allow for maximum control of the environment by the researcher and thus achieve high internal validity, experiments have disadvantages as well. Their settings are not natural, and they cannot test claims of long-term effects. To overcome these difficulties and to develop a clearer understanding of the effects of different styles of television mediation, both cross-sectional and longitudinal survey studies are necessary.

However, to investigate the short- and long-term effects of television mediation in a survey context investigators need a reliable instrument that measures the different styles of television mediation used by parents. With unreliable scales, effect sizes are attenuated, and results may be less convincing than otherwise (see Cronbach, 1990, for a discussion).

Mediation Strategies

Several attempts have been made to unambiguously classify the various styles of television mediation in which parents engage. Across all of the studies reviewed, four general television mediation strategies have been recognized, although not consistently, nor (necessarily) simultaneously. The first style of television mediation in which parents may engage has been called *restrictive* mediation, also called at times rule making (e.g., Atkin et al., 1991; Bybee et al., 1982; Nathanson, 1997). In this style of mediation parents set rules for viewing or prohibit the viewing of certain content. For instance, parents may set specific viewing hours for their child, or forbid the child to watch a particular program.

The second style of television mediation has been called *instructive*, sometimes referred to as *evaluative* or *active* mediation (Austin, 1993; Bybee et al., 1982; Nathanson, 1997). This style of mediation refers to the process of discussing certain aspects of programs with children, either during or after viewing. Examples of *instructive* mediation are parents' explanation of things that happen on TV, that certain shows are unrealistic, or that good or bad things are done by characters.

The third style of mediation is *coviewing* (Dorr et al., 1989). Coviewing refers to occasions when adults and children watch television together, sharing the viewing experience, but not engaging in any discussion about the program. Coviewing is considered a form of mediation, because it has been shown to have positive effects on children. Research has indicated, for instance, that parents and children report feeling closer to one another after participating in coviewing (Bryce & Leichter, 1983), and children learn more about human relationships from a family program when they coview with parents than when they view alone (Dorr et al., 1989).

The fourth style of mediation is *unfocused* mediation. The concept of "unfocused mediation" was originally identified by Bybee et al. (1982). They developed a 14-item scale that resulted in a three-factor solution — restrictive, evaluative and unfocused mediation. The unfocused mediation style was described by the authors as a style that included an unstructured, relaxed approach to television on the part of parents. The original Bybee et al. (1982) scale was subsequently used by other researchers (Abelman & Pettey, 1989; Van der Voort et al., 1992; Van Lil, 1995; Weaver & Barbour, 1992) and has become one of the more frequently used measures of parental television mediation. The unfocused mediation style measure included four items that asked:

- (a) How often do parents watch TV with their child?
- (b) How often do they encourage specific programs?
- (c) How often do they talk about a show while viewing?
- (d) How often do they discuss a show just viewed or about to be viewed?

While Bybee et al. argue that these items index an unfocused style of mediation, several problems exist. First, the items appear unrelated conceptually and, therefore, the composite measure lacks face validity. It is not surprising that the internal consistency reliability coefficients for this factor are generally low (Cronbach's alphas range from .50 to .65, see Van der Voort et al., 1992; Van Lil, 1995). It is possible that the unfocused mediation style is a methodological artifact resulting from a forced interpretation of items that loaded on a "left-over" factor.

In summary, although four styles of television mediation are identified in the literature and are discussed theoretically, no statistically reliable scale that identifies and measures each of the styles of mediation has been reported. In fact, the frequently used Bybee et al. scale which tries to tap more than one mediation style, identifies a factor that may not be measured with reliability. It is the aim of this study to identify styles of mediation that exist among parents and to develop a reliable instrument for measuring them.

Developing a Television Mediation Scale

We created 30 items possibly measuring television mediation strategies of parents. Some of the items were new; others were taken from earlier studies (Austin, 1993; Bybee et al., 1982; Van der Voort et al., 1992; Van Lil, 1995). We wanted to investigate whether one or more of the theoretically identified television mediation styles mentioned above could be differentiated empirically. The first research question of this study asks:

RQ₁: What are the different styles of television mediation employed by parents for their children?

Testing the Television Mediation Scale

The second aim of the study is to discover which of the mediation styles are most prevalent among parents. Because of considerable controversy in the literature, this is an issue in need of resolution. For example, Weaver and Barbour (1992), Gross and Walsh (1980), Mohr (1979) and a Gallup poll (1989) all indicate that restrictive mediation occurs more frequently than instructive mediation. Other studies (Bybee et al., 1982; Van Lil, 1995) have found instructive mediation to occur more frequently than restrictive mediation. Therefore, our second research question asks:

RQ₂: What style of television mediation is most frequently used by parents?

A third aim of this study is to determine what factors affect the different styles of mediation that can be identified. Many studies have investigated the determinants of television mediation. These studies have shown that overall; mothers (Bybee et al., 1982; Mohr, 1979; Van der Voort et al., 1992; Van Lil, 1995), educated parents (Bower, 1973; Mohr, 1979; Van Lil, 1995) and parents of younger children (Bybee et al., 1982; Lin & Atkin, 1989; Mohr, 1979; Van der Voort et al., 1992; Van Lil, 1995) more frequently engage in various styles of television mediation. Some observers have hypothesized that parents of elementary-school girls employ more mediation strategies than do parents of elementary-school boys. But this hypothesis has not been supported by studies that included child gender as a predictor of television mediation (Abelman, & Pettet, 1989; Atkin et al., 1989; Van der Voort et al., 1992; Van Lil, 1995). We therefore hypothesize that:

H₁: (a) Mothers, (b) more educated parents, and (c) parents of younger children will engage in more television mediation than fathers, less educated parents, and parents of older children.

In addition to these demographic predictors, other factors have been found to contribute to parent likelihood to engage in television mediation. Parental concerns, specifically the effects that parents believe television to have, affects the amount and style of mediation that they use. Krcmar (1998) has shown that parents who are concerned about the effects of television on child behavior are more likely to restrict their children's television viewing by intending to use the V-chip than parents who are not concerned. Other studies suggest that

parents are likely to restrict and evaluate television for their children when they believe that television has negative effects (e.g., Bybee et al., 1982). This study seeks to discover how parents' *specific* concerns about violent and sexually explicit television content affect their likelihood to use each style of mediation. Our final research question is therefore:

RQ₃: What is the impact of parent concerns about television-induced aggression, television-induced fright and the sexual content of television on their likelihood to use each style of mediation?

Method

Sample

In February 1997, the Audience Research Department of the Netherlands Broadcasting Corporation conducted telephone interviews among a random sample of Dutch parents ($N = 519$) with one or more children between 5 and 12 years old. The sample was drawn from a large, representative data bank ($N = 10,000$) of people who had agreed to participate in telephone interviews. The interviews were conducted in afternoon and evening hours. Because fewer men than women were at home at the time of the phone contact, the sample contained more mothers (61%) than fathers (39%). When a respondent had more than one child in the age range 5-12 years, he or she was asked to respond to the questions by thinking about only one of the children; half of the parents with more than one child were asked to think about the child whose birthday would occur first after the interview, while the other half were asked to choose the child whose birthday had occurred most recently. The resulting sample of children was 52.6% male and 47.4% female. For purposes of analysis, the children were grouped into two age ranges: age 5-8 (51.8% of sample), and age 9-12 (48.2% of the sample).

Parents' Television Mediation Styles

The development of the scale to assess parent television mediation styles started with a pilot study of 123 Dutch parents. The pilot study was conducted three weeks before the main study. Its goal was to explore a 30-item instrument, then to reduce the instrument to a smaller set of items with high internal consistency. The pilot inventory was administered to the parents by telephone interview. All items dealt with the frequency (often, sometimes, rarely, or never) with which parents used various means to mediate their child's television viewing. The pilot items were created to form interval rating scales as opposed to ordinal scales (signifying "more than" or "less than"). There is still some controversy whether most measures used in sociobehavioral research are applied on an ordinal or an interval level (Pedhazur, Pedhazur-Smelkin, 1991). The consensus of many methodologists is that "usually no harm is done in most studies in the behavioral sciences by employing methods of mathematical and statistical analysis which take intervals seriously" (Nunnally, 1978, p.17).

To measure restrictive mediation, we drew five items from Bybee et al. (1982). The items have been investigated by Van der Voort et al. (1992) and yielded a Cronbach's alpha of .75. To augment this alpha, an additional item was added: "How often do you tell your child to turn off the TV when s/he is

watching an unsuitable program?" To measure *instructive* mediation, five items from Bybee et al. (1982), originally labeled *evaluative guidance*, were used. These items had a Cronbach's alpha of .75 in the Van der Voort et al. (1992) study. To raise this alpha, three *active* mediation items from Austin (1993) were added.

To learn whether additional mediation styles could be identified, we created 16 other items tapping television mediation activities in which parents could engage. Some of these items were taken from the *unfocused guidance* style measured by Bybee et al. (1982). Still other items added were "how often do you watch together, because you both like the show?" "How often do let your child choose the programs s/he likes to watch?" "How often do you try to solve quiz-show questions with your child?" (Van Lil, 1995), and "How often do you discuss a show just viewed or about to be viewed?" (Bybee et al., 1982).

The order in which the 30 questions were asked was randomly varied by means of a computerized rotation technique. To reduce the 30 television mediation items, a principal component analysis was carried out to determine which of the added items would load highly on a third or fourth factor. The factor analysis produced only one additional factor, for a total of three factors. This third factor was indexed by items such as "how often do you watch television with your child, because you both like the program," and "how often do you watch together because of a common interest in a show." The factor underlying these items was labeled *social coviewing*. For the main study we used only the fifteen items that had the highest loadings on the factors defined. The order in which the 15 questions were asked was randomly varied.

Amount of Television Watched by the Child

Because children's viewing time may be related to one or more television mediation styles, this variable was included. Estimates of children's viewing time were obtained by asking the parents four questions: (a) how many days does your child usually watch TV on weekdays? (Monday through Friday); (b) on the weekdays your child watches TV, how long does s/he usually watch?; (c) how many days does your child usually watch TV on a weekend? (Saturday and Sunday); and (d) on weekends that your child watches TV, how long does s/he usually watch per day? A child's viewing time per week was calculated by multiplying the number of days per week that s/he watched by the number of hours that s/he watched on each day.

Parents' Concerns About the Effects of Television on Their Child

To investigate parent concerns about the effects of television on their child we replicated the approach of Cantor, Stutman, and Duran (1996). Parents were asked to rate concerns about the effects of television on their child. The question was introduced as follows: "We would like to know how concerned you are about the effect of unsuitable programs on your child. What kinds of effects are you most concerned about for you child?" This introduction was followed by a list of nine possible negative effects. For each effect, parents responded on a four-point scale with: (0) "not at all concerned," (1) "a little bit concerned," (2) "moderately concerned," and (3) "very concerned."

The nine items were entered into factor analysis with varimax rotation. This yielded three interpretable factors. The first factor (4 items, Eigenvalue: 2.59) represented parent concerns about television-induced aggression and included items such as: "How concerned are you that watching what you consider to be inappropriate programs would ... encourage your child to think violence is an acceptable way to solve problems?" and "...stimulate your child to imitate the violence?" The second factor (3 items, Eigenvalue: 2.54) represented parent concerns about television-induced fright and included items such as: "How concerned are you that watching what you consider to be inappropriate programs will frighten your child?" and "...cause nightmares?" The third factor (2 items, Eigenvalue: 1.84) represented parent concerns about sexual content and included the items: "How concerned are you that watching what you consider to be inappropriate programs will teach your child prematurely about sexual matters?" and "...encourage your child to prematurely engage in sexual activity?" On the basis of principal-component results, three scales were formed: one measuring concern for television-induced aggression ($\alpha = .85$; $M = 1.27$; $sd = .96$), a scale measuring concern for television-induced fright ($\alpha = .90$; $M = 1.40$; $sd = 1.05$), and a scale measuring concern for sexual content ($\alpha = .82$; $M = 1.08$; $sd = 1.03$).

Results

Development of Television Mediation Scale

The result of the scale development procedure in the pilot study was a 15-item television mediation scale, then used in the main study. To confirm the dimensional structure of the television mediation items from the pilot study, a second principal components analysis of main study data was conducted. This analysis yielded a factor solution identical to that in the pilot study. Three factors emerged, labeled "instructive mediation," "restrictive mediation," and "social coviewing." The three-factor solution explained 55.6% of the variance (Table 1).

Factor scores were constructed for each of the three mediation styles by totaling the unweighted scores on the items indexing each mediation factor. Cronbach's alpha values were .80 for instructive mediation (5 items); .79 for restrictive mediation (5 items); and .79 for social coviewing (5 items). The correlation between the restrictive and instructive mediation scale was: $r = .41$, $p < .001$, between the restrictive and social coviewing scale: $r = .15$, $p < .001$; and between the instructive mediation and social coviewing scale: $r = .32$, $p < .001$.

Factors Affecting Parents' Style of Television Mediation

Because several earlier studies (Bybee et al., 1982; van der Voort et al., 1992; Van Lil, 1995) employed hierarchical multiple regression analyses to identify factors affecting parent use of the three mediation styles, we replicated this method of analysis. Demographic variables (parent's age, parent's education, child's gender, and child's age) were included in the first block. Because a child's viewing time may be correlated with certain styles of mediation or with parental concerns about television, child viewing time was included as a control variable in the first block. Parental concerns about television's negative

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effects (concerns about television-induced aggression, television-induced fright, and sexual content) were entered in the second block.

Table 1
Varimax-Rotated Factor Solution for the Three Parental Mediation Styles

How often do you...	FACTOR 1 Instructive Mediation	FACTOR 2 Restrictive Mediation	FACTOR 3 Social Coviewing
INSTRUCTIVE MEDIATION			
1. ...try to help the child understand what s/he sees on TV? ^a	.76	.18	.12
2. ...point out why some things actors do are good? ^a	.74	.07	.13
3. ...point out why some things actors do are bad? ^a	.74	.13	.15
4. ...explain the motives of TV characters? ^a	.70	.20	.12
5. ...explain what something on TV really means? ^a	.67	.21	.09
RESTRICTIVE MEDIATION			
6. ...say to your child to turn off TV when s/he is watching an unsuitable program? ^c	.16	.76	.03
7. ...set specific viewing hours for your child? ^a	.15	.74	.04
8. ...forbid your child to watch certain programs? ^a	.17	.73	.07
9. ...restrict the amount of child viewing? ^a	.10	.73	.00
10. ...specify in advance the programs that may be watched? ^a	.17	.67	.09
SOCIAL COVIEWING			
11.watch together because you both like a program? ^c	.11	.06	.80
12.watch together because of a common interest in a program? ^c	.10	.06	.80
13.watch together just for the fun? ^c	.13	.02	.76
14.do you watch your favorite program together? ^c	.18	.02	.72
15.do you laugh with your child about the things you see on TV? ^c	.04	.07	.53

^a Item adopted from Austin (1993); ^b Item adopted from Bybee et al. (1982); ^c New item.

The first block, demographics and child TV viewing time, accounted for 5% of the variance in restrictive mediation, $F(5,438) = 4.67$, $p < .001$; $R = .21$, 3% of the variance in instructive mediation, $F(5,438) = 2.68$, $p < .05$; $R = .16$, and 3% of the variance in social coviewing, $F(5,438) = 2.65$, $p < .05$; $R = .17$. The addition of the second block, parental concern, resulted in a significant increase in the variance explained for each of the three mediation styles. Parent's concerns about television added 15% to the variance explained in restrictive mediation, $F(8,435) = 9.58$, $p < .001$, 7% to the variance in instructive mediation, $F(8,435) = 4.07$, $p < .001$, and 4% to the variance of social coviewing, $F(8,435) = 2.11$, $p < .05$. Table 2 presents final beta weights for each of the independent variables.

Table 2
Multiple Regression Prediction of Restrictive Mediation, Instructive Mediation, and Social Coviewing

Predictor	Restrictive Mediation beta	Instructive Mediation beta	Social Coviewing beta
BACKGROUND VARIABLES			
Parent's Gender (1 = Male; 2 = female)	.10*	.10*	.07
Parent's Education	.19***	.07	.05
Child's Gender	-.06	-.06	-.01
Child's Age	.00	-.09	-.02
Child's Television Viewing Time	.02	.00	.17***
PARENTAL CONCERNS ABOUT TV			
Concerns about TV-induced aggression	.19**	.03	-.08
Concerns about TV-induced fright	.22***	.11	.01
Concerns about Sexual Content	-.06	.10	-.01
Multiple R	.39***	.26***	.19*
R ² Adjusted	.13	.05	.02

* $p < .05$; ** $p < .01$; *** $p < .001$

In agreement with H_{1a} , the tendency to engage in instructive and restrictive mediation was greater among mothers than among fathers. H_{1b} received partial support. Highly educated parents used restrictive mediation more frequently, but educational level of the parent did not contribute to the prediction of restrictive mediation. Consistent with H_{1c} , there was a tendency for parents to employ instructive mediation with younger children, although this finding did not reach significance ($p = .06$). Social coviewing was predicted by child's viewing time only. The more children watch television, the more they view television with their parents. Consistent with earlier research findings, child gender was not a significant predictor of any mediation style.

Tendency to engage in restrictive mediation was higher among parents concerned about television-induced aggression and television-induced fright. There was also a tendency for parents to use more instructive mediation when they were concerned about television-induced fright, although this finding did not reach significance ($p = .06$). Parent concerns about television were not related to social coviewing.

Frequency With Which Parents Engage in Different Styles of Television Mediation

The hierarchical regression analysis showed that demographic variables and parental concerns about television can predict different television mediation styles. However, this analysis cannot represent frequencies with which *subgroups* of parents engage in different television mediation styles. To investigate variations in frequency with which parents engage in different mediation styles, we conducted a multivariate analysis of variance with television mediation style (restrictive vs. instructive vs. social coviewing) as a within-subjects factor, and with gender of the parent, educational level of the parent (low, middle, high), and age of the child (5 to 8 vs 9 to 12) as between-subjects

variables. Differences in parental mediation styles among all parents, and differences between fathers and mothers, parents with higher and lower education, and parents of younger and older children are presented in Table 3.

The MANOVA yielded a significant main effect for television mediation style, $F(2, 948) = 204.74, p < .001, \eta^2 = .30$. This effect indicates that social coviewing occurred most often, and instructive mediation least often. Restrictive mediation fell in-between. Post-hoc pairwise t-tests revealed that the three mediation styles differed significantly from each other. Social coviewing differed from instructional mediation, $t = -9.49, df = 497, p < .001$, and from restrictive mediation, $t = -18.64, df = 501, p < .001$, and instructional mediation differed significantly from restrictive mediation, $t = 12.94, df = 492, p < .001$.

The MANOVA also reflected a significant main effect for parent gender, $F(1, 474) = 5.35, p < .05, \eta^2 = .01$, indicating that mothers engage in each of the three television mediation styles more than fathers. However, post-hoc simple effects analyses (Tabachnick & Fidell, 1989) indicated that difference in mediation style between fathers and mothers reached significance only in case of instructive mediation, $F(1, 499) = 7.95, p < .01, \eta^2 = .01$. Difference in restrictive mediation between fathers and mothers fell below the level of significance, $F(1, 474) = 3.07, p = .08$. No significant differences between fathers and mothers appear with respect to social coviewing.

Table 3
Frequency With Which Parents Engage in Three Different Styles of Television Mediation by Parent's Gender, Parent's Educational Level, and Child's Age

	Restrictive Mediation <i>M (sd)</i>	Instructive Mediation <i>M (sd)</i>	Social Coviewing <i>M (sd)</i>
Fathers	2.50 (.81) ^a	2.94 (.70) ^a	3.29 (.56)
Mothers	2.62 (.81) ^b	3.10 (.63) ^b	3.37 (.56)
Younger Children (5-8)	2.63 (.85) ^a	3.09 (.68) ^a	3.32 (.59)
Older Children (9-12)	2.50 (.77) ^b	2.98 (.62) ^b	3.36 (.53)
Education Level of Parents:			
Low	2.30 (.82) ^a	2.92 (.76) ^a	3.30 (.64)
Middle	2.61 (.79) ^b	3.07 (.63) ^b	3.38 (.54)
High	2.70 (.80) ^b	3.08 (.60) ^b	3.32 (.52)
All Parents	2.57 (.81) ^x	3.04 (.65) ^y	3.34 (.56) ^z

Note. The scales ranged from 1 (never) to 4 (often); ^{a, b} Comparisons for subgroups with different superscripts were significant at $p < .08$; ^{x, y, z} Comparisons for the overall sample with different subscripts are significant at $p < .001$.

The MANOVA showed a significant interaction between parents' educational level and style of mediation, $F(4, 948) = 2.93, p < .05, \eta^2 = .01$. Post-hoc t-tests indicated that parents of middle and higher educational levels tended to restrict child viewing more often than parents of a lower educational level, $t_{(low-middle)} = 2.93, df = 335, p < .01, t_{(low-high)} = 3.93, df = 274, p < .001$.

More highly educated parents also showed a tendency to engage in more instructive mediation than less educated parents $t_{(low-middle)} = 2.01, df = 329, p < .01, t_{(low-high)} = 2.17, df = 274, p < .05$. There was no significant difference in social coviewing between parents of different educational levels.

Finally, a significant interaction between child age and style of mediation appeared, $F(2, 948) = 3.88, p < .05, \eta^2 = .01$. Post-hoc comparisons indicated that parents of younger children engage in more instructive mediation than parents of older children, $F(1, 502) = 7.85, p < .01, \eta^2 = .02$. Differences in restrictive mediation between parents of younger and older children fell below the level of significance, $F(1, 506) = 3.07, p = .08$. There were no significant differences in social coviewing between parents of younger and older children.

Discussion

The primary aim of this study was to clarify the styles of television mediation in which parents engage. Based on earlier studies concerning occurrence, precursors and effects of television mediation, we attempted the construction of a reliable scale to assess the different styles of parent television mediation strategies used by parents. Scale development took place in two steps. In a pilot study we investigated a 30-item instrument measuring a wide range of television mediation strategies. On the basis of principal components analysis, three styles of television mediation can be reliably measured: *Restrictive mediation*, where parents set rules for viewing or prohibit children from viewing certain programs; *Instructive mediation*, where parents explain or discuss certain aspect of programs; and *Social coviewing*, where parents and children simply watch television together.

An unfocused style of mediation did not emerge in our work. Results lend support to our hypothesis that the unfocused mediation style identified in several earlier studies (Abelman & Pettey, 1989; Bybee et al., 1982; Van der Voort et al., 1992; Van Lil, 1995; Weaver & Barbour, 1992) is an invalid style of mediation, resulting from a misinterpretation of miscellaneous items that grouped together on a "left over" principal components factor. The present study suggests that the concept of unfocused mediation be ignored in the future in favor of a focus on social coviewing as a third style of television mediation.

A second aim of this study was to discover which style of mediation parents most frequently use. Results suggest that social coviewing is the style most frequently used by Dutch parents. This result held for both mothers and fathers, for parents of younger and older children, and for more and less educated parents. In addition, our findings indicate that instructive mediation is more often used than restrictive mediation. This finding is congruent with earlier studies conducted in the US (Bybee et al., 1982) and the Netherlands (Van Lil, 1995). Because some studies have found the opposite result — that restrictive mediation occurs more often than instructive mediation (Gross & Walsh, 1980; Mohr, 1979; Weaver and Barbour, 1992) — future research must resolve this inconsistency.

In accordance with H_{1a} and with earlier studies, mothers more often than fathers engaged in restrictive and instructive television mediation. This finding

may result from the fact that mothers are frequently primary care givers. In both the US and in the Netherlands, a considerable number of mothers do not work outside the home, and it is conceivable, therefore, that they are more likely to explain or set rules about television content. Brown et al. (1990) suggest that differences in television mediation styles between fathers and mothers should not be attributed to the gender of the parent but to his or her position in the home. Brown et al. found that employed mothers are less likely to impose television content restrictions than mothers who do not work outside the home.

In this and earlier studies, parents with higher levels of education are more likely to engage in restrictive and instructive mediation than are less educated parents. Parents of younger children were more likely to use instructive and restrictive mediation styles than are parents of older children. The finding that differences between parents of younger and older children disappeared when parental concerns were statistically controlled suggests that parents of younger children are more concerned than parents of older children about television negative effects. It is this concern (rather than child age) that motivates the increased mediation of parents of younger children.

The present study indicates that parent concerns, specifically concerns about television-induced aggression and television-induced fright, can influence their style of television mediation. Parents who are more concerned about television-induced fright and aggression use more restrictive mediation than parents who do not worry about these potential effects. It is likely that these parents aim to minimize the negative impact of television and that for these parents restricting what their children watch is the simplest, most direct way of doing so.

Social coviewing was not associated with background variables or parental concerns. Social coviewing was predicted only by the *amount* of television viewing done by children. Without great concerns for the negative impact of television, some parents sit down with their child merely to watch television as family entertainment or as a means of spending time together. The more children watch, the more opportunity parents have to join them, and vice versa. The fact that this mediation style is unrelated to other predictor variables suggests that it is a unique style of parental approach to viewing.

Data for this study were collected among Dutch parents. Whether styles of parental television guidance found among Dutch parents can also be identified in the repertoires of US or other parents remains to be seen. There are some obvious differences in the home entertainment environment of Dutch and US children: difference in average daily viewing time (Dutch = 2 hours and US = 4 hours). There are also striking similarities. Most American children's shows, such as the *Power Rangers*, *Batman*, and *Rugrats*, are also broadcast in the Netherlands, and these programs are also popular among Dutch children.

As in the US, concerns of Dutch parents about increased violence in children's programming have risen to an unprecedented level in the past few years (Valkenburg, 1997). Violence on TV is the subject of political debate in the Netherlands and in the US. Although Dutch TV was governed by public broadcasters prior to 1989, commercial broadcasters have recently begun to compete for viewers. With the arrival of commercial broadcasts, violent and sexually oriented programs have increased. The majority of these programs are

imported from the US. Therefore, it is likely that with a similar television landscape, parental mediation in the Netherlands will be similar to that in the US.

We are currently collecting data from a US sample of parents and children to determine whether the television mediation dimensions found in this study also hold for US parents. We aim not only to investigate whether the three television mediation scales hold among US parents, but also whether television mediation dimensions identified by parents reports are reflected in children's reports of mediation.

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