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Video-feedback intervention increases sensitive parenting in ethnic minority mothers: a randomized control trial

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Using a randomized control trial design we tested the effectiveness of a culturally sensitive adaptation of the Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD) in a sample of 76 Turkish minority families in the Netherlands. The VIPP-SD was adapted based on a pilot with feedback of the target mothers, resulting in the VIPP-TM (VIPP-Turkish Minorities). The sample included families with 20–47-month-old children with high levels of externalizing problems. Maternal sensitivity, nonintrusiveness, and discipline strategies were observed during pretest and posttest home visits. The VIPP-TM was effective in increasing maternal sensitivity and nonintrusiveness, but not in enhancing discipline strategies. Applying newly learned sensitivity skills in discipline situations may take more time, especially in a cultural context that favors more authoritarian strategies. We conclude that the VIPP-SD program and its video-feedback approach can be successfully applied in immigrant families with a non-Western cultural background, with demonstrated effects on parenting sensitivity and nonintrusiveness.

Keywords: parenting intervention; randomized control trial; sensitivity; discipline

The Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD) is an attachment-based intervention aimed at enhancing parental sensitivity and sensitive discipline (Juffer, Bakermans-Kranenburg, & van IJzendoorn, 2008). Previous research has shown the effectiveness of the VIPP-SD in enhancing parental sensitive discipline and decreasing toddler externalizing problems (Mesman et al., 2008; Van Zeijl et al., 2006). However, this short-term behavior-focused intervention has not yet been adapted to and evaluated in households with toddlers reared in families from ethnic minority groups. A number of studies have shown lower levels of sensitive parenting behavior in ethnic minority versus ethnic majority families (Barnett, Shanahan, Deng, Haskett, & Cox, 2010; Pungello, Iruka, Dotterer, Mills-Koonce, & Reznick, 2009; Yaman, Mesman, van IJzendoorn, Bakermans-Kranenburg, & Linting, 2010), as well as a higher prevalence of child behavior problems (e.g., Daglar, Melhuish, & Barnes, 2011; Stevens et al., 2003; Yaman, Mesman, van IJzendoorn, & Bakermans-Kranenburg, 2010), suggesting that evidence-based parenting interventions for these families may be particularly important. The aim of this study is to test the effectiveness of VIPP-SD adapted to the child-rearing context of Turkish minority families (VIPP-TM) in the Netherlands in a randomized control trial.

The development of externalizing problems (overactive, oppositional, and aggressive behavior) in early childhood is predictive of a variety of problems in later childhood (Blandon, Calkins, & Keane, 2010; Brennan, Shaw, Dishion, & Wilson, 2012; Farris,
In addition, there is evidence that life-course persistent antisocial problems start early in life and predict problems even into adulthood (Alink & Egeland, 2013; Moffitt, Caspi, Harrington, & Milne, 2002; Odgers et al., 2008). Without intervention, early externalizing problems can develop into severe clinical problems and become a lifetime concern (Jennings & Reingle, 2012; Kendziora, 2004). Research investigating early maladaptive parent–child interaction patterns in relation to the development of externalizing problems in early childhood has been based on two theoretical frameworks: attachment theory (Bowlby, 1969) and coercion theory (Patterson, 1982). Attachment theory focuses on the role of parental sensitive responsiveness to child signals defined as responses that meet the child’s needs, whereas coercion theory focuses specifically on discipline situations in which there is a potential conflict between the parent’s and the child’s wishes. From an attachment perspective, several studies have shown that maternal sensitivity and insecure attachment are related to externalizing problems in children (e.g., Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsley, & Roisman, 2010; Haltigan, Roisman, & Fraley, 2013; Lorber & Egeland, 2009; Olson, Bates, Sandy, & Lanthier, 2000). Based on insights from coercion theory there is also substantial evidence that a pattern of negative, overreactive and inconsistent parental discipline strategies predict problem behaviors in children (e.g., Deater-Deckard et al., 2009; Prinzie et al., 2003; Viding, Fontaine, Oliver, & Plomin, 2009). Both theoretical paradigms have inspired the development of (preventive) interventions aimed at enhancing parenting quality (e.g., Juffer et al., 2008; Kazdin, 2005). The VIPP-SD was specially designed to include elements from both attachment theory and coercion theory to enhance parental sensitivity and discipline practices with the ultimate goal of promoting positive parenting and preventing or reducing child behavior problems (Juffer et al., 2008; Van Zeijl et al., 2006).

A focus of the VIPP-SD program is to support parents to show more sensitive responsiveness by helping them to notice child signals, interpret them correctly, and respond to them promptly and appropriately. Successful sensitive interactions (called “sensitivity chains”) are highlighted during the video-feedback sessions so that the parent may observe that the sensitive responses have a positive effect on the child (Juffer, Bakermans-Kranenburg, & van IJzendoorn, 2014; Juffer et al., 2008). In addition, parents are provided with tips on how to respond sensitively in situations in which discipline is required to replace potentially negative and coercive discipline strategies. Sensitive discipline includes the adoption of positive and child-oriented discipline methods, such as the use of explanations for rules about child behavior, also referred to as induction (e.g., Hoffman, 1984), and empathy for the child when he or she is frustrated or angry (e.g., Lieberman, 2004). For a full description of the VIPP-SD see also Van Zeijl et al. (2006). In a randomized control trial, the VIPP-SD program was proven to be effective in enhancing positive parental attitudes towards and actual use of sensitive discipline strategies, and in decreasing child externalizing behaviors in Dutch toddlers screened for externalizing problems (Mesman et al., 2008; Van Zeijl et al., 2006). The effectiveness of the VIPP approach (with or without the additional focus on sensitive discipline) has been shown by studies in a variety of countries and in a range of clinical and non-clinical groups (see for a review Juffer et al., 2014), but not yet in families from non-Western cultures.

In the Netherlands, Turkish immigrants represent the largest non-Western ethnic population of about 388,967 people (Centraal Bureau voor de Statistiek [CBS], 2012). Turkish immigrants first came to the Netherlands as invited guest workers in the period 1960–1970. Their intention was to make money and return to their countries of origin, but many stayed in the Netherlands. The Turkish culture can be described as collectivistic, and indeed dependency, obedience, conformity, and respect for adults are expected more
in Turkish minority families than in the Dutch individualistic culture (e.g., Bengi-Arslan, Verhulst, Van der Ende, & Erol, 1997). First- and second-generation immigrants identify themselves more with their own ethnic culture than with that of the host society (Phinney, Horenczyk, Liebkind, & Vedder, 2001). Second-generation Turkish immigrants in the Netherlands have been found to be in contact mostly with persons with a similar ethnic background in their leisure time, and generally marry within their own ethnic group (Sociaal en Cultureel Planbureau, 2009, 2011). Consistently, they are generally viewed as culturally different from the Dutch majority group as judged by themselves as well as by the majority (Verkuyten, 2005).

Turkish parents of toddlers have been found to show lower levels of sensitivity than Dutch parents (Leseman & Van den Boom, 1999; Yaman, Mesman, van IJzendoorn, Bakermans-Kranenburg, & Linting, 2010). Since there is growing evidence that maternal sensitivity is relevant for positive child development across cultures (Mesman, van IJzendoorn, & Bakermans-Kranenburg, 2012), the VIPP-SD could also be beneficial to the Turkish cultural group. Regarding discipline, several studies have shown that families from a collectivistic cultural background value the community and obedience more than the individual and autonomy (Kagitcibasi & Kazdin, 2007; Keller & Otto, 2009). In addition, in a collectivistic culture verbal criticism is common while praise is not (Kagitcibasi, Eldering, Kloprogge, & Kagitcibasi, 1989). These cultural values may be less conducive to sensitive discipline, and a parenting intervention aimed at enhancing these skills in ethnic minority parents in the context of an individualistic culture may be particularly relevant. Indeed, Turkish minority parents in the Netherlands have been found to show more authoritarian discipline than Dutch mothers (Yaman, Mesman, van IJzendoorn, Bakermans-Kranenburg, & Linting, 2010). Importantly, the negative effects of authoritarian discipline strategies (such as physical discipline) on child development have been found to be especially prominent in cultures in which such practices are less normative (e.g., Lansford et al., 2010). Given that authoritarian discipline in general and physical discipline in particular are not normative in the Dutch individualistic culture (as evidenced by a law against physical discipline), such discipline strategies in the Netherlands are important targets for intervention to prevent adaptation problems in children in these families.

In the current study we tested the effectiveness of the VIPP-SD adapted to the specific child-rearing context of Turkish families (VIPP-TM) in the Netherlands in a randomized control trial including second-generation Turkish immigrant families with toddlers at risk for the development of externalizing problems. We hypothesize that the VIPP-TM is effective in improving parental sensitivity and discipline practices.

**Method**

**Participants**

Second-generation Turkish mothers with a child between the age of 18 months and 3 years were recruited from municipal records of several cities and towns in the western region of the Netherlands. To ensure a homogeneous sample and to control for confounding effects of ethnicity and migration, only second-generation Turkish mothers born in the Netherlands (who have at least one parent born in Turkey) were included in the study. The second generation is the fastest growing population within the Turkish minority group in the Netherlands, currently comprising 49.3% of the Turkish minority population (CBS, 2012). Eligible families received an information letter and brochure about the study. All correspondence was made available in Turkish and in Dutch. After one week a bilingual
female assistant of Turkish origin visited the families at home to ask the mothers if they would like to participate in the study. If mothers agreed, they were asked to complete a screening questionnaire to assess their eligibility for the intervention project.

Figure 1 shows the enrollment and dropout of participants according to the principles of the Consort 2010 Statement (Schulz, Altman, & Moher, 2010). Screening was based on the same criteria as used in the VIPP-SD effectiveness study (Van Zeijl et al., 2006). Families were selected if their toddlers had a score above the 75th percentile on the Externalizing Problems scale of Child Behavior Checklist for preschoolers (CBCL/1½-5; Achenbach & Rescorla, 2000). Families were excluded in case of severe physical or mental health problems of mother or child. In the screening phase, 344 families filled in the CBCL, of whom 138 met the selection criterion (40.1%). These families were then approached again to ask for their participation in the intervention study. Eighty-six families were willing to participate (62.3%) and were then randomly allocated to the intervention or control group (dummy intervention), stratified for age group, gender, and presence of siblings. Of these 86 families, five dropped out after the pretest and did not receive the allocated (dummy) intervention at all; three families dropped out after the second intervention session and one family after the first intervention session; one family dropped out after the second control group telephone call. All of the families who received the (dummy) intervention also completed the posttest (follow-up). The final sample that completed the entire program (pretest, control/intervention, posttest) consisted of 76 families (36 in the intervention group and 40 in the control group).

In the sample, 41% were girls, 59% had siblings, and 51% were firstborns. The mean age of the children at the pretest was 30.83 months (SD = 6.44; range = 19.76–46.58). Mean age of the mothers was 29.96 years (SD = 3.45; range = 22–38); 57% was of a middle educational level. There were no significant differences between the 62 families who were not willing to participate or dropped out and the 76 families that remained in the study regarding child age at screening (p = .29), gender of child (p = .20), maternal
educational level ($p = .72$), and presence of siblings ($p = .93$). The 62 mothers who dropped out were generally younger than the 76 mothers who participated throughout the study, $F(1,136) = 5.17, p < .05, \eta^2 = .04$.

**Procedure**

The pretest session started with the clarification of research procedures and signing of the informed consent form followed by a videotaped one-hour home visit in which mother and child completed several tasks. After the pretest, a computer-generated list randomly assigned families, stratified for gender, age and presence of siblings, to either the intervention group or the control group. Families in the intervention group received six home visits; the duration of each home visit was approximately 2.5–3 hours. The relatively long duration was due to the cultural background of the mothers (and the home visitors), as in the Turkish culture it is expected that visitors engage in social conversations about daily-life topics. Starting the protocol without engaging in this social ritual would have been considered rude and not conducive to the mothers’ willingness to participate. It is important to note, however, that all interveners were trained to refrain from evaluative statements or giving advice outside of the VIPP-SD protocol in these conversations. The intervention sessions took place every two weeks. Program attendance was high: all participants received six home visits and completed all steps planned in the VIPP-TM protocol (see description below). All interveners participated in regular group meetings and additional individual meetings in which their video-feedback scripts for the upcoming intervention sessions were reviewed, discussed and adapted if necessary.

Parallel to the intervention sessions, the mothers in the control group received six telephone calls. This dummy intervention was implemented to ensure comparable motivation and attention in the intervention and control groups and to prevent selective attrition (Juffer, Bakermans-Kranenburg, & van IJzendoorn, 2005). In the six telephone calls, mothers were invited to talk about the development of their child (e.g., eating, sleeping, playing) in a semi-structured interview format. The telephone calls in the control group lasted approximately 15–30 minutes and, within each family, were almost always conducted by the same person (rare exceptions were made if an intervjener was unavailable at a time that mother requested to be contacted). Control group mothers received no advice or information about child development in general or (the development of) problem behavior in their child. Requests for advice or information were kept minimal by the use of specific questions inviting mothers to talk extensively about their child. If mothers did ask for advice or information, it was suggested that they consult their general practitioner or well-baby clinic.

Approximately six months after the pretest, families from both the intervention and the control group were visited at home again for the posttest, which included the same procedures as the pretest. Mean age of the children at the posttest was 40.88 months ($SD = 7.11$; range = 26.66–54.70).

**The VIPP-TM program**

The VIPP-TM program is a culturally sensitive adaptation of the VIPP-SD program for Turkish minority families in the Netherlands, but follows the general procedures of the original program.
Outline of the VIPP-SD approach

The VIPP-SD program is described in a detailed protocol and consists of six home visits. The first four visits each have their own themes regarding sensitivity and discipline, and the last two sessions are booster sessions in which the themes from previous sessions are reviewed once more (Juffer et al., 2008; Van Zeijl et al., 2006; see also Mesman et al., 2008 for a full description of the VIPP-SD intervention sessions). For these booster sessions fathers are also invited to participate along with the mothers. In between home visits, the interveners select specific video fragments and prepare feedback based on the specific theme to be discussed in the next intervention session. Interveners reinforce positive mother–child interactions and effective parenting strategies, and the mothers are explicitly involved as the experts on their own child. Although the structure and content of every intervention session are the same for all families, the video feedback is adjusted to the specific mother–child dyads, depending on their particular needs and the nature of the videotaped interactions.

Adaptations for the VIPP-TM

A pilot study was conducted aimed at developing a culture-sensitive adaptation of the VIPP-SD for the Turkish population in the Netherlands. The pilot study consisted of four phases: (1) Revising the VIPP-SD based on the culture-specific knowledge of two second-generation Turkish PhD students; (2) Obtaining and processing suggestions and feedback from a panel of second-generation Turkish mothers; (3) Administering the VIPP-TM in four families, and adapt the program if necessary; (4) Administering the VIPP-TM in 10 more families. In the first phase, two second-generation Turkish PhD students were consulted about the VIPP-TM. Adaptations were made according to their experiences with the Turkish culture. Certain toys and materials used in the original VIPP-SD program were found unsuitable for Turkish families, as they would be unfamiliar to them (such as hand puppets). Such materials were substituted for more appropriate ones, which resulted in the following adaptations: intervention home visit 1: mother’s reading to the child was replaced by mother and child playing together with a tea set; home visit 3: mother’s singing songs with their toddlers was replaced by fantasy play; home visit 4: playing together with hand puppets was replaced by playing together with clay. In the second phase, three second-generation mothers with varying educational levels were recruited for a focus group discussion. During the first meeting with the focus group, all aspects of the intervention were discussed. The mothers appreciated being actively involved in the development of the program before its implementation, and they were very positive about the VIPP-TM, especially about the combination of video and feedback. They agreed with the adaptations suggested by the PhD students and offered some new suggestions. The focus group members felt that it was important that the intervener would be female and would follow the language use of the mothers (Turkish, Dutch, or a mix of the two). The results of the focus group meeting were processed and integrated into the intervention manual. In phase 3, the revised protocol was administered to four second-generation Turkish mothers, yielding no indications for further adaptations. In phase 4, 10 other families received the adapted version of the intervention program (VIPP-TM) with success. When evaluating the intervention, mothers expressed their enthusiasm about the toys that were used in the program and they indicated being triggered to play with their child more often.

The VIPP-TM program was delivered by female interveners with a Turkish background who visited the families at home to provide personal feedback on parenting by using videotaped mother–child interactions, as well as information on the development of
young children in general. Nine interveners were trained extensively to conduct the intervention and joined weekly feedback sessions with trainers during the intervention phase.

**Measures**

**Externalizing problems**

Mothers completed the Child Behavior Checklist (CBCL/1½-5; Achenbach & Rescorla, 2000) during the screening home visit to assess their toddler’s externalizing problems. Families were selected if the toddler had a score above the 75th percentile on the Externalizing Problems scale within their age group, as was also done in the original VIPP-SD effectiveness study (Van Zeijl et al., 2006).

**Maternal sensitivity and nonintrusiveness**

During the pretest and the posttest home visits, maternal sensitivity and nonintrusiveness were measured in a 10-minute unstructured free-play episode with toys brought by the intervener and in a 10-minute problem-solving task. During the 10-minute unstructured free-play episode, mother and child were free to play with all the toys, and mothers were instructed to play with their child the way they would normally do. In the 10-minute problem-solving task, mother and child were given two tasks (each five minutes) in which they were asked to solve puzzles that were too difficult considering the age of the child (different puzzles were used in each age group). Mothers were instructed to help their child the way they would normally do.

Mother–child interactions were coded using the Sensitivity and Nonintrusiveness scales of the 4th Edition of the Emotional Availability Scales (EAS; Biringen, 2008). Each scale consists of seven subscales, two with scores ranging from 1–7 and five with scores ranging from 1–3 (total potential score range for each scale 7–29; Biringen, 2008). Sensitivity refers to appropriate responding to the child’s signals combined with positive affect. Higher scores refer to more positive parenting. Nonintrusiveness refers to following the child’s lead and waiting for optimal breaks to enter interaction without interfering with the child’s activities. Higher scores refer to more positive parenting. During the training of a team of (under) graduate coders provided by the second author, who completed the online EAS-training and who is an experienced coder of parent–child interactions, three types of alterations were made to prevent persistent interpretation problems and to improve intercoder agreement. These alterations consisted of removing subjective criteria, adjustment of the criteria for some scores on subscales to make them more linear, and improvement of the independence of the separate dimensions by removing overlapping criteria (a complete account of these adaptations is available from the authors). In addition, one subscale was removed from the nonintrusiveness scale because it referred to child behavior rather than parent behavior (leading to a potential score range of 7–26 for nonintrusiveness).

The three coders were unaware of the experimental condition or other data concerning the participants, and pretest and posttest were coded independently. The scores for maternal behavior during free play and problem-solving were averaged into composite scores for sensitivity and nonintrusiveness (except for one mother, for whom only the score on the problem-solving task was used, due to a technical failure during the free play session). Two coders were Dutch-Turkish and one coder was Dutch (the expert coder trained by the author of the EA scales). The Dutch coder was assigned to mother–child
dyads who communicated in Dutch, and also coded videos of dyads speaking Turkish that had been subtitled in Dutch by bilingual colleagues. Intercoder reliability (15 cases) within the team of three coders ranged from .73 to .96, with an average of .83 (intraclass correlation, single rater, absolute agreement).

Maternal discipline

Maternal discipline strategies were observed during the pretest and posttest. The observations consisted of two tasks: a 4-minute “don’t-touch” task and a clean-up task. In the don’t-touch task, mothers were presented with a bag full of attractive toys and they were instructed to take the toys out of the bag, place them in front of the child and to make sure the child would not touch the toys. After two minutes the child was allowed to play only with the least attractive toy, which was a simple stuffed animal, for another two minutes. Following five minutes of free play with all toys (not coded for this study), mothers were instructed to ask their child to put all toys back in the suitcase brought by the intervener. Instructions specified that mother could help and encourage the child as she would normally do, but that it was important for the observation that the child would clean up as much as possible. The clean-up session was finished when all toys were back in the suitcase.

The videos were coded with an adapted version of the discipline rating scales used by Verschueren, Dossche, Marcoen, Mahieu, and Bakermans-Kranenburg (2006). Physical discipline was coded when mothers in any way physically obstructed the child from touching the toys or physically making the child clean up the toys (5-point scale). Higher scores refer to less positive parenting. Laxness was coded when mothers showed a lack of (convincing) commands and directions given by the parent when the child does not obey (rated on a 5-point scale). Higher scores refer to less positive parenting. In addition, the videos were also coded for maternal supportive presence (Egeland, Erickson, Clemenhagen-Moon, Hiester, & Korfmacher, 1990). The Erickson Supportive Presence scale is rated on a 7-point scale (higher scores refer to more positive parenting), and refers to maternal positive regard and emotional support adapted to the child’s needs.

Scores were averaged across the two discipline situations to form composite scores for each scale (except for one mother, for whom only the score on the clean-up task was used because the don’t-touch task was missing). All four coders (different from the ones coding sensitivity and nonintrusiveness) were unaware of the experimental condition or other data concerning the participants; pretest and posttest observations were coded independently. Two coders were Dutch-Turkish and two were Dutch (one of which was the expert coder). The Dutch coders rated observations of mother–child dyads who communicated in Dutch, as well as videos in Turkish with Dutch subtitles. Intercoder reliability (18 tapes) for all possible pairs of coders for each of the scales ranged from .71 to .96, with an average of .84 (intraclass correlation, single rater, absolute agreement).

Results

Preliminary analyses

Four outliers (|z| ≥ 3.29) were found for the laxness subscale of maternal discipline. Values were winsorized to the next highest value of that particular variable (Dixon, 1960; Tabachnick & Fidell, 2001). The distribution of the laxness scores of the
maternal discipline construct were skewed to the right. Laxness scores were transformed \((\frac{1}{\text{score} + 1})\), which substantially reduced skewness. These transformed scores were used in further analyses.

There were no differences between the experimental and control group regarding the percentage of girls \((p = .55)\), child and maternal age \((p = .14\) and \(p = .87)\), respectively, the presence of siblings \((p = .72)\), maternal educational level \((p = .15)\), or the initial level of child externalizing problems \((p = .67)\). At baseline, the two groups did not differ in observed maternal sensitivity \((p = .72)\), maternal nonintrusiveness \((p = .37)\), and maternal discipline strategies \((ps = .57–.84)\). Finally, neither gender nor age of the child were related to outcomes in the intervention and control group, so these variables were not included as covariates in the analyses.

Finally, we computed correlations between the observed parenting dimensions. At pretest, maternal sensitivity and nonintrusiveness were highly correlated, \(r(76) = .78, \ p < .01\). In addition, supportive presence in the discipline settings was significantly related to both maternal sensitivity during free play and the teaching task, \(r(76) = .29, \ p = .01\), and laxness during the discipline tasks, \(r(76) = .28, \ p < .05\). None of the other correlations between the parenting dimensions were significant \((ps = .07–.55)\). At posttest, the same patterns of significant associations were found, in addition to relations between parenting dimensions, including those between sensitivity during free play and teaching and physical discipline during the discipline tasks, \(r(76) = -.30, \ p < .01\), nonintrusiveness and physical discipline, \(r(76) = -.31, \ p < .01\), nonintrusiveness and supportive presence during discipline, \(r(76) = .27, \ p < .05\), and physical discipline and supportive presence, \(r(76) = -.26, \ p < .05\).

### Effectiveness of the VIPP-TM program

Table 1 shows the means and standard deviations for all outcome measures at pretest and posttest for the experimental and the control group. GLM Repeated Measures analyses were conducted to test intervention effects. First, observed maternal sensitivity and

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pretest Experimental M (SD)</th>
<th>Pretest Control M (SD)</th>
<th>Posttest Experimental M (SD)</th>
<th>Posttest Control M (SD)</th>
<th>Intervention effects (interaction time*group)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed maternal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>parenting</td>
<td></td>
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</tr>
<tr>
<td>Sensitivity</td>
<td>22.08 (3.22)</td>
<td>22.35 (3.24)</td>
<td>23.82 (3.15)</td>
<td>22.26 (3.58)</td>
<td>(F(1,74) = 4.38, \ p &lt; .05, \eta^2_p = .06)</td>
</tr>
<tr>
<td>Nonintrusiveness</td>
<td>18.81 (3.79)</td>
<td>19.60 (3.87)</td>
<td>23.43 (3.45)</td>
<td>21.18 (3.85)</td>
<td>(F(1,74) = 8.60, \ p &lt; .01, \eta^2_p = .10)</td>
</tr>
<tr>
<td>Physical discipline</td>
<td>2.05 (0.73)</td>
<td>1.97 (0.74)</td>
<td>1.56 (0.50)</td>
<td>1.66 (0.58)</td>
<td>(F(1,74) = 0.96, \ p = .33, \eta^2_p = .01)</td>
</tr>
<tr>
<td>Laxness(^1)</td>
<td>0.39 (0.09)</td>
<td>0.39 (0.10)</td>
<td>0.42 (0.08)</td>
<td>0.44 (0.09)</td>
<td>(F(1,74) = 0.49, \ p = .49, \eta^2_p = .01)</td>
</tr>
<tr>
<td>Supportive presence</td>
<td>4.18 (1.15)</td>
<td>4.34 (1.31)</td>
<td>4.79 (1.12)</td>
<td>4.89 (1.05)</td>
<td>(F(1,74) = 0.04, \ p = .84, \eta^2_p = .00)</td>
</tr>
</tbody>
</table>

Note: \(^1\)Figures in table represent transformed scores (see Method section)
nonintrusiveness at pretest and posttest were included as within-subjects factors, and group (experimental versus control) as between-subjects factor. The multivariate interaction between time and group was significant, $F(2,73) = 4.28$, $p < .05$, partial $\eta^2 = .11$. Post hoc univariate analyses showed significant time*group interaction effects for both sensitivity and nonintrusiveness (see Table 1). As shown in Figures 2 and 3, mothers who received the VIPP-TM intervention showed significant increases in sensitivity and nonintrusiveness whereas mothers in the control group did not show such (strong) improvement. Next, the four observed discipline variables (physical discipline, harshness, laxness, and supportive presence) were included as within-subjects variables in a Repeated Measures analysis. The multivariate interaction between time and group was not

![Figure 2](image2.png)  
**Figure 2.** Maternal sensitivity scores (M, SE) for intervention and control group at pretest and posttest.

![Figure 3](image3.png)  
**Figure 3.** Maternal nonintrusiveness scores (M, SE) for intervention and control group at pretest and posttest.
significant, $F(3, 72) = 0.63$, $p = .60$, partial $\eta^2 = .03$, and none of the post hoc analyses for the separate discipline strategies was significant either (see Table 1).

**Discussion**

The Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline for Turkish Minorities (VIPP-TM) proved to be effective in increasing maternal sensitivity and nonintrusiveness in these minority families with toddlers at risk for externalizing problems. Maternal discipline strategies were not affected by the intervention.

The results of this randomized control trial support the notion that interventions aimed at enhancing maternal sensitivity are relevant across cultural groups (Mesman et al., 2012). More specifically, the VIPP-SD was shown to be effective in Turkish minority families, who have a non-Western cultural background, extending previous research proving its effectiveness in Western majority samples. This means that the video-feedback approach with a focus on sensitivity and sensitive discipline holds promise for other ethnic minority groups as well. This finding is in line with the results from our pilot study, in which Turkish minority mothers expressed their support for the intervention in general and its specific aspects, including the use of video-feedback and the parenting topics that are discussed in the program. As one of the mothers in the intervention study noted: “I really enjoyed it a lot, and I can’t wait to see the whole DVD again”, and another mother wrote “I have definitely used the advice that I received and still do. They have given me more insight into the behavior of my child that is fitting for his age and how I can deal with it, both his difficult and good behavior”. It is also important to note that the changes to the original VIPP-SD program resulting from the pilot study were relatively minor. None of the core aspects needed to be adapted based on the evaluations of the focus group. Changes only pertained to the use of certain play materials, the cultural background and language skills of the interveners, and the inclusion of only female interveners (noting that this is already the case in most but not all parenting intervention studies with other samples as well). Thus, the fundamental foci and contents of the VIPP-TM program can be seen as fully representative of the VIPP-SD program.

Although mothers in the intervention group did show increased sensitive parenting during free play and teaching situations, the intervention did not (yet) result in higher levels of sensitive discipline. It may be that the pressures of a discipline situation in which children are likely to show challenging behaviors prevented mothers from using their newly learned sensitive parenting behaviors that they did apply in less stressful situations. Mothers may need more time to practice their general sensitivity skills to be able to use them under more stressful conditions. Indeed, the time between pretest and posttest in this study was approximately six months, whereas there was about 12 months between the first and last assessments in the study by Van Zeijl et al. (2006) who reported a significant intervention effect on sensitive discipline. A follow-up in the current sample may reveal intervention effects on sensitive discipline as well. It may also be that discipline practices are more culturally influenced than sensitivity, which may make these parenting behaviors more difficult to change. Indeed, parental beliefs about sensitive parenting in early childhood have been found to be very similar across cultural groups (Emmen, Malda, Mesman, Ekmekci, & van IJzendoorn, 2012), whereas attitudes towards discipline have been found to vary by culture (Giles-Sims & Lockhart, 2005). Thus, explicitly addressing cultural beliefs about discipline in parenting interventions may be necessary to encourage change.
Given the Turkish cultural background of our sample, it is also important to consider cultural issues. Whereas parental sensitivity towards young children has been shown to be important and valued across cultures (Emmen et al., 2012; Mesman et al., 2012), attitudes about discipline strategies appear to be influenced by cultural factors. For instance, several studies have shown that parents with a Turkish collectivistic cultural background show more authoritarian values and parenting behaviors (e.g., Pels, Nijsten, Oosterwegel, & Vollebergh, 2006; Yaman, Mesman, van IJzendoorn, Bakermans-Kranenburg, & Linting, 2010) and that families with a non-Western cultural background place greater value on child obedience than parents from Western cultural backgrounds (e.g., Harwood, Schoelmerich, Schulze, & Gonzalez, 1999; Kagitcibasi & Kazdin, 2007). This is in contrast to socialization goals in Western cultures aiming at promoting child autonomy. Some may then argue that an intervention aimed at autonomy-supporting discipline is not appropriate in families with a non-Western cultural background. However, it has been argued that promoting autonomy can co-occur with more collectivistic values focused on obedience (Tamis-LeMonda et al., 2007), and that this is particularly the case in urban Turkish families and those who have moved to Western countries (Kagitcibasi, 1996). In a study on Turkish minority families in the Netherlands, positive parenting including autonomy-promoting strategies in discipline situations was related to lower levels of child aggression (Yaman, Mesman, van IJzendoorn, Bakermans-Kranenburg, & Linting, 2010). The study showed that sensitive discipline does occur in these families, and that it also promotes positive child development. Thus, the focus of VIPP-TM on sensitive discipline strategies does appear to fit the cultural context of Turkish minority families.

In a related vein, it is important to note that in our study maternal sensitivity in play situations was significantly related to supportive presence in the discipline situations at both pretest and posttest. In addition, physical discipline was negatively related to both sensitivity and nonintrusiveness at posttest. This is consistent with other studies that report meaningful associations of sensitivity and nonintrusiveness with discipline practices (e.g., Joosen et al., 2012; Lyons-Ruth, Connell, Zoll, & Stahl, 1987), suggesting that increases in sensitivity and nonintrusiveness as a result of the intervention do have the potential to also enhance supportiveness and decrease coercive strategies in discipline situations. Apparently, the transfer of sensitivity skills from neutral situations to discipline situations is a realistic possibility, even though this transfer was not completed within the timeframe of the current study.

Strengths of the study include the use of a randomized control trial design and observational measures of parenting. Some limitations of the study may also be noted. Although the initial participation rate after the selection of families was similar to that found by Van Zeijl et al. (2006), the dropout rate during the intervention phase was higher (12% versus 4%). Dropout was mostly due to problematic family circumstances such as divorce, lack of support from family members to take part in the study, and having to take care of a family member who fell ill. These reasons may be partly related to the cultural background of the mothers, but may also have to do with the fact that the sample had a lower socioeconomic background than the Dutch mothers in the Van Zeijl et al. (2006) study. Second, the posttest took place within one or two months after the final intervention session. A longer follow-up period is needed to fully gauge the effects and maintenance of improvements related to the intervention. Finally, for reasons of homogeneity we chose to involve mothers who were second-generation immigrants, which may have facilitated the implementation of the VIPP-TM program. For a more stringent test of the applicability and effectiveness of the program to non-Western cultural groups, studies in first-generation immigrant mothers or non-migrant mothers in non-Western countries need to be conducted.
In conclusion, the VIPP-TM program proved to be effective in improving the quality of mother–child interactions in Turkish minority families in the Netherlands. This shows that the video-feedback approach is not only applicable in Western majority families, but is also useful and effective in families with a non-Western cultural background. Given the large number of Turkish minority families in many (European) countries, the results of the current study hold promise for the application of the VIPP-SD approach and specifically the video-feedback in countries other than the Netherlands. The results also point to opportunities for adapting the VIPP-SD to other cultural groups, and may encourage others to broaden the scope of such interventions beyond ethnic majority Western samples.

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References


