Parental Mediation of Advertising Effects

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Abstract

The aim of this study was to investigate the effectiveness of various types of parental mediation of three potentially undesired effects of television advertising. In a survey among 360 parent-child dyads with children in the 8–12 age range, we investigated how different styles of advertising mediation (active vs. restrictive) and family consumer communication (concept-oriented vs. socio-oriented) moderated the relations between the children’s advertising exposure and their materialism, purchase requests, and conflicts with their parents. Our results showed that active advertising mediation and concept-oriented consumer communication were most effective in reducing the effects of advertising.
Parental Mediation of Undesired Advertising Effects

Ever since James McNeal (1969) recognized children as a distinct consumer market, advertisers have been interested in developing strategies to reach the child consumer. The growing interest in children as consumers has been paralleled by increased concern about the consequences of marketing aimed at children, in particular television advertising. These concerns have been fueled by empirical evidence that children’s exposure to television advertising may indeed lead to materialistic attitudes, increased purchase requests, and parent-child conflict (see Buijzen & Valkenburg, 2003a).

This study investigates which types of parental mediation are most effective in counteracting potentially undesirable advertising effects (Buijzen & Valkenburg, 2003a; Kunkel, 2001; Smith & Atkin, 2003; Valkenburg, 2004). In a parent-child survey, we investigate how various types of parental mediation affect the influence of television advertising on materialism, purchase requests, and parent-child conflict. Parental mediation is often considered the most effective tool in the management of television’s influence on children (Donohue & Meyer, 1984). Children usually watch television in a family context that is largely provided by their parents. This family context not only influences how children use the medium and the messages they get from it, but also how literate children become as television viewers (Dorr, 1986; Gunter & Furnham, 1998).

There is an impressive body of research on parental mediation of television content (see Austin, 2001). Parents can reduce undesirable media effects, including media-induced aggression (Nathanson, 1999, 2004; Nathanson & Cantor, 2000), fear responses (Cantor, Sparks, & Hoffner, 1988; Wilson, 1989; Wilson & Weiss, 1991), and
alcohol use (Austin, 1997; Austin, Pinkleton, & Fujioka, 2000), whereas they can increase desirable effects, such as learning from educational television programs (Huston & Wright, 1994; Salomon, 1977; Valkenburg, Krcmar, & De Roos, 1998).

Although the mediation literature has burgeoned in the past two decades, research on parental mediation of advertising effects is still relatively scarce (Boush, 2001). A number of studies have investigated the effectiveness of media literacy programs about advertising (Donohue, Henke, & Meyer, 1983; Feshbach, Feshbach, & Cohen, 1982; Roberts, Christenson, Gibson, Mooser, & Goldberg, 1980; Robinson, Saphir, Kraemer, Varady, & Haydel, 2001). However, these studies have usually been conducted in school settings and have thus disregarded the role of parents.

**Two Types of Parental Mediation**

Two types of parental mediation of children’s advertising exposure have been identified in the literature (Carlson & Grossbart, 1988; Robertson, 1979). The first type involves parental mediation strategies specifically related to advertising; The second type is related to more general family consumer communication patterns.

**Advertising Mediation**

The advertising mediation literature has so far identified two strategies that parents can use to modify the effects of advertising: active and restrictive advertising mediation (Bijmolt, Claassen, & Brus, 1998; Wiman, 1983). Active mediation includes making deliberate comments and judgments about television commercials and actively explaining the nature and selling intent of advertising. Restrictive mediation involves sheltering children from advertising by reducing their exposure to it. This type of mediation includes family rules restricting children’s viewing of commercial television channels. It has been argued that because young children lack the cognitive abilities to
resist commercial messages, reducing their exposure to television may sometimes be the only effective way to counteract negative effects (Robinson et al., 2001).

The few studies that have investigated parental advertising mediation have focused on the effects of mediation on children’s understanding of advertising (Bijmolt et al., 1998; Wiman, 1983), their skepticism towards advertising (Wiman, 1983), and their preferences or requests for advertised products (Prasad, Rao, & Sheikh, 1978; Wiman, 1983). Thus far, no study has investigated mediation effects on the undesired effects of advertising, such as materialism or parent-child conflict. The two studies that compared the effectiveness of active vs. restrictive mediation on children’s understanding and skepticism arrived at opposite conclusions. Bijmolt et al. (1998) concluded that active mediation was the most effective mediation style, whereas Wiman (1983) found that restrictive mediation was the most effective way to mediate advertising effects.

In conclusion, the research findings on how active and restrictive mediation influence advertising effects are indecisive, and in the case of the undesired advertising effects they are nonexistent. There is a need to investigate and compare how the two styles of mediation affect the relations between advertising exposure and materialism, purchase requests, and parent-child conflict. Earlier research evidence is too scarce and inconclusive to enable us to formulate specific hypotheses, which is why we investigate the following research question:

RQ1: How do active and restrictive mediation affect children’s advertising-induced materialistic attitudes, purchase requests, and parent-child conflict, and which type of mediation is most effective in reducing them?
Family Consumer Communication

In addition to specific advertising-related mediation, more general consumer-related family communication styles can influence children’s responses to advertising (Moschis, 1985; Robertson, 1979; Roedder John, 1999; Ward, 1974). In the literature, two types of family communication patterns are distinguished: one stressing negotiation, individual ideas, and opinions (concept-orientation) and one emphasizing obedience and harmony (socio-orientation) (Carlson & Grossbart, 1988; Chaffee, McLeod, & Atkin, 1971; Moschis & Moore, 1979).

Studies on family consumer communication patterns have shown that adolescents from families with a concept-oriented communication style have more knowledge about consumer-related matters, are better able to see through selling techniques in advertising, and display less materialistic values (Churchill & Moschis, 1979; Moore & Moschis 1978; Moschis, 1985; Moschis & Moore, 1982). In contrast, adolescents from families with a socio-oriented communication style are more susceptible to the influence of external sources such as television advertising (Moore & Moschis, 1978; Moschis, 1987).

There is as yet no research on the effects of family communication styles on children’s advertising-induced purchase requests and conflicts with their parents. The study on the effects of family communication on materialism only included adolescents (12–18-year-olds). However, since children learn consumer skills well before they reach adolescence (Valkenburg & Cantor, 2001), it is important to investigate the influence of consumer communication styles on children under the age of 12:

H1: Concept-oriented consumer communication is more effective in reducing the relations between advertising exposure and materialism, purchase requests, and parent-child conflict than socio-oriented consumer communication.
Method

Sample and Procedure

The results of this study are part of a larger parent-child survey into the unintended effects of television advertising on children (see Buijzen & Valkenburg, 2003b). The children in our sample were recruited from five elementary schools in urban and rural districts in the Netherlands. In all, 427 children completed a paper-and-pencil questionnaire previously tested in a pilot study among 10 children. The questionnaires were administered in the children’s regular classrooms by a trained examiner. After completing the questionnaire, which took about 25 minutes, the children were given a parent questionnaire to take home. They were told they would get a present when they returned the completed questionnaire. A total of 360 questionnaires (84%) were returned, yielding a total sample of 360 parent-child dyads from various economic backgrounds. The final child sample consisted of 175 boys (48.6%) and 185 girls (51.4%) between the ages of 8 and 12 ($M = 10.0$, $SD = 1.25$). The parent sample consisted of 291 mothers and 61 fathers and eight parents who did not indicate their gender.

The parent questionnaire was accompanied by a letter asking the parent who spent the most time with the child to fill it out. If more than one child in a family brought home the questionnaire, the parent was asked to complete one for each child with that child in mind. After all the questionnaires were collected, the parents were informed about the nature and purpose of the study via the school newspaper. All the children, including those who had not returned the questionnaire, were given a present.

Measures

A parent-child sample was chosen because we were interested in behaviors and responses of both parents and children. In the case of the mediation variables, we were
interested in the parents’ estimates of their frequency of using the different mediation styles. In the case of advertising exposure and effects, we were primarily interested in children’s estimates. Therefore, we chose to measure the mediation variables (i.e., advertising mediation and family consumer communication) among parents, and the advertising exposure and effects variables (i.e., advertising viewing frequency, materialism, purchase request behavior, and parent-child conflict) among children.

However, to check whether children were able to produce reliable responses on the advertising effects variables, we measured these variables (i.e., materialism, purchase requests, parent-child conflict) among both children and parents. Only the advertising exposure variable was exclusively measured among children, because our operationalization of this variable has been validated in earlier research (Vooijs, Van der Voort, & Beentjes, 1987). All child and parent advertising effects measures were significantly correlated, and none of the analyses yielded substantial discrepancies between the correlations investigated in the child and parent samples. We therefore based the remaining analyses in this study on the advertising exposure and effects variables measured among children.

Advertising mediation and consumer communication. To determine advertising mediation, we used a television mediation scale developed by Valkenburg, Krcmar, Peeters, and Marseille (1999). We adapted the items representing an active mediation style (e.g., how often parents try to help their children understand what they see on television) and a restrictive mediation style (e.g., how often parents forbid their children to watch certain programs) to reflect communication strategies more directly relevant to television advertising. The 10 items dealt with the frequency (often, sometimes, rarely, or never) of the various mediation strategies used by parents. To measure consumer
communication patterns, we used the original Family Communications Patterns (FCP) scale developed by Chaffee et al. (1971). The items on this scale were adapted to measure consumer-related communication patterns.

Our final list of items measuring types and styles of parental mediation consisted of 24 items, 10 for advertising mediation and 14 for consumer communication. The items were simultaneously entered into a principal components analysis, yielding four factors explaining 48.2% of the variance. These factors were: (1) active advertising mediation, (2) restrictive advertising mediation, (3) concept-oriented consumer communication, and (4) socio-oriented consumer communication.

The individual items and their factor loadings, means, and standard deviations are included in Table 1. The correlations among the four scales ranged from $r = .00$, ns, between restrictive advertising mediation and concept-oriented communication to $r = .29$, $p < .001$, between active advertising mediation and concept-oriented communication. Scales were constructed for each of the four factors by averaging the scores on the items loading on each factor. For the moderator analyses, each scale was recoded into dichotomous variables by way of mean splits.

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Please Insert Table 1
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Advertising viewing frequency. The frequency of viewing television advertising was measured by presenting the children with the titles of 10 commercials broadcasted on several television channels in the data collection period. We asked the children to indicate whether they had seen each one $1 = \text{never}$, $2 = \text{sometimes}$, or $3 = \text{often}$. This method has been demonstrated to be a valid measure of children’s television exposure among
elementary school children (Vooijs et al., 1987). We conducted a principal components analysis with varimax rotation on the 10 commercials. This analysis yielded one factor, which explained 33.1% of the variance. A total score of children’s advertising exposure was calculated by averaging the unweighted scores on the 10 commercials. Cronbach’s alpha of this scale was $\alpha = .77$ ($M = 2.13$, $SD = 0.41$).

**Materialism.** To ascertain the children’s level of materialism, we adopted a scale used by most studies on the relation between advertising and materialism (Churchill & Moschis, 1979; Moschis & Churchill, 1978; Moschis & Moore, 1982; Ward & Wackman, 1971). Examples of the questions were: (1) Do you think it is important to have a lot of money? (2) Do you think it is important to own a lot of things? (3) Would you like to be able to buy things that cost a lot of money? Children responded to the questions on a 4-point scale, ranging from 1 = *no, not at all* to 4 = *yes, very much*. A principal components analysis with children’s responses on these five items yielded one factor, explaining 35.7% of the variance. A materialism scale was constructed by averaging the scores on the five items ($\alpha = .70$, $M = 2.74$, $SD = 0.55$).

**Purchase requests.** To measure children’s purchase request behavior, children were presented with a list of nine product types selected to appeal to boys and girls alike and to younger and older children (toys, CDs, school stationery, candy, clothes, computer games, snacks, athletic equipment, and money). The children were asked to indicate whether they 1 = *never*, 2 = *sometimes*, or 3 = *often* asked their parents for each product type. Principal components analysis on children’s responses showed a one-factor solution explaining 23.5% of the variance. The total purchase request variable was constructed by averaging the scores on the nine items (Cronbach’s $\alpha = .59$, $M = 1.76$, $SD = 0.33$).
Parental Mediation of Advertising Effects

Parent-child conflict. To measure parent-child conflict about purchase requests, children were asked to indicate on a 4-point scale how often there was a conflict after denial of a purchase request for each of four product types (toys, candy, school stationery, clothes). Principal components analyses yielded one factor explaining 45.0% of the variance. Total conflict scores were constructed by averaging the scores on the four items (α = .58, M = 1.17, SD = 0.29).

Results

The aim of this study was to investigate and compare the moderating influence of advertising mediation (active vs. restrictive) and consumer communication (socio-oriented vs. concept-oriented) on three effects of television advertising (materialism, purchase requests, and parent-child conflict). To do so, we compared the outcomes of the children of parents who scored either high or low on each of the parental mediation styles.

Research on the unintended effects of advertising has demonstrated that children’s advertising exposure is directly related to their materialism and purchase requests (Buijzen & Valkenburg, 2003a, 2003b). Children’s advertising exposure is also related to parent-child conflict, but this relation is mediated by children’s purchase requests (advertising exposure influences purchase requests, which in turn enhance the chance of parent-child conflict). To measure these direct and mediated relations, we first investigated the zero-order correlations between (a) advertising exposure and materialism, (b) advertising exposure and purchase requests, and (c) purchase requests and parent-child conflict. We then investigated the third-order correlations for the same relations, controlling for the children’s age, sex, and socioeconomic status. Statistical significances of the differences between the correlation coefficients in the various
subgroups were computed with the formula \( z = z_{r1} - z_{r2} / \sqrt{(1 / N_1 - 3) + (1 / N_2 - 3)} \); see McCall (1998). The results of the moderator analyses for the three relations are shown in Table 2.

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Table 2

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By means of our research question, we aimed to investigate how active and restrictive advertising mediation affect advertising-induced materialism, purchase requests, and parent-child conflict, and which type of mediation is most effective in reducing these advertising-induced effects. As Table 2 shows, two of the three investigated relations, (i.e., between advertising exposure and materialism, and between advertising exposure and purchase requests) were significantly stronger for children whose parents rarely use active mediation than for children whose parents often use this strategy. This pattern also emerged when controlling for children’s age, sex, and socioeconomic status, although differences for the relation between advertising exposure and materialism only approached significance \((z = 1.57)\).

The use of restrictive mediation only moderated the relation between advertising exposure and materialism and not those between advertising exposure and purchase requests, and between purchase requests and parent-child conflict. Contrary to expectations, the relation between advertising and materialism was stronger among children whose parents often use a restrictive mediation style. However, this difference did not hold when controlling for age, sex, and socioeconomic status.

In our hypothesis, we stated that concept-oriented consumer communication would be more effective than socio-oriented consumer communication. As can be seen in
Table 2, each of the three investigated relations was weaker for children whose parents often use concept-oriented consumer communication than for children whose parents rarely use this type of communication. However, the moderating effect on the relations between advertising exposure and materialism and between purchase requests and parent-child conflict only approached significance ($z = 1.24$ and $z = 1.40$), probably due to the small sample sizes of the subgroups. The same pattern emerged when controlling for children’s age, sex, and socioeconomic status. Socio-oriented communication did not moderate any of the relations. The observed trends are in agreement with our hypothesis that concept-oriented consumer communication is a more effective moderator of advertising effects than socio-oriented consumer communication.

**Discussion**

The aim of this study was to investigate how various parental mediation styles affect the relations between children’s advertising exposure and materialism, purchase requests, and conflicts with their parents. We distinguished two styles of mediation: advertising mediation and family consumer communication.

**Effectiveness of Active vs. Restrictive Advertising Mediation**

Our first aim was to investigate how active and restrictive mediation affect children’s advertising-induced materialistic attitudes, purchase requests, and conflicts with their parents, and which type of mediation is most effective in reducing these relations. Our results indicate that active mediation was significantly more effective in reducing advertising effects than restrictive mediation. These results are in line with the findings of Bijnmolt et al. (1998), who compared the effects of restrictive vs. active mediation on children’s comprehension of advertising. They noted that active mediation
increased children’s comprehension of advertising, and that restrictive mediation had the opposite effect.

In the first instance, our finding that restrictive mediation did not lead to a decrease in purchase requests may seem counterintuitive. After all, various studies have shown that children who watch more television advertising make more purchase requests (see Buijzen & Valkenburg, 2003a). One would expect that a parental restriction of children’s exposure to advertising would lead to a reduction in their purchase requests.

A possible explanation for the ineffectiveness of restrictive mediation policies is that in reality these policies do not lead to sufficient reductions in children’s television viewing. After all, children watch commercial television for several hours a day, and it is often unfeasible to avoid their exposure to advertising. Because both children’s television viewing and parents’ restrictive mediation were variables in our data set, we could test this explanation by turning back to the data and verifying the relationship between television advertising exposure and restrictive mediation. The correlation between the two variables was indeed nonsignificant ($r = -.06, p = .28$), suggesting that parental restriction methods do not necessarily prevent children from being exposed to television advertising.

**Effectiveness of Concept-Oriented vs. Socio-Oriented Consumer Communication**

Our findings suggest that concept-oriented consumer communication is more effective in reducing the relations between advertising exposure and children’s materialism, purchase requests, and conflicts with their parents than socio-oriented consumer communication. Although more research is needed to come to decisive conclusions about the observed trends, these findings are in agreement with our hypothesis about family consumer communication. As is noted above, concept-oriented
communication involves active discussions with children about consumer matters, whereas socio-oriented communication involves promoting obedience and harmony. Concept-oriented communication might be more effective in counteracting advertising effects because it actively teaches children to become critical consumers, which may in turn reinforce their defenses against advertising (Churchill & Moschis, 1979; Moschis & Churchill, 1978; Moschis & Moore, 1982). Socio-oriented communication may be less able to counteract the effects of advertising because it does not teach children about advertising and consumer matters, and thus does not help them to learn and apply defenses against advertising.

In sum, active mediation and concept-oriented communication are both more effective mediation styles than restrictive advertising mediation and socio-oriented consumer communication. This result is plausible, because active mediation and concept-oriented communication are conceptually related, as are restrictive and socio-oriented communication. Active mediation and concept-oriented communication are focused on family discussions and increasing children’s understanding and autonomy, whereas restrictive mediation and socio-oriented communication are mainly focused on protecting children from advertising. Our study suggests that strategies like these are less useful than active communicative strategies.

**Practical and Theoretical Implications**

The results of this study have implications for those involved in the daily care of children as well as for academics investigating advertising effects. Our findings can help parents and educators to learn how to deal with potentially undesired consequences of advertising. Even though most Western countries have protective policies concerning child-directed advertising, the lion’s share of the responsibility of dealing with the
negative effects is still shouldered by the parents, who are usually the first to experience inconvenience as a result of advertising (Buijzen & Valkenburg, 2003a). Our results indicate that parents are able to counteract the effects of advertising by talking with their children about advertising and consumer matters. Parental attempts to restrict children’s exposure to commercial television content have negligible effect, whereas actively interacting with children turned out an effective way to modify children’s responses to advertising.

There is a need for further research to explore the specific ways in which talking with children can reduce potentially undesirable advertising effects. Future studies could draw from the more developed research line on parental mediation of children’s responses to televised violence. Mediation research on media violence suggests that the outcomes of parental mediation depend on (a) child and family characteristics, such as children’s age and parents’ perceptions of television influence (Abelman & Pettey, 1989; Nathanson, Eveland, Park, & Paul, 2002), and (b) the content and form of the mediation (Nathanson, 2004; Nathanson & Yang, 2003). Nathanson (2004) has compared different types of active mediation (i.e., factual vs. evaluative mediation), which could be adapted to investigate advertising-related mediation strategies. Future advertising mediation research should encompass survey studies, to determine the role of different child and family variables, as well as experimental studies to compare the outcomes of different mediation strategies. Such research will not only benefit parents and educators, but also designers of curriculum-based educational programs aimed at increasing children’s advertising literacy and consumer skills.
References


Table 1

Principal Components Analysis for Advertising Mediation and Consumer Communication

<table>
<thead>
<tr>
<th>How often do you tell your child…</th>
<th>Component loadings</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. …that advertising depicts products as better than they really are?</td>
<td>.85</td>
<td>2.07</td>
<td>.67</td>
</tr>
<tr>
<td>2. …that advertising does not always tell the truth?</td>
<td>.83</td>
<td>2.07</td>
<td>.69</td>
</tr>
<tr>
<td>3. …that the purpose of advertising is to sell products?</td>
<td>.78</td>
<td>2.13</td>
<td>.71</td>
</tr>
<tr>
<td>4. …that not all advertised products are of good quality?</td>
<td>.74</td>
<td>1.73</td>
<td>.65</td>
</tr>
<tr>
<td>5. …that some advertised products aren’t good for children?</td>
<td>.67</td>
<td>1.64</td>
<td>.60</td>
</tr>
</tbody>
</table>

TOTAL ACTIVE MEDIATION SCALE

(Eigenvalue 4.33; α = .80)

| 6. …to turn off the television when (s)he is watching commercials? | .74 | 1.14 | .41 |
| 7. …that (s)he shouldn’t watch commercial networks because they broadcast too many commercials? | .74 | 1.12 | .39 |
| 8. …to switch to a channel that broadcasts fewer commercials? | .72 | 1.14 | .40 |
| 9. …that (s)he shouldn’t watch television advertising at all? | .65 | 1.08 | .29 |
| 10. …to watch specific networks that broadcast relatively few commercials? | .63 | 1.23 | .52 |

TOTAL RESTRICTIVE MEDIATION SCALE

(Eigenvalue 2.13; α = .73)
11. …that every member of your family should have some say in family purchase decisions?  .77  2.54  .76
12. …to give his/her opinion when discussing family purchases?  .71  2.21  .80
13. …to give his/her opinion about products and brands?  .70  2.44  .87
14. …that you respect his/her expertise on certain products and brands?  .68  2.33  .77
15. …that you consider his/her preferences when making a purchase?  .66  2.87  .72
16. …to consider the advantages and disadvantages of products and brands?  .60  2.28  .82
17. …that (s)he can co-decide when you make purchases for him/her?  .49  3.06  .70

TOTAL CONCEPT-ORIENTED COMMUNICATION SCALE  2.53  .52
(Eigenvalue 3.19; α = .79)

18. …that you know which products are best for him/her?  .70  2.31  .75
19. …not to argue with you when you say no to their product requests?  .64  1.70  .73
20. …that you expect him/her to accept your decisions about product purchases?  .63  2.62  .84
21. …which products are or are not purchased for the family?  .62  2.53  .77
22. …which products (s)he should or should not buy?  .58  2.96  .68
23. …that you have strict and clear rules when it comes to product purchases?  .50  2.27  .86
24. …that (s)he is not allowed to ask for products?  .44  1.42  .58

TOTAL SOCIO-ORIENTED COMMUNICATION SCALE  2.26  .45
(Eigenvalue 1.91; α = .77)
Table 2

The Moderating Influence of Different Parental Mediation Styles

<table>
<thead>
<tr>
<th>Investigated relation</th>
<th>Advertising exposure – materialism</th>
<th>Advertising exposure – purchase requests</th>
<th>Purchase requests – parent-child conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active mediation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (n = 234)</td>
<td>.3† (.28)</td>
<td>.27b (.25b)</td>
<td>.29 (.33)</td>
</tr>
<tr>
<td>High (n = 120)</td>
<td>.1 (.11)</td>
<td>.04a (.01a)</td>
<td>.37 (.36)</td>
</tr>
<tr>
<td>Restrictive mediation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (n = 246)</td>
<td>.1† (.20)</td>
<td>.21 (.21)</td>
<td>.35 (.37)</td>
</tr>
<tr>
<td>High (n = 108)</td>
<td>.3† (.24)</td>
<td>.13 (.10)</td>
<td>.24 (.24)</td>
</tr>
<tr>
<td>Consumer communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept-oriented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (n = 223)</td>
<td>.2 (.25)</td>
<td>.28b (.25b)</td>
<td>.37 (.37)</td>
</tr>
<tr>
<td>High (n = 135)</td>
<td>.1 (.10)</td>
<td>.05a (.00a)</td>
<td>.23 (.26)</td>
</tr>
<tr>
<td>Socio-oriented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (n = 212)</td>
<td>.1 (.16)</td>
<td>.23 (.18)</td>
<td>.32 (.33)</td>
</tr>
<tr>
<td>High (n = 146)</td>
<td>.2 (.27)</td>
<td>.14 (.16)</td>
<td>.32 (.33)</td>
</tr>
</tbody>
</table>

†Third-order correlations controlling for children’s age, sex, and socioeconomic status.
Cell values with different superscripts are significantly different from each other at least at $p < .05$ (one-tailed).