

Individual and Group Effects in a Community-Based Implementation of a Positive Parenting Program

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Abstract

Objective: To examine the effects of individual and group factors on the changes in child-rearing practices in a parenting program. **Method:** At risk and non at-risk parents ($N = 496$), who varied by sociodemographic factors, participated in 94 groups that differed by size and composition. Latent growth curve modeling was used to examine the impact of individual and group variables on pre–post changes in inductive, coercive, and permissive-neglecting practices. **Results:** Inductive parenting increased and coercive and permissive-neglecting parenting decreased over the intervention and the proportion of change was influenced by family structure, parents' gender and group composition. Low-risk groups and mixed (at-risk and non at-risk) groups did better than medium/high-risk groups in changing inductive and coercive practices whereas all groups did well in changing permissive-neglecting practices. **Conclusion:** To test the effectiveness of a group-based intervention requires taking into account both individual and group sources of variation in the implementation process.

Keywords

positive parenting, child maltreatment prevention, evidence-based program, individual and group effects, latent growth curve modelling

Introduction

In the area of child maltreatment prevention, there is a growing concern about the importance of evidence-based parental intervention to help parents develop and enhance their parenting skills and to avoid inadequate child-rearing (Rodrigo, Byrne, & Alvarez, 2012; Webster-Stratton & Reid, 2010). Although the adoption of evidence-based orientation in practice settings is still a far-reaching outcome (Barth, 2009; Barth et al., 2012; Bellamy, Bledsoe, Mullen, Fang, & Manuel, 2008; Kohl, Schurer, & Bellamy, 2009), child welfare agencies are moving toward the implementation of evidence-based programs as part of family preservation and other services (Barth, 2008; Johnson et al., 2010; Whitaker, Lutzker, Self-Brown, & Edwards, 2008). The typical profile of at-risk parents attending these programs includes low-income parents who have poor models of parenting, lack personal empowerment, have inadequate life management skills, show inconsistent, and unresponsive parenting, are punitive in managing children's behavior or provide inadequate supervision of children and neglect of their basic needs (e.g., Johnson et al., 2010). It is essential that effective prevention programs be developed that target such at-risk populations according to the current standards of prevention intervention (Flay et al., 2005;). These standards define what constitutes evidence that

a given program works and the best ways to implement it, that is, to put the program into practice in real-world settings and test for its effectiveness (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

It is also crucial to select program outcomes that consist not only of a decrease in the parents' use of negative child-rearing practices but also of an increase in the use of positive ones. In the field of child maltreatment, there is a need to abandon the deficit perspective and move toward a strengthening approach that identifies parents' existing skills and strengths in at-risk families and builds on these (Kumpfer & Alvarado, 2003). In fact, a core component of effective family strengthening interventions is to include increasing attention and praise for positive children's behaviors, positive family communication skills, and effective discipline (Kaminski, Valle, Filene & Boyle, 2008). In the same vein, the positive parenting initiative

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launched by the Council of Europe (Recommendation (2006) 19 on Policy to Support Positive Parenting) involves a focus on the empowerment of parents and vulnerable families in the context of families–services partnerships (Rodrigo, 2010). Here, positive parenting has been defined as parental behavior ensuring the fulfillment of the best interests of the child “that is nurturing, empowering, non-violent and provides recognition and guidance which involves the setting of boundaries to enable the full development of the child.” The present study examined some individual and group factors of the implementation process that may modulate the changes in positive and negative child-rearing practices in a group-based parenting program for at-risk parents (*Apoyo Personal y Familiar*, or *APF: Personal and Family Support*), delivered through local social services in Spain.

The use of group-based parenting programs has some advantages for at-risk populations. They are usually delivered in the context of center-based services along with the use of day-care facilities and other community resources, which facilitate the parents’ use of these resources. In these programs, there is an emphasis on building close bonds within the parent group, which may provide an important source of informal support to keep the parents’ attendance at a reasonable rate (McCurdy, Hurvis, & Clark, 1996). In a previous evaluation of the APF program, the attrition rate was 22% (Rodrigo, Máiquez, Correa, Martín, & Rodríguez, 2006a). Increasing the informal support is also a way to decrease the participant’s dependency on the practitioner, which generates feelings of incompetence in the family (Coleman & Karraker, 2003). Program providers are usually aware of the barriers to service use that prevent vulnerable families from their full integration into the community (Staudt, Schleuler-Whitaker, & Hinterlong, 2001). Finally, group-based programs are usually implemented within a schema of significant partnership with local child protection agencies and delivered by well-trained personnel, two positive features associated with program effectiveness (Chaffin, Bonner, & Hill, 2001; Daro & Donnelly, 2002; MacLeod & Nelson, 2000).

However, the implementation of a group-based program in real-world settings involves many sources of variation arising from individual, group, and systemic factors. Thus, there is a need to determine the field conditions that will assure the correct implementation of the program: parents’ sociodemographic profile and risk status, criteria and procedures used to create groups, selection and training of professionals, material resources needed, technical assistance teams and organizational culture, and climate of the services (Fixsen et al., 2005). The specification of all these aspects is very important to properly assess the fidelity to the original program standards in a massive application of the program across different sites or in successive trials (Durlak & DuPre, 2008). Among all the factors, in this study we have focused on the characteristics of the parents and the groups in which they participate that correspond to the first two factors mentioned above.

Individual and Group Influences on Program Outcomes

In a group-based program implemented in real-world conditions, there are individual and group influences that may have an impact on the results. Concerning the individual factors, low socioeconomic status (SES), single-parent status, young parent age, unstable housing, and reliance on government subsidies are associated with poorer outcome in parent training (Holden, Lavigne, & Cameron, 1990; Kazdin, Mazurick, & Bass, 1993; Kazdin & Wassell, 1999; Miller & Prinz, 1990). In particular, socioeconomic disadvantage has frequently been associated with poor outcomes in parent training (Knapp & Deluty, 1989; Webster-Stratton & Hammond, 1990). In a meta-analysis of parent training to modify parent and child behaviors those parents facing higher levels of financial adversity did not benefit from training as much as their nondisadvantaged counterparts (Lundahl, Risser, & Lovejoy, 2006). However, in a multiagency randomized trial of the Incredible Years parenting program aimed at preventing conduct problems in high-risk preschool children, it was found that single parenthood and very low income showed no predictive effects, implying intervention was at least as successful at helping the most disadvantaged families, compared to more advantaged ones (Gardner, Hutchings, Bywater, & Whitaker, 2010). Family psychosocial adversity is also believed to undermine the effectiveness of parent training interventions. Nonrisk or low-risk families who are experiencing minor difficulties at-home usually attend the program on a voluntarily basis. By contrast, medium-to-high-risk families (herein med/high-risk) usually attend the program under mandatory basis, as they are referred by the social services. Therefore, it is more likely that med/high-risk families could benefit less from the program than nonrisk or low-risk families since they are not as motivated to participate and find more difficulties in establishing a trusting and open dialog with the rest of the parents (DePanfilis & Wilson, 1996; Webster-Stratton & Reid, 2010).

The characteristic of the parent groups is another understudied aspect of the quality of implementation. And yet, group size and composition are presumably two important sources of variability due to the adaptation to local conditions in a community-based implementation of a parenting program. It is likely that small groups work better than large groups, as they allow for a personal “touch” with the participants and for more opportunities for intimate exchanges with other parents (the ideal group size could be between 8 and 12 participants), but large groups can also work well, as long as they are run by well-trained facilitators (Kumpfer, Alvarado, & Whiteside, 2003). In fact in a multisite trial of the Strengthening Families Program for Parents and Youth 10–14 (SFP) for substance abuse prevention, it was found that none of the program variables (group size, number of facilitators, facilitator experience, and match of minority status between participants and facilitators) was significantly related to change in parenting scores (Cantu, Hill, & Becker, 2010).

It is also important to analyze the composition of the group, that is, whether the group is heterogenous or homogenous in

terms of combination of risk status of the families. High-risk parents with a history of involvement in welfare services showed higher levels of negative parenting practices and lower levels of positive parenting practices than non at-risk parents (Lutzker & Bigelow, 2002). Therefore, groups combining at-risk and non at-risk parents may have more chances to experience a greater variety of role models of parenting than homogenous groups of at-risk parents. Group discussions about others' views lead to better results on child-rearing practices than discussions focused on personal experiences or general ideas about parenting (Rodrigo, Correa, Máiquez, Martín, & Rodríguez, 2006b). However, in homogenous groups, parents are less exposed to different views but may have more opportunities to talk about similar personal experiences and to go deeper into their own views, which may also be helpful to change their practices. These are empirical questions that deserve attention.

The Present Study

The main goal of the present study is to examine the impact of individual and group factors in the implementation process on the reported use of positive and negative parenting practices. We report results of the Personal and Family Support Program for referred parents for being at-risk of maltreating their children and nonreferred parents from the community, provided by regular staff (psychologist, social workers, and family educators) in multiple local social services. Individual factors are parental age, gender, educational level, family structure, number of children, zone of residence, and financial aid, whereas group factors are size and composition. Moreover, as individuals are nested in different groups, the present study uses latent growth curve modeling for dependent data (clusters) to examine the relative impact of the individual and group variables on pre–post changes in positive and negative parenting practices. This type of analysis is used to obtain a description of the mean growth in a population over a specific period of time. However, the main emphasis lies in explaining variability between subjects in the parameters that describe their growth curves, that is, in interindividual differences in intraindividual change. It also allows for estimating whether the variability is due to individual or group factors or both. Including different program outcomes would also allow for providing some hints about the process of change of these outcomes. For instance, it could be the case that group characteristics matter more than individual characteristics for the change in positive practices but not for the change in negative practices.

The last community trial of the Personal and Family Support Program carried out in the local social services of the Spanish Community of Castile and Leon offers a rich database to answer the above questions (Byrne, 2010). First, APF is a sustained, well-researched program that has been evaluated with good results in previous trials in other Spanish Communities as part of the Family Preservation Services aimed at increasing parental and personal competence, in order to improve the autonomous functioning of poorly educated parents at

psychosocial risk and to prevent child maltreatment, mainly physical and emotional abuse and neglect (Rodrigo et al., 2006a, 2006b). The program is conceived as a community-based intervention delivered by the municipal social services to provide the most focused and longest possible service, which should be offered as close as possible to the home environment. Second, social services personnel in each municipality (e.g., psychologists, social workers) are responsible for selecting referred parents at psychosocial risk. The program is also open to nonreferred parents from the community to avoid stigmatizing the at-risk families and to promote social cohesion in the neighborhoods. In this way, a continuum of family situations is considered, instead of focusing on high-risk families only. Third, APF is a multisite program involving a large number of participants and groups, which ensures enough variability to perform the multilevel analyses. Fourth, it is a well-structured program involving the same training workshop for the professionals carried out at the same time, the same set of 32 sessions of 1.30 hr of duration each and the use of the same teaching materials on all sites, which assures that the program outcomes are less contaminated by these factors. Despite the long duration, on average across sites, 70% of families participated in 28–32 sessions, which is consistent with rates reported in other community-based program implementations with shorter durations (Cantu et al., 2010). Five, the intervention goals involve changes in positive child-rearing (increase in the use of inductive practices based on the use of reasons, explanations, and negotiating with the child) as well as changes in negative child-rearing (decrease in the use of permissive-neglecting behavior such as lack of supervision, low demands, and low control and coercion practices such as physical punishment and verbal threats), allowing for a contrast between the individual and group factors that promote each type of change. Finally, the organizational factors are also similar across sites as the program was introduced as part of a University-Community partnership (University of La Laguna and University of Las Palmas de Gran Canaria, the Autonomous Government of the Spanish Community of Castile and Leon, and the municipal social services of this Community).

In sum, although research on large-scale prevention program disseminations is sparse, we expect that both individual and group variables may contribute to explain variations in the effectiveness of APF in promoting positive parenting and reducing inadequate child-rearing. These results may inform us about the critical ingredients that contribute to program success under real-world conditions.

Method

Participants

The participants in the present study were 496 parents, approximately half of whom ($N = 245$) were referred by the municipal social services and half of whom ($N = 251$) were nonreferred parents living in the Autonomous Community of Castile and Leon, Spain, who attended the program during the years

2005–2007. All parents were recruited across the nine provinces of the community while participating in the APF program. Referred and nonreferred parents were similarly distributed among the provinces. Referred parents were particularly invited to participate as part of the casework intervention, whereas nonreferred parents attended the program on a more voluntarily basis. The referral criterion of the at-risk group was having a minor who was at-risk. A minor is declared *at-risk* when several psychosocial family and personal factors indicate a situation that is potentially harmful to his or her healthy development. Social services personnel in each municipality (psychologists, social workers, and educators) specially trained for working with such at-risk families were requested to perform this evaluation using a standardized instrument described below. Social services personnel also interviewed the nonreferred parents to clarify their motivations to participate and to make sure that they did not have any problematic situation that put their children at-risk. It happened that none of them had experienced these situations, therefore, we considered these parents as non at-risk parents.

Sociodemographic characteristics of the parents who participated in this study as well as the group characteristics are presented in Table 1. Participants (93% were mothers) ranged in age from 20 years to 66 years, with an average age of 38.4 (7.18) years. Participants had an average of 1.8 (.86) children, ranged from 0 to 10 children. Half lived in urban areas, most tended to be in two-parent families (85%), the majority had studies at the secondary level (57%), tended to be not entirely on welfare but received some goods as financial support (70%), and half were unemployed. The average attrition rate of the program was around 25% of the participants, and participants who dropped out and who completed the program did not differ on any sociodemographic and pretest measures.

The at-risk and non at-risk parents participated in 94 groups distributed among three sizes (small, medium, and large) and with a variety of composition: half were only formed by non at-risk parents, and the rest had different groupings: groups comprising low-risk parents only; groups comprising med/high-risk parents, and groups with a mixed composition of non at-risk and at-risk parents from any level of risk. Group composition was not imposed by the staff but varied naturally among groups. Protocols for the assessment of the three levels of risk (low, medium, and high risk) to the minor were designed to provide a homogenous criterion for the definition of risk in two-parent and one-parent families (see below). Groups were monitored by 60 mediators, quite evenly distributed by sex (46% male and 54% female) and age (50% <30 and 50% >30); most were social workers (83%) and the rest were psychologist and family educators, and the majority (75%) attended the program's initial training workshop. Monitor information was not use in the analyses, because of the large proportion of missing values (50%) due to a misunderstanding of the instructions received in some provinces.

Table 1. Description of Participant and Group Variables

Parents (N = 496)	M (SD) / %
Psychosocial risk status	
Non at-risk	50.1
At-risk	49.9
Sex	
Father	6.9
Mother	93.1
Age	38.4 (7.18)
Number of children	1.8 (0.86)
Area	
Rural	54.3
Urban	45.7
Family structure	
One parent	15
Two parent	85
Educational level	
No studies or primary level	17
Secondary level	56.7
High school or university level	26.3
Financial situation	
Not on welfare	69.8
On welfare	3.2
Employment situation	
Unemployed	55.5
Employed	44.5
Groups (N = 94)	%
Group size	
Small (4–8)	23.8
Medium (9–12)	32.3
Large (13–29)	44
Group composition	
Non-at-risk	48
Low-risk	12.5
Med/high-risk	23.2
Mixed	16.3

Instruments

Protocols of Psychosocial Risk Assessment (Protocolos de evaluación del riesgo psicosocial; Rodríguez, Camacho, Rodrigo, Martín, & Máiquez, 2006). The protocols used in this study analyzed 42 indicators with a yes or no scoring in the following areas: sociodemographic factors (8 items; e.g., parental level of education, number of children); family social network (2 items; e.g., support of extended family); family organization and household conditions (7 items; e.g., poor housing, poor household management, lack of sanitary control); caregiver's history of maltreatment and personal characteristics (7 items; e.g., father history of abuse, father's or a relative's substance abuse, maternal psychological distress); quality of relationships within the family (7 items; e.g., conflictive parent-child relationships, marital violent relationships), inadequate child-rearing practices (5 items; e.g., parental negligence, rigid, and incoherent norms), and child adjustment problems (6 items; e.g., child behavioral problems, emotional problems). There is one version for two-parent families and another version for one-parent families, but they only differ in the section about the

quality of relationships within the family (taking into account the possible existence of a mother's partner in one-parent families). The instrument gives three discriminant coefficients for each risk indicator (with the exception of the sociodemographic factors that were only included to characterize the families), according to the level of risk (low, medium, and high). A simple calculation, consisting of adding up the coefficients of the indicators observed in each family for each level of risk plus a constant, allows for the estimation of the level of risk to the minor (the resulting level corresponds to that with a larger sum). The coefficients were obtained from a previous study performed with 45 social agents of municipal social services of the Canary Islands, Spain, who assessed the level of risk of a total of 468 minors from 245 two-parent and 223 one-parent families referred by the social services (Rodríguez et al., 2006).

According to the risk assessment, the high level of risk corresponds to both a violent profile (abusive child-rearing, father's or a relative's substance abuse, violent and conflictive parent-child relationships, lack of sanitary control, mother's history of antisocial behavior, lack of attention to child education, parental negligence, child's emotional problems, child's behavioral problems) and a social deprivation profile (poor housing and poor household management, lack of attention to the child's cognitive and emotional needs, lack of personal hygiene, rigid and incoherent norms, lack of social support, and conflictive marital relationships). The medium level of risk corresponds to those families showing the psychosocial deprivation profile only, and the low level of risk corresponds to families with just three or four indicators on the social deprivation profile (e.g., lack of social support, poor housing, poor household management, rigid and incoherent norms) and none from the violent profile. According to the protocols, at-risk parents in this study were classified into three levels: 140 low-risk parents, 60 medium-risk parents, and 45 high-risk parents.

Situational Questionnaire on Child-Rearing Practices, Situational questionnaire of child-rearing practices and goals (Máiquez, Rodrigo, Capote, & Vermaes, 2000). Mothers' reports of child-rearing methods were obtained across 12 hypothetical situations involving a variety of child problem behaviors, grouped according to the Achenbach's (1993) categorization. There were two parallel forms ($r = .87$) used at initial and final testing, containing six situations each: two of externalization (e.g., *One evening your daughter is alone at home. She is bored and, though she is not allowed to, she plays roughly with her sister's stereo, which gets damaged*), two of internalization (e.g., *your daughter comes home very sad and almost in tears. Some peers have been kidding her and refused to play with her*), and two of social transgression (e.g., *at lunch time your daughter refuses to eat her meal and makes a fuss*). The questionnaire examines the mothers' use of three types of practices (five-point frequency scale): Negligence and Permissiveness, which involves lack of supervision, low demands, and low control (9 items, Cronbach α reliability = .80), Coerciveness, which involves taking away some privileges, physical punishment, and verbal threats (4 items;

Cronbach α reliability = .75), Inductiveness, which involves taking others' views, giving explanations, promoting rule following but taking into account the child's views and initiatives (5 items; Cronbach α reliability = .78). As for the validity of the scales, at-risk mothers using Negligent-Permissive and Coercive practices were more likely to endorse Nativism and Nurturist views about child development, which are especially negative because parents believe that they have little influence on child development, and they have a minimal understanding of the child's psychological needs (Máiquez et al., 2000). By contrast, Inductive practices were mostly associated to the endorsement of Constructivist beliefs, which are positive for child development because they involve a high-perceived influence on child development and a high understanding of the child's emotional and cognitive needs. We computed three average scores for each mother. A high score in negligence and permissiveness means that a mother avoids conflict with the child, does not correct the child's misdeeds, does not pay attention to the child's problems, and does not demand any mature behavior. A high score in coerciveness indicates that a mother uses physical punishment, encourages aggressive responses to other children, takes away some privileges as a way to pressure the child, and uses verbal threats. A high score in inductiveness indicates that a mother gives explanations of rules, offers reasons for desired behavior, points out the harmful consequences of the child's behavior for others, and offers support, confidence and communication.

Procedure

Prior to the initial session of the parenting program, the social services personnel in each municipality who were in charge of the referred parents filled in the protocol of risk assessment including the sociodemographic data. For the nonreferred attendees, there was an interview and collected the sociodemographic data. The first session of the parenting program was used to fill in the questionnaire of child-rearing practices by the parents and the last session was used for the posttest. The conditions of administration of the questionnaire were the same across provinces and groups. More importantly for the purpose of the analyses is that pre-post testing occurred at the same time across the groups no matter their characteristics.

Plan of Analysis

Latent growth curve models (Muthén & Muthén, 2007) were used to study the change in child-rearing practices and the effect of a number of individual and group characteristics on the change in child-rearing practices. The analyses were carried out using Mplus Version 5.21 (Muthén & Muthén, 2007). On the latent growth curve, random effects are used to capture individual differences and fixed effects are used to estimate the average growth of the entire sample. Because two measurements, before and after the intervention, were taken for child-rearing practices, only two growth parameters could be estimated: the individual level (intercept) and linear change.

Table 2. Results for the Change (Pre–Post Test) in Child-Rearing Practices

Child-Rearing Practices	Pretest M (SD)	Posttest M (SD)	Intercept [95%CI]	Linear Slope [95%CI]	% of Change [95%CI]	Correlation Intercept With Linear Slope [95%CI]
Inductive	2.48 (.65)	3.07 (.62)	2.89*** [2.82, 2.95]	.19*** [.10, .27]	7 [4, 9]	-.21*** [-.27, .15]
Coercive	1.21 (.65)	.93 (.65)	1.22*** [1.15, 1.29]	-.29*** [-.38, .19]	24 [17, 29]	-.31*** [-.37, .25]
Permissive-neglect	.62 (.49)	.45 (.43)	.63*** [.55, .70]	-.17*** [-.23, .11]	27 [20, 33]	-.18*** [-.23, .13]

Note. *** $p < .001$.

The main focus of this study was the individual change in child-rearing practices, so the reporting of the results focuses on change and the individual and group factors that are associated with it. The individual factors related to SES (educational level, financial situation, and employment status) substantially correlated. To avoid any problems related to collinearity, only financial situation was used to represent individual's SES in the models. The non at-risk group was chosen as a reference group in analyzing group composition. In the group size, medium and small groups were collapsed into the same category to make sure that the cell frequencies were adequate. The large group was used as a reference group for group size. The dependency of the individuals in the same intervention group was taken into account in the models by treating the groups as clusters. The fit of the models was assessed by chi square analysis, but because this index is sensitive to sample size we also used two other fit indices as recommended by Hu and Bentler (1999): the Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA; Steiger, 1990). A value at or below .08 for the RMSEA, and at or above .95 for the CFI was considered to be an acceptable fit for the model.

Results

Pre–Post Changes

This analysis began with investigating the changes in child-rearing practices over the intervention (pretest and posttest). In relation to child-rearing practices, the evaluation of the normality and linearity assumptions was satisfactory. The mean values for the pre- and posttest were on average higher for inductive practice than for coercive and permissive-neglecting practices. The latent growth curves for the base model that did not include individual or group factors indicated that change (linear slope) over the intervention was significant in all three child-rearing practices (see Table 2). Inductive parenting significantly increased and coercive and permissive-neglecting parenting significantly decreased over the intervention. The proportion of change during the intervention was 7% increase for inductive practices, 24% decrease for coercive practices, and 27% decrease for permissive-neglecting parenting (95%CI). The correlation between the initial level (intercept) and change (linear slope) was also significant. The negative correlation suggested that a lower initial level was associated with a faster change, or alternatively, a higher initial level was associated with a slower change in child-rearing practices over the intervention.

Effects of Individual and Group Factors on Change in Child-Rearing Practices

In this stage, a number of individual (age, gender, number of children, financial situation, and family structure) and group factors (group composition and group size) were added to the base latent growth curve model. In this full model, the proportions of change during the intervention were 10% increase for inductive, 34% decrease for coercive, and 26% decrease for permissive-neglecting practices (95%CI). Overall, the fit of the models was very good (Table 3). Of the individual and group factors, family structure and group composition were associated with change in inductive parenting (Table 3). One-parent families tended to report less inductive practices initially compared to two-parent families. The increase in inductive parenting over the intervention was faster for one-parent families reaching the level of two-parent families at the end of the program (Figure 1). Participants in the low-risk group increased inductive parenting considerably more than those in the non at-risk group (Figure 2). Also those in mixed and med/high-risk groups seemed to experience increase in inductive parenting (especially those in mixed groups), but the difference to the non at-risk group was not significant.

In coercive parenting, the factors related to change were gender, family structure and group composition (Table 3). Fathers tended to report substantially higher levels of coercive parenting initially compared to mothers (Figure 3). The decline in coercive parenting over the intervention was faster for fathers than for mothers. Coercive parenting declined faster among two-parent families than among one-parent families (Figure 4). All risk groups showed decline in coercive parenting (Figure 5). Participants in the mixed group had the highest initial level, but also declined significantly faster than in the non at-risk group.

In permissive-neglecting parenting, group composition was associated with change over the intervention (Table 3). All risk groups showed a decrease in permissive-neglecting parenting over the intervention (Figure 6). The decline was significantly faster for low-risk, med/high-risk and mixed groups as compared to the non at-risk group.

Discussion and Applications to Social Work

This study analyzed the relative impact of individual and group factors of the implementation process on the individual changes in the reported use of positive and negative parenting practices. Latent growth curve models were applied to the data

Table 3. Models of Change (Unstandardized Estimates) for Inductive, Coercive, and Permissive-Neglecting Parenting

	Inductive	Coercive	Permissive-Neglecting
Gender (female = 1)	-.05	.41**	.07
Age	.00	-.00	.01
Family structure (two-parent family = 1)	-.19*	-.26*	-.04
No. of children	-.00	.05	-.04
Financial situation (receiving social benefits = 1)	.09	.01	-.05
Area of residence (rural = 1)	.11	-.04	.06
Group composition (ref = non at-risk)			
Low risk	.38***	-.11	-.18*
Mixed	.18	-.29*	-.17*
Med/high risk	.11	.01	-.18*
Group size (large group = 1)	.01	.06	.01
Model fit			
χ^2 (df)	124.96 (21)	77.23 (21)	109.52 (21)
CFI	1.00	1.00	1.00
RMSEA	.000	.000	.000

Note. Intercepts were estimated in the models (not shown in the table).
 * $p < .05$. ** $p < .01$. *** $p < .001$.

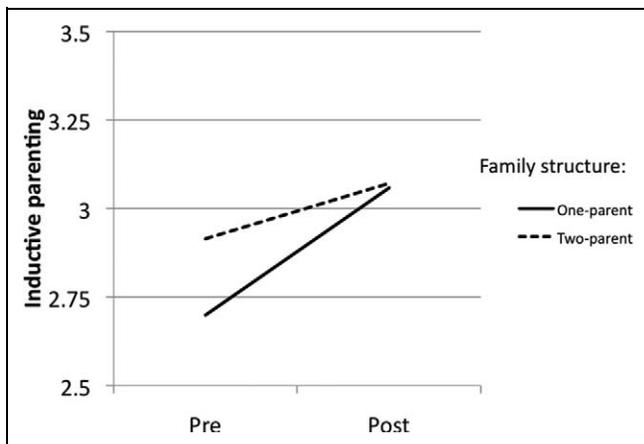


Figure 1. The effect of family structure on change in inductive parenting. The estimates are predicted values from the full latent curve model.

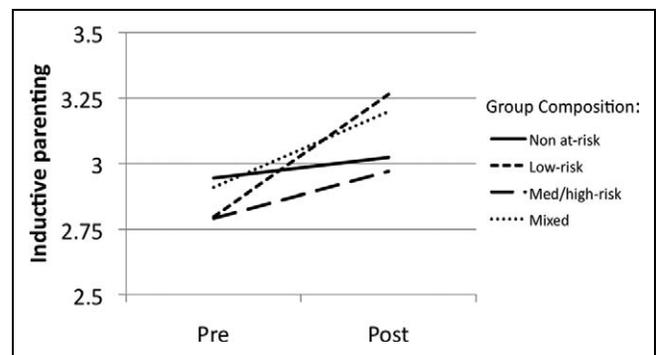


Figure 2. The effect of group composition on change in inductive parenting. The estimates are predicted values from the full latent curve model.

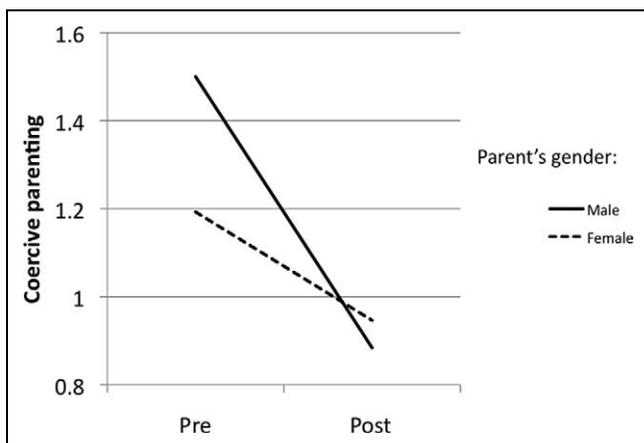


Figure 3. The effect of parent's gender on change in coercive parenting. The estimates are predicted values from the full latent curve model.

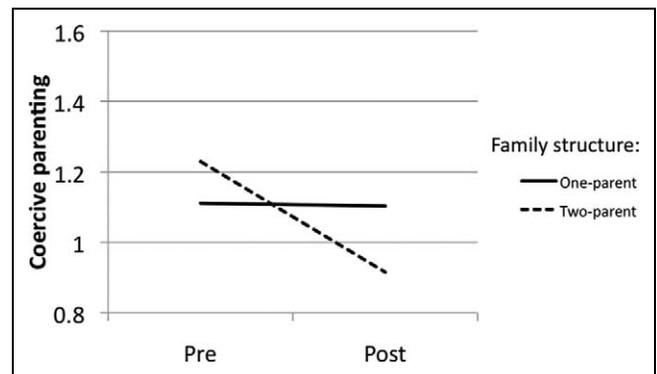


Figure 4. The effect of family structure on change in coercive parenting. The estimates are predicted values from the full latent curve model.

obtained from the last trial of the Personal and Family Support Program for at-risk parents delivered by regular staff in multiple local social services. The rationale for these analyses is that it is very important to identify the critical ingredients that contribute to positive effects in real-world settings (Durlak &

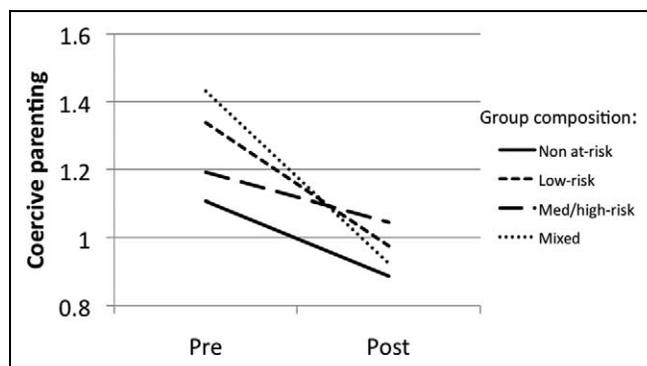


Figure 5. The effect of group composition on change in coercive parenting. The estimates are predicted values from the full latent curve model.

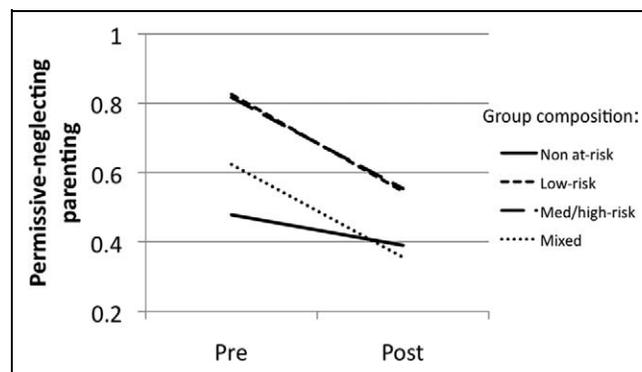


Figure 6. The effect of group composition on change in permissive-neglecting parenting. The estimates are predicted values from the full latent curve model.

DuPre, 2008; Fixsen et al., 2005; Weersing & Weisz, 2002). The advantage of using the latent growth curves is that it takes into account both the average growth in the entire sample and individual differences in growth. The modeling with clusters, in this case intervention groups, makes it possible to adjust for dependent variation in the data.

Overall, the latent growth curves indicated that change over the intervention was significant in all three child-rearing practices. The amount of change was negatively related to the initial level, indicating that there was more room for a fast change over the intervention when participants entered in the program with a low initial level and vice versa. As expected, parents reported a significant decrease in the use of permissive-neglecting practices and coercive practices and a significant increase in the use of inductive practices after the program completion. Results from a previous trial of the program targeting similar at-risk and non at-risk populations showed similar results (Rodrigo et al., 2006b). On that occasion, small effect sizes were found for coercive and permissive-neglecting practices and medium effect sizes were found for inductive practices, even when there was an extensive initial training and follow-up of the facilitators' preparation of the sessions during the program. In the present trial, which only involved the initial training, the percentages of change from the initial level were 34% in coercive, 26% in permissive-neglecting, and 10% in inductive practices, when individual and group variables are added to the models. That means that overall, the program maintained its level of effectiveness with a less intensive monitoring of the facilitators.

To what extent did individual and/or group variables contribute to explain the variability of individual change in the reported child-rearing practices over the intervention? Concerning individual factors, the results indicated that family structure and to a lesser extent gender of the parents had an impact on the program results. One-parent families showed a fast increase in inductive practices up to the level of two-parent families after the program, but they were not able to decrease their level of reported coercion toward the child. These results suggest that the program was able to promote the use of positive forms of parenting based on explanations,

negotiations and taking the child's perspective point of view. But living in at-risk circumstances associated with the single-parent status (poor financial conditions, work overload at home, problems to reconcile family and work life) posited difficulties to abandon coercive methods of child-rearing. Accordingly, single-parent status has been identified as a risk factor for physical abuse and coercive parenting (Sedlak & Broadhurst, 1996). Results from other intervention studies go in this direction, as the majority have shown that one-parent families obtained poorer results after the program than two-parent families (e.g., Holden et al., 1990; Kazdin, Mazurick, & Bass, 1993; Kazdin & Wassell, 1999; Knapp & Deluty, 1989; Lundahl et al., 2006; Miller & Prinz, 1990; Webster-Stratton & Hammond, 1990) and only one study found no differential impact of family structure on the program results and the attrition rate was very low 17% (Gardner et al., 2010). Therefore, family structure is an important factor when recruiting families for a group intervention, since more attention should be paid to support them by improving their living conditions and promoting their capacities to deal with the adversities.

Fathers showed a very fast decrease in their reported use of coercive tactics down to the level of mothers after the program. Although the sample of fathers is rather small, this result is very important, as males are responsible for a sizable portion of physical abuse and play a role in child neglect, being involved in 38% of substantiated cases nationally (Coohey, 2006; US Department of Health and Human Services, 2004). High-risk fathers of physical abuse showed less "perspective-taking" toward their children and consequently more self-centered views, whereas high-risk mothers had elevated levels of "personal distress," indicating that the situation is damaging for their mental stability (Perez-Albeniz & de Paul, 2004). When participating in intervention programs, at-risk fathers often speak of conflicts with their children as power struggles and tend to feel that they deserve unconditional love and respect and unquestioning compliance (Scott & Cooks, 2004). Our results showed that the few fathers who attended the program were able to decrease the reported use of coercive behavior. While clearly promising, these results indicate the need for a better understanding of the fathers' influence on the family life

in at-risk circumstances, and improved efforts to engage and support them in family interventions (Brown, Callahan, Strega, Walmsley, & Dominelli, 2008).

Concerning the group factors, the size of the group did not influence the program results in line with the results from the multisite trial of the Strengthening Families Program for Parents and Youth (Cantu et al., 2010). This program recognizes an optimal family load of 4–14 families per group (Kumpfer et al., 2003). In our case, pattern of changes in the small and medium groups (from 4 to 12 participants) did not differ from those in the large groups (from 13 to 29 participants), probably because the facilitators are well-trained professionals who were able to deal properly with dynamics of large groups. In addition, in most of the activities it is possible to create subgroups and deliver the task among them in a complementary way resulting in a positive learning atmosphere and an effective distribution of time. Among large groups, it is also possible to create supporting teams that facilitate the work to other less advantaged subgroups.

The other group factor, group composition, did produce significant effects on the pattern of change in positive and negative parenting. Overall, low-risk groups and mixed groups did better than med/high-risk groups. Parents participating in low-risk groups and to lesser extent in mixed groups (involving both at-risk and non at-risk parents) increased the reported use of inductive parenting considerably more than those participating in non at-risk groups. They even reached higher levels of positive parenting at the end than those in non at-risk and med/high-risk groups. High-risk parents showed higher levels of negative parenting practices and lower levels of positive parenting practices than non or low at-risk parents (Lutzker & Bigelow, 2002). Therefore, it is reasonable that med/high-risk groups achieved poorer results than low-risk groups (DePanfilis & Wilson, 1996; Webster-Stratton & Reid, 2010). However, it is not so clear why low-risk groups obtained more benefit from the program than non at-risk groups, as in both cases they may have had opportunities to reflect upon their own positive models. A possible explanation is that the contents and activities of the program, which are intended to target at-risk families, are more appropriate for revealing adverse situations in which the use of positive parenting is appropriate in low-risk families than in non at-risk families. Another possibility is that low-risk families showed more heterogeneity in their use of parenting practices, as some of them might fare well with their risk factors whereas others might be more affected by them, thus providing a richer environment for modeling other methods than non at-risk families.

In coercive parenting, participants in mixed groups had the highest initial level, but also declined fastest to the level of participants in non at-risk groups after the program. A possible explanation is that groups combining risk and non at-risk parents may have had more chances to learn from other role models of parenting than low-risk and med/high-risk groups. In a previous trial of this program, the presence of groups of parents arguing from different positions and taking into account the others' points of view was found to predict better

outcomes on child-rearing practices than the simple anecdotic discourse based on personal experiences and the unfocused and generic discourse based on general statements about parental roles and family life (Rodrigo et al., 2006a).

In the same vein, in this study participants in mixed groups lowered the level of reported permissive-neglecting parenting to the level of participants in non at-risk groups. However, in this case the decline was also significantly faster for participants in low-risk and med/high-risk groups compared to participants in non at-risk groups. A possible explanation is that the permissive-neglecting parenting involved simple practices based on “doing nothing” or “not reacting” to any child behavior. Therefore, as the program progresses it becomes clear to the parents, no matter which group they are in, that there is a variety of ways of doing things and reacting appropriately toward the child's behavior. A convergent result is that the percentage of change of permissive neglectful practices remained around 26–27% both in the initial model and in the full model that used the individual variables as covariates and the group variables. In future studies, it would be good to replicate the results on group composition using higher percentages of participants in the categories for the groups containing at-risk parents.

At this point, several limitations of this study should be mentioned. We had no observational data to get closer to the inside group dynamics in order to support our interpretations of the results. It is also a limitation that we could not use the facilitators' data to complete the study of the variables at a group level. Finally, the effects of implementation factors on long-term outcomes are unknown.

In conclusion, after the APF intervention, parents reported that they have reinforced their use of reasoning and explanations to the child, which is a positive way to promote the understanding of norms and the child's autonomy. They are also less likely to report physical punishment, verbal threats or disregard of the child's needs, and avoid correcting the child's misdeeds. However, there is a substantial variability in the patterns of change partially explained by both individual and group factors examined in this study. In addition to the parents' gender, what most influenced the program's effectiveness were ecological conditions such as the type of family in which the parents lived and the type of group in which they participated. In particular, the results for the group composition indicated that the heterogeneity versus homogeneity of the groups in terms of risk status of the families is an important issue in the implementation of group-based parenting programs, especially for promoting changes in inductive and coercive parenting. These results did not follow the simple rule that at-risk parents achieved poorer results than non at-risk parents. They showed that at-risk parents interacting in groups under certain compositions (especially low-risk and mixed groups) achieved similar results for negative parenting or even better results for positive parenting than not at-risk parents participating in homogenous groups.

The existence of basic and specialized teams of practitioners that are well-coordinated at the local level and the fact that the assistance is provided free of charge makes it possible for

integrative prevention work to be done across different levels of risk (Rodrigo et al., 2012). The ability of the local social services to create a group setting where a variety of families can benefit from mutual support is important to avoid the danger of stigmatization and lack of social integration of the at-risk families that are more likely to occur when services are exclusively targeted at this group. Moreover, when engaging at-risk and non at-risk parents in the group interventions at the community level, it is easier to involve agencies and community groups, which are not traditionally considered to be connected with child maltreatment prevention, but whose activities can have a significant impact on the wellbeing of the at-risk families and the community at large where they live (Daro & Dodge, 2009; McCall, 2009). While it is true that the higher the risks and the lower the capacities, the more assistance at-risk families should receive at individual, group, and community levels, the real challenge for child maltreatment prevention at the local level is to create comprehensive and integrated systems that serve all families and empower communities.

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