TITLE: PARENTING PRACTICES AND CHILDREN'S SOCIO-EMOTIONAL DEVELOPMENT: A STUDY WITH PORTUGUESE COMMUNITY PRESCHOOL AGE CHILDREN

Authors:

- **Maria Filomena Gaspar,** Assistant Professor – Faculty of Psychology and Educational Sciences – University of Coimbra, member of the Centre of Psychopedagogy [FEDER/POCTI-SFA-160-490], Coimbra, Portugal (ninigaspar@fpce.uc.pt).
- **Paula dos Santos e Paiva,** Master Student - Faculty of Psychology and Educational Sciences – University of Coimbra, Coimbra, Portugal.

Abstract: A recent and compelling study entitled "Neurons to Neighborhoods", conducted by the Board on Children, Youth, and Families of the Institute of Medicine (USA) calls attention to the importance of early emotional development in young children. Based on a careful review of neuroscience and developmental science, it highlights compelling evidence that a child's earliest experiences and relationships set the stage for how he or she manages feelings and impulses, and relates to others (Raver & Knitzer, 2002).

This paper discusses data from studies of behavioural and emotional problems and prosocial behaviour in a community sample of 362 Portuguese preschool children (age 3 to 6 years) and examine how these problems vary, as hypothesized, with parental practices.

Each mother/father completed the Portuguese translation of two measures: Parenting Practices Questionnaire (adapted from the Oregon Social Learning Centre's discipline questionnaire and revised for young children by Webster-Stratton, Reid and Hammond, 2001); Strengths and Difficulties Questionnaire (Goodman, 1997).

Implications for prevention and intervention, in terms of parenting education and support, and for the development of social policies are discussed.

Key words: parental practices; emotional and behavioural problems; prosocial behaviour; preschool; parenting training; parental education; SDQ.

Emotional and behavioural problems in children versus emotional and behavioural well-being in children, families and communities

Types of maladjustment in children are often broadly categorized as internalizing and externalizing disorders. Internalizing refers to problems whose central feature is disordered emotion and, in contrast, externalizing are those whose central feature is dysregulated behaviour. The terms emotional versus behavioural disorders are broadly synonymous with internalising and externalising conditions (Flouri et al., 2000) and are going be used in this paper.

Relatively few researchers have focused on the prevalence of behaviour problems in the general, non-clinical population of preschool age children (ages 3-5). The actual prevalence of behaviour problems among young children is difficult to determine. The prevalence rates reported in the literature vary greatly depending on the age of the child, the area in which he or she lives, the child's sex, the time period, the specific type of disorder and the method of assessment. Despite these limitations, Qi and Kaiser (2003) indicate that the prevalence of behaviour problems was estimated at between 3 and 6% in the general child population, with a higher incidence (30%) among low-income preschool children. According to Flouri et al. (2000) the prevalence of maladjustments range from 6 to 25%. Webster-Stratton, Reid and Hammond (2001) report that anywhere from 7 to 20% of the children meet the diagnostic criteria for oppositional defiant disorder (ODD) or conduct disorder (CD) and these rates may be as high as 35% for low income families.

Recent research (see Buchanan, 2002), using data from the National Child Development Study (NCDS) has shown that nearly 50 per cent of all children have "difficult" behaviour at some stage.

As Sonuga-Barke et al., 1997, postulated, there is now a great deal to support one of the tenets of developmental Psychopathology: the proposition that difficult early life

experiences, often manifested in early signs of maladjustment during infancy and early childhood, are likely to provide the context for the development of poor mental health later in life.

In the last 50 years, our understanding of both causes and consequences of emotional and behavioural difficulties in children has developed considerably. There is now good evidence, especially from longitudinal studies, that such problems can affect a child's life course. It appears that a chain reaction may be set in motion: emotional and behavioural difficulties in the pre-school period become associated with poorer school progress, fewer educational qualifications and poorer job opportunities – perhaps leading to adult depression – and another cycle of sub-optimum parenting, in the next generation (cf. Buchanan & Hudson, 2000).

The results of some studies show a link between childhood behaviour problems and social and mental well-being in adulthood (see Bor, Sanders & Markie-Dadds, 2002; Farrington & Coid, 2003; Moffitt, 1993; Stewart-Brown, 2000**;** Webster-Stratton, Reid & Hammond, 2001):

- behavioural observations at age 3 years predict antisocial personality disorder and depression at age 21.
- temperament at age 3 years predicts personality in young adulthood.
- emergence of "early onset" ODD/CD in preschool children (high rates of oppositional defiant, aggressive and noncompliant behaviours) is stable over time and appears to be the single most important behavioural risk factor related to antisocial behaviour for boys and girls in adolescence. Such behaviour has repeatedly been found to predict the development of drug abuse in adolescence, as well as juvenile delinquency, depression, violent behaviour, and school dropout. CD becomes increasingly resistant to change over time.
- the best predictor of follow-up diagnosis (e.g. ODD/CD and ADHD) at age 6-7.5 years was the level of children's externalizing behaviour problems at age 2 years reported by mothers.

The anxiety about children with emotional and behavioural problems is that whatever may have been the cause of a child's initial difficulties, once serious difficulties present, emotional and behavioural problems can escalate (spiral effect) (Buchanan, 2000, 2002).

A final concern is that children with emotional and behavioural problems become the parents of the next generation.
Childhood emotional well-being determines adult emotional well-being. Adult emotional well-being is the primary determinant of the quality of adult relationships and therefore of social well-being in communities and societies.

Some risk and protective factors in families for emotional and behavioural disorders in children

The rise over time during the last 50 years in the rates of many disorders in young people makes it clear that environmental factors of some kind must be influential (Rutter, 1999, cit. by Buchanan, 2000).
The model of well-being adopted in this paper and proposed by Stewart-Brown (2000) has the emotional well-being of children as its focus, and suggests that this is determined primarily by the way children are treated by their parents during childhood, manifested by social well-being in homes. If children are parented with respect, empathy and genuineness, they experience emotional well-being, and develop ways of relating to others that enhance their own and others well-being.

Under the interacting ecological model (Bronfenbrenner, 1979) the child is viewed across four domains: the biological child, the family, the school/community, and the wider world. In each of these domains risk and protective factors can be identified for a child's emotional well-being. These factors are not absolute or static: in each domain they interact with each other. The cumulative effect of risk factors may be greatest where they set off a chain reaction. Additionally, the strength of thinking about a child "ecologically" is that compensatory experiences can artificially be created in another domain for children who do not have them naturally and do not necessarily have to be present at the time of the risk (early or later protective experiences may compensate for the cumulative effects of risk factors) (Buchanan, 2000).
The child and his/her family operate in a social context, which also influences their mental health.

Risk factors are prior factors that predict and increase probability of emotional and behavioural disorders. There are several definitions of protective factors (Farrington, 2003): one suggests that protective factors are merely the opposite end of the scale from risk factors (for example, just as poor parental supervision is a risk factor, high parental supervision may be a protective factor); another possible definition is a variable that interacts with a risk factor to minimize the risk factor's effects (for example, higher family income might be regarded as a protective factor against the effects of the risk factor of harsh discipline, if harsh parenting was related to emotional and behavioural disorders only for children from low income families, and not from higher income families).

Less is known about protective factors than about risk factors and considering both externalizing and internalizing disorders the same need of identification of protective mechanisms exists (Flouri et al., 2000). Longitudinal and intervention data are required.

Some risk and protective factors **in families** for emotional and behavioural disorders in children are (cf. Buchanan, 2000):

Risk:

Family adversities: poverty; maltreatment; domestic violence; mental illness in parents; alcoholism, criminality.

Conflict with, and between, parents.

Lax, inconsistent supervision.

Punitive, authoritarian/inflexible parenting.

Protective:

Good relation with parents. Supportive grandparents.

Lack of domestic tensions.

Family involvement in activities: family "togetherness".

Father involvement.

Being brought up in a birth family.

Positive parenting.

Numerous family risk factors predict a child's later antisocial behaviour (Farrington, 2003):

- having criminal or antisocial parents.
- important family interaction include inconsistent, harsh or abusive parenting; cold or rejecting parental attitude; poor parental supervision or monitoring; low parental involvement with the child; separation/divorce and parental conflict.
- numerous socio-economic factors predict a child's later antisocial behaviour, including: low family income, large family size (four or more biological siblings in Cambridge Study which is also a family interaction factor), poor housing, a teenage mother, dependence on welfare benefits, and unemployed parents.

The best-established well research base on parenting shows that a small number of parenting practices are associated with emotional and behavioural problems in children. There are several schools of thought about what causes this association, but all accept the experimental evidence that interventions, which are successful in changing parental behaviours, have an important impact on children behaviour (Stewart-Brown, 2000).

"There is a general agreement that interactions characterized as mutually hostile, harsh, permissive or overcontrolling contribute to a wide spectrum of child psychopathologies" (Hollenstein et al., 2004, p.595).

Substantial research shows that preschool children who developed attentional/hyperactive difficulties experience coercive family interactions and their parents often report disciplinary concerns, experiencing a kind of conflict-reading relationship with their children (Bor, Sanders & Markie-Dadds, 2002).

The review of research on the prevalence of behaviour problems in preschool children from low income families, and the risk factors associated with these behaviours, was reviewed by Qi and Kaiser (2003) and yielded several findings: children from low socio-economic status (SES) backgrounds were found to have a higher incidence of behaviour problems as compared to the general population; behaviour problems were associated with multiple risk factors found in these children's lives related to the child, parent, and socio-economic characteristics; findings have been consistent in indicating that children from low-income backgrounds identified as having more behaviour problems in preschool years tend to have parents who are more stressed, more depressed, and harsher in their use of child discipline.

Patterson's observations of parent-child interaction showed that parents of anti-social children were deficient in their methods of child rearing (Patterson et al., 1992). These parents:

- failed to tell their children how they were expected to behave.
- failed to monitor their children's behaviour to ensure that it was desirable.
- failed to enforce rules promptly and unambiguously with appropriate rewards and penalties.
- used more punishment (such as scolding, shouting or threatening), but failed to make it contingent to rules.

Research evidence about the impact of parenting on emotional and behavioural problems in childhood and on mental and social disease in adulthood (cf. Stewart-Brown, 2000) reveals:

- researchers in the disciplines of child psychiatry, health psychology and criminology have created an impressive body of literature showing that certain "parenting styles" are a cause of childhood emotional and behavioural problems. Structural equation models, developed from some of these studies, show that a small number of parenting practices can account for 30-40% of antisocial children and adolescents. These same parenting styles have shown in further models to be the predictors of male violence towards female partners.
- the growing number of studies which show that it is possible to reduce emotional and behavioural problems using interventions which aim to change parental behaviours add weight to the evidence that the relationship is causal.
- the key attributes of parental behaviour investigated in these studies are: lack of positive regard; lack of warmth; inconsistent discipline; harsh discipline; poor monitoring and supervision.

Dekovic et al. (2003) in a study aimed to examine the combined and unique ability of different aspects of family functioning to predict involvement in antisocial behaviour in a large non-clinical (community) sample of adolescents, made a distinction between global (e.g. family socio-economic status and composition), distal (dispositional characteristics of parents, e.g. parental depression and confidence), contextual (family characteristics as

family cohesion) and proximal (parent-childrearing behaviours and the quality of parent-adolescent relationship) factors. According to results, proximal factors were significant predictors of antisocial behaviour, independent of their shared variance with other factors and the effects of distal and contextual factors were mostly indirect: these factors were found to be no longer related to antisocial behaviour, after their association with proximal factors was taken in account. In other words, the proximal factors mediated the relationship between these more distant factors and adolescent anti-social behaviour.

STUDY QUESTIONS

The present study attempts to specify how different family factors relate to children's emotional and behavioural problems and socio-emotional competence. We are therefore interested in not only parenting practices as risk factors for problems but also as protector factors at promoting the child's prosocial behaviour.

Following the ecological perspective we make a distinction between two family group factors that are ordered according to the level of the proximity to the child's everyday experience:

- proximal: parent-child interaction (practices)
- global: family socio-economic status

Our general hypotheses were that:

- negative parenting practices are associated with elevated levels of emotional and behavioural problems and with reduced levels of prosocial behaviour.
- positive parenting practices are associated with reduced levels of emotional and behavioural problems and with elevated levels of prosocial behaviour.
- the relationship between parenting practices and the child's emotional and behavioural problems and prosocial behaviour is different for girls and boys.
- the relationship between parenting practices and the child's emotional and behavioural problems and prosocial behaviour changes according to the child's age.
- parenting practices relates differently to the child's emotional and behavioural problems and prosocial behaviour in different socio-economic contexts.
- parenting practices used by the parents of the top range of children with more difficult behaviour, more emotional problems and less prosocial competence are different from the parenting practices used by parents of more "normal" children.

METHOD

Participants

The participants were the parents of 362 pre-school age children (174 boys and 188 girls). The children were recruited at first (3 years old), second (4 years old) and third (5 years old) year classes from 12 preschools (community source) that served an urban area, during the first trimester of 2004 year. The average age was 55.4 months (SD= 10): 23.8% (n=86) of the cohort were 3 years old; 37% (n=134) 4 years; 31.5% (n=114) 5 years old; and 3.3% (n=12) were 6 years old. For 4.4% of the sample (n=16) we didn't have access to the birthday data of the child.

All the parents of the children attending the preschool centres were invited to participate by letter. The mean participation rate was 56.1%.

The sample of the children and families who participate in the study were representative of those in the neighbourhood and of the urban area in which the sample was located.

Seventy one percent (71.3 %) of the children resided in intact families, 12.2 % in single parent (almost exclusively maternal) households, 4.4 % in blended families and 7.2 % in other family configurations. Five percent of the families didn't answer to that question.

Family size: 34.5% of the families had one child only; 48.9% had two children; 12.7% three children; and 3.6% had four or five; and one family (0.3%) had seven children.

The monthly family income was between 357 and 1072 euros for 25.4%; 1073 and 2146 euros for 33.7% ; 2147 and 3320 for 21.3%; more than 3221 euros for 6.9%; 12.7% of the families didn't give that information.

Unemployment: 8.8% of the mothers and 6.4% of the fathers were unemployed.

The average maternal age was 34 years (SD=5.01). For fathers the average age was 35.6 years (DP=5.78).

Mother's education: 47.5 % of the mothers had education beyond high school; only 21 % attained a high school degree.

Father's education: 38.8 % of the fathers had education beyond high school; only 26.2 % attained a high school degree.

Three mothers and three fathers couldn't read or write.

Parents were given a questionnaire pack by the pre-school teacher. Families chose which parent completed the questionnaires: 79.3% were completed by the mother only. Support in

filling out the questionnaires or in answering any question was given to parents by the researchers in the preschool centres.

Measures

Parenting practices questionnaire (PPQ) – Portuguese translation

The Parenting practices questionnaire (PPQ) was adapted from the Oregon Social Learning Center's (OSLC) discipline questionnaire and revised for young children (3 to 8 years old) by Webster-Stratton, Reid e Hammond (2001).

In this study we use five scales of this measure**. "Negative parenting scales":** Harsh Discipline (14 items including: when the child misbehave, hit another child, refused to do what the parent wanted he/she to do, the parent scold or yell, threaten to punish, give a spanking, slap or hit); Inconsistent Discipline (6 items including: give up trying to get the child do something when he/she doesn't do it after the parent ask to do; doesn't discipline the child after warn he/she that will discipline if he/she doesn't stop; the child get away with things that the parents feels he/she should have been disciplined for; after decided to punish the child, the parent change his/her mind based on child's explanations, excuses and arguments; the child is successful in getting around the rules the parent had set; the kind of punishment the parent gives his/her child depends on the parent's mood). "**Positive parenting scales**": Appropriate Discipline (16 items including: When the child misbehave, hit another child, refused to do what the parent wanted he/she to do, the parent: get the child to correct the problem or make up for his/her mistake; give he/she a time out; take away privileges like TV, playing with friends; discuss the problem with child or ask questions; praise or reward the child one he/she complete his/her chores and when goes to bed or gets up on time, take away a privilege or grounding he/she when the child does not complete his/her chores; punish the child when he/she fights, steals or lies); Positive Parenting (15 items including: When the child behaves well or does a good job at something the parent: praise or compliment the child; give he/she a hug, kiss, pat, handshake or "high five"; buy something for he/she (such as a special food, a small toy) or give he/she money for good behaviour; give points or stars on a chart); Monitoring (9 items

including: adult supervision at home and in activities outside his/her home; know where the child is when he/she is away from parent's direct supervision; know well him/her child's friends).

Internal consistency in this study was: .76 for Harsh Discipline; .49 for Inconsistent Discipline; .81 for Appropriate Discipline; .63 for Positive Parenting; .51 for Monitoring.

To compute summary scales we followed the procedure indicated by Webster-Stratton, Reid and Hammond (2001): all items were converted to 7-point scales so that all the items in each scale had the same range of values. Items with 5-point scales (4a to e4, 14a to 14c) were recoded as (1=1)(2=2)(3=4)(4=6)(5=7). Items with 8-point scales (12 & 13) were recoded as (1=1)(2=2)(3=3)(4,5=4)(6=5)(7=6)(8=7). For items 8a & 8b, the value of 8 was recoded to missing. Scales were then reversed for selected items. Summary scales were computed as the average of the component items, so that the range of values for the summary scales is 1 to 7.

The PPQ was used as a self-report questionnaire completed by the child's primary caregiver.

Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997, Goodman, Meltzer & Bailey, 1998), parents version - Portuguese translation

The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening questionnaire that explores children's positive and negative attributes.

The 25 items are separated into 5 scales of 5 items each:

1. Conduct problems scale (0-10 points)
2. Hyperactivity/ inattention scale (0-10 points)
3. Emotional symptoms scale (0-10 points)
4. Peer problems scale (0-10 points)
5. Prosocial behaviour scale (0-10 points)

Total difficulties scale: sum of all but the last scale (0-40 points)

Each item can be marked "Not true", "Somewhat true" or "Certainly true".

The score for each of the five scales is generated by summing the scores for the five items that make up the scale, thereby generating a scale score ranging from 0 to 10. The scores for the four difficulties scales can be summed to generate a total difficulties score ranging from 0 to 40.

The informant-rated version of the SDQ can be completed by either parents or teachers of children and teenagers aged between 3 to 16 years old. In this study we only used the parents' version.

Analytical Strategy

Three analytical approaches were used to test the hypothesized relationship between parental practices (positive and negative) and early childhood behaviour (emotional and behavioural problems and prosocial behaviour):

- the first tested the relationship between parental practices and externalising and internalizing behaviours and social competence as continuous measures, for the all sample.
- the second analytical approach examined the patterns of this relationship across: children age; family social index; child gender. We examined sex, age and SES differences by conducting separated intercorrelations of the different levels for these variables.
- the third compared the parental practices for children whose scores were in the highest 20% of the problem behaviours with the remaining 80% of the samples. We used Goodman's strategy: a percentage cut-off band so roughly 80% of children are normal, 10% are borderline, 10% are abnormal. It was felt that a 20% cut-off of the highest scores best identified the top range of children with more difficult behaviour, more emotional problems and less prosocial competence.

  Because parental negative practices may have its most pronounced effects for children who scored highest on externalising or internalizing measures, and lowest in prosocial behaviour, we used a categorical approach. We

conducted an analyse of variance (one-way Anova) on parenting practice measures using the two levels of the various children' behavioural measures (normal; borderline/abnormal).

RESULTS

Table 1 shows the intercorrelations between the measures of parental practices and the measures of children' emotional and behavioural problems and prosocial behaviour.

As expected, the correlations between total difficulties score and negative practices were positive and significant for both negative parenting practices (harsh: $r=.23$, $p<.01$; inconsistent: $r=.21$, $p<.01$) and negative and significant for the positive dimension of supervision ($r=-.17$, $p<.01$). With regards to the prosocial behaviour, we found positive and significant associations with all the three positive dimensions of parenting practices - appropriate: $r=.26$, $p<.01$; positive: $r=.16$, $p<.01$; supervision: $r=.12$, $p<.05$). According to these results higher harsh and inconsistent discipline and lower supervision acts as risk factors for childrens' difficulties, and higher appropriate and positive discipline and supervision acts as protection factors as they appear to be associated with prosocial behaviour.

When we consider the different scales of children's difficulties, our results shows different intercorrelations according to the type of difficulties analysed: externalizing (Conduct problems; Hyperactivity) or internalizing (Emotional symptoms). The intercorrelations show that harsh and inconsistent discipline are positively and significantly associated with externalizing problems (conduct problems - harsh: $r=.19$, $p<.01$; inconsistent: $r=.16$, $p<.01$; hyperactivity - harsh: $r=.22$, $p<.01$; inconsistent: $r=.19$, $p<.01$;) but not with internalizing problems (emotional symptoms - harsh: $r=.09$, $p>.05$; inconsistent: $r=.08$, $p>.05$). Supervision is associated with hyperactivity and emotional symptoms in a negative way (hyperactivity: $r= -.17$, $p<.01$; emotional: $r= -.13$, $p<.05$). The intercorrelations considering appropriate discipline are negative and significant for hyperactivity: $r= -.11$, $p<.05$.

For peer problems our results indicate a positive association with inconsistent discipline ($r= .13$, $p<.05$.) and a negative one with supervision ($r=-.15$, $p<.01$).

TABLE 1

Correlations Between Parental Practices Questionnaire and SDQ' Scales (n=362)

	Total Diffic.	Emotional Symp.	Conduct Problem.	Hyperact./ Inattent.	Peer Problem.	Prosocial Behav.
PPQ						
Harsh	**.23****	.09	**.19****	**.22****	.08	-.07
Inconsistent	**.21****	.08	**.16****	**.19****	**.13****	-.09
Appropriate	-.08	.06	-.07	**-.11***	-.07	**.26****
Positive	-.02	.05	-.03	-.01	-.09	**.16****
Supervision	**-.17****	**-.13***	-.01	**-.17****	**-.15****	**.12***

*p<.05, **p<.01

The intercorrelations considering the different gender groups (cf. Table 2) show that harsh discipline is positively associated with problems in boys and in girls (boys: r= .20, p<.05; girls: r= .27, p<.01), but that inconsistent discipline is only associated with problems in boys (boys: r= .32, p<.01; girls: r= .13, p>.05). The latter result becomes more relevant with this additional result, that is, a negative association between inconsistent discipline and prosocial behaviour for boys only (boys: r= -.18, p<.05; girls: r= -.04, p>.05). The appropriate dimension of discipline is associated positively with prosocial competence in both gender groups (boys: r= .33, p<.01; girls: r= .20, p<.01), but the positive dimension is for boys only (boys: r= .20, p<.01; girls: r= .12, p>.05).

According to our results lower supervision is only associated with higher total difficulties in the girls group (boys: r= .09, p>.05; girls: r= -.24, p<.01).

TABLE 2
Correlations Between Parental Practices Questionnaire and SDQ' Total Difficulties and Prosocial Behaviour Scales According to Children's Gender

	Total Difficult.		**Prosocial Behav.**	
	Boys [1]	***Girls*** [2]	***Boys*** [1]	***Girls*** [2]
PPQ				
Harsh	**.20***	**.27****	-.07	-.06
Inconsistent	**.32****	.13	**-.18***	-.04
Appropriate	-.08	-.07	**.33****	**.20****
Positive	.05	-.09	**.20****	.12
Supervision	-.09	**-.24****	.13	.12

*p<.05, **p<.01 [1] n= 174 [2] n=188

The intercorrelations of the different age groups (3, 4 and 5 years; cf. Table 3) show that harsh and inconsistent discipline are positively associated with total difficulties in all age groups (3 years- harsh: r=.28, p<.01; inconsistent: r=.22, p<.05; 4 years - harsh: r=.23, p<.01; inconsistent: r=.23, p<.01; 5 years - harsh: r=.24, p<.01; inconsistent: r=.25, p<.01). Positive discipline acts as a protection factor against total difficulties only at the young age (3 years - positive: r= -.23, p<.05) and as children grow older (5 years old) supervision becomes significantly and negatively associated with childhood difficulties (5 years - inconsistent: r= -.18, p<.05).

When we consider the prosocial scores our data show that appropriate discipline is positively associated with this behaviour dimension in all age groups (3 years: r=.31, p<.01; 4 years: r=.19, p<.05; 5 years old: r=.30, p<.01). As children grow older (5 years old) inconsistent discipline becomes significantly and negatively associated with children's prosocial competence (5 years - inconsistent: r= -.24, p<.01) and positive discipline becomes significantly and positively associated with that competence (5 years - positive: r= .22, p<.05). Supervision looks important at 4 years old in the development of prosocial behaviour (4 years - supervision: r= .22, p<.05).

TABLE 3

Correlations Between Parental Practices Questionnaire and SDQ' Total Difficulties and Prosocial Behaviour Scales According to Children's Age

	Total Difficult.			**Prosocial Behav.**		
	3 years [1]	***4 years*** [2]	***5 years*** [3]	***3 years*** [1]	***4 years*** [2]	***5 years*** [3]
PPQ						
Harsh	**.28****	**.23****	**.24****	-.10	-.13	-.04
Inconsistent	**.22***	**.23****	**.25****	.04	-.05	**-.24****
Appropriate	-.05	-.05	-.14	**.31****	**.19***	**.30****
Positive	**-.23***	.15	-.14	.16	.16	**.22***
Supervision	-.20	-.11	**-.18***	-.04	**.22***	.10

*p<.05, **p<.01 [1] n= 86 [2] n= 134 [3] n= 126

To test the hypothesis that the association between parenting practices and children's behaviours is different for different SES, bivariate correlations were examined across the different levels of each variable (cf. Table 4). The SES was composed of paternal and maternal occupation, paternal and maternal education and family income. A composite index was calculated with the five variables. Three SES levels were calculated: low; medium; high.

Regarding harsh discipline, a positive and significant association was found with the total difficulties score for low and medium SES, but not for high SES (low: r=.19, p<.05; medium r=.33, p<.01; high: r=.17, p>.05). We found a similar distribution of the associations for appropriate discipline with prosocial behaviour: a positive and significant association for low and medium SES but not for high SES (low: r=.35, p<.01; medium r=.38, p<.01; high: r=-.08, p>.05). With regards to the association between appropriate discipline and total difficulties and inconsistent discipline and supervision with prosocial behaviour our results only show significant associations for the low SES group (appropriate - low: r= -.29, p<.01; medium r=.01, p>.05; high: r=.18, p>.05; inconsistent - low: r=-.19, p<.05; medium r=.05, p>.05; high: r=.06, p>.05; supervision - low: r=.19, p<.05; medium r=.06, p>.05; high: r=.10, p>.05)

TABLE 4
Correlations Between Parental Practices Questionnaire and SDQ' Total Difficulties and Prosocial Behaviour Scales According to Family' SES

	Total Difficult.			**Prosocial Behav.**		
	low [1]	***medium*** [2]	***high*** [3]	***low*** [1]	***medium*** [2]	***high*** [3]
PPQ						
Harsh	**.19***	**.33****	.17	-.02	-.02	-.12
Inconsistent	.15	.17	.13	**-.19***	.05	.06
Appropriate	**-.29****	.01	.18	**.35****	**.38****	-.08
Positive	-.12	.05	.04	**.22***	.20	.01
Supervision	-.12	-.11	-.15	**.19***	.06	.10

*p<.05, **p<.01 [1] n= 116 [2] n= 94 [3] n= 33

We took a categorical approach and conducted an analysis of variance (one-way anova) on parenting practices measures and using the two levels (normal; borderline/abnormal) of the total difficulties scale and prosocial behavioural scale. We tested the hypothesis the parenting practices used by parents of "normal" children are different from the parenting practices used by parents of "borderline/abnormal" children (cf. Table 5).

Regarding harsh discipline a significant effect of total difficulties was found (F (1, 360) = 15.57, p <.001) with parents of children in the "normal" range (n=292) showing a lower level of such disciplinary practice (M= 2.47, SD=.62) when compared to parents of "borderline/abnormal" children (n=70) (M= 2.62, SD=.61). For inconsistent discipline we found a similar effect (F (1, 360) = 7.56, p =.006) with parents of children in the "normal" range showing a lower level of inconsistent behaviour (M= 2.94, SD=.62) when compared to parents of "borderline/abnormal" children (M= 3.0, SD=.66). Supervision is the parenting dimension where parents of children in the "normal" range show a higher level of such behaviours (M= 5.8, SD=.66) when compared to parents of "borderline/abnormal" children (M= 5.6, SD=.82) (F (1, 360) = 4.84, p =.03). Appropriate and positive discipline scores for parents of "borderline/abnormal" children and of children in the "normal" range were not significantly different (appropriate - (F (1, 360) = 2.81, p =.10); positive - (F (1, 360) = .20, p =.89).

TABLE 5
Means and Standard Deviations for Parenting Practices' Scores on Children' Normal and Bordeline/Abnormal Groups on SDQ' Total Difficulties and Prosocial Behaviour' scales

	Total Difficulties						Prosocial Behaviour					
	Normal (n=292)		Bord./Abnor. (n=70)				Normal (n=285)		Bord./Abnor. (n=76)			
	M	***SD***	***M***	***SD***	***F***	***p***	***M***	***SD***	***M***	***SD***	***F***	***p***
PPQ												
Harsh	2.47	.62	2.62	.61	15.57	**.000**	2.46	.62	2.62	.59	4.20	**.04**
Inconsistent	2.94	.64	3.0	.66	7.56	**.006**	2.39	.65	3.04	.64	1.7	.19
Appropriate	4.64	.75	4.77	.88	2.81	.10	4.73	.78	4.41	.70	11.05	**.001**
Positive	4.12	.56	4.20	.70	.20	.89	4.18	.59	3.99	.57	5.7	**.02**
Supervision	5.8	.66	5.6	.82	4.84	**.03**	5.84	.68	5.68	.75	3.4	.07

A significant effect of prosocial behaviour was found for appropriate (F (1, 359) = 11.05, p =.001) and positive discipline (F (1, 359) = 5.7, p =.02) with parents of children in the "normal" range (n=285) showing a higher level of such behaviours when compared to parents of children in the "borderline/abnormal" group (n=76) (Appropriate-normal: M= 4.73, SD=.78, borderline/abnormal: M=4.41, SD=.70; Positive- normal: M= 4.18, SD=.59, borderline/abnormal: M=3.99, SD=.57). We also found a significant effect of harsh discipline (F (1, 359) = 4.20, p<.05) with parents of children in the "normal" range showing a lower level of such behaviours when compared to parents of children in the borderline/abnormal group (normal: M= 2.46, SD=.62, borderline/abnormal: M=2.62, SD=.59). Inconsistent and supervision scores for parents of children in the "borderline/abnormal" group and of children in the "normal" range were not significantly different (inconsistent- (F (1, 359) = 1.7, p =.19); supervision- (F (1, 359) = 3.4, p =.07).

DISCUSSION

The present study showed that parenting practices characterized as harsh, inconsistent and lower in supervision were all related to children' total difficulties and discriminate between

"borderline/abnormal" from "normal" children on those difficulties. As expected, parents whose children exhibited more difficulties use more punishment (such as verbal and physical aggression) but failed to make it contingent on rules because they are inconsistent (parent gives up trying, changes mind or punishment or punishment depends on the parent's mood). They also failed with monitoring (they don't know where the child is, the child has too little supervision and when supervision exists, it is very little). These practices contribute to discriminating significantly the "borderline/abnormal" from the "normal" children.

Also as expected, the harsh and inconsistent negative dimensions of parenting appeared to be significantly associated with the externalizing facets of difficulties (conduct problems and hyperactivity/inattention) but not with the internalizing ones (emotional symptoms).

When we look for children's competences, specifically prosocial behaviour, our findings indicated that parents of prosocial children use more appropriate and positive practices and, additionally, monitor their children more. According to these results the more the parents use appropriate practices (such us take away privileges like TV and playing with friends the when the child misbehave; praise or reward the child one he/she complete his/her chores), positive parenting (including verbal encouragement, praise and reinforcement, and use of incentives or privileges) and monitoring, the more prosocial the child will be. Whilst the use of appropriate and positive practices contribute to discriminating between "borderline/abnormal" and "normal" prosocial children, monitoring does not appear to make this contribution. But, interestingly, the use of harsh disciplinary practices contribute to this discrimination, meaning that parents of "borderline/abnormal" prosocial children use more punishment and aggression than parents of "normal" prosocial children. If we consider that prosocial behaviour is a competence that could act as a protection factor, it is clear that our findings have important implications.

Considering our findings concerning the associations between negative parenting practices (harsh, inconsistent and lower supervision) and children's difficulties, and between positive parenting practices (appropriate, positive and supervision) and children's competence, across the age range of our study (3, 4, 5 years old), we can conclude that for harsh, inconsistent and appropriate discipline we found the same negative or positive effect on

children behaviours in all age groups. In the younger group positive discipline appears to act as a protection against the development of difficulties, while in the older group monitoring was the important factor. At 4 years old, supervision appeared to promote prosocial behaviours whilst at five years old it is positive discipline which promotes that competence.

Inconsistency has a significant impact on the development of difficulties and competences for boys but not girls, positive discipline looks more important in the development of the prosocial behaviours in boys and supervision acts as a protection against the development of difficulties for girls. For both gender groups, appropriate discipline is associated with the development of social competence and harsh discipline with the development of difficulties.

Our results concerning the socio-economic context of the families could be seen as a relevant contribution to the use of the bio-ecological model and the social interactional model in the explanation of and intervention into the emotional and behavioural development in early years: the associations between parental practices and children behaviours (difficulties and competences) are different for the different SES.

High SES appears to act as a protective factor against the development of children's difficulties when their parents use harsh discipline practices. Furthermore, the use of appropriate discipline by parents in the high SES group is not significantly associated with the development of children's competence, contrary to what happens in the other two SES groups.

The use of positive discipline and supervision by parents of children from low SES only is significantly associated with the development of child prosocial competence and the inconsistency in disciplinary practices acts as a risk factor to development in this group alone. Additionally only for this group, is lower use of appropriate discipline a risk factor for the development of difficulties.

We are aware of several limitations of our study. First it was carried out at a single point in time and therefore the data cannot support any claims regarding the direction of effects:

each association we found reflects bidirectional influences and causation is circular and not linear (prosocial children evoke good parenting, externalising children evoke negative parenting). We need more longitudinal and intervention studies.
Second our study used a very simple statistical analysis. More complex statistical analysis should be done with our data to analyse mediation effects and variance explained when we consider more than one variable.
Third we only selected some aspects of family risk and protective factors that have been looked at in previous research as being important for children's well-being.

Notwithstanding these limitations, our study makes an important contribution to the research exploring the associations between parenting practices of Portuguese parents of preschool age children and the behaviour and emotional development of their children, for different SES, age and gender groups of a community sample. We cannot however be certain about the direction of effects. The contribution of our results should be taken into account when designing the content of early prevention interventions that focus on parental training. The findings of the present study suggest that family intervention should focus on teaching parents not just about not using negative practices (use less harsh and inconsistent discipline). Attention should be given to methods to improve appropriate and positive parenting and also to the importance of monitoring. Many different types of parent training programmes have been used but the behavioural parent management training developed by Patterson in Oregon is one of the most promising approaches (Farrington, 2003). Our research team is working on a Portuguese adaptation and translation of a parenting training program developed using the same Patterson's principles: the Incredible Years Program (Webster-Stratton).

Another important contribution of our study is for the selection of parent "risk" groups. The findings of this study suggest a pressing need for prevention efforts with preschool children whose family poverty and educational status places them at increased risk for behaviour and emotional problems, to prevent further problems in behaviour and academic

functioning in later years. Our results show the need to offer appropriate parental training programs urgently for parents of preschool age community children from low SES.

Indirectly our study points to the need for a prevention movement that moves from a child protection role to a more proactive preventive role in promoting children's well-being and combat "social exclusion" (Buchanan, 2002): combat the risk factors for psychological disturbance and to promote the protective resources associated with emotional well-being. We need more social and educational solutions, rather than health (psychiatric and psychological) solutions, for children with early behavioural and emotional problems to protect them from the potential damaging effect of the label "psychiatric case".

Other supports for children and families require public policy changes and larger scale interventions. Families with low income have urgent needs for collaborative and comprehensive services, including: health care, child care, housing, nutrition, mental health, parenting and education. Because low education levels for mothers tend to be related to higher levels of problem behaviour in their children, more effort should be made to help these mothers further their education in general. And, as a consequence, programs to prevent school dropout are needed, in order to prevent a next generation of children of low educated parents.

Parents who are well supported by the communities and societies in which they live are more likely to be able to unlearn any unhelpful behavioural responses they learned in their childhood and to develop more helpful responses. In reversing the downward spiral inherent in this model multifaceted approaches are likely to be required (Stewart-Brown, 2000) but parenting education or training should be an important focus.

REFERENCES

Bor, W., Sanders, M., & Markie-Dadds, C. (2002). The effects of triple P – positive parenting program on preschool children with co-occuring disruptive behaviour and attentional/hyperactive difficulties. *Journal of Abnormal Child Psychology*, 30 (6), 571-

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge: Harvard University Press.

Buchanan, A. (2000). Present issues and concerns. In A. Buchanan & B. Hudson (Eds.). *Promoting children's emotional well-being* (pp.1-27). New York: Oxford University Press.

Buchanan, A. (2002). Family support. In D. McNeish, T. Newman & H. Roberts (Eds.). *What works for children? Effective services for children and families* (pp. 252-273). Buckingham: Open University Press.

Dekovic, M., Janssens, J., & van As, N. (2003). Family predictors of antisocial behavior in adolescence. *Family Process*, 42 (2), 223-235.

Farrington, D. (2003). Advancing knowledge for the primary prevention of adult antisocial behaviour: "High risk" or "population" strategies? In D. Farrington & J. Coid (Eds). (2003). *Early prevention of adult antisocial behaviour* (pp.1-31) Cambridge: Cambridge University Press.

Farrington, D., & Coid, J. (Eds) (2003). *Early prevention of adult antisocial behaviour*. Cambridge: Cambrigde University Press.

Flouri, E., Buchanan, A., & Bream, V. (2000). In and out of emotional and behavioural problems. In A. Buchanan & B. Hudson (Eds.), *Promoting children's emotional well-being* (pp. 48-68). New York: Oxford University Press.

Goodman, R, Meltzer, H., & Bailey, V. (1998). The strengths and difficulties questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry*, 7, 125-130.

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38 (5), 581-586.

Hollenstein, T., Granic, I., Stoolmiller, M., & Snyder, J. (2004). Rigidity in parent-child interactions and the development of externalizing and internalizing behavior in early childhood. *Journal of Abnormal Child Psychology*, 32 (6), 595-607.

Moffitt, T. (1993). “Life-course-persistent” and “adolescence-limited” antisocial behaviour: A developmental taxonomy. *Psychological Review*, 100, 674-701.

Patterson, G., Reid, B., & Dishion, T. (1992). *A social interactional approach: Vol. 4. Antisocial boys*. Eugene, OR: Castila Publishing.

Qi, C, & Kaiser, A. (2003). Behavior problems of preschool children from low-income families : Review of the literature. *Topics in Early Childhood Special Education*, 23 (4), 188-.

Raver, C., & Knitzer, C. (2002). *Promoting the emotional well-being of children and families. Policy Paper No. 3 Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. NY: National Center for Children in Poverty.

Sonuga-Barke, E.,Thompson, M., Stevenson, J., & Viney, D. (1997). Patterns of behaviour problems among pre-school children. *Psychological Medicine*, 27, 909-918.

Stewart-Brown, S. (2000). Parenting, well-being, health and disease. In A.Buchanan & B. Hudson (Eds.), *Promoting children’s emotional well-being* (pp. 28-47). New York: Oxford University Press.

Webster-Stratton, C., Reid, M., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*, 30 (3), 283-302.