Published in final edited form as:

Parent Sci Pract. 2015 ; 15(3): 207–228.

Parenting Practices and Child Misbehavior: A Mixed Method Study of Italian Mothers and Children

Anna Silvia Bombi,

Sapienza University of Rome, Via dei Marsi 78, 00185 Roma, Italy

Anna Di Norcia,

Sapienza University of Rome, Italy

Laura Di Giunta,

Sapienza University of Rome, Italy

Concetta Pastorelli, and

Sapienza University of Rome, Italy

Jennifer E. Lansford

Duke University

Abstract

Objective—The present study uses a mixed qualitative and quantitative method to examine three main research questions: What are the practices that mothers report they use when trying to correct their children's misbehaviors? Are there common patterns of these practices? Are the patterns that emerge related to children's well-being?

Design—Italian mother-child dyads ($N=103$) participated in the study (when children were 8 years of age). At Time 1 (T1), mothers answered open-ended questions about discipline; in addition, measures of maternal physical discipline and rejection and child aggression were assessed in mothers and children at T1, one year later (T2), and two years later (T3).

Results—Mothers' answers to open-ended questions about what they would do in three disciplinary situations were classified in six categories: physical or psychological punishment, control, mix of force and reasoning, reasoning, listening, and permissiveness. Cluster analysis yielded 3 clusters: Group 1, Induction (predominant use of reasoning and listening; 74%); Group 2, Punishment (punitive practices and no reasoning; 16%); Group 3, Mixed practices (combination of reasoning and punishment, as well as high control and no listening; 10%). Multiple-group latent growth curves of maternal physical discipline, maternal rejection, and child aggression were implemented to evaluate possible differences in the developmental trends from T1 to T3, as a function of cluster.

Conclusions—Qualitative data deepen understanding of parenting because they shed light on what parents think about themselves; their self-descriptions, in turn, help to identify ways of parenting that may have long-lasting consequences for children's adjustment.

INTRODUCTION

Since the classic studies of Baldwin (1948), Sears, Maccoby, and Levin (1957), Becker (1964) and above all Baumrind (1980), researchers have sought to trace an integrated picture of parenting behaviors, identifying patterns of actions that contribute to an overall climate or style. After the first studies, however, the preference for structured questionnaires over open ended interviews has led researchers to focus more and more on specific practices. This methodological approach has several advantages, particularly the adherence to behavioral instances and the economy of data collection. However, the focus on specific actions, whose frequency or severity is evaluated one-by-one by participants, might obscure the *combination* of practices, and their contextual meaning; qualitative data have the potential to shed light on beliefs and attitudes that undergird parenting strategies (Calzada, Basil, & Fernandez, 2013). The present study adopts both a quantitative and a qualitative approach, using the open-ended answers of a group of mothers as a way to access their self-image as parents.

Discipline and Its Effects

We focus on a common parenting problem: how to cope with a child's misbehaviour. Discipline encounters have been one of the most widely studied components of parenting because they are inevitable and revealing of the overall parent-child relationship (Lansford, Wager, Bates, Dodge, & Pettit, 2012). If not properly managed, parental discipline may cause serious damage to child adjustment, as shown by the short-term difficulties of maltreated children in kindergarten (Dodge, Bates, & Pettit, 1990; Weiss, Dodge, Bates, & Pettit, 1992). Also physical discipline may have serious long-term effects, even when partialling out the effects of environment and prior child characteristics (Gershoff, 2002; Lansford et al., 2002).

Because parents' reactions typically differ according to the child's wrongdoing, most instruments that assess discipline include several instances of misbehavior to be evaluated (e.g., lists of children's actions or more complex scenarios). However, if each action or each scenario is followed by a set of pre-ordered questions, the risk exists of losing the complexity of parents' reactions. The answers to open-ended questions should avoid this risk because they allow parents to mention more than a single action and to describe a sequence of actions revealing inconsistencies or fruitful combinations of different strategies. In particular, it has been suggested that a mixture of power assertion and induction would be effective in obtaining immediate obedience and long-term internalization of rules (Hoffman, 1994), due to the fact that initial coercive action draws the child's attention to the subsequent parental message. Similarly, a positive link between reasoning and punishment has been reported by Larzelere, Sather, Schneider, Larson, and Pike (1998) in a longitudinal study with young children (2-3 years at Time 1), but as far as we know older children were seldom considered in studies focused on the effect of both reasoning and punishment as parental practices. A study by Thompson, Raynor, Cornah, Stevenson, and Sonuga-Barke (2002) based on narrative descriptions reported a very small overlap of reasoning and punishment, but did not provide external measures of the child outcomes.

Child perception of maternal rejection and child aggression are two possible correlates of inappropriate discipline. Aggression and externalizing behaviors in general are widely documented negative consequences of punitive parenting, but they are also a cause of punitive reactions from parents (Dodge et al., 1990). For this reason, we rely on children's self-rated aggressive behavior to minimize the possibility that mothers would present the child as difficult when they are – for whatever reason – inclined to use punitive forms of discipline.

If children perceive their parents as being out of control and rejecting, that in turn reinforces children's externalizing problems (Deater-Deckard & Dodge, 1997). A large body of literature shows that rejection and lack of warmth are typical of an authoritarian style (Baumrind, 1980) and are linked with negative outcomes in childhood and adolescence (Darling & Steinberg, 1993). Again, in the present study, we use the child as informant because the perception of being rejected might be more important than the actual parental behavior. In fact, the mechanism through which parents' behaviors affect children's adjustment might be at least partly mediated by the children's *perception* of parents' warmth (e.g., Erkman & Rohner, 2006; Hipwell et al., 2008).

The Italian Context

Perris, Maj, Perris, and Eisemann (1985) described Italian mothers as less warm than mothers in northern Europe, but more recent studies present them as warm and caring (Bornstein et al., 2012; Senese, Poderico, & Venuti, 2003); they have been found to be more accepting than the grand mean across nine countries in a large cross-cultural study that included the participants in the present study (Putnick et al., 2012). Previous research has demonstrated that Italian mothers tend to feel directly responsible for their children's educational outcomes, more than women in other countries, due to their high familial involvement (Bornstein et al., 1998). In a social climate that prizes graciousness in social situations (Edwards, Gandini, & Giovannini, 2003), mothers' worry for children's misbehavior could be especially strong where aggressiveness is concerned, and their reaction to it could be moderated by the child's gender, as found by Schneider, Attili, Vermigli, and Younger (1997).

Physical punishment, even if not explicitly forbidden as in other European countries, is no longer popular in Italy and has been declared unlawful by the Supreme Court of Cassation in 1996 (endcorporalpunishment.org). A larger study that included the mothers interviewed here (Lansford et al., 2010) showed that only a small percentage of the Italian participants approved of physical punishment, ranging from 2% to 5%, according to the child's gender and the parent's gender. However, from the same study we know that about one-third of mothers admitted having administered a mild physical punishment, and some parents also reported more harsh forms of punishment (Lansford et al., 2010).

The Present Study

In this work we used a mixed qualitative and quantitative method to examine child aggression and perceived maternal rejection in relation to maternal discipline. Mothers' descriptions of their reactions to their child's misbehaviour in hypothetical situations were

used to study maternal discipline. Because we anticipated that such a self-portrait would reflect more the low approval of corporal punishment than its real use, we complemented mothers' free reports with their self-rated use of physical punishment. To determine if the need to appear a "good mother" had a differential impact within the group of participants, we also took into account their social desirability.

As mentioned, we relied on children's reports about two important components of the overall picture: the child's self-rating as more or less aggressive, and the child's perception of maternal rejection, operationalized as the combination of lack of warmth and affection with hostility and neglect (Lansford et al., 2014; Putnick et al., 2012).

With these instruments, we tested the following hypotheses: (1) when required to describe their reactions to hypothetical children's misbehaviors, mothers mention mainly appropriate practices, because they try to describe their optimal maternal behavior; (2) mothers' reactions across situations are sufficiently coherent to define common patterns; (3) qualitative and quantitative methods offer coherent information in identifying such patterns; (4) the emergent patterns of practices are related to children's well-being through time.

METHOD

Participants

Participants were recruited from schools in metropolitan Rome, Italy, as part of a larger cross-national and longitudinal study of parent behavior and child adjustment (see Bombi et al., 2011; Lansford & Bornstein, 2011). Rome is the country's largest and most populated municipality, with over 2.7 million residents (Oasi Association, 2008). Teachers and educators distributed letters describing the project to families of children aged between 8 and 10 years old. Parents who were willing to learn more about the study returned contact forms to the teacher or the educator and were contacted accordingly. At Time 1 (T1), the resulting sample included 103 mothers and 103 children (51% boys); the mean age of the children was 8.38 years ($SD = .81$). Children's mothers had an average age of 40.29 years ($SD = 5.19$) and had completed an average of 14.11 years of school ($SD = 4.04$). More than half of the mothers (52%) had two children, 30% of mothers had a single child, and 19% had three or more children. Seventy-eight percent of mothers were employed (45% full-time; 33% part-time). Income questions were not asked at T1, but one year later at T2, 18% of the families had an annual household income of less than the equivalent of \$15,000, 50% had an income of \$16,000- \$40,000, and 32% had an income of \$41,000 or higher. Mother-child dyads were all of Italian origin, except one mother who was of Egyptian origin but had lived in Italy for 15 years. In 12 of these families, fathers were not part of the household (3 deceased, 9 divorced). Participants were reassessed one year after T1 at T2 and two years later at T3; nine families at T2 and four more families at T3 did not participate due to relocation or organizational difficulties. Compared to families that missed one or two assessments, mothers who participated at all three assessments did not differ in years of education and were not different in physical discipline and rejection at T1, and children did not differ in aggression at T1.

Procedures and Measures

Annual interviews were conducted one-on-one in places deemed by participants as convenient. These included the target children's schools or homes, parents' work places, and the University. Participants provided consent and were interviewed (including additional measures that were part of the larger study) over approximately 1.5 hours. Families were given a modest honorarium of 50 euro to thank them for their time and reimburse their transportation expenses. Measures were administered in Italian, following forward- and back-translation and meetings to resolve any item-by-item ambiguities in linguistic or semantic content (Erkut, 2010).

Mother Measures

Maternal practices (T1)—To assess self-descriptions of discipline, we used the first part of the Concerns and Constraints Questionnaire (CCQ; Deater-Deckard, Dodge, Bates, & Pettit, 1996). This instrument is based on the presentation of short stories, each pertaining to a different type of child misbehavior; parents are asked to imagine that their child acts that way, and subsequently asked several open- and closed-ended questions. Here, we analyze free answers to the first question: "What will you do?" as a reaction to the depicted hypothetical situation. Only three out of four stories were considered: Story 1 (Peer), in which the child, losing a game, insults the winner; Story 2 (Mother) in which the child does not cooperate with his/her mother and refuses to get dressed in the morning; Story 3 (Teacher) in which the child answers disrespectfully to his/her teacher. We omitted the fourth story, in which the child refuses to join other children playing together because our respondents did not consider this refusal a real misbehavior.

Maternal responses were transcribed by the interviewer and classified in six categories, derived from a combination of theory-driven and data-driven criteria (DeCuir-Gunby, Marshall, & McCulloch, 2011). In a first step, entirely theory driven, we integrated the manual suggested by the instrument authors (and derived from Scarr, Pinkerton, & Eisenberg, 1994), with the coding system proposed by Hastings and Grusec (1998) to create a provisional list of categories (see Table 1), wide enough to comprise all the parental practices mentioned by participants for one or more situations, while maintaining a theoretically based distinction between power assertion, on the one hand, and permissiveness, on the other, with reasoning as the most beneficial point of equilibrium between the two.

In a second step, mostly data driven, we eliminated some categories which were not present in our data set and created new categories to capture responses which were not represented in the original coding systems. Finally, in the third step, data- and theory-driven, on the bases of frequencies and theoretical affinity we aggregated six categories subsequently included in a cluster analysis (see Table 1). To assess reliability, the data were coded independently by the first author and a graduate student; intercoder reliability was high ($\kappa = .94$). The few discrepancies were discussed until consensus was reached.

Maternal social desirability (T1)—The 13-item Social Desirability Scale-Short Form (SDS-SF; Reynolds, 1982) was used to assess mothers' social desirability bias. Statements

like “I’m always willing to admit when I make a mistake.” were rated as *True* or *False* and averaged to create a scale. The SDS-SF has demonstrated strong psychometric properties (Loo & Thorpe, 2000), also in cross-cultural contexts (Bornstein et al., in press).

Maternal use of physical discipline (T1, T2, T3)—At each time point, we averaged the standardized scores of two different measures of physical discipline (average inter-correlation between these measures at T1, T2, and T3 was adequate, $r = .51$, to support their aggregation): (1) Frequency of Corporal Punishment in the Last Year. Mothers were asked how frequently in the last year (1 = *never* - 5 = *almost every day*) they used two types of corporal punishment: (a) spanking, slapping, or hitting and (b) grabbing or shaking. (2) Harshness of Corporal Punishment was assessed with mother-reports of the Physical Punishment Questionnaire (PPQ; Rohner, Ripoll-Núñez, Moodie, & Ruan, 2005). We summed the standardized scores of the frequency (or incidence) and severity of corporal punishment with the following items: “Overall, I physically punish my child.”: 1= *Only once/twice ever* – 5= *Almost every day*”; “On average, I physically punish my child ... times in any given week.”; “Overall, when I physically punish my child, it is”: 1= *Not hard at all* – 4 = *Very hard*. Average α s across T1, T2, and T3 standardized scores of the two different measures of physical discipline = .75.

Child Measures

Maternal rejection (T1, T2, T3)—The Parental Acceptance-Rejection/Control Questionnaire-Short Form (PARQ/Control-SF; Rohner, 2005) was used to measure children’s reports of the frequency of mothers’ parenting behaviors (1 = *never or almost never* - 4 = *every day*). In agreement with previous studies (e.g., Putnick et al., 2012), we focused on the total acceptance-rejection scale, which is computed as the sum of the items for warmth-affection (reversed; 8 items such as “I make my child feel wanted and needed.”) and hostility-aggression, rejection, and neglect-indifference (16 items such as “I punish my child severely when I am angry.” and “I pay no attention to my child when (s)he asks for help.”). A high score of the total acceptance-rejection scale corresponds to more rejection (average α s across T1, T2, and T3 = .81).

Child aggression (T1, T2, T3)—The Behavior Frequency Scale, which includes 22 items (average α s across T1, T2, and T3 = .84) adapted from Farrell, Danish, and Howard (1992), Crick and Bigbee (1998), and Orpinas and Frankowski (2001), was used to assess self-reported child aggression. Children were asked how often in the last 30 days they engaged in a series of aggressive physical (e.g., hitting or slapping other children) or relational (e.g., spreading a false rumor about someone) acts. Responses ranged from *never* to 20 or more times in the last 30 days.

RESULTS

Qualitative Analysis

The categories created in the first step of the qualitative analysis were ordered along a continuum from harsh punishment to permissiveness (see Table 1). The categories added in the second step were placed in appropriate positions along this continuum; a few answers

which were incoherent, and could not be included in a meaningful position within this list, along with some “I don’t know” responses were omitted at this point, leaving a total of 299 coded answers (out of a possible total of 309). Some original categories, not represented in our data, were eliminated, resulting in a list of 17 (see Table 2). The rare mentions of punishment (physical and verbal) did not allow us to maintain the distinction between Hurting and Coercion (suggested by Hastings & Grusec, 1998); these forms of force were combined with Unspecified Punishment and Scolding. Due to the low frequency of Privileges Withdrawal, the distinction between Coercive Verbal Control and Behavior Modification (proposed by Scarr et al., 1994) was not possible; hence, this category was summed to Give Orders in the larger category of Control, as suggested by Hastings and Grusec (1998). Also the subcategories of Responsiveness (Hastings & Grusec, 1998) or Low Use of Authority (in terms of Scarr et al., 1994) were not sufficiently frequent to be kept separate.

In contrast, the category of Induction was not only distinguished in Reasoning and Listening (maintaining two out of the three sub-categories of Hastings & Grusec, 1998), but was further distinguished according to the simultaneous presence of power acts or of responsive acts. The answers with a Mix of Force and Reasoning were frequent enough to form a distinct category in the final list, but the Mix of Reasoning and Responsiveness was rarer, and was eventually combined with Permissiveness. The correspondence of the sub-categories with the final six categories, along with their frequencies and percentages is shown in Table 1.

Reasoning as a way of dealing with a child’s misbehavior is the most frequent category (33.1%). Parenting based on adults’ power assertion is also frequent (28.4%), and in large part is represented by punishment (19.7% of the total). However, only 2.3% of punishment takes a harsh form (physical or psychological). Quite often power assertion is based on attempts to control the child (8.7% of the total), principally by giving orders, and to a limited extent by trying to modify the child’s behavior by withdrawing privileges.

Instead, a permissive approach is quite rare (7.7%). The closer approximation to this end of the parenting practice continuum is a group of answers (15%) of mothers who react to a misbehavior by listening to the child’s perspective or engaging in a discussion with the child.

Two interesting categories emerged when reasoning is combined with other actions characterized by completely different valences. Reasoning is combined with comforting or other forms of indulgence in a few cases (3.3%). Being quite rare, this combination of correction and indulgence was summed with the even rarer cases of comforting, negotiating for partial obedience, and minimizing, to form the category of Permissiveness.

Reasoning occurred with the use of force in a much larger number of answers (16%). In many cases, the first reaction is punishment, and only as a second step the reasoning takes place (I yell that I will punish her, because if she doesn’t dress I will be late for work); in other cases the order is reversed (I say that she should respect teachers, and I punish her).

Cluster Analysis of Parental Practices

We used cluster analysis with average linkage between groups hierarchical method to identify an empirically based classification of maternal practices. In accordance with Aldenderfer and Blashfield (1984), the criteria used to select the number of clusters were: interpretability, size, and ability to differentiate the outcome measures. Solutions with three and with four groups were attempted. The three-groups solution was ultimately selected because it yielded the clearest distinctions among the within-cluster patterns of parenting characteristics.

Figure 1 shows how mothers were grouped according to their discipline practices. Group 1, Induction, includes 76 cases (74%). Group 2, Punishment, includes 16 cases (16%). Group 3, Mixed practices, includes 10 cases (10%).

From an empirical standpoint, cluster solutions also are evaluated by the extent to which cluster variables significantly differentiate among groups. For the three-groups solution, a series of ANOVAs revealed significant mean differences between groups for five of the six cluster variables. Tukey follow-up tests confirmed that the only variable not yielding significant group differences was Permissiveness. Reasoning is higher in Group 1 (Induction) than in the other two groups, and listening is higher in Group 1 (Induction) than in Group 3 (Mixed practices). Physical or psychological punishment is higher in Group 2 (Punishment) than in the other two groups. Control and mix of force and reasoning are higher in Group 3 (Mixed practices) than in the other two groups (see Table 2).

Mothers of Group 1 (Induction) typically reason with their child and listen to his/her perspective; these mothers do not feel the need to control their child with orders or attempts to modify his/her behavior, even if sometimes they admit to having punished the child, sometimes in combination with an attempt at reasoning.

Mothers who punish divide in two groups. The larger of these (Group 2, Punishment) is focused almost exclusively on punishment, being extremely low in reasoning (even when accompanied by the use of force) and quite low also in control. Occasionally, however, they listen to the child, much as the mothers in Group 1 (Induction), whom they also resemble in level of control; instead, these mothers almost completely lack any kind of reasoning.

The last and smallest group (Group 3, Mixed practices) is the opposite of Group 1 (Induction), being characterized by the combination of reasoning and force, high control, and low frequency of all the other practices. These mothers try to control their children with orders or behavior modification, and above all they give explanations in attempts to correct their child's behavior. However, their use of reasoning is always mixed with punishment, and they do not listen to their child.

Quantitative Analyses of Parental Practices and Child Adjustment

Cluster groups and demographics—We investigated links between the cluster groups and some demographic characteristics by performing ANOVAs (with years of education as dependent variable) and cross-tabulations with some sociodemographic variables. We found no associations between identified clusters and T2 family income (measured with three

levels as reported in the Participants section, $\chi^2(4) = 4.13$; $p = .13$; being the mother of a single-child versus not, $\chi^2(2) = .26$, $p = .88$; T1 maternal years of education, $F(2,99) = .27$, $p = .77$; and age of children, $F(2,99) = .86$, $p = .43$. However, a significant association emerged between child gender and parenting practice patterns (Group 1 - Inductive: $\chi^2(1) = 3.37$, $p = .07$; Group 2 - Punishment: $\chi^2(1) = .25$, $p = .62$; Group 3 - Mixed practices: $\chi^2(1) = 6.40$, $p = .01$). Girls were significantly more likely than expected by chance to belong to Group 3; the percentages of boys in each group are reported in Table 2.

Association between identified clusters and the developmental trajectory of physical punishment, maternal rejection, and child aggression—

We preliminarily performed an ANOVA to determine differences in T1 maternal proneness to socially desirable answers across the three identified cluster groups. No significant differences emerged, $F(2,99) = .86$, $p = .43$. To study the association between identified clusters and the optimal functional form of growth for each outcome (i.e., maternal physical punishment, maternal rejection, and child aggression development, respectively), latent growth curve (LGC) models were used to assess inter-individual differences in intra-individual change over time (Curran, Obeidat, & Losardo, 2010). Models were tested separately for those mothers belonging to the different groups identified with the cluster analysis using a multiple-group approach in a SEM framework (Curran, 2000). The LGC model included two latent factors for which variances were decomposed: an intercept and a slope. The intercept represents the initial level, whereas the slope represents the rate of linear change. It was not possible to run any model with a quadratic term because of non-convergence issues. We first examined a no-growth model (intercept only) and then a linear model representing a constant change over time (factor loadings were fixed to 0, 1, and 2). The evaluation of goodness of fit was based on CFI values of at least 0.90 (Kline, 2005) and RMSEA values lower than 0.07 (Browne & Cudeck, 1993). Because all these models are nested, we performed a chi-square difference test (χ^2) to compare them (Kline, 2005). The equivalence between the cluster groups was evaluated by including constraints imposing identical unstandardized estimates for the model's parameters across the cluster groups; the plausibility of these equality constraints was examined with the χ^2 test between nested models (i.e., constrained vs. the baseline unconstrained models), in which the invariance across groups can be supported if the equality constraints produce a nonsignificant increase of the χ^2 . Modification indices were also used to assess the equality of the constraints across groups.

The developmental trajectory of maternal physical punishment—Both the no-growth model (with the intercept factor only) and the linear model (with intercept and slope factors) had good fit indices (see the upper part of Table 3), and the χ^2 test comparing those models did not support the need for the latent slope factor, $\chi^2(3) = .61$, $p = .90$. Regarding the multiple-group analysis across the three identified cluster groups, χ^2 test, comparing the constrained model with the unconstrained one, was significant, $\chi^2(10) = 34.33$, $p < .001$, suggesting that equality of all parameters did not hold across the three cluster groups. After an examination of modification indices, we obtained a model in which the χ^2 test between the unconstrained model and the partially constrained model was no longer significant, $\chi^2(7) = 11.30$, $p = .13$, by relaxing the error variance for T1 maternal

physical punishment in Group 2 (Punishment) and mean intercept in each group (Inductive, Punishment, and Mixed Practices) to differ from the other two cluster groups. As reported in Table 4, the nonsignificant mean of the intercept of maternal physical punishment for all the cluster groups indicated that the three cluster groups reported an average starting point that is not significantly different from zero at T1, with the highest intercept for the trajectory of physical punishment reported by those mothers belonging to Group 2 (Punishment), followed by mothers belonging to Group 1 (Inductive) and to Group 3 (Mixed practices). The significant variance of the intercept for all the cluster groups indicates inter-individual variability around this mean, similarly across the three groups. The growth trajectory explained a moderate to high proportion of the variance in the time-specific indicator of maternal physical punishment at T1, T2, and T3 (Group 1 – Inductive: 74%, 66%, and 67%, respectively; Group 2 – Punishment: 34%, 66%, and 67%, respectively; Group 3 – Mixed Practices: 74%, 66%, and 67%, respectively).

The developmental trajectory of maternal rejection—The no-growth model had a poor fit, whereas the linear model had a good fit (see the middle part of Table 3), and the χ^2 test comparing those models supported the need for the latent slope factor, $\chi^2(3) = 22.58, p < .001$. Regarding the multiple-group analysis across the three identified cluster groups, χ^2 test, comparing the constrained model with the unconstrained one, was significant, $\chi^2(12) = 36.35, p < .001$, suggesting that equality of all parameters did not hold across the three cluster groups. After an examination of modification indices, we obtained a model in which the χ^2 test between the unconstrained model and the partially constrained model was no longer significant, $\chi^2(7) = 11.30, p = .13$, by relaxing the mean intercept in Group 1 (Inductive), mean slope in Group 2 (Punishment), variance slope and covariance between intercept and slope in Group 3 (Mixed practices) to differ from the other two cluster groups. As reported in Table 4, the significant mean of the intercept of maternal rejection for all the cluster groups indicated that the three cluster groups reported an average starting point that is significantly different from zero at T1, with the lowest intercept for Group 1 (Inductive) maternal rejection trajectory, similarly followed by Group 2 (Punishment) and Group 3 (Mixed practices) trajectories. The significant variance of the intercept for all the cluster groups indicates inter-individual variability around this mean, similarly across the three groups. The mean of the slope was significant and negative for all three cluster groups, showing a tendency for maternal rejection to decline in a linear fashion across time, with a steeper decline for Group 2 (Punishment) trajectory, than trajectories in the other two cluster groups. The variance of the linear slope was marginally significant for all three cluster groups, indicating some support for inter-individual variability in growth over time, especially in relation to Group 3 (Mixed practices) trajectory, in comparison to the other cluster groups. The growth trajectory explained a moderate to high proportion of the variance in the time-specific indicator of maternal rejection at T1, T2, and T3 (Group 1 – Inductive: 70%, 55%, and 42%, respectively; Group 2 – Punishment: 70%, 55%, and 42%, respectively; Group 3 – Mixed Practices: 70%, 73%, and 82%, respectively).

The developmental trajectory of child aggression—The no-growth model had a poor fit, whereas the linear model had a good fit (see the final part of Table 3), and the χ^2 test comparing those models supported the need for the latent slope factor, $\chi^2(3) = 19.60, p$

< .001. Regarding the multiple-group analysis across the three identified cluster groups, χ^2 test, comparing the constrained model with the unconstrained one, was significant, $\chi^2(12) = 46.02, p < .001$, suggesting that equality of all parameters did not hold across the three cluster groups. After an examination of modification indices, we obtained a model in which the χ^2 test between the unconstrained model and the partially constrained model was no longer significant, $\chi^2(7) = 2.61, p = .92$, by relaxing mean slope, mean intercept, and error variance of T2 child aggression in Group 1 (Inductive), and mean and variance intercept, as well as covariance between intercept and slope in Group 3 (Mixed practices). As reported in Table 4, the significant mean of the intercept of child aggression for all the cluster groups indicated that the three cluster groups reported an average starting point that is significantly different from zero at T1, with the highest intercept for Group 3 (Mixed practices) child aggression, followed by Group 2 (Punishment) and Group 1 (Inductive) trajectories, respectively. The significant variance of the intercept for all the cluster groups indicates inter-individual variability around this mean, with higher inter-individual variability around the intercept mean in Group 3 (Mixed practices) trajectory than the similar variability in the trajectory corresponding to the other two cluster groups. The mean of the slope was similarly significant and negative in Group 2 (Punishment) and Group 3 (Mixed practices) trajectories (showing a tendency for child aggression to decline over time), and significant and positive in Group 1 (Inductive; showing a tendency for child aggression to increase over time). The variance of the linear slope was nonsignificant for all three cluster groups, indicating no inter-individual variability in the linear trend in the three cluster groups. The growth trajectory explained a moderate to high proportion of the variance in the time-specific indicator of child aggression at T1, T2, and T3 (Group 1 – Inductive: 72%, 29%, and 48%, respectively; Group 2 – Punishment: 72%, 61%, and 48%, respectively; Group 3 – Mixed Practices: 88%, 82%, and 67%, respectively).

DISCUSSION

We discuss the results in light of our hypotheses, beginning with the description of parental practices provided by mothers and their grouping in cluster analysis and then examining the results from our quantitative data.

The parental practices mothers rely on when correcting their children's misbehavior, ordered from maximal punishment to maximal permissiveness, cohere with the theoretical organization suggested by Scarr et al. (1994) and by Hastings and Grusec (1998), but our data are much more concentrated in the intermediate category because the participants provided a quite benevolent self-presentation in their parental role and because they come from typical families. Parental strategies oriented to responsiveness have been found to be frequent only when the focus of parents' intervention is to show affection to the child, and not to correct his/her misbehavior (Hastings & Grusec, 1998). Also the format of our interview might be responsible for the low presence of permissiveness. Mothers were required to tell *what* they would have done, without previously asking if they would have done something at all, or not.

The use of mixed practices, a combination of reasoning and force, has been depicted as a useful form of parenting by Hoffman (1994) and Larzelere et al. (1998) with young children.

The descriptions provided by our participants do not encourage the extension of this perspective to older children. In some cases, reasoning comes first, as a way to legitimize the subsequent use of force; the child is not offered the opportunity of learning from the parent's explanations, being punished instead. In other cases, punishment appears more as the result of mothers' impulsiveness than a planned educational strategy. In both cases, punishment seems to reduce the positive meaning of reasoning.

The cluster analysis showed that the above described practices aggregate in three meaningful patterns, in which five of six categories are discriminant; only Permissiveness is similarly low in all three groups. While two of these patterns (Induction and Punishment) correspond to classic styles described in numerous previous studies (e.g., Lansford et al., 2012), the third (Mixed Practices) is not so commonly discussed in the literature, possibly because it does not emerge through separate questions in structured questionnaires. A notable exception is the study by Thompson et al. (2002), in which the overlapping of positive and negative practices was found to be rare, a result to which our data correspond. The optimal parenting profile is clearly that of Group 1 (Induction), which includes the large majority of participants. Mothers in Group 2 (Punishment) seem to react angrily to the child, as shown by their lack of control and reasoning. Mothers in Group 3 (Mixed Practices) seem to have more initiative than those in Group 2 (Punishment) because they try to control their children with orders or behavior modification, and above all they give explanations in attempts to correct children's behavior. However, their use of reasoning is threatened by their concurrent use of punishment, and they are insensitive to the child's point of view (zero listening). In sum, mothers in Mixed Practices, Group 3 appear to be more authoritarian than mothers in Punishment, Group 2. It is important to note that the three groups do not differ in their tendency to give socially desirable answers; in particular, the mothers who gave the more favourable self-presentation were not more inclined to social desirability than the others.

These qualitative findings cohere with findings from the quantitative measures, giving support to the clusters and helping to interpret them. Both punitive groups of mothers (Punishment and Mixed practices) were perceived by children as high in rejection at T1, showing that punishment is negative even when combined with an apparently good practice, such as reasoning. Moreover, maternal rejection trajectories decreased over time for all three groups, but the group that decreased the most was Group 2 (Punishment), indicating that when mothers used mixed practices (Group 3), children continue to feel rejected by them over time. The decline of maternal rejection associated with Group 2 (Punishment) may reflect the normative decreasing trend in rejection over time.

Mothers belonging to Group 2 (Punishment) had a physical discipline trajectory with the highest starting point in physical punishment at T1 in comparison to the other two cluster groups. Explicit mention of physical punishment during the interview was rare; it is possible that its use is masked in this group by answers referring to "Unspecified Punishment." Instead, mothers belonging to Group 3 (Mixed practices) had a physical discipline trajectory with the lowest starting point in physical punishment at T1 in comparison to the other two cluster groups. This outcome may be due to the fact that these women are in 9 out of 10 cases mothers of girls, with whom harsh parenting is rarer (Pinderhughes, Dodge, Bates,

Pettit, & Zelli, 2000). In general girls are monitored more than boys (McHale, Updergraff, Jackson-Newsom, Tucker, & Crouter, 2000; Pettit, Laird, Dodge, Bates, & Criss, 2001), but the literature is mixed regarding gender differences in punishment, with some studies reporting that boys tend to receive more and harsher punishments (Lytton & Romney, 1991; McKee et al., 2007) with others using data from many low- and middle-income countries showing negligible gender differences in punishment (Deater-Deckard & Lansford, 2015). In line with previous studies that have examined longitudinal trajectories of physical discipline in the transition from childhood to adolescence (Lansford et al., 2009), all the cluster groups were characterized by a stable physical discipline trajectory from T1 to T3.

At Time 1 child aggression was highest in Group 2 (Punishment), followed by Group 3 (Mixed Practices), and finally by Group 1 (Induction). Moreover, aggressive children from Groups 2 and 3 showed a decrease in this behavior in the subsequent years, as expected in this developmental period (Di Giunta et al., 2010). However, this decreasing trend was not observed in children whose mothers belong to Group 1 (Induction), who were already more adjusted at T1 (i.e., whose trajectory was characterized by the lowest starting point in child aggression at T1).

We cannot establish the direction of the link between the authoritarian style of Group 3 (Mixed practices) and the child's behavior. Mothers quite possibly adopt this type of practice when children are difficult (as shown by their high aggression scores); that is to say, mothers who otherwise would adhere to a rational, inductive approach act inconsistently, adding punishment as a reaction to their children's difficult behavior (Coplan, Hastings, Lagace-Seguin, & Moulton, 2002). The fact that this happened (in 9 out of 10 cases) for girls is consistent with the fact that mothers are especially involved with daughters (Starrels, 1994), such that the disappointment due to their daughters' aggressiveness or to the perception that aggression in girls is especially problematic could result in punishment that overcomes reasoning.

Another interpretive suggestion comes from the high control associated with Mixed practices in Group 3; we know from the category's content that the control is mainly psychological. Following Pettit et al. (2001, p. 596), we could also think that girls who perceive their mothers as psychologically controlling may react in ways that lead their mothers to judge them as being more antisocial, or, taking a more bi-directional view, that as girls increasingly show signs of behavior problems, their mothers' use of psychologically controlling strategies escalates, which in turn encourages the development of more problem behaviors. In a study by Nelson, Yang, Coyne, Olsen, and Hart (2013), several dimensions of psychological control (such as shaming, disappointment, constraining verbal expressions, love withdrawal, and guilt induction) were significantly associated with childhood aggression, especially in same-gender parent-child dyads.

As we mentioned earlier, a certain dose of power assertion has been regarded as useful as a sort of alert to the message conveyed by parents' words (Hoffman, 1994; Larzelere et al., 1998). In fact, children from the two Groups who are more problematic at T1, and are more often punished, reduced aggression. By contrast, an overuse of power assertion would be detrimental because of its inherent negativity for the child. We can speculate that this is the

case for the mothers in Group 3 (Mixed practices), and this interpretation is consistent with the high rejection scores that they received at T1 and consistently across subsequent years. In practice, a combination of controlling and punitive actions with inductive techniques, such as reasoning (Teti & Candelaria, 2002), seems to be successful in behavioral terms, but at a cost in terms of mother-child relationship quality.

In some previous studies, an association between gender and parenting practices has been found: in particular, mothers give more commands to difficult daughters than to non-problematic daughters, and mothers give fewer commands to difficult sons than to non-problematic sons (Gordon, 1983; Kim, Arnold, Fisher, & Zeljo, 2005). Finally, the majority of studies report less parental acceptance of irritability and negative affect in girls than in boys (Putnam, Sanson, & Rothbart, 2002). The significant prevalence of girls in Group 3 (Mixed practices) is consistent with these data.

Surprisingly, children whose mothers rely on “punishment only” (Group 2) demonstrate, over time, a significant reduction of both aggression and perceived maternal rejection. This result seems to indicate that children tolerate better an irrational punishment than the authoritarian combination of control, punishment, and rational justification. Alternatively, the lesser impact of punishment in children whose mothers belong to Group 2 (Punishment) could be explained by a mitigating role of listening, in which these women are similar to those of Group 1 (Induction).

Limitations and Future Directions

We are aware of the limitations of this study, including the small sample size that forced us to combine interesting categories of answers, the scarce mention of physical punishment and of harsh punishment in general, and the rare mention of laissez faire parenting. These findings are consistent with the typicality of the involved families, but a larger sample would have provided an increased presence of these types of parenting behaviors and allowed a finer analysis of the parental practices. The small number of participants also affects the representativeness of the sample, which reflects only urban Italian families. Future works should also expand our study by examining similarities and differences between paternal and maternal practices when dealing with their children’s misbehaviors. The representativeness of the scenarios is also limited by including only three stories; however, these stories capture several important features of children’s common misbehaviors (age and role of recipient; public or private place of occurrence; irritating quality for the parent) but certainly there are other features missing (e.g., different degrees of severity, isolated or repeated occurrence, etc.). When interpreting these results we should also remember that interventions to correct a child’s misbehavior are only a fraction, albeit important part, of a child’s education. Preventive teaching, environments that encourage children to behave properly, good parental examples, and praise and comments that reinforce positive behavior are some of the factors of positive parenting, and are completely missing from our picture.

A strength of our study is the fact that it takes into consideration the perceptions of both mothers and children. Children’s perception of rejection, which is high with (physically) punitive mothers and with mothers who try to use more sophisticated techniques (combining punishment and reasoning), is a strong indication of the actual results of punishment, in

whatever way it is used. Also the fact that the child's aggressiveness is self-reported helps forge a more solid link between the child's characteristics and the mother's actions, with less concern about shared method variance. Another strength is the longitudinal design which allowed us to demonstrate the long-term consequences of maternal attitudes.

Conclusions

One main message from this study is probably that qualitative data are useful in the study of parenting. The fact that the self-descriptions provided by the interviewees are not all positive shows that from mothers' own words we may learn about detrimental situations, complementing more structured methods. In fact, even if more costly than questionnaires, interviews provide the opportunity for an in-depth appreciation of parenting practices, and especially the simultaneous use of actions with different meanings, such as punishment and reasoning. Through the combination of qualitative and quantitative data, and of mothers' and children's reports, we have been able to show that the positive impact of reasoning can be destroyed by the association with punishment and psychological control and the lack of listening, at least with girls. This is not a transitory effect, because 2 years later children who were submitted to this kind of discipline feel strongly rejected by their mothers.

IMPLICATIONS FOR PRACTICE AND POLICY

The results of this study suggest that practitioners working with families should pay attention not only to the frequency of separate disciplinary actions, but also to the joint use of different practices. Parents should be warned that even a positive practice, such as reasoning, may change its meaning when used in combination with punishment, especially when children are old enough to focus on their parents' verbal messages without the need of a contingent behavioral reinforcement. Professionals could educate parents that reasoning does not cancel the negative impact of punishment, even if these negative consequences may not be immediately evident.

We can only speculate about the reasons leading the mothers in our study to resort to a practice which has proved so negative. It is possible that this group of Italian mothers were especially disappointed about the mismatch between their daughters' aggressive behavior and the female stereotype (gentle, not aggressive). Professionals should pay special attention to same-sex parent-child dyads, in which the parents' role expectancies may be more relevant. Possible discrepancies between the child's actions and his/her gender norms may lead parents to over-react in the attempt to correct the less than desirable behavior. In this vein, mothers of aggressive daughters may benefit from information about the normative decreasing developmental trajectories of aggressive behavior, and from counselling about coherent disciplinary practices.

ACKNOWLEDGEMENTS

We are grateful to the children and parents who participated in this research.

FUNDING

This research was funded by the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development grant RO1-HD054805 and Fogarty International Center grant RO3-TW008141. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or NICHD.

REFERENCES

- Aldenderfer, MS.; Blashfield, R. Cluster analysis. Sage; Beverly Hills, CA: 1984.
- Baldwin AL. Socialization and the parent-child relationship. *Child Development*. 1948; 19:127–136.
- Baumrind D. New directions in socialization research. *American Psychologist*. 1980; 35:639–652. doi: 10.1037/0003-066X.35.7.639.
- Becker, WC. Consequences of different kinds of parental discipline. In: Hoffman, ML.; Hoffman, LW., editors. *Review of child development research* (Vol. 1, 169-208). Russell Sage Foundation; New York: 1964.
- Bombi AS, Pastorelli C, Bacchini D, Di Giunta L, Miranda MC, Zelli A. Attributions and attitudes of mothers and fathers in Italy. *Parenting: Science and Practice*. 2011; 11:129–141. doi: 10.1080/15295192.2011.585557.
- Bornstein MH, Putnick DL, Lansford JE, Pastorelli C, Skinner AT, Sorbring E, Oburu P. Mother and father socially desirable responding in nine countries: Two kinds of agreement and relations to parenting self-reports. *International Journal of Psychology*. in press. doi: 10.1002/ijop.12084.
- Bornstein MH, Haynes OM, Azuma H, Galperin C, Maital S, Ogino M, Wright B. A cross-national study of self-evaluations and attributions in parenting: Argentina, Belgium, France, Israel, Italy, Japan, and the United States. *Developmental Psychology*. 1998; 34:662–676. doi: 10.1037/0012-1649.34.4.662. [PubMed: 9681258]
- Bornstein MH, Putnick DL, Suwalsky JTD, Venuti P, de Falco S, de Galperin CZ, Tichovolsky MH. Emotional relationships in mothers and infants: Culture-common and community-specific characteristics of dyads from rural and metropolitan settings in Argentina, Italy, and the United States. *Journal of Cross-Cultural Psychology*. 2012; 43:171–197. doi:10.1177/0022022110388563. [PubMed: 22247569]
- Browne, MW.; Cudeck, R. Alternative ways of assessing model fit. In: Bollen, KA.; Long, JS., editors. *Testing structural equation models*. Sage; Newbury Park, CA: 1993. p. 136-159.
- Calzada EJ, Basil S, Fernandez Y. What Latina mothers think of evidence-based parenting practices: A qualitative study of treatment acceptability. *Cognitive and Behavioral Practice*. 2013; 20:362–374. doi: 10.1016/j.cbpra.2012.08.004.
- Coplan RJ, Hastings PD, Lagacé-Séguin DG, Moulton CE. Authoritative and authoritarian mothers' parenting goals, attributions, and emotions across different childrearing contexts. *Parenting: Science and Practice*. 2002; 2:1–26. doi: 10.1207/S15327922PAR0201_1.
- Crick NR, Bigbee MA. Relational and overt forms of peer victimization: A multi-informant approach. *Journal of Consulting and Clinical Psychology*. 1998; 66:337–347. doi: 10.1037//0022-006X.66.2.337. [PubMed: 9583337]
- Curran, PJ. A latent curve framework for studying developmental trajectories of adolescent substance use. In: Rose, J.; Chassin, L.; Presson, C.; Sherman, J., editors. *Multivariate applications in substance use research*. Erlbaum; Hillsdale, NJ: 2000. p. 1-42. doi: 10.1080/15248371003699969
- Curran PJ, Obeidat K, Losardo D. Twelve frequently asked questions about growth curve modeling. *Journal of Cognition and Development*. 2010; 11:121–136. doi: 10.1080/15248371003699969. [PubMed: 21743795]
- Darling N, Steinberg L. Parenting style as context: An integrative model. *Psychological Bulletin*. 1993; 113:487–496. doi: 10.1037/0033-2909.113.3.487.
- Deater-Deckard K, Dodge KA. Externalizing behavior problems and discipline revisited: Nonlinear effects and variation by culture, context, and gender. *Psychological Inquiry*. 1997; 8:161–175. doi: 10.1207/s15327965pli0803_1.
- Deater-Deckard K, Dodge KA, Bates JE, Pettit GS. Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Developmental Psychology*. 1996; 32:1065–1072. doi: 10.1037/0012-1649.32.6.1065.

- Deater-Deckard, K.; Lansford, JE. V. Daughters' and sons' exposure to childrearing discipline and violence in low- and middle-income countries. In: Bornstein, MH.; Putnick, DL.; Lansford, JE.; Deater-Deckard, K.; Bradley, RH., editors. *Gender in low- and middle-income countries*. Monograph of the Society for Research in Child Development; 2015.
- DeCuir-Gunby JT, Marshall PL, McCulloch AW. Developing and using a codebook for the analysis of interview data: An example from a professional development research project. *Field Methods*. 2011; 23:136–155. doi:10.1177/1525822X10388468.
- Di Giunta L, Pastorelli C, Eisenberg N, Gerbino M, Castellani V, Bombi AS. Developmental trajectories of physical aggression: Prediction of overt and covert antisocial behaviors from self and mothers' reports. *European Journal of Child and Adolescent Psychiatry*. 2010; 19:873–882. doi: 10.1007/s00787-010-0134-4.
- Dodge KA, Bates JE, Pettit GS. Mechanisms in the cycle of violence. *Science*. 1990; 250:1678–1683. doi:10.1126/science.2270481. [PubMed: 2270481]
- Edwards, CP.; Gandini, L.; Giovannini, D.; Harkness, S.; Super, C. Parental cultural belief systems. Guilford; New York: 1993. The contrasting developmental timetables of parents and preschool teachers in two cultural communities; p. 270-288.
- Erkman F, Rohner RP. Youths' perceptions of corporal punishment, parental acceptance, and psychological adjustment in a Turkish metropolis. *Cross-Cultural Research*. 2006; 40:250–267. doi:10.1177/1069397106287924.
- Erkut S. Developing multiple language versions of instruments for intercultural research. *Child Development Perspectives*. 2010; 4:19–24. doi:10.1111/j.1750-8606.2009.00111.x. [PubMed: 21423824]
- Farrell AD, Danish SJ, Howard CW. Risk factors for drug use in urban adolescents: Identification and cross-validation. *American Journal of Community Psychology*. 1992; 20:263–286. doi: 10.1007/BF00937910. [PubMed: 1415029]
- Gershoff ET. Parental corporal punishment and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*. 2002; 128:539–579. doi: 10.1037/0033-2909.128.4.539. [PubMed: 12081081]
- Gordon B. Maternal perception of child temperament and observed mother–child interaction. *Child Psychiatry and Human Development*. 1983; 13:153–167. doi: 10.1007/BF00705856. [PubMed: 6861554]
- Hastings PD, Grusec JE. Parenting goals as organizers of responses to parent–child disagreement. *Developmental Psychology*. 1998; 34:465–479. doi: 10.1037/0012-1649.34.3.465. [PubMed: 9597357]
- Hipwell A, Keenan K, Kasza K, Loeber R, Stouthamer-Loeber M, Bean T. Reciprocal influences between girls' conduct problems and depression, and parental punishment and warmth: A six year prospective analysis. *Journal of Abnormal Child Psychology*. 2008; 36:663–677. doi: 10.1007/s10802-007-9206-4. [PubMed: 18172753]
- Hoffman ML. Discipline and internalization. *Developmental Psychology*. 1994; 30:26–28. doi: 10.1037/0012-1649.30.1.26.
- Kim HJ, Arnold DH, Fisher PH, Zeljo A. Parenting and preschoolers' symptoms as a function of child gender and SES. *Child and Family Behavior Therapy*. 2005; 27:23–41. doi: 10.1300/J019v27n02_03.
- Kline, RB. Principles and practice of structural equation modeling. 2nd. Guilford; New York, NY: 2005.
- Lansford JE, Alampay LP, Al-Hassan S, Bacchini D, Bombi AS, Bornstein MH, Zelli A. Corporal punishment of children in nine countries as a function of child gender and parent gender. *International Journal of Pediatrics*. 2010:1–12. Article ID 672780. doi: 10.1155/2010/672780.
- Lansford JE, Bornstein MH. Parenting attributions and attitudes in diverse cultural contexts: Introduction to the special issue. *Parenting: Science and Practice*. 2011; 11:87–101. doi: 10.1080/15295192.2011.585552.
- Lansford JE, Criss MM, Dodge KA, Shaw DS, Pettit GS, Bates JE. Trajectories of physical discipline: Antecedents and developmental outcomes. *Child Development*. 2009; 80:1385–1402. doi: 10.1111/j.1467-8624.2009.01340.x. [PubMed: 19765007]

- Lansford JE, Dodge KA, Pettit GS, Bates JE, Crozier J, Kaplow J. A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. *Archives of Pediatrics and Adolescent Medicine*. 2002; 156:824–830. doi: 10.1001/archpedi.156.8.824. [PubMed: 12144375]
- Lansford JE, Sharma C, Malone PS, Woodlief D, Dodge KA, Oburu P, Di Giunta L. Corporal punishment, maternal warmth, and child adjustment: A longitudinal study in eight countries. *Journal of Clinical Child and Adolescent Psychology*. 2014; 43:670–685. doi: 10.1080/15374416.2014.893518. [PubMed: 24885184]
- Lansford JE, Wager LB, Bates JE, Dodge KA, Pettit GS. Parental reasoning, denying privileges, yelling, and spanking: Ethnic differences and associations with child externalizing behavior. *Parenting: Science and Practice*. 2012; 12:42–56. doi: 10.1080/15295192.2011.613727.
- Larzelere RE, Sather PR, Schneider WN, Larson DB, Pike PL. Punishment enhances reasoning's effectiveness as a disciplinary response to toddlers. *Journal of Marriage and the Family*. 1998; 60:388–403. doi: 10.2307/353856.
- Loo R, Thorpe K. Confirmatory factor analyses of the full and short versions of the Marlowe Crowne Social Desirability scale. *Journal of Social Psychology*. 2000; 140:628–635. doi: 10.1080/00224540009600503. [PubMed: 11059209]
- Lytton H, Romney DM. Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin*. 1991; 109:267–296. doi: 10.1037/0033-2909.109.2.267.
- McHale SM, Updegraff KA, Jackson-Newsom J, Tucker CJ, Crouter AC. When does parents' differential treatment have negative implications for siblings? *Social Development*. 2000; 9:149–172. doi: 10.1111/1467-9507.00117.
- McKee L, Roland E, Coffelt N, Olson AL, Forehand R, Massari C, Jones D, Zens MS. Harsh discipline and child problem behaviors: The roles of positive parenting and gender. *Journal of Family Violence*. 2007; 22:187–196. doi: 10.1007/s10896-007-9070-6.
- Nelson DA, Yang C, Coyne SM, Olsen JA, Hart CH. Parental psychological control dimensions: Connections with Russian preschoolers' physical and relational aggression. *Journal of Applied Developmental Psychology*. 2013; 34:1–8. doi: 10.1016/j.appdev.2012.07.003.
- Oasi Association. 1° Dossier Famiglia – Comune di Roma (1st Family Report – City of Rome). Assessorato alle Politiche di Promozione della Famiglia e dell'Infanzia (Department for Policies of Family and Children Promotion); 2008. Retrieved from <http://www.comune.roma.it>
- Orpinas P, Frankowski R. The aggression scale: A self-report measure of aggressive behavior for young adolescents. *Journal of Early Adolescence*. 2001; 21:51–68. doi: 10.1177/0272431601021001003.
- Perris C, Maj M, Perris H, Eisemann M. Perceived parental rearing behaviour in unipolar and bipolar depressed patients. *Acta Psychiatrica Scandinavica*. 1985; 72:172–175. doi: 10.1111/j.1600-0447.1985.tb02591.x. [PubMed: 4050510]
- Pettit GS, Laird RD, Dodge KA, Bates JE, Criss MM. Antecedents and behavior problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development*. 2001; 72:583–598. doi: 10.1111/1467-8624.00298. [PubMed: 11333086]
- Pinderhughes EE, Dodge KA, Bates JE, Pettit GS, Zelli A. Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes. *Journal of Family Psychology*. 2000; 14:380–400. doi: 10.1037/0893-3200.14.3.380. [PubMed: 11025931]
- Putnam, SP.; Sanson, AV.; Rothbart, MK. Child temperament and parenting. In: Bornstein, MH., editor. *Handbook of parenting*. Vol I: Children and parenting. LEA; London: 2002.
- Putnick DL, Bornstein MH, Lansford JE, Chang L, Deater-Deckard K, Di Giunta L, Bombi AS. Agreement in mother and father acceptance-rejection, warmth, and hostility/rejection/neglect of children across nine countries. *Cross-Cultural Research*. 2012; 46:191–223. doi: 10.1177/1069397112440931. [PubMed: 23024576]
- Reynolds WM. Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*. 1982; 38:119–125. doi: 10.1002/1097-4679(198201)38:1<119::AID-JCLP2270380118>3.0.CO;2-I.

- Rohner, RP. Parental Acceptance-Rejection/Control Questionnaire (PARQ/Control): Test manual. In: Rohner, RP.; Khaleque, A., editors. Handbook for the study of parental acceptance and rejection. 4th. Center for the Study of Parental Acceptance and Rejection, University of Connecticut; Storrs, CT: 2005. p. 137-186.
- Rohner, RP.; Ripoll-Nunez, KJ.; Moodie, NA.; Ruan, C. Physical punishment questionnaire (PPQ): Adult, parent, and youth versions: Test manual. In: Rohner, RP.; Khaleque, A., editors. Handbook for the study of parental acceptance and rejection. Rohner Research Publications; Storrs, CT: 2005. p. 251-317.
- Scarr, S.; Pinkerton, R.; Eisenberg, M. The Discipline Interview manual. University of Virginia; Charlottesville, VA: 1994.
- Sears, RR.; Maccoby, EE.; Levin, H. Patterns of child rearing. Row, Peterson; Evanston, IL: 1957.
- Schneider BH, Attili G, Vermigli P, Younger A. A comparison of middle-class English-Canadian and Italian mothers, beliefs about children's peer-directed aggression and social withdrawal. *International Journal of Behavioral Development*. 1997; 21:133–154. doi: 10.1080/016502597385027.
- Senese, P.; Poderico, C.; Venuti, P. Credenze parentali sulla relazione genitori-figli: confronto tra diversi gruppi etnici [Parental beliefs about parent-youth relationship: A comparison across different ethnic groups]. In: Poderico, C.; Venuti, P.; Marcone, R., editors. *Diverse culture Bambini diversi* [Different cultures different children]. Unicopli; Milano: 2003. p. 57-70.
- Starrels ME. Gender differences in parent-child relations. *Journal of Family Issues*. 1994; 15:148–165. doi: 10.1177/019251394015001007.
- Teti, DM.; Candelaria, MA. Parenting competence. In: Bornstein, MH., editor. *Handbook of parenting*. Vol. IV: Social conditions and applied parenting. LEA; London: 2002. p. 149-180.
- Thompson MJ, Raynor A, Cornah D, Stevenson J, Sonuga-Barke EJ. Parenting behavior described by mothers in a general population sample. *Child: care, health and development*. 2002; 28:149–155. doi: 10.1046/j.1365-2214.2002.00258.x.
- Weiss B, Dodge KA, Bates JE, Pettit GS. Some consequences of early harsh discipline: Child aggression and a maladaptive social information processing style. *Child Development*. 1992; 63:1321–1335. [PubMed: 1446555]

FIGURE 1.

Empirically derived maternal parenting practice clusters as a function of the identified categories through a qualitative approach.

Note. Numbers reported in y-axis refer to the means of the categories of parental practices identified with a qualitative approach, divided by cluster.

FIGURE 2.

Development of maternal physical punishment, maternal rejection, and child aggression from T1 (average child age = 8 years old) to T3 (average child age = 10 years old), divided by cluster groups.

TABLE 1

Coding System that Integrates Scarr et al. (1994), Hastings and Grusec (1998) and New Categories

		Initial categories	Frequency	%	Final categories
Power ^{a,b}	Hurt	1. Punish physically ^{a,b}	2	0.7	Physical or Psychological Punishment (19.7%)
		2. Humiliate ^a	1	0.3	
		3. Induce guilt ^a	1	0.3	
	Coerce	4. Force physically ^{a,b}	2	0.7	
		5. Threaten ^{a,b}	1	0.3	
		6. Punish (unspecified)	15	5.0	
		7. Scold	37	12.4	
	Control	Withdraw love ^{a,b}			Control (8.7%)
		8. Force verbally, give orders ^{a,b}	22	7.4	
		9. Withdraw privileges ^{a,b}	4	1.3	
		Other forms of behavior modification (restitution, timeout, ignoring) ^b			
Induction ^{a,b}	Reason	10. Reason but also punish	48	16	Mix of force and reasoning (16%)
		11. Reason ^{a,b}	99	33.2	Reasoning (33.2%)
		12. Dialogue with child ^a	12	4	
		13. Ask about the child's perspective ^a	32	10.7	Listening (14.7%)
		14. Reason and show indulgence	10	3.3	Permissiveness (7.7%)
Responsiveness ^{a,b}	Negotiate	Divert attention ^{a,b}			
		15. Negotiate for partial obedience ^a	5	1.7	
		16. Minimize	2	0.7	

Initial categories		Frequency	%	Final categories
	<i>17. Comfort</i> ^{a,b}	6	2.0	
Affect	Acknowledge child's perspective ^a			
	Bribe ^{a,b}			
Accept	Praise ^{a,b}			
	Accept the child's wishes ^a			
Doing nothing ^b	Redefining the situation ^b			
	Delegatine the authority ^b			
	Total	299	100	

Note.

The lines in the column "Initial categories" that do not have superscripts refer to maternal answers for which we created new categories because none of the ones in agreement with ^a and ^b was applicable. The lines without numbers in the "Frequency" column refer to those categories that were not applicable to our data; we could code maternal answers only for the categories reported in *italics*.

^a = Hasting & Grusec (1998).

^b = Scarr, Pinkerton & Eisenberg (1994).

TABLE 2

Group Means, Standard Deviations, and Post-Hoc Comparisons for Clustering Variables and for Mothers' and Children's Behavioral Characteristics

	Group 1 (Induction) (<i>n</i>=76)		Group 2 (Punishment) (<i>n</i>=16)		Group 3 (Mixed practices) (<i>n</i>=10)	
Percent boys	60%		56%		10%	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Physical or psychological punishment	.42 _a	.57	1.69 _b	.79	.00 _a	.00
Control	.11 _a	.31	.37 _a	.62	1.00 _b	.47
Mix of force and reasoning	.39 _a	.59	.25 _a	.58	1.40 _b	.70
Reasoning	1.33 _b	.77	.00 _a	.00	.30 _a	.48
Listening	.50 _b	.64	.31 _{ab}	.60	.00 _a	.00
Permissiveness	.22 _a	.45	.25 _a	.58	.20 _a	.42

Note. Means in a column followed by a different subscript differ at $p < .05$.

TABLE 3

Fit Indices for Unconditional Growth Models for Maternal Physical Punishment, Maternal Rejection, and Child Aggression

Models	χ^2	df	p	CFI	RMSEA	χ^2	df	p
Maternal physical punishment								
Intercept only	.77	4	.94	1.00	<.001			
Linear	.16	4	.69	1.00	<.001	.61	3	.90
<i>Intercept only / multiple-groups</i>								
Unconstrained	4.07	12	.98	1.00	<.001			
Constrained	38.40	22	.02	.87	.15	34.33	10	<.001
Partially constrained ^a	15.37	19	.70	1.00	<.001	11.30	7	.13
Maternal rejection								
Intercept only ^b	22.99	5	<.001	.56	.19			
Linear ^b	0.41	2	.82	1.00	<.001	22.58	3	<.001
<i>Linear / multiple-groups</i>								
Unconstrained ^b	6.61	9	.67	1.00	<.001			
Constrained ^b	42.96	21	<.001	.56	.18	36.35	12	<.001
Partially constrained ^{b c}	17.09	17	.45	1.00	.01	10.48	8	.23
Child aggression								
Intercept only ^d	25.26	5	<.001	.73	.20			
Linear ^d	5.66	2	.06	.95	.13	19.60	3	<.001
<i>Linear / multiple-groups</i>								
Unconstrained ^d	15.29	9	.08	.96	.14			
Constrained ^d	61.31	21	<.001	.73	.24	46.02	12	<.001
Partially constrained ^{d e}	16.79	15	.33	.99	.06	2.61	7	.92

Note.

^a error variance for T1 maternal physical discipline in Group 2 (Punishment) and mean intercept in each group (Inductive, Punishment, and Mixed Practices) were freely estimated in comparison to the other groups.

^b error variances of T1 and T2 maternal rejection were constrained to be equal for convergence issue.

^c Mean intercept in Group 1 (Inductive), mean slope in Group 2 (Punishment), variance slope and covariance between intercept and slope in Group 3 (Mixed practices) were freely estimated in comparison to the other groups.

^d error variances of T1 and T2 child aggression were constrained to be equal for convergence issue.

^e Mean slope, mean intercept, and error variance of T2 child aggression in Group 1 (Inductive), and mean and variance intercept, as well as covariance between intercept and slope in Group 3 (Mixed practices) were freely estimated in comparison to the other groups.

TABLE 4

Growth Parameters' Unstandardized Estimates of the Partially Constrained Model for Maternal Physical Discipline, Maternal Rejection, and Child Aggression Trajectories Divided by Cluster Groups

		Group 1 (Inductive)		Group 2 (Punishment)		Group 3 (Mixed Practices)	
Maternal Physical Discipline: Intercept only – multiple-group partially constrained model							
Intercept	Mean	– .10	a	.22	b	–.29	c
	Variance	.33**	a	.33**	a	.33**	a
Maternal Rejection: Linear - multiple-group partially constrained model							
Intercept	Mean	31.98**	a	38.46**	b	38.46**	b
	Variance	41.42**	a	41.42**	a	41.42**	a
Slope	Mean	–1.41**	a	–4.20**	b	–1.41**	a
	Variance	5.71	a	5.71	a	13.95	b
Covariance between intercept and slope		12.90*	a	12.90*	a	–4.24	b
Child Aggression: Linear - multiple-group partially constrained model							
Intercept	Mean	.21**	a	.36**	b	.42**	c
	Variance	.05**	a	.05**	a	.16*	b
Slope	Mean	.03*	a	–.09*	b	–.09*	b
	Variance	.004	a	.004	a	.004	a
Covariance between intercept and slope		–.01*	a	–.01*	a	–.01*	a

Note. Different letters correspond to significant differences in the growth parameters across the cluster groups.

*
 $p < .05$,

**
 $p < .01$